Effect of Finerenone in With HFmrEF/HFpEF According to Frailty

A Prespecified Analysis of the FINEARTS-HF Trial

Jawad H. Butt, MD PhD;[1] Pardeep S. Jhund, MBChB MSc PhD;[1] Alasdair D. Henderson, PhD;[1] Brian L. Claggett, PhD;[2] Chern-En Chiang, MD PhD;[3] Gerard C.M. Linssen, MD PhD;[4] Clara I. Saldarriaga, MD;[5] Jose F.K. Saraiva, MD PhD;[6] Naoki Sato, MD PhD;[7] Morten Schou, MD DMSc;[8] Dirk von Lewinski, MD;[9] James Lay-Flurrie, MSc;[10] Andrea Scalise, MD;[11] Katja Rohwedder, MD;[12] Akshay S. Desai, MD MPH;[2] Carolyn S.P. Lam, MD PhD;[13] Michele Senni, MD;[14] Sanjiv J. Shah, MD;[15] Faiez Zannad, MD;[16] Bertram Pitt, MD;[17] Muthiah Vaduganathan, MD MPH;[2] Scott D. Solomon, MD;[2] John J.V. McMurray, MD[1]

[1]British Heart Foundation Cardiovascular Research Centre, University of Glasgow, Glasgow, United Kingdom; [2]Cardiovascular Division, Brigham and Women's Hospital, Harvard Medical School, Boston, Massachusetts, USA; [3]General Clinical Research Center and Division of Cardiology, Taipei Veterans General Hospital, and National Yang Ming Chiao Tung University, Taipei, Taiwan; [4]Department of Cardiology, Hospital Group Twente, Almelo, Netherlands; [5]Centro Cardiovascular Colombiano, Clínica Santa María, Medellin, Colombia; [6]Cardiovascular Division, Instituto de Pesquisa Clínica de Campinas, Campinas, Brazil; [7]Kawaguchi Cardiovascular and Respiratory Hospital, Saitama, Japan; [8]Department of Cardiology, Herlev-Gentofte University Hospital, Hellerup, Denmark; [9]Department of Internal Medicine, Division of Cardiology, Medical University of Graz, Graz, Austria; [10]Bayer, Research & Development, Pharmaceuticals, Reading, UK; [11]Bayer, Cardiology and Nephrology Clinical Development, Bayer Hispania S.L., Barcelona, Spain; [12]Bayer, Global Medical Affairs, Berlin, Germany; [13]National Heart Centre Singapore & Duke-National University of Singapore, Singapore; [14]University of Milano-Bicocca ASST Papa Giovanni XXIII Hospital, Bergamo, Italy; [15]Northwestern University Feinberg School of Medicine, Chicago, Illinois, United States; [16]University of Lorraine, Nancy, France; [17]University of Michigan, Ann Arbor, Michigan, United States.

Background

- Frailty and heart failure (HF) are two distinct, yet commonly associated conditions, and each increases the likelihood and complicates the course of the other
- Patients with frailty are often perceived to have a less favorable risk/benefit profile for novel therapies and, therefore, less likely to receive these

Purpose

- To examine the effects of the non-steroidal MRA finerenone, compared with placebo, according to frailty status, measured using the Rockwood cumulative deficit approach, in patients with HF and mildly reduced or preserved ejection fraction (HFmrEF/HFpEF)

Methods

FINEARTS-HF was a randomized, double-blind, controlled trial in patients with HFmrEF/HFpEF, evaluating the efficacy and safety of finerenone compared with placebo

- **Key inclusion criteria:** NYHA II-IV; LVEF ≥40%; evidence of structural heart disease; elevated natriuretic peptides
- **Key exclusion criteria:** eGFR <25ml/min/1.73m^2; potassium >5.0 mmol/L
- **Participants:** Frailty Index (FI) was calculable in 5,952 patients; FI class I (not frail, FI ≤0.210): 26.7%; FI class II (more frail, FI 0.211-0.310): 36.0%; FI class III (most frail, FI ≥0.311): 27.3%
- **Primary outcome:** Composite of cardiovascular death and total worsening HF events (HF hospitalization or urgent HF visit)

