

Efficacy and safety of finerenone in patients with CKD and T2D across the frailty spectrum: A FIDELITY post hoc analysis

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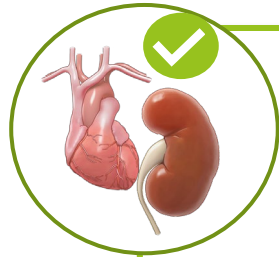
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Disclosures

- **Peter Rossing** reports personal fees from Bayer during the conduct of the study; he has received research support and personal fees from AstraZeneca and Novo Nordisk, and personal fees from Astellas, Boehringer Ingelheim, Eli Lilly, Gilead, Mundipharma, Sanofi and Vifor; all fees are given to Steno Diabetes Center Copenhagen

Frailty is associated with increased risk of adverse outcomes¹⁻³



Finerenone, a selective nonsteroidal MRA, **reduced the risk of adverse CV and kidney outcomes vs placebo in FIDELITY**, a prespecified pooled analysis of the phase III FIDELIO-DKD and FIGARO-DKD trials⁴⁻⁶

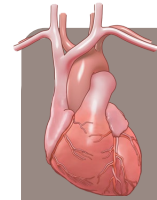


FIDELITY

12,990 patients with CKD and T2D on optimised RAS inhibitor and randomised 1:1 to finerenone or placebo⁴⁻⁶



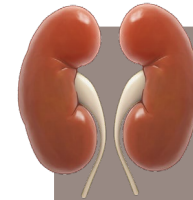
Objective: This FIDELITY post hoc analysis explored the efficacy and safety of finerenone in patients with CKD and T2D according to baseline frailty index



CV composite outcome

Time to first occurrence of:

- CV death
- Non-fatal MI
- Non-fatal stroke
- Hospitalisation for HF



Kidney composite outcome

Time to first occurrence of:

- Kidney failure
- Sustained $\geq 57\%$ decrease in eGFR from baseline*
- Kidney-related death



Other outcomes

Safety outcomes assessed treatment-emergent AEs

*Events based on a sustained decrease in eGFR are considered from randomisation up until 5 months after the last eGFR is recorded at a clinic visit

AE, adverse event; CKD, chronic kidney disease; CV, cardiovascular; eGFR, estimated glomerular filtration rate; HF, heart failure; MI, myocardial infarction; MRA, mineralocorticoid receptor antagonist; RAS, renin-angiotensin system; T2D, type 2 diabetes

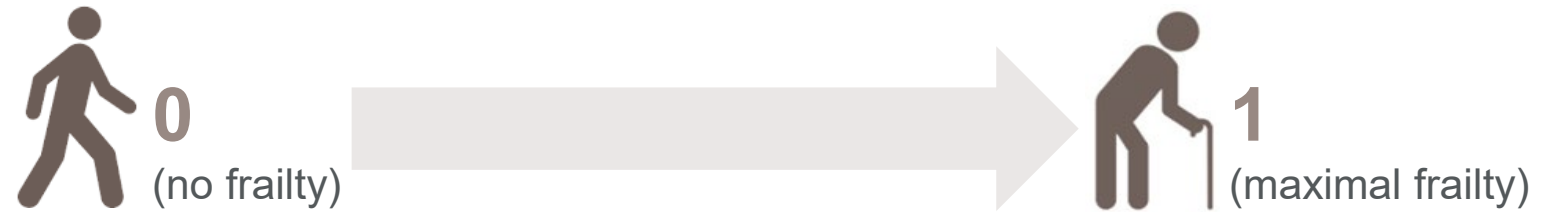
1. Hannan M, et al. *Am J Kidney Dis* 2023;83:208-215; 2. Mansur HN, et al. *Health Qual Life Outcomes* 2014;12:27; 3. Roshanravan B, et al. *Am J Kidney Dis* 2012;60:912-921;




4. Bakris GL, et al. *N Engl J Med* 2020;383:2219-2229; 5. Pitt B, et al. *N Engl J Med* 2021;385:2252-2263; 6. Agarwal R, et al. *Eur Heart J* 2022;43:474-484



Frailty was defined using the Rockwood cumulative deficit approach



30 characteristics

were used to construct the frailty index and assign a normalised frailty index score to each patient*



Laboratory parameters	
	UACR
	eGFR
	[K] ⁺
	Systolic blood pressure
	Diastolic blood pressure
	Pulse pressure
	HbA1c
	Haemoglobin
	C-reactive protein

