

Palm Beach Gardens Medical Center: Award-Winning Cardiac Care



PALM BEACH
HEALTH NETWORK

PALM BEACH GARDENS
MEDICAL CENTER

Dr. Nishant Patel, Cardiothoracic Surgeon

- **Board Certifications**

- Diplomat American Board of Thoracic Surgery
- Diplomat American Board of Surgery

- **Education**

- Medical School: Johns Hopkins University School of Medicine
- Johns Hopkins Hospital, Department of Surgery – General Surgery
- Johns Hopkins Hospital, Department of Surgery – Chief Resident
- Johns Hopkins Hospital, Divisions of Cardiac and Thoracic Surgery – Resident
- Johns Hopkins Hospital, Divisions of Cardiac and Thoracic Surgery – Chief Resident

- **ECMO Medical Director for the Palm Beach Health Network**



Comprehensive Cardiovascular Care

Palm Beach Gardens Medical Center Offers a Comprehensive Cardiovascular Program To Support Patients From Diagnosis Through Recovery

2 Dedicated Cardiac Operating Rooms + 1 Hybrid Operating Room

3 Cardiac Catheterization Labs

2 Electrophysiology Labs

Cardiac Trained Anesthesiologists

Cardiac Trained Intensivist

Cardiovascular Intensive Care Unit with 12 Beds

Diagnostic Imaging, including 256 Slice CT Scanner and Cardiac MRI

Dedicated Cardiovascular Patient Navigator

Inpatient and Outpatient Cardiac Rehabilitation



Dr. Jeff Newman
Cardiothoracic Medical Director



Dr. Nishant Patel
ECMO Medical Director



Dr. Melissa Levack

Leading the Way in Heart Care

- **First in the Region:** First to Perform Open-Heart Surgery in Palm Beach County (1983), With 20,000+ Procedures Completed Since.
- **Award-Winning Excellence:** Consistently Recognized for Clinical Quality and Superior Outcomes in Cardiac Surgery and Coronary Intervention.
- **Multidisciplinary Clinical Team:** Home to a Team of Cardiologists, Cardiothoracic Surgeons, Specialized Nursing Staff, and Support Teams Dedicated to Personalized Cardiovascular Care.
- **First-To-Market Technology:** First in South Florida to Offer Impella RP Flex; Early Adopter of ECMO and Minimally Invasive Valve Surgery.
- **Advanced Programs:** Specialized Bloodless Cardiac Surgery and ERAS Programs.
- **Cardiac Milestones:** 1,000+ TAVR Procedures, 500+ LAAO Procedures, 200+ Minimally Invasive Valve Surgeries

Palm Beach Gardens Medical Center – Where Excellence is the Standard

- The **ONLY** Hospital In Northern Palm Beach County to Be Named Among the **Top 50 Hospitals in the United States for Cardiac Surgery**
- Achieved Numerous Accolades For Cardiac Excellence From Healthgrades:
 - **Cardiac Surgery Excellence Award**
 - **Five-Star Recipient for Valve Surgery**
 - **Five-Star Recipient for Treatment of Heart Failure**
- Named a **Comprehensive Florida Resuscitation Center of Excellence (FRCE)** – a Designation That Highlights Our Commitment to Delivering Exceptional Outcomes in Cardiac Arrest Care



