radcliffe cardiology

Title: HFA 24 Late-Breaker Discussion: The TITRATE-HF Study
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Dr Jasper Brugts

“So my name is Jasper Brugts, I'm a cardiologist from the Erasmus Medical Centre in the Netherlands, and I presented today a subgroup analysis of the MONITOR HF trial.

Importance of Subgroup Analysis

Subgroup analyses are important to study because we can search for certain subgroups with more or less clinical benefit from a certain technology so you can tailor therapy towards the patient most likely to benefit.

MONITOR HF Trial Overview

The MONITOR HF trial was a randomised clinical trial involving 3,048 patients. We selected patients with chronic heart failure, NYHA class III, and one previous heart failure hospitalisation, all on guideline-directed medical therapy (GDMT). These patients were randomised to standard of care or PA-guided therapy on top of standard of care. It was an open-label design, and we had a follow-up period of 1.8 years. The primary endpoint was all-cause mortality, and the secondary endpoint was cumulative heart failure hospitalisations during follow-up.

Subgroup Analysis

We conducted predefined subgroup analyses based on age, gender, ejection fraction, aetiology, atrial fibrillation, diabetes, and ICD therapy. Additionally, we explored subgroups for obesity, renal function, and NT-proBNP levels, assessing all subgroups across various clinically relevant endpoints. These endpoints included quality of life, heart failure hospitalisations, all-cause hospitalisations, and mortality, as well as the effect on mean pulmonary artery pressure to provide a comprehensive clinical overview.

Key Findings

We found an overall consistent treatment effect of PA-guided therapy in patients with chronic heart failure across all predefined and exploratory subgroups. This consistency was observed within the predefined endpoints and across various clinical endpoints. The benefits were consistent across quality of life, heart failure hospitalisations, and effects on mean pulmonary artery pressure.

Implications

These findings from the subgroup analysis reinforce the current data, showing consistent treatment effects across predefined and exploratory subgroups within and across various clinically relevant endpoints. We did not find any clinically relevant heterogeneity in the treatment effect, which is significant. We could not identify a subgroup with more or less clinical benefit from PA monitoring. The consistency within and across endpoints supports the wider implementation of this technology.

Next Steps

The next steps are to study the wider implementation of this technology in Europe, as it is not reimbursed at this moment. I believe more data will help assess the level of overall evidence for this technology and support its broader implementation throughout Europe."