Demographics	
	Diabetes duration
	BMI
	Age
	Gender
EQ-5D questionnaire	
	EQ-5D-5L (usual)
	EQ-5D-5L (mobility)
	EQ-5D-5L (pain)
	EQ-5D-5L (anxiety)
	EQ-5D-5L (selfcare)

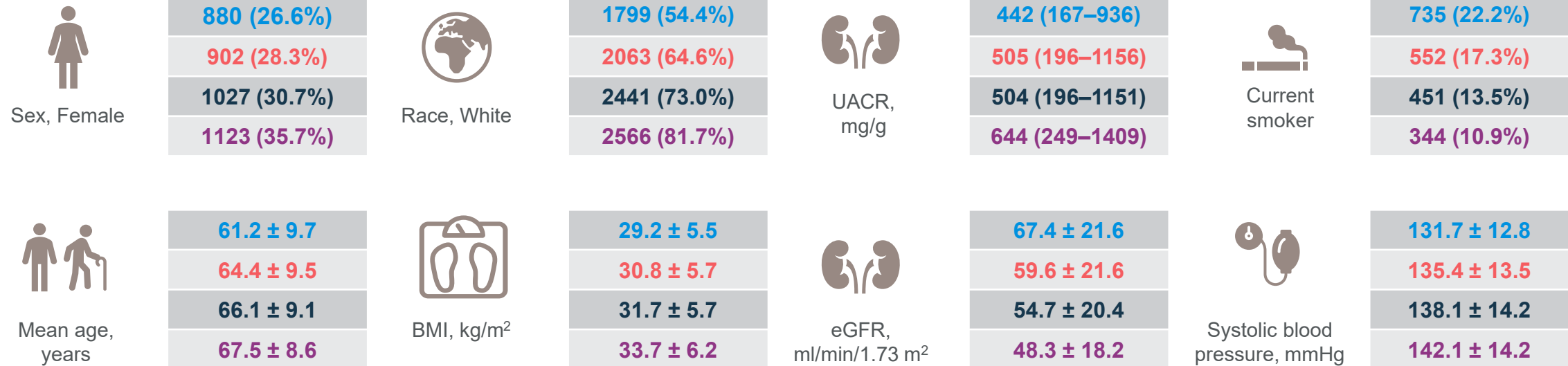
Medical history	
	HF
	MI
	Stroke
	CAD
	Atrial fibrillation/flutter
	Peripheral arterial occlusive disease
	PCI or CABG
	Hypertension
	Hyperlipidaemia
	Diabetic neuropathy
	COPD
	Retinopathy

*For each characteristic, patients were assigned a score between 0 and 1. The frailty index score was normalised by dividing the total score by the number of non-missing characteristics. Patients were categorised by frailty index quartiles ($\leq Q1$ [least frail], $>Q1$ to $\leq Q2$, $>Q2$ to $\leq Q3$, $>Q3$ [most frail])

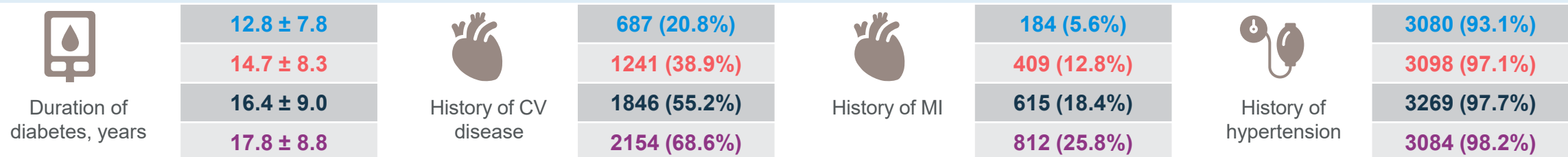
BMI, body mass index; CABG, coronary artery bypass graft; CAD, coronary artery disease; COPD, chronic obstructive pulmonary disease; eGFR, estimated glomerular filtration rate; EQ-5D, EuroQol-5 Dimension; HbA1c, glycated haemoglobin; HF, heart failure; [K]⁺, serum potassium concentration; MI, myocardial infarction; PCI, percutaneous coronary intervention; UACR, urine albumin-to-creatinine ratio

As severity of frailty increased, patients had older age, higher UACR and longer duration of diabetes, and lower eGFR at baseline

Frailty subgroup: $\leq Q1$ $>Q1$ to $\leq Q2$ $>Q2$ to $\leq Q3$ $>Q3$
 N=3310 N=3192 N=3346 N=3142



