



JACC

Current Issue

Just Accepted

Archives

Submit

JACC Journals > JACC > Archives > Vol. 87 No. 13_Supplement

GET ACCESS Poster Contributions 27 March 2026

26-A-21331-ACC CARDIAC REHABILITATION AND SURVIVAL OUTCOMES IN HEART FAILURE: EVIDENCE FROM LONG-TERM MORTALITY TRINETX DATA

Authors: Khaled Ali, Omar Mohamed Kamel, Ali Dway, Abdelrahman El Helbawy, Fouad Hanna, Amir Bastawisy, and Hady Atef | [AUTHORS INFO & AFFILIATIONS](#)

Publication: JACC Volume 87, Number 13_Supplement



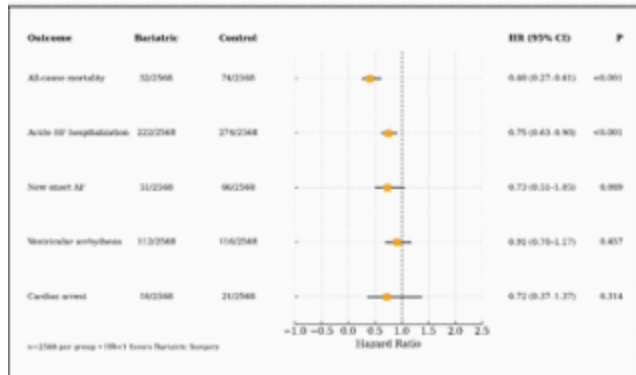
GET ACCESS



All-cause mortality and cardiovascular outcomes were evaluated using Cox regression models and Kaplan-Meier analyses.

RESULTS Of 26,345 patients, 2,568 in each cohort were well matched (mean age: 53 years, 74% female, BMI: 41.0 kg/m²). Over a follow-up period of 12 months, BS was associated with significantly reduced all-cause mortality (1.2% vs. 2.9%; HR = 0.40; 95% CI: 0.27 to 0.61, p < 0.001), and acute HF hospitalization (8.6% vs. 10.7%; HR = 0.75; 95% CI: 0.63 to 0.90, p < 0.001). Rates of arrhythmias and cardiac arrest were similar between both groups.

CONCLUSION In obese patients with HCM, BS was associated with lower mortality, and fewer HF hospitalizations, supporting its role in risk modification for this population.



POSTER CONTRIBUTIONS

**26-A-21331-ACC
CARDIAC REHABILITATION AND SURVIVAL OUTCOMES
IN HEART FAILURE: EVIDENCE FROM LONG-TERM
MORTALITY TRINETX DATA**



Khaled Ali, Omar Mohamed Kamel, Ali Dway, Abdelrahman El Helbawy, Fouad Hanna, Amir Bastawisy, Hady Atef Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA, NOVA | Network for Cardiothoracic & Vascular Advancement, Cairo, Egypt

BACKGROUND Exercise-based cardiac rehabilitation (CR) has been shown to be useful in the treatment of heart failure (HF), but there is a paucity of real-world evidence of efficacy.

METHODS The TriNetX research network was used for this study. Two equal cohorts of total 7,666 patients after matching, all with heart failure and a Left Ventricular Ejection Fraction (LVEF) <40%. In Cohort 1, patients received cardiac rehabilitation, while In Cohort 2, patients had no record of it. Diagnostic outcomes assessed were mortality incidence, incidence of left bundle branch block, and arrhythmia. Laboratory and vital outcomes included changes in LVEF, BNP levels, systolic and diastolic blood pressure, heart rate, and QT interval.

RESULTS Cardiac rehabilitation was associated with a lower risk of all-cause mortality (Hazard Ratio=0.184, 95%CI (0.158-0.213), p<0.001), better results in terms of left ventricular ejection fraction (Mean Difference=+15.47%, p<0.001), Pro-BNP (MD= -5439.29 pg/ mL, p<0.001), heart rate (MD= -4.11 bpm, p<0.001), and QT interval (MD= -16.03 ms, p<0.001), reduced risk of left bundle branch block (RD= -0.018, p=0.036), higher systolic (MD=+6.41 mmHg, p<0.001) and diastolic (MD=+2.63 mmHg, p<0.001) blood pressure. There was no significant difference in the risk of arrhythmia between the cohorts (RD=0.011, p=0.073).

CONCLUSION Cardiac rehabilitation was associated with lower risk of mortality and significant improvements in cardiac function in patients with heart failure and reduced ejection fraction.

MODERATED POSTER CONTRIBUTIONS

**26-A-21340-ACC
EFFECTIVENESS OF SODIUM-GLUCOSE
COTRANSPORTER-2 INHIBITORS AMONG OLDER
PATIENTS HOSPITALIZED WITH HEART FAILURE WITH
MILDLY REDUCED OR PRESERVED EJECTION
FRACTION**



Adhivithi Pingili, Nicole Solomon, Stephen Greene, Karen E. Chiswell, Erika Feller, Gregg C. Fonarow, Nicholas Keisuke Brownell University of Kansas Medical Center, Kansas City, KS, USA

BACKGROUND Sodium-glucose cotransporter-2 inhibitors (SGLT2i) are a key treatment for heart failure with mildly reduced ejection fraction (HFmrEF) and heart failure with preserved ejection fraction (HFpEF). This study evaluated effectiveness of SGLT2i in reducing mortality and rehospitalization among older patients discharged alive after HF hospitalization.