Society of Thoracic Surgeons (STS) Star Ratings

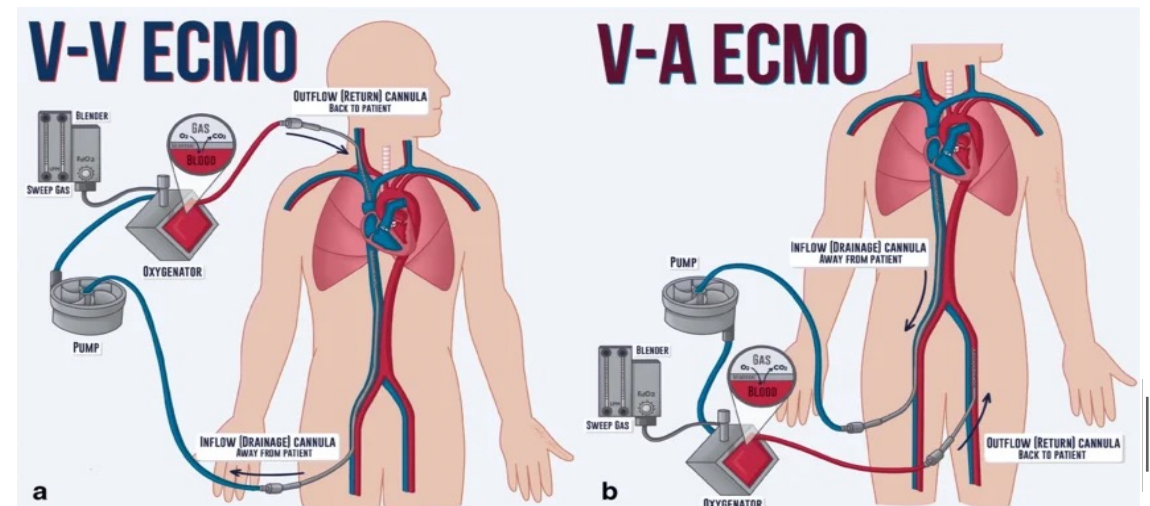
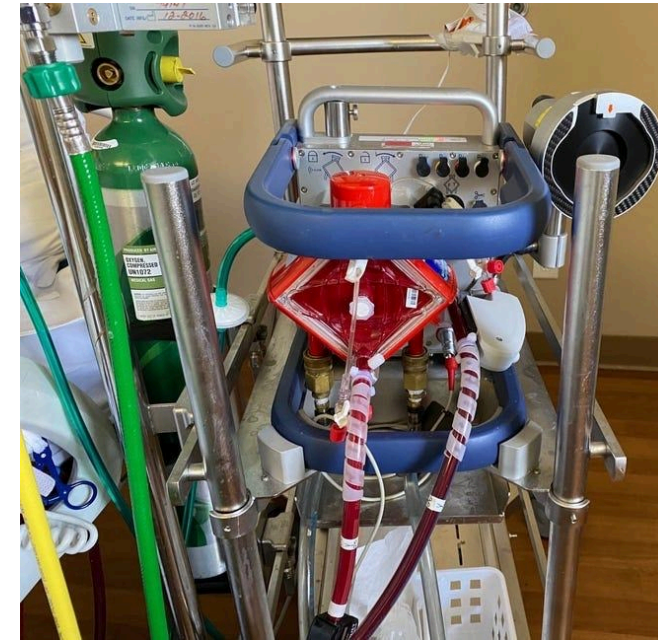
- Palm Beach Gardens Medical Center earned a distinguished **three-star rating – the top rating** – from STS for its patient care and outcomes in **isolated coronary artery bypass (CABG)** procedures and for the **Multiprocedural Composite Quality Rating**
- The STS rating system is one of the most sophisticated and highly regarded overall measures of quality in health care, rating the benchmarked outcomes of cardiothoracic surgery programs across the United States and Canada
- The STS 3-star rating reflects superior performance in risk-adjusted outcomes, surgical quality and patient safety over a 3-year period
- Only ~15 - 20% of programs achieve 3 stars for isolated CABG
- The **Multiprocedural Composite Quality Rating** evaluates the full range of cardiac surgeries for mortality and morbidity; 3 stars represents the top ~10 – 15% of programs