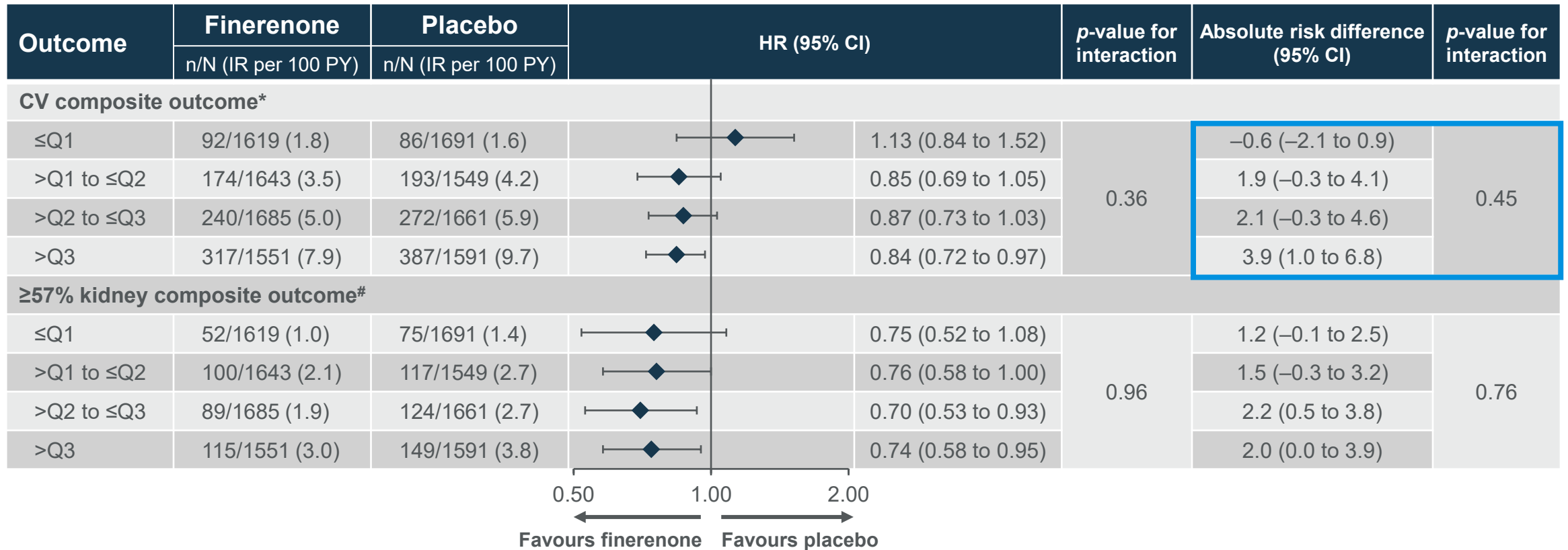
Medical History



Values are n (%), mean ± SD or median (IQR).

BMI, body mass index; CV, cardiovascular; eGFR, estimated glomerular filtration rate; IQR, interquartile range; MI, myocardial infarction; Q, quartile; SD, standard deviation; UACR, urine albumin-to-creatinine ratio

