

Global differences in heart failure with preserved ejection fraction: the paragon-hf trial

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Background: Heart failure with preserved ejection fraction (HFpEF) is a global public health problem with important regional differences. We investigated these differences in the PARAGON-HF trial, the largest, most inclusive global HFpEF trial.

Methods: We studied differences in clinical characteristics, outcomes and regional treatment effects of Sacubitril/Valsartan in 4796 patients with HFpEF from the PARAGON-HF trial, grouped according to geographic region.

Results: Regional differences in patient characteristics and comorbidities were observed (Figure 1): patients from Western Europe were oldest (75±7 years) with the highest prevalence of atrial fibrillation (36%); Central/Eastern European patients were youngest (71±8 years) with the highest prevalence of coronary artery disease (CAD, 49%); North American patients had the highest prevalence of obesity (64%) with metabolic syndrome; Latin American patients were youngest and had a high prevalence

of obesity (53%); Asia-Pacific patients had a high prevalence of diabetes (44%) despite low prevalence of obesity (26%). Rates of the primary composite endpoint of total hospitalizations for HF and death from cardiovascular causes was lowest in patients from Central Europe (9 per 100 patient years) and highest in patients from North America (28 per 100 patient years), which was primarily driven by a greater number of total hospitalizations for HF and independent of confounders. In the total population, sacubitril–valsartan did not result in a significantly lower rate of total hospitalizations for heart failure and death from cardiovascular causes with no significant heterogeneity in treatment response to sacubitril–valsartan across regions.

Conclusion: This first report on regional differences in the largest prospective global trial in HFpEF suggests substantial regional heterogeneity with respect to phenotype, outcomes and quality of life.

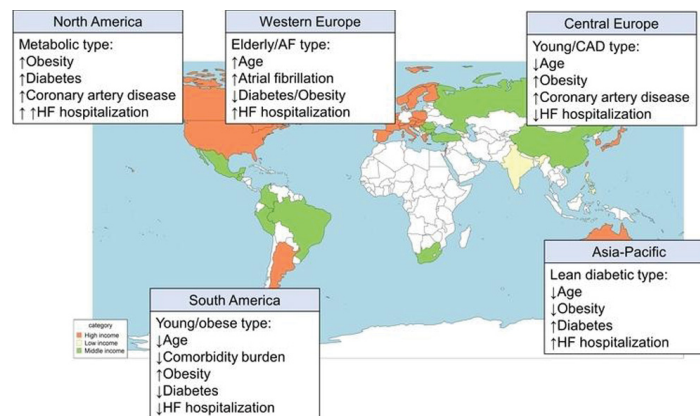


Figure 1