**The Society
of Thoracic
Surgeons**

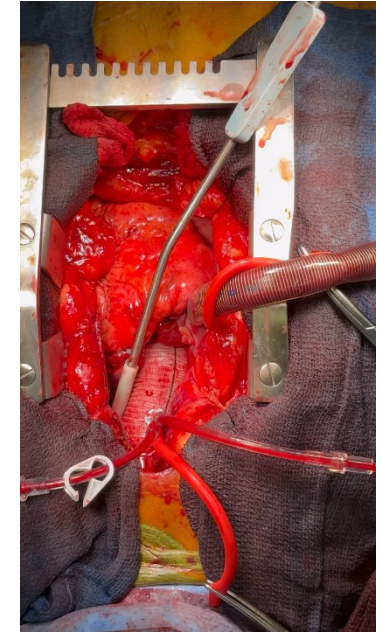
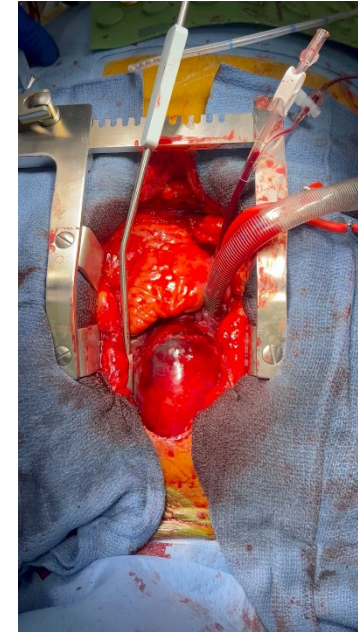
Extracorporeal Membrane Oxygenation (ECMO)

- PBGMC initiated its ECMO program in 2021 during the height of COVID
- **Extracorporeal Membrane Oxygenation (ECMO)** is a sophisticated, short-to-medium-term life machine that takes over heart and lung function for patients with critical, reversible organ failure
- **Veno-venous (VV) ECMO** which support only the lungs and **venous-arterial (VA) ECMO** which supports both the heart and the lungs
- Shock Team:
 - Cardiac Surgeon
 - Interventional Cardiologists
 - Cardiac Intensivist
 - Specialized Perfusionists
 - ECMO Coordinator



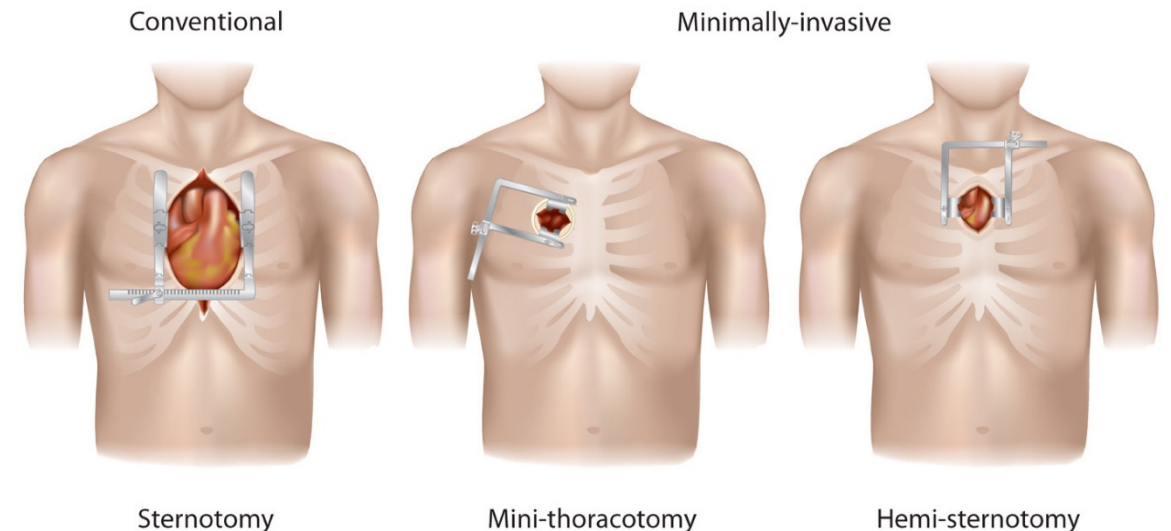
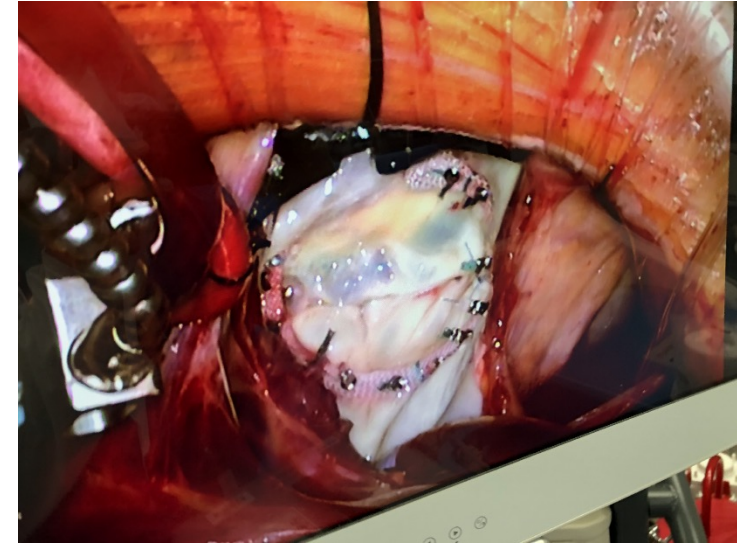
Ascending Aortic Aneurysm (AAA)

