

# Cardiology Literature Roundup

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## February 4, 2026 Morning Brief

Prepared for Dr. Peter Bleszynski, MD, FACC, FSCAI

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### STRUCTURAL HEART

#### 1. NAVULTRA Registry: Navitor vs SAPIEN 3 Ultra in Small Annuli

**Source:** EuroIntervention, February 2, 2026

**Summary:** Multicenter real-world registry comparing outcomes between the self-expanding Navitor valve and balloon-expandable SAPIEN 3 Ultra in patients with small aortic annuli.

##### **Key Findings:**

- Head-to-head comparison in challenging small annulus anatomy
- Real-world data applicable to clinical practice
- Provides guidance for device selection in smaller patients

**Clinical Relevance:** Directly applicable to your TAVR program when planning cases in patients with smaller annuli.

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#### 2. DurAVR Biomimetic THV: 30-Day Outcomes in Small Annuli

**Source:** Recent publication, February 2026

**Summary:** Novel leaflet design biomimetic transcatheter heart valve demonstrating promising early results in small aortic annuli.

##### **Key Findings:**

- High technical success rates
- Favorable hemodynamic outcomes at 30 days
- Novel biomimetic approach to valve design

**Clinical Relevance:** Emerging technology to watch — another potential tool in the pipeline for challenging small annulus cases.

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### 3. Residual Mean Gradient After TAVR Predicts Long-Term Outcomes

**Authors:** Palmerini et al.

**Source:** February 2026

**Summary:** Analysis of post-procedural residual mean pressure gradients and their association with structural valve deterioration and mortality.

#### Key Findings:

- Early residual MPG independently predicts structural valve deterioration
- Associated with bioprosthetic valve failure (BVF)
- Linked to increased 10-year mortality

**Clinical Takeaway:** Don't ignore post-procedural gradients. Careful attention to hemodynamic results at time of implant may have long-term implications.

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## INTERVENTIONAL

### 4. 3D ICE in Structural Interventions: Expert Review

**Source:** EuroIntervention, February 4, 2026

**Summary:** Comprehensive expert review on the use of 3-dimensional intracardiac echocardiography for guiding structural heart procedures.

#### Applications Covered:

- TAVR guidance
- Left atrial appendage occlusion (LAAO)
- PFO/ASD closures
- Other structural interventions

**Clinical Relevance:** Worth reading if you're considering expanding ICE use in your practice — offers high-resolution imaging without the need for TEE and general anesthesia.

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### 5. Leadless vs. Transvenous Pacemakers Post-Valve Surgery

**Type:** Systematic Review and Meta-Analysis

**Summary:** With growing rates of permanent pacemaker implantation after TAVR and valve surgery, this analysis compares outcomes between leadless pacemakers (Micra) and conventional transvenous pacing.

**Clinical Relevance:** Useful for post-procedure decision-making when patients require permanent pacing after structural interventions.

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## **QUICK HITS**

### **M-TEER + GDMT Superiority Confirmed**

Updated meta-analysis confirms that mitral transcatheter edge-to-edge repair (M-TEER) combined with guideline-directed medical therapy reduces death and heart failure hospitalization at 24 months compared to GDMT alone in functional MR.

### **AF Common After PFO Closure**

Implantable cardiac monitor study found high incidence of asymptomatic paroxysmal atrial fibrillation following PFO closure, with significant late-onset events occurring beyond 30 days post-procedure. Implications for monitoring strategy.

### **Exercise-Based Cardiac Rehab Benefits TAVR Patients**

RCT meta-analysis supports functional benefit of exercise-based cardiac rehabilitation after TAVR, even in patients with successful aortic stenosis correction.

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## **Summary**

This week's literature continues to advance our understanding of:

1. **Device selection** in challenging anatomies (small annuli)
  2. **Procedural optimization** (residual gradients matter)
  3. **Imaging advances** (3D ICE expanding indications)
  4. **Post-procedure management** (pacing strategies, rehab, AF monitoring)
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\*Compiled by Vienna | February 4, 2026\*