Interim Results-1 of US Cohort from FINE-REAL: A Prospective Phase IV Study of Finerenone Use in Routine Clinical Settings

Susanne B. Nicholas,[1] Ricardo Correa-Rotter,[2] Nihar Desai,[3] Lixin Guo,[4] David C. Wheeler,[5] Kevin M. Pantalone,[6] Christoph Wanner,[7] Stefanie Hamacher,[8] Andrea Horvat-Broecker,[9] Samuel T. Fatoba,[10] Martin Merz,[11] Sankar D. Navaneethan[12]

[1]David Geffen School of Medicine at UCLA, Los Angeles, CA, USA; [2]Instituto Nacional de Ciencias Médicas y Nutricion Salvador Zubiran, Ciudad de Mexico, Mexico; [3]Yale School of Medicine, New Haven, CT, USA; [4]Chinese Academy of Sciences, Beijing, China; [5]University College London, London, UK; [6]Cleveland Clinic, Cleveland, OH, USA; [7]Hospital Würzburg, Würzburg, Germany; [8]ClinStat GmbH, Huerth, Germany; [9]Bayer AG, Wuppertal, Germany; [10]Bayer US LLC, Whippany, NJ, USA; [11]Bayer AG, Berlin, Germany; [12]Baylor College of Medicine, Houston, TX, USA

Introduction

- Finerenone, a selective non-steroidal mineralocorticoid receptor antagonist (MRA), is approved for the treatment of chronic kidney disease (CKD) associated with type 2 diabetes (T2D) worldwide, including the United States, European Union, China, and Japan.[1,2]
- Finerenone is included as a recommended treatment for CKD associated with T2D in guidance from the American Diabetes Association, American Association of Clinical Endocrinologists, European Society of Cardiology (ESC), and the Kidney Disease Improving Global Outcomes (KDIGO) work group[3–6] and is also recommended as a treatment to reduce the risk of hospitalization for heart failure in patients with CKD associated with T2D in guidance from the ESC.[7]
- The FINE-REAL study (NCT05348733) aims to provide insight on characteristics and treatment patterns of participants treated with finerenone in routine clinical practice. An interim analysis of the US cohort in FINE-REAL, with an approximate median 8 months' follow-up observation (initiation of finerenone treatment to last recorded observation), is presented.

Methods

- Eligible participants were aged ≥18 years, with a diagnosis of CKD associated with T2D based on physician assessment.[8]
- Participants were receiving finerenone (10 or 20 mg) in accordance with the local marketing authorization.
  - Participants were allowed to be enrolled into the study after the decision to initiate finerenone treatment was made. Treatment initiation could occur after study enrollment.
- The primary endpoint was to describe clinical characteristics and treatment patterns in participants with CKD and T2D treated with finerenone.
- Secondary endpoints were the occurrence of treatment-emergent adverse events (TEAEs) and serious TEAEs, particularly hyperkalemia.
- Data from participants enrolled in the US are reported here.
- The data cutoff for this interim analysis was June 13, 2023.

Results

- By April 2023, 436 participants were enrolled in the US across primary care, endocrinology, nephrology, and cardiology settings.
  - Of these, 390 were included in the full analysis set. A total of 46 were excluded from the analysis, as either no participation was possible (n=17) or no finerenone was taken during this initial observation period (n=29).
- Baseline demographics and disease characteristics, including baseline estimated glomerular filtration rate (eGFR) and urine albumin:creatinine ratio (UACR) as well as prior and concomitant therapies are shown in **Table 1**.
- The proportions of participants in the low-risk, moderate-risk, high-risk, and very high-risk KDIGO risk categories in FINE-REAL (the US and global cohorts) and FIDELITY (the global cohort; a pooled analysis of patients with CKD and T2D from the phase 3 FIDELIO-DKD and FIGARO-DKD studies)[9] are shown in **Figure 1**.

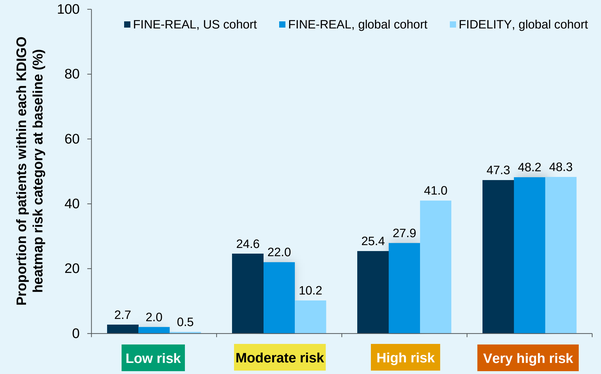
Table 1. Baseline demographics and disease characteristics†

Characteristic	All participants (N=390)
Age, mean (SD), years	65.8 (11.2)
Sex, n (%)	
Male	216 (55.4)
Female	174 (44.6)
Race or ethnic group, n (%)	
White	224 (57.4)
Black	63 (16.2)
Asian	45 (11.5)
American Indian or Alaska Native/Native Hawaiian/other Pacific Islander	6 (1.5)
Not reported	52 (13.3)
Ethnicity, n (%)	
Hispanic or Latino	100 (25.6)
Smoking status, n (%)	
Never	265 (68.1)
Former	87 (22.4)
Current	37 (9.5)
Missing	1 (0.3)
Duration of T2D, median (IQR), years	13.0 (7.0–22.0)
History of heart failure, n (%)	17 (4.4)
UACR, median (IQR), mg/g‡	248.0 (74.6–779.0)
UACR category, n (%)§	
<30	38 (9.8)
30 to <300	105 (27.2)
≥300	120 (31.1)
Not done‖	123 (31.9)
eGFR, mean (SD), mL/min/1.73 m²¶	52.2 (26.3)
eGFR category, n (%)#	
≥60	108 (28.6)
30 to <60	208 (55.2)
15 to <30	58 (15.4)
Serum potassium, mean (SD), mmol/L	4.4 (0.4)
HbA1c, mean (SD), %	7.4 (1.5)
Systolic blood pressure, mean (SD), mmHg	138.0 (19.2)
Prior/concomitant medication, n (%)	
ACEi/ARB	290 (74.4)
Statins	312 (80.0)
Insulin	251 (64.4)
SGLT2 inhibitor	199 (51.0)
GLP-1 receptor agonist	147 (37.7)
Previous steroidal MRA	11 (2.8)

