Finerenone Reduces Loop Diuretic Requirement in Patients with Type 2 Diabetes and CKD: A Participant Level Pooled Analysis of FIDELIO-DKD and FIGARO-DKD

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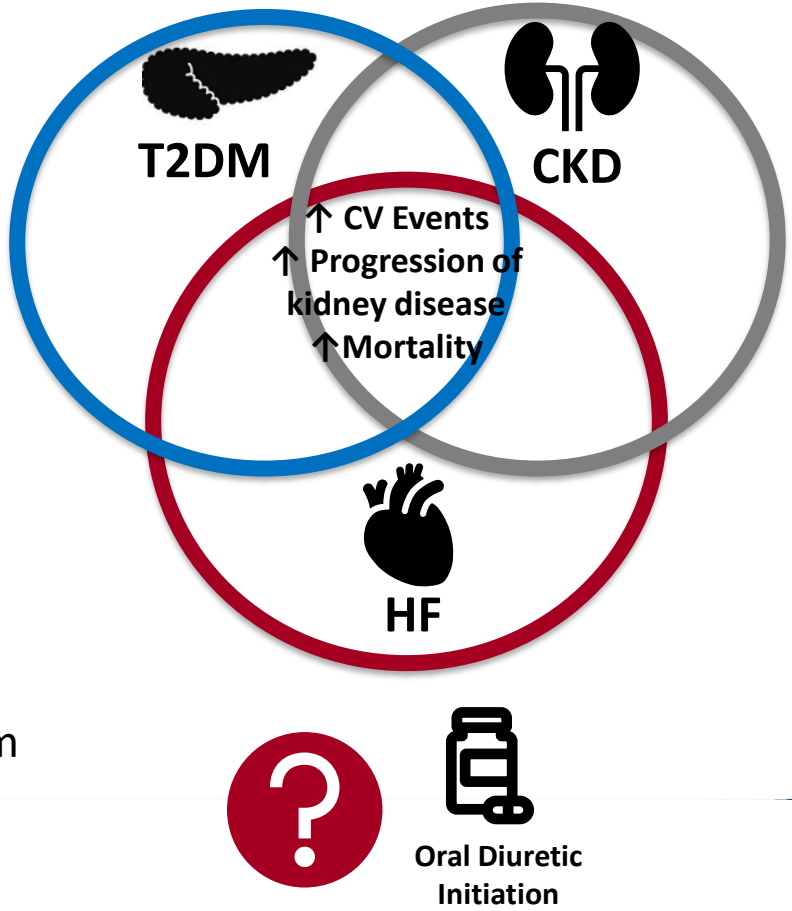
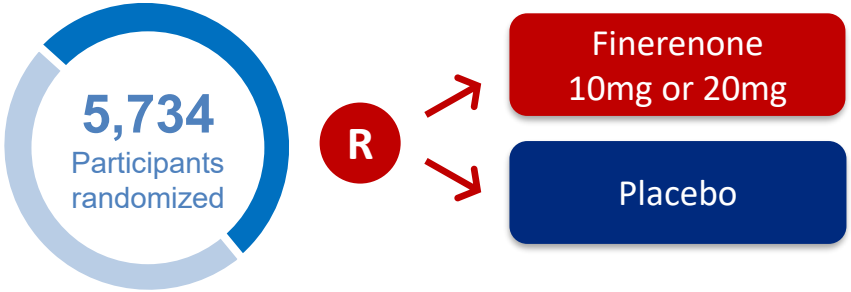
Background and Rationale