Results

Figure 1. Association between Frailty Index class and the risk of outcomes

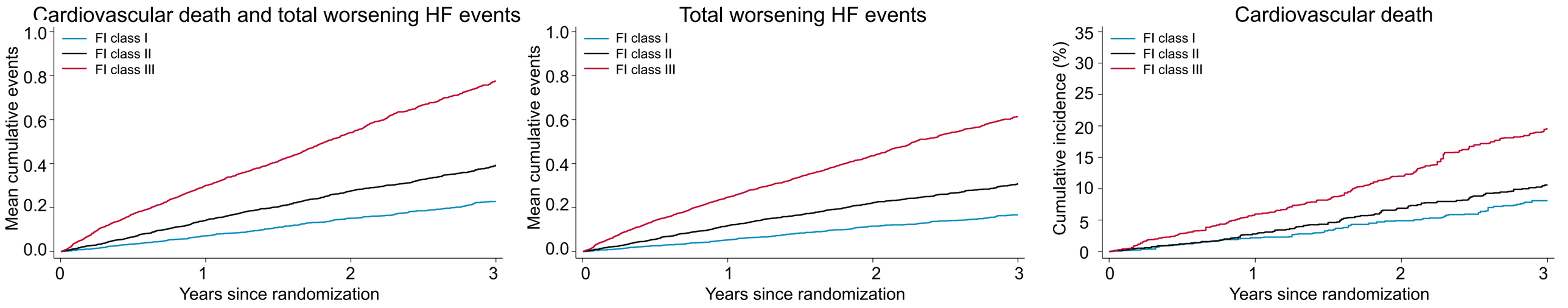
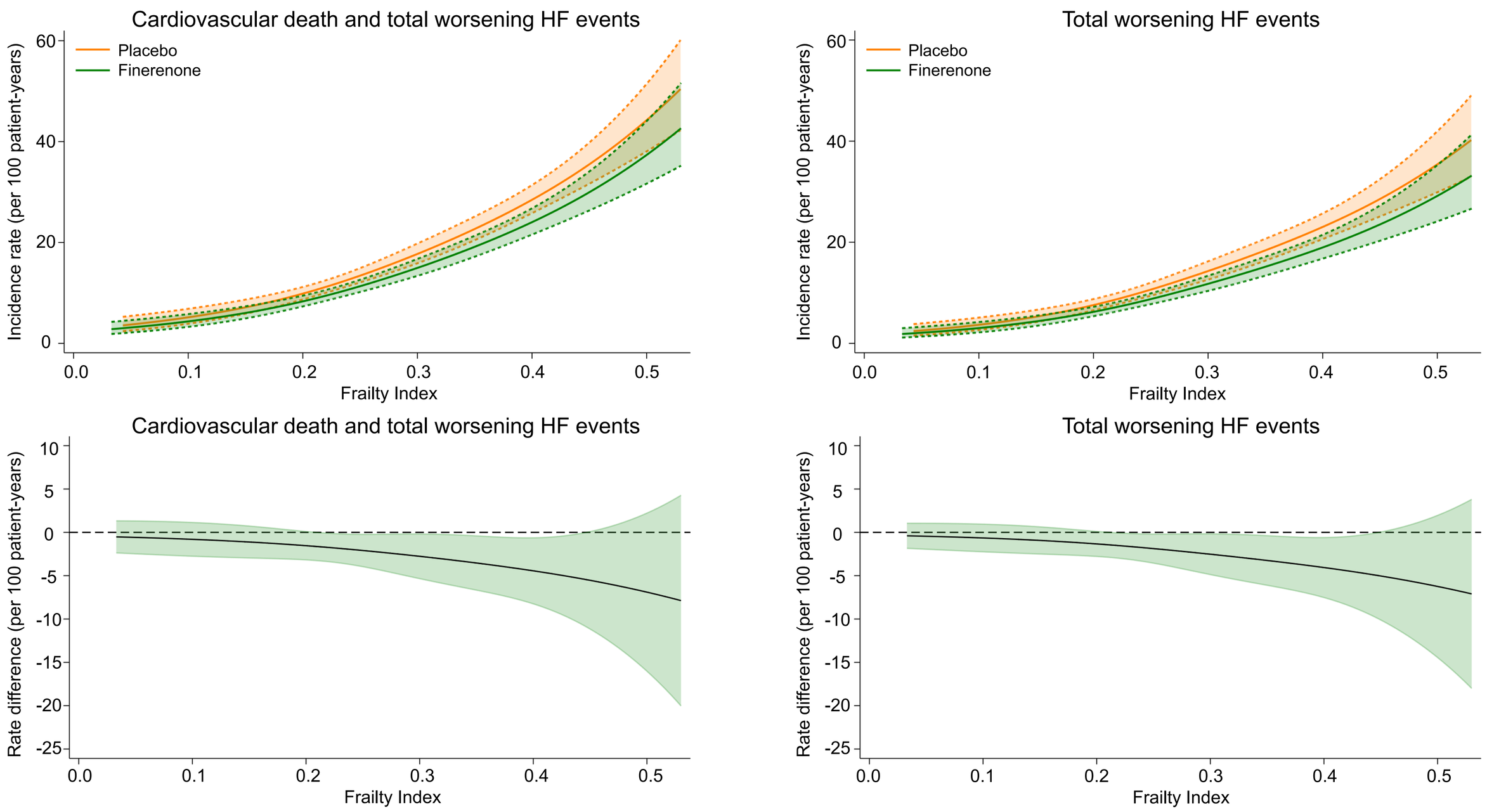


Figure 2. Effect of finerenone, compared with placebo, on clinical outcomes according to continuous Frailty Index



The upper panels show the association between Frailty Index and the incidence rate for the primary composite outcome and total worsening HF events. The lower panels show the absolute benefits of finerenone across the range of Frailty Index. The shaded area represents the 95% confidence interval.

Conclusions

In patients with HFmrEF/HFpEF enrolled in FINEARTS-HF, the beneficial effects of finerenone on clinical events and symptoms were observed across the range of frailty studied.