METHODS We analyzed Medicare beneficiaries hospitalized for HF with EF >40% in the Get With The Guidelines-Heart Failure registry between July 2021-June 2024, comparing those newly prescribed an SGLT2i at discharge with those who were not. Covariate-adjusted associations between SGLT2i and outcomes were assessed with propensity-score overlap weighted Cox regression.

RESULTS We studied 27,941 patients eligible for SGLT2i initiation across 268 hospitals. Overall 16,894 (60.5%) were female and median age was 82.0 years (Q1-Q3, 75-88). There were 2,420 (8.7%) newly prescribed and 25,521 (91.3%) not prescribed SGLT2i at discharge. In adjusted models, patients discharged with SGLT2i had better outcomes at 1 year including all-cause mortality (aHR, 0.86; 95% CI, 0.77-0.95; p 0.0026), all-cause readmission (aHR, 0.88; 95% CI, 0.83-0.93; p <0.0001) and HF readmission (aHR, 0.83; 95% CI, 0.75-0.91; p 0.0002).

CONCLUSION In this large contemporary cohort of older US patients hospitalized for HFmrEF and HFpEF, SGLT2i prescription at discharge was associated with reduced all-cause mortality, all-cause readmissions and HF readmissions.

Table 1: Association of discharge SGLT2i prescription with 12-month clinical outcomes

| Outcome | Cumulative Incidence | | Unadjusted | | Propensity Weighted | |
|-----------------------------------|-----------------------|---------------------------|-----------------------|---------|-----------------------|---------|
| | Prescribed (N=14,036) | Not Prescribed (N=13,905) | Hazard Ratio (95% CI) | P-Value | Hazard Ratio (95% CI) | P-Value |
| All-cause mortality | 25.2 | 32.9 | 0.71 (0.65, 0.79) | <0.0001 | 0.86 (0.77, 0.95) | 0.0026 |
| All-cause readmission | 59.1 | 63.6 | 0.85 (0.80, 0.89) | <0.0001 | 0.88 (0.83, 0.93) | <0.0001 |
| HF readmission | 22.0 | 26.4 | 0.76 (0.69, 0.84) | <0.0001 | 0.83 (0.75, 0.91) | 0.0002 |
| HF readmission or death | 39.0 | 49.0 | 0.72 (0.67, 0.78) | <0.0001 | 0.82 (0.76, 0.89) | <0.0001 |
| Hospitalization for ketoacidosis | 0.1 | 0.1 | 0.92 (0.21, 3.98) | 0.9103 | - | - |
| Hospitalization for AKI | 5.3 | 4.8 | 1.05 (0.87, 1.28) | 0.6145 | 0.95 (0.78, 1.16) | 0.6159 |
| Hospitalization for dialysis/ESKD | 0.9 | 2.0 | 0.45 (0.28, 0.72) | 0.0008 | 0.53 (0.34, 0.85) | 0.0086 |

* Effective sample size after propensity-score overlap weighting

POSTER CONTRIBUTIONS

**26-A-21504-ACC
PERCUTANEOUS INTERATRIAL SHUNT DEVICES FOR
LEFT ATRIAL DECOMPRESSION IN HFPEF AND
HFMR EF: A SHAM-CONTROLLED META-ANALYSIS OF
RANDOMIZED TRIALS ON HEMODYNAMIC,
FUNCTIONAL, AND CLINICAL OUTCOMES**



Abram S. Younan, Muhammad Minisy, Ahmed Hammad, Ahmed Abdelaziz, Hisham Mousa, Doaa Massoud, Moustafa Elnewishy Cairo University, Cairo, Egypt

BACKGROUND Interatrial shunt devices (IASDs) have been proposed to lower left atrial pressure and improve outcomes in patients with heart failure with preserved ejection fraction (HFpEF). While early

Get full access to this article

View all available purchase options and get full access to this article.

 GET ACCESS

IF YOU HAVE ACC MEMBER/SUBSCRIPTION ACCESS TO THIS CONTENT, PLEASE [SIGN IN](#)

Advertisement

[View full text](#) | [Download PDF](#)

Advertisement

JACC

[Home](#)

[Current Issue](#)

[Just Accepted](#)

[Archives](#)

[About](#)

[Editor-in-Chief Biography](#)

[Editorial Board](#)



American College of Cardiology

Heart House

2400 N St. NW

Washington, DC 20037

Contact ACC Member Care

Phone: 1-202-375-6000

Toll Free: 1-800-253-4636

Fax: 1-202-375-6819

About the Journals

The Journal of the American College of Cardiology (JACC) stands as a leading global resource for impactful cardiovascular research, delivering essential peer-reviewed articles and crucial clinical practice guidelines. Gain access to authoritative medical content and vital CME resources designed to advance cardiovascular medicine and improve heart patient outcomes.

[Read More About JACC](#)

Stay Connected

[Email Alerts](#)

[Events](#)

[Contact Us](#)

[Social Media](#)

[Subscribe](#)

ACC Digital Family

[ACC](#)

[Annual Scientific Session](#)

[NCDR](#)

[ACC Accreditation Services](#)

[Cardiosmart](#)

[MedAxiom](#)

[Privacy Policy](#) | [Registered User Agreement](#) | [Terms of Service](#) | [Cookie Policy](#) | [Media](#)



© 2025 American College of Cardiology Foundation. All rights reserved.