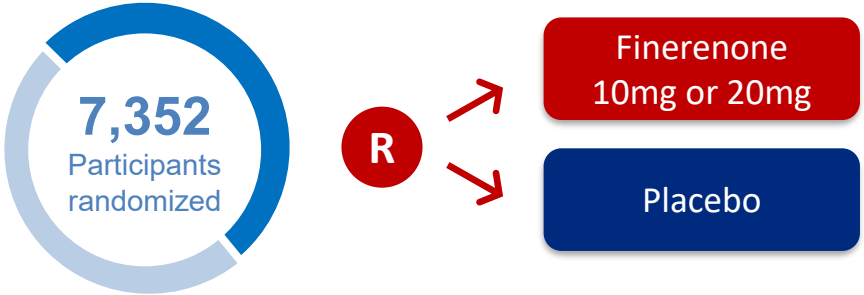
- Patients with **T2DM** face ↑ risk for the development of co-morbid **CV and kidney disease** including HF
- **Diuretics** are **widely used** in the management of patients with **CKD**.
- **Prognostic relevance** of outpatient oral diuretic initiation in patients with T2DM and CKD **is less certain**
- **Inclusion** of such events **in a composite endpoint** may provide more complete capture of the spectrum of HF events and have **implications for** the conduct of **future clinical trials**



FIDELIO-DKD:
age≥18yrs, T2DM, CKD (UACR 30 to <300mg/g, eGFR 25 to <60 + diabetic retinopathy or UACR 300 to 5000mg/g, eGFR 25 to <75)



FIGARO-DKD:
age≥18yrs, T2DM, CKD (UACR 30 to <300mg/g, eGFR 25 to 90 or UACR 300 to 5000mg/g, eGFR ≥ 60)



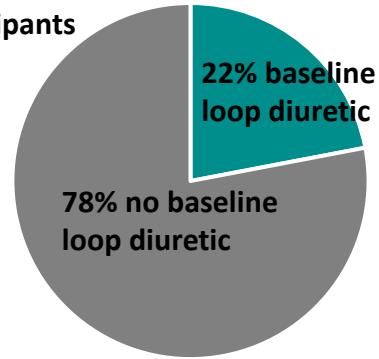
Key Objectives:

1) Assess the prognostic importance of oral diuretic initiation and treatment effects of finerenone vs. placebo on oral diuretic use in patients with T2DM and CKD.

2) Evaluate the implications of the inclusion of oral diuretic initiation in an expanded CV composite outcome

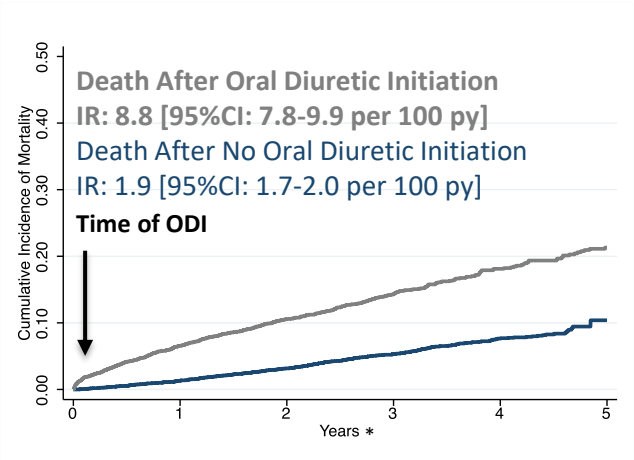
2,107 (21%) participants in FIDELTY Experienced New Oral Diuretic Initiation

Of 12,990 participants in FIDELITY:

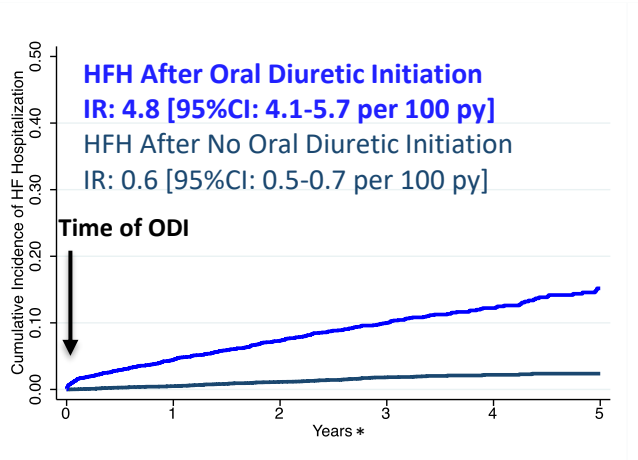


Prognosis After Oral Diuretic Initiation

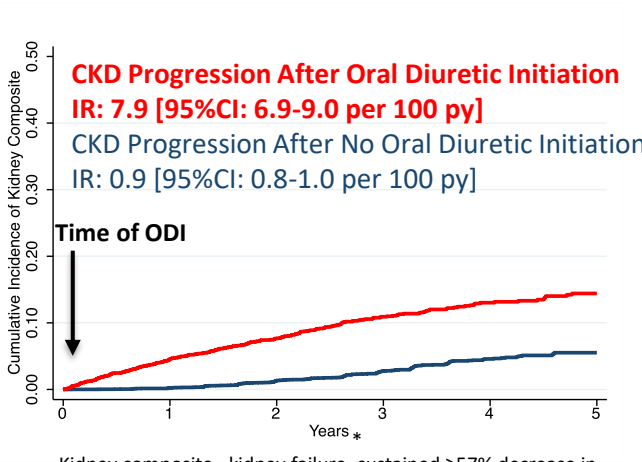
All Cause Mortality



HF Hospitalization



CKD Progression

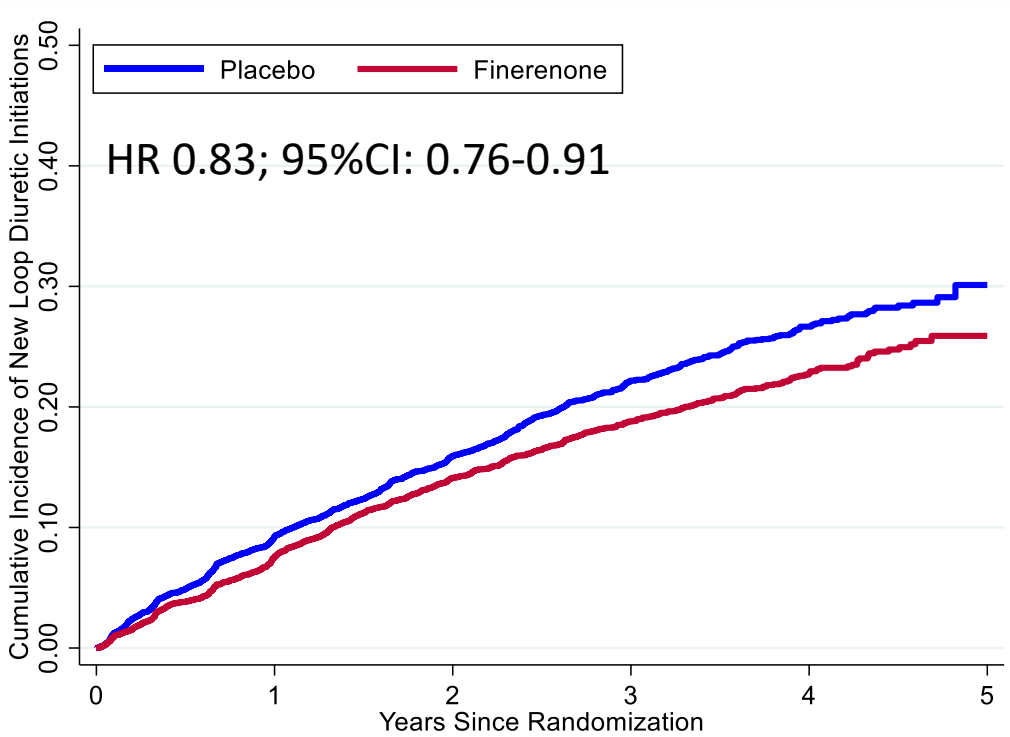


Kidney composite= kidney failure, sustained ≥57% decrease in eGFR over ≥4 weeks, or renal death

*Time scale for patients experiencing oral diuretic initiation (gray, blue, red lines) is time after oral diuretic initiation event and time scale for patients not experiencing oral diuretic initiation(navy line) is time from randomization.

