



AMERICAN
COLLEGE of
CARDIOLOGY®

TAVR UNLOAD

Transcatheter Aortic Valve Replacement
to UNload the Left Ventricle in Patients
With ADvanced Heart Failure



JACC

OBJECTIVE

To determine whether TAVR for moderate aortic stenosis (AS) provides clinical benefit in patients with heart failure with reduced ejection fraction (HFrEF)

STUDY METHODS

TOTAL NO. OF PATIENTS: 178
(Average age 77 years; 20.8% women)

INCLUSION CRITERIA:
HFrEF with moderate AS, taking guideline-directed medical therapy (GDMT);
suitable for transfemoral TAVR with balloon-expandable valve

STUDY DESIGN:
Randomized 1:1 to TAVR or clinical aortic stenosis surveillance (CASS)
with aortic valve replacement on progression to severe AS



PRIMARY ENDPOINTS

NO SIGNIFICANT DIFFERENCE FOUND BETWEEN PREEMPTIVE TAVR AND CASS IN THE HIERARCHICAL OCCURRENCE OF ALL-CAUSE DEATH, DISABLING STROKE, DISEASE-RELATED HOSPITALIZATIONS AND HF EQUIVALENTS, AND CHANGE FROM BASELINE IN QUALITY OF LIFE (QOL) AT 23-MONTH MEDIAN FOLLOW-UP.

CLINICALLY MEANINGFUL IMPROVEMENTS IN QOL OBSERVED AT ONE YEAR WITH TAVR (60% VS. 35.2% WITH CASS).

CONCLUSION

TAVR was not superior to CASS for the primary hierarchical composite endpoint in patients with moderate AS and HFrEF on GDMT. Preemptive TAVR for moderate AS was safe and may provide clinically meaningful QOL benefits.