†Baseline demographics and disease characteristics are captured from medical records or by interviewing the participant. Clinical variables of interest are shaded green. ‡263 (68.1%) of participants had UACR measurements at baseline. §The UACR assessment was missing for four patients; 386 participants were evaluable for categorization. ‖The 'Not done' category for UACR is part of the case report form. ¶Calculated using the CKD-EPI 2009 formula without adjustment for race; 378 (97.2%) of participants had eGFR measurements at baseline. #The eGFR assessment was missing for 12 participants; 378 participants were evaluable for categorization.
ACEi, angiotensin-converting enzyme inhibitors; ARB, angiotensin receptor blocker; CKD-EPI, Chronic Kidney Disease Epidemiology Collaboration; eGFR, estimated glomerular filtration rate; GLP-1, glucagon-like peptide-1; HbA1c, glycated hemoglobin; IQR, interquartile range; MRA, mineralocorticoid receptor antagonist; SD, standard deviation; SGLT2, sodium-glucose cotransporter 2; T2D, type 2 diabetes; UACR, urine albumin:creatinine ratio.

- At the cutoff date, participants in the full analysis set had been followed for a median (interquartile range [IQR]) of 251.0 (156.0–323.0) days.
- A total of 343 (87.9%) and 47 (12.1%) participants initiated finerenone at doses of 10 mg and 20 mg, respectively.
- After initiation of finerenone, treatment was defined as either continuously administered, interrupted, or withdrawn in 358 (92%), 21 (5%), and 4 (1%) participants, respectively (per participant evaluation at the last available visit).

Figure 1. Proportion according to KDIGO CKD risk categories in FINE-REAL and FIDELITY at baseline†,‡,9



†Pooled analysis of patients with CKD and T2D from the phase 3 FIDELIO-DKD and FIGARO-DKD studies. ‡Only participants with a UACR with an upper limit of ≤5000 mg/g were permitted into the FIDELIO-DKD or FIGARO-DKD studies.
CKD, chronic kidney disease; KDIGO, Kidney Disease Improving Global Outcomes.

- Safety information is shown in **Table 2**.

Table 2. Summary of TEAEs overall

Event, n (%)	Participants (N=390)
Any TEAE	79 (20)
Any serious TEAE	19 (5)
Any TEAE with fatal outcome	1 (0.3)

TEAE, treatment-emergent adverse event.

- TEAEs were reported in 79 participants (20%). The three most frequently reported TEAEs were hyperkalemia/blood potassium-increased (21 participants; 5%), vitamin D deficiency (six participants; 2%), and acute kidney injury (five participants; 1%).
- Serious TEAEs were reported in 19 participants (5%). The most frequently reported serious TEAE was acute kidney injury (five participants; 1.0%).
- One patient with concomitant hepatic cancer died during the study because of hepatic failure.
- Information on hyperkalemia TEAEs is shown in **Table 3**.

Table 3. Number (percentage) of participants with hyperkalemia† TEAEs

Outcome, n (%)	All participants (N=390)
Any event	21 (5)
Symptomatic event	1 (0.3)
Clinical signs/symptoms (multiple answers possible)	
Paresthesia	1 (0.3)
Leading to dialysis	0
Leading to hospitalization	0
Serum potassium >5.5 mmol/L	17 (4)
Serum potassium >6.0 mmol/L	2 (0.5)

†The term hyperkalemia refers to the combined MedDRA PTs hyperkalemia and blood potassium increased.
MedDRA, Medical Dictionary for Regulatory Activities; PT, preferred term; TEAE, treatment-emergent adverse event.

Conclusions

- FINE-REAL is the first global prospective observational study investigating the use of finerenone in routine clinical care in patients with CKD and T2D.
- Participants across a wide spectrum of KDIGO risk classification at baseline were observed.
- Relative to FIDELITY, at the time of this interim analysis, FINE-REAL-US included a greater proportion of participants in the moderate KDIGO risk category, fewer participants in the high-risk category, and a similar number of participants in the very high-risk category.
- Over 70% of participants were prescribed an ACEi/ARB, and >50% of participants were prescribed a SGLT2 inhibitor.
- UACR testing remains sub-optimal in the CKD-T2D a real-world setting. Uptake of guideline-recommended therapies for CKD associated with T2D can be further improved, and better adherence may improve outcomes.
- This interim analysis also showed that in finerenone users, the occurrence of hyperkalemia in the real-world setting was low, with no fatal hyperkalemia and no hyperkalemia leading to dialysis or hospitalization.
- Results from FINE-REAL will help to inform decision-making with respect to initiation of finerenone in patients with CKD and T2D.

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Disclosures

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Contact details: Name: Samuel T. Fatoba; Email: samuel.fatoba@bayer.com