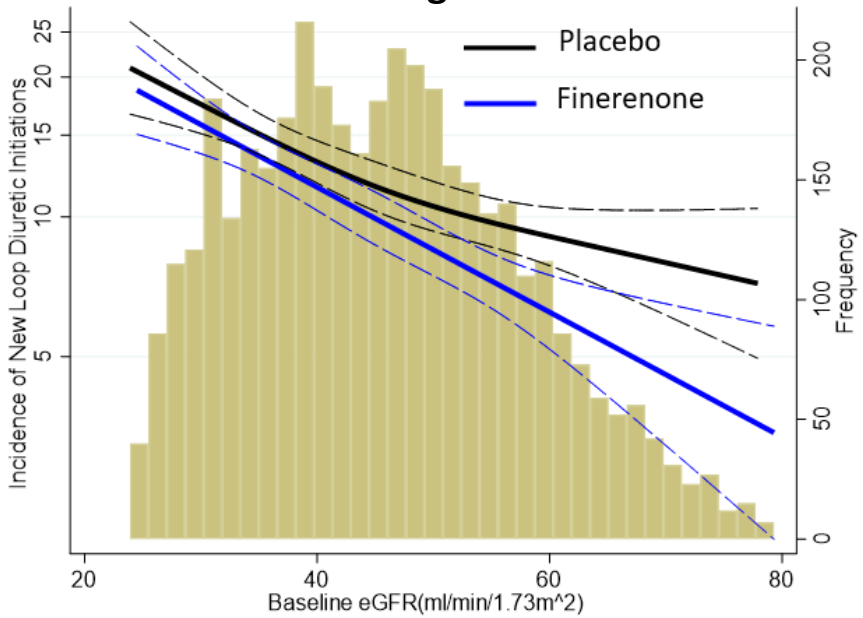
Treatment Effects of Finerenone on Oral Diuretic Initiation

Overall Treatment Effect on New Oral Diuretic Initiations

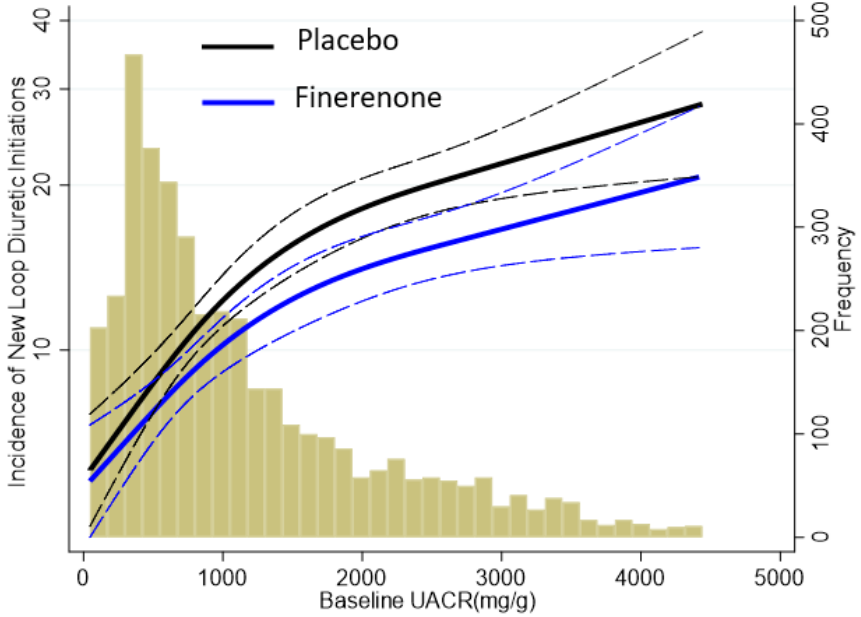


Incidence of Oral Diuretic Initiation By Treatment Assignment Across Baseline Kidney Function

