

Heart Failure with Preserved Ejection Fraction Management Current Literature Review



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Background

- Heart failure with preserved ejection fraction (HFpEF) affects about 6 million Americans and is expected to rise to 8 million by 2030¹
 - The preeminent guideline on heart failure is produced by the AHA/ACC/HFSA working group, with latest release in 2022², after a prior release in 2017
 - Understanding of the pathophysiology of HFpEF continues to evolve
 - HFpEF has many risk factors and associated conditions
 - HFpEF may be preceded by a long asymptomatic period of left ventricular diastolic dysfunction³
 - HFpEF has many “mimics”, complicating diagnosis

Objective

Review of recent publications regarding the management of heart failure with preserved ejection fraction, particularly those since the release of the previously current AHA/ACC/HFSA guidelines in 2017

Methods

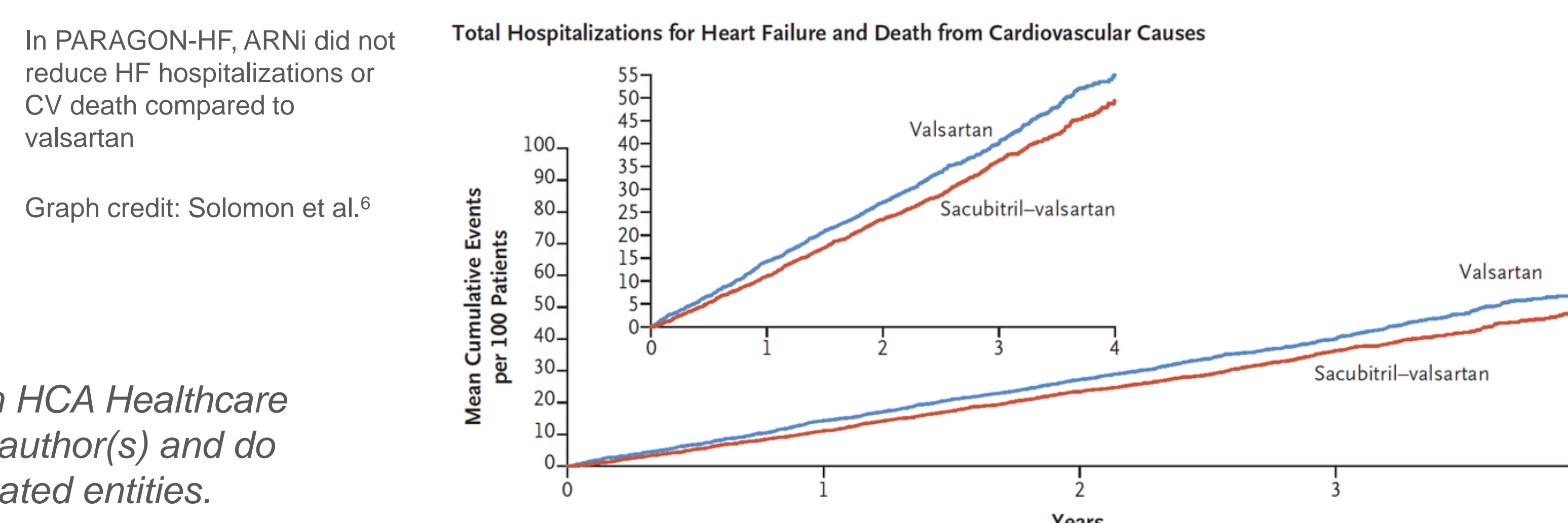
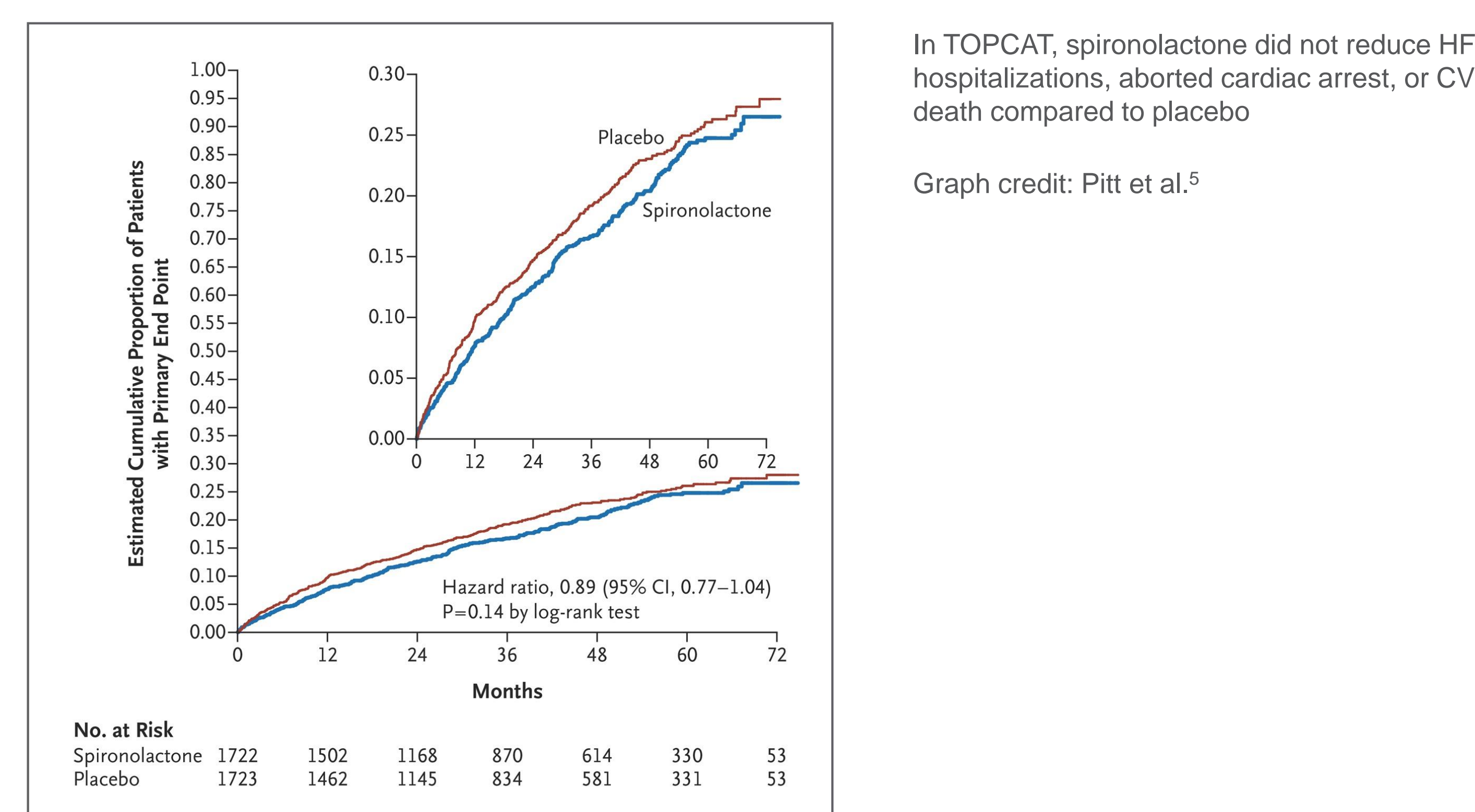
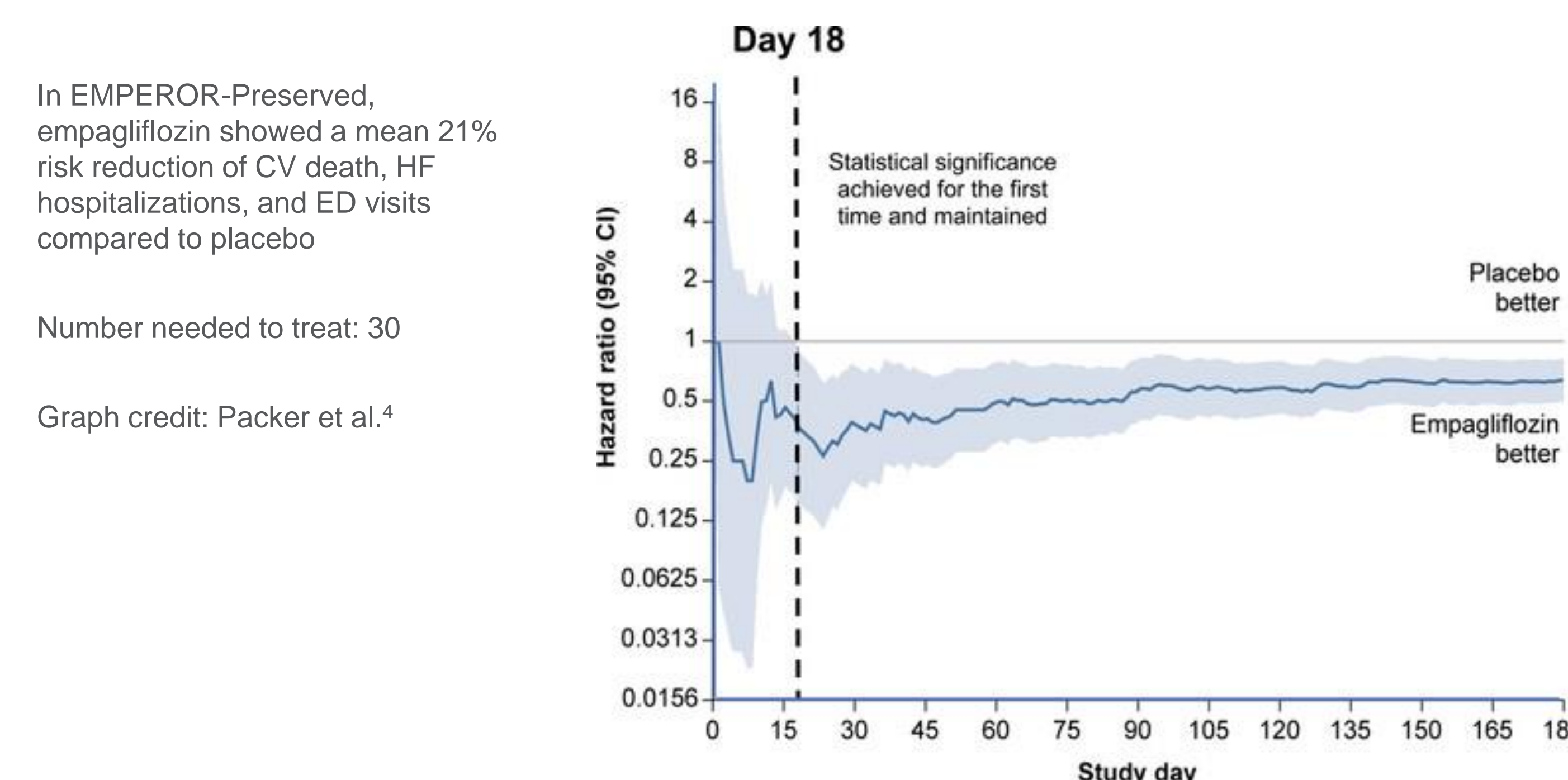
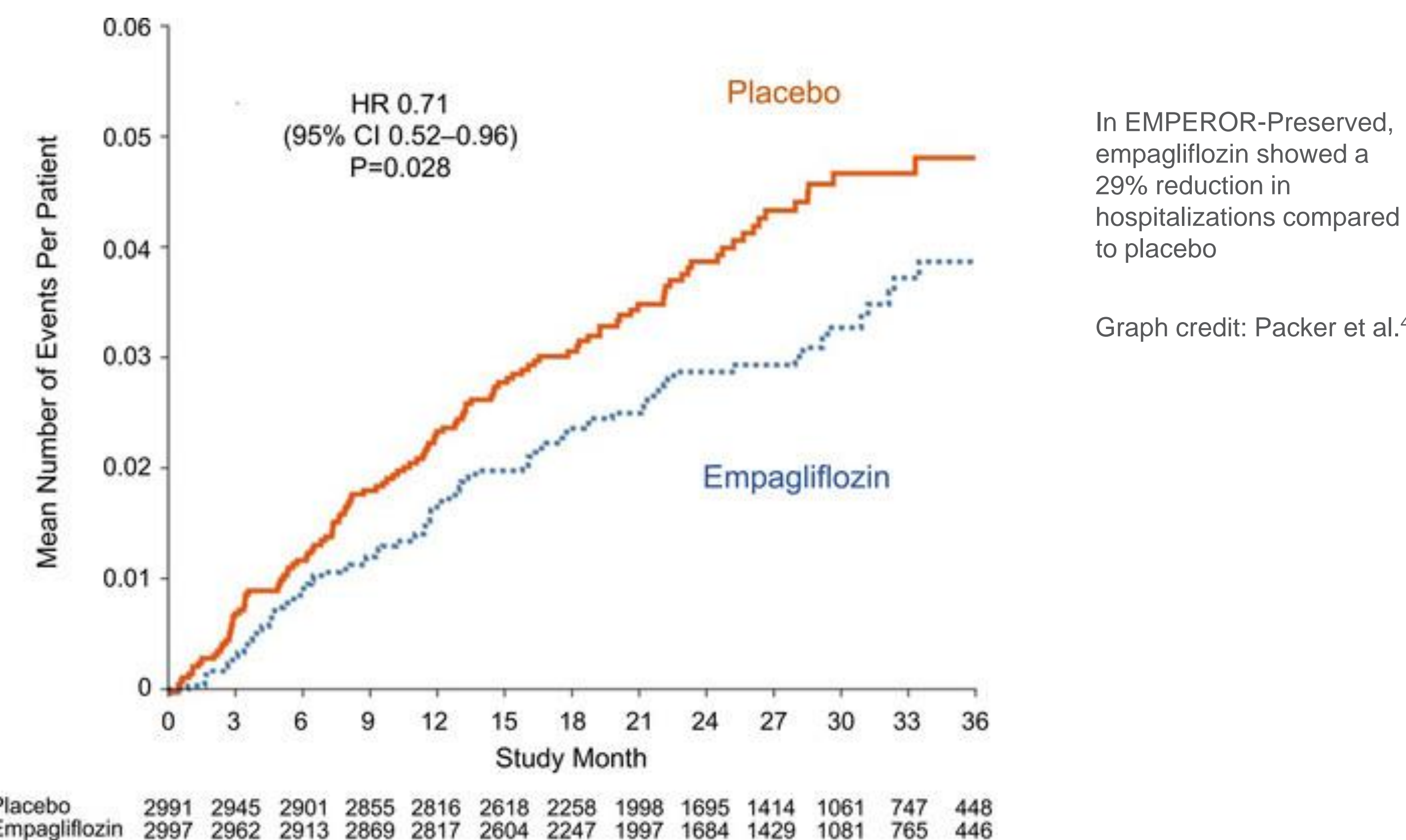
Literature search using PubMed was performed. References of the 2022 AHA/ACC/HFSA Heart Failure Guideline were reviewed.