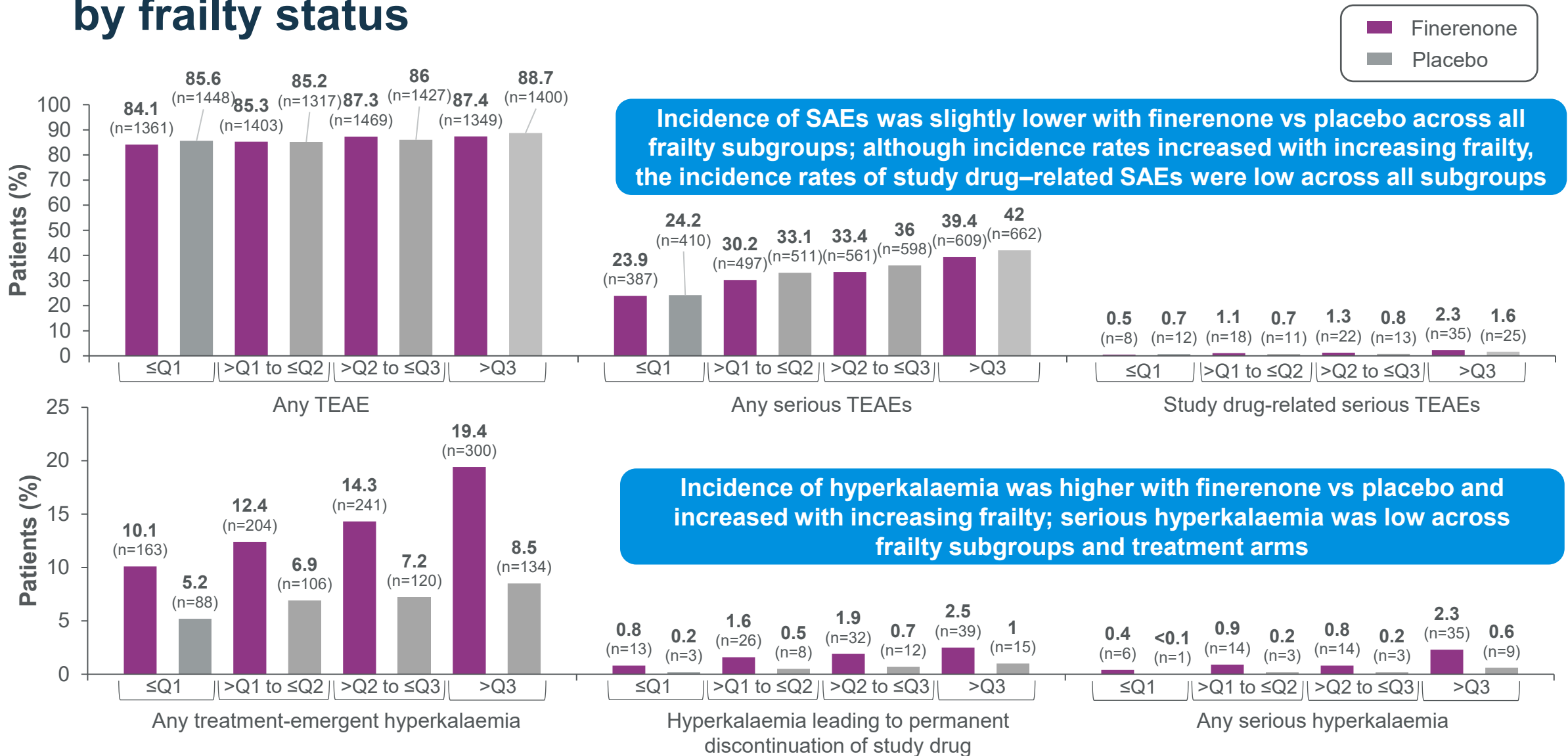
Finerenone lowered the risk of CV and kidney outcomes irrespective of frailty status



Absolute risk reduction of CV composite outcome with finerenone vs placebo was nominally higher in severely frail patients (p-value for interaction = 0.45)

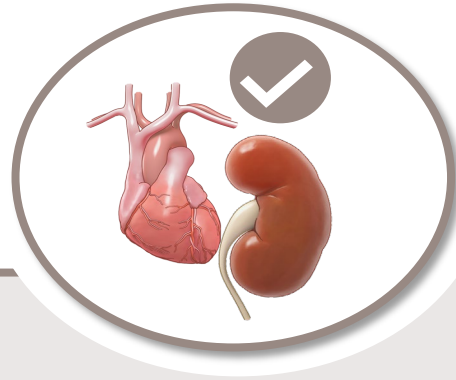
*Defined as a composite of CV death, non-fatal myocardial infarction, non-fatal stroke, or HHF; #defined as kidney failure, sustained ≥57% eGFR decline, or kidney-related death
 CI, confidence interval; CV, cardiovascular; eGFR, estimated glomerular filtration rate; HHF, hospitalisation for heart failure; HR, hazard ratio; IR, incidence rate; PY, person-years; Q, quartile

The safety profile of finerenone relative to placebo was not modified by frailty status



AE, adverse event; Q, quartile; SAE, serious adverse event; TEAE, treatment-emergent adverse event

Summary



Finerenone lowered the risk of CV and kidney outcomes in patients with CKD and T2D regardless of frailty status



Incidence rates of SAEs and hyperkalaemia increased with frailty index score



These data suggest finerenone is an effective and well-tolerated treatment option for people with CKD and T2D across the spectrum of frailty

Thank you

Executive committee

George L. Bakris* (co-chair); Gerasimos Filippatos (co-chair); Rajiv Agarwal; Stefan D. Anker; Bertram Pitt; Luis M. Ruilope

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*Our esteemed steering committee member, George Bakris, passed away in June 2024 and will be remembered for his passion for science and patient care.



FIDELITY

Fibrenone in chronic kidney disease and type 2 diabetes:
Combined FIDELIO-DKD and FIGARO-DKD Trial programme analysis

The FIDELIO-DKD and FIGARO-DKD teams would also like to thank all participating investigators, the centres, and the participants and their families