A. Incidence of New Oral Diuretic Initiations According to Baseline eGFR

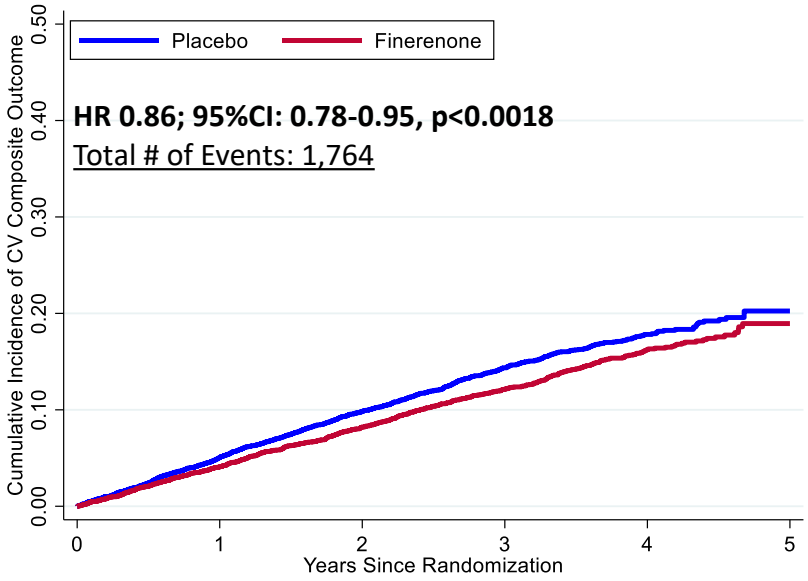


B. Incidence of New Oral Diuretic Initiations According to Baseline UACR

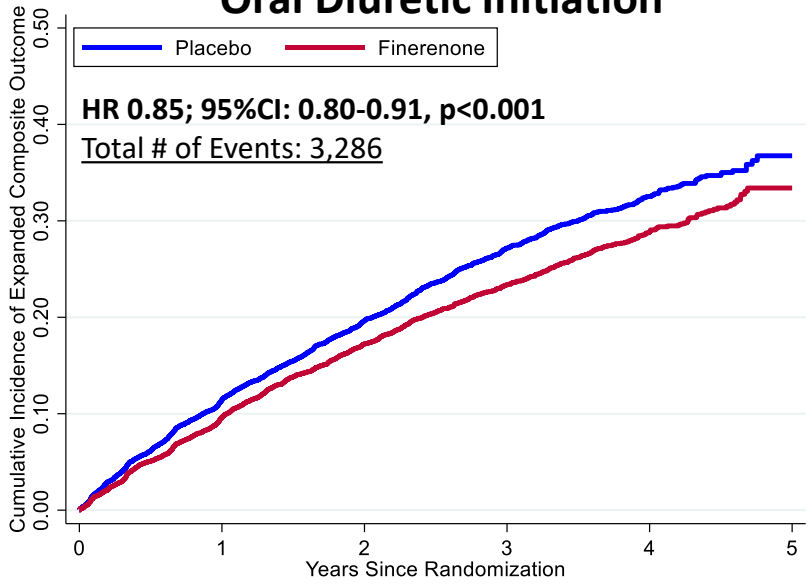


Treatment with Finerenone Reduced the Composite of CV Death, non-fatal MI, non-fatal stroke, HF Hospitalization or Outpatient Oral Diuretic Initiation

FIDELITY CV Composite Outcome



Expanded CV Composite Outcome Including Oral Diuretic Initiation



Addition of oral diuretic initiation to the primary composite outcome increased the number of events from 1,764 to 3,286 (86% increase) resulting in a 15% reduction in the expanded composite with finerenone.

Conclusions

- **New requirement for diuretic was frequent occurring in 1 in 5 patients** with type 2 diabetes and CKD and was **associated** with ↑**risk of subsequent mortality, HF hospitalization and CKD progression**
- **Treatment with finerenone significantly reduced** the need for new **oral diuretic initiation** across the spectrum of kidney function
- **Inclusion of outpatient oral diuretic initiation** in a broader composite CV endpoint **greatly increases the number of clinical events**.

Take Home Point: Oral diuretic initiation is a frequent, prognostically relevant and modifiable event assessed alone and as part of an expanded CV end point supporting its potential adaption in future clinical trials.