Results

- New recommendations of the 2022 AHA/ACC/HFSA Heart Failure Guideline*
 - SGLT2 inhibitors (SGLT2i)
 - Class of recommendation 2a (LOE: B-R)
 - Primarily based off of EMPEROR-Preserved study that showed empagliflozin reduced combined risk of CV death, HF hospitalizations, and ED visits compared to placebo⁴
 - Mineralocorticoid receptor antagonists (MRA)
 - Class of recommendation 2b (LOE: B-R)
 - Primarily based off TOPCAT study that showed reduction in HF hospitalizations, and especially multiple hospitalizations, compared to placebo⁵
 - Angiotensin receptor/neprilysin inhibitors (ARNi)
 - Class of recommendation 2b (LOE: B-R)
 - Primarily based off PARAGON-HF study that showed ARNi did not decrease HF hospitalizations or CV mortality compared to valsartan, but trended enough to get FDA approval for HFpEF and HFmrEF⁶

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Results



Discussion

- Renewed recommendations of the 2022 AHA/ACC/HFSA Heart Failure Guideline*
 - Treatment of hypertension
 - Class of recommendation 1 (LOE: C-LD)
 - Of note, in the ALLHAT study, chlorthalidone reduced risk of HFpEF and HF hospitalizations compared to lisinopril, doxazosin, and amlodipine⁷
 - Treatment of atrial fibrillation
 - Class of recommendation 2a (LOE: C-EO)
 - Strict rate control should be avoided to avoid blunting chronotropic reserve⁸
 - Angiotensin II receptor blockers (ARB)
 - Class of recommendation 2b (LOE: B-R)
 - CHARM-Preserved showed candesartan slightly decreased hospitalizations compared to placebo⁹
 - Other class of recommendation 1
 - Diuretics, as needed (LOE: B-NR)
 - Mostly for improvement of symptoms, as in treatment of atrial fibrillation
 - Future direction
 - Application of HFpEF phenotypes in practice, cardiac rehab for HFpEF, telemedicine, devices
 - HFpEF therapies require frequent monitoring and optimization
 - HFpEF is often a multisystem disease that warrants treatment not only by an expert in heart failure but a multidisciplinary team

Conclusion

- Arguably the most notable change from the 2017 guideline to 2022 is for SGLT2i
 - DELIVER affirmed EMPEROR-Preserved showing reduction in CV death, HF hospitalizations, and ED visits compared to placebo¹⁰

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