- An **ascending aortic aneurysm (AAA)** is a dangerous, often asymptomatic, bulge in the aorta, the body's main artery
- Up to 85% of patients with a ruptured AAA pass, often before reaching the hospital
- **Factors Affecting Survival**
 - Location of Rupture
 - Time to Treatment
 - Patient Condition
- **PBGMC Comprehensive Aortic Aneurysm Clinic**
 - Follow Patients With Serial CT Scans 4.0cm
 - Aneurysm Repair At 5.0cm, Or Growth >0.5cm/Yr
 - 4.5cm For CTD And Strong Family History
 - Goal: Prevent Aortic Catastrophe
 - Procedures: Aortic Root Replacement, Ascending Repair, Hemiarch Repair, Total Arch Repair



Minimally Invasive Cardiac Surgery

- PBGMC launched in Minimally Invasive Cardiac Surgery program in January 2021
- **Types of Minimally Invasive Cardiac Surgery:**
 - Mini Aortic Valve Replacement
 - Mini Mitral Valve Replacement / Repair
 - Mini Tricuspid Valve Replacement / Repair
 - PFO / ASD Closure
 - Left VATS LAAW with AtriClip
- **Key Benefits:**
 - Faster Recovery
 - Shorter Hospital Stays
 - Reduced Pain
 - Lower Infection Risk
 - Minimized Blood Loss
 - Improved Cosmetics
 - Enhanced Respiratory Function



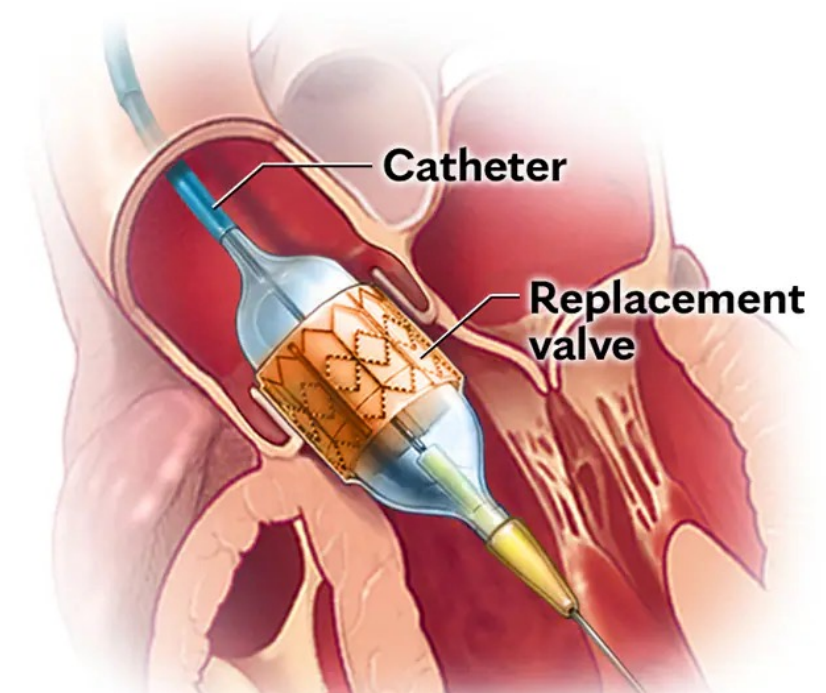
Dr. Melissa Levack, Cardiothoracic Surgeon

- **Board Certifications:**
 - Diplomat American Board of Thoracic Surgery
 - Diplomat American Board of Surgery
- **Education**
 - Undergraduate: Dartmouth College
 - Medical School: Emory University School of Medicine
 - Residency: Massachusetts General Hospital
 - Fellowship: Cleveland Clinic Foundation
 - Research Fellowship: University of Pennsylvania
- **Professional Affiliations**
 - Fellow, American College of Surgeons
 - Fellow, American Heart Association
 - Fellow, American College of Cardiology
 - Member, Society of Thoracic Surgeons



Transcatheter Aortic Valve Replacement (TAVR)

- First procedure performed in the United States in 2002, now **over 100,000** TAVR procedures are performed annually in the US
- PBGMC launched its TAVR program in 2013 and has completed **over 1,000** procedures since
- Patients are reviewed during a **heart team conference** to ensure collaboration among the clinical team to determine best treatment pathway
- Procedure is performed by a trained Interventional Cardiologist and Cardiothoracic Surgeon
- **Benefits:**
 - Faster Recovery
 - Less Invasive
 - Improved Symptoms
- **Patient Candidates:**
 - High risk for traditional open-heart surgery
 - Severe, symptomatic aortic stenosis (narrowing of the valve)
 - Typically older (70 – 80s year of age)
 - Previously placed failing surgical valve

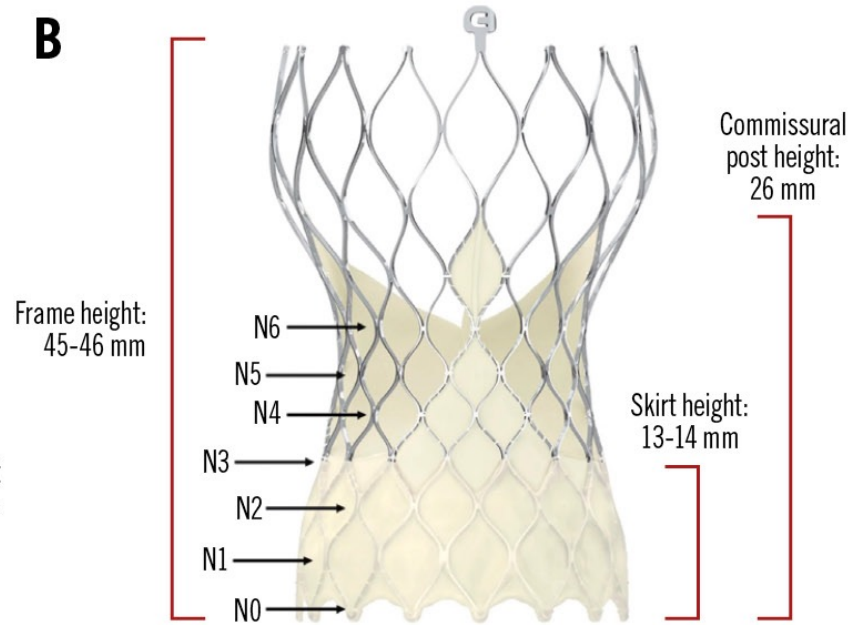


Type of Valves

- Customized the valve choice based on the patient's anatomy to help ensure optimal outcomes
- Valves can use either a balloon-expandable technique or self-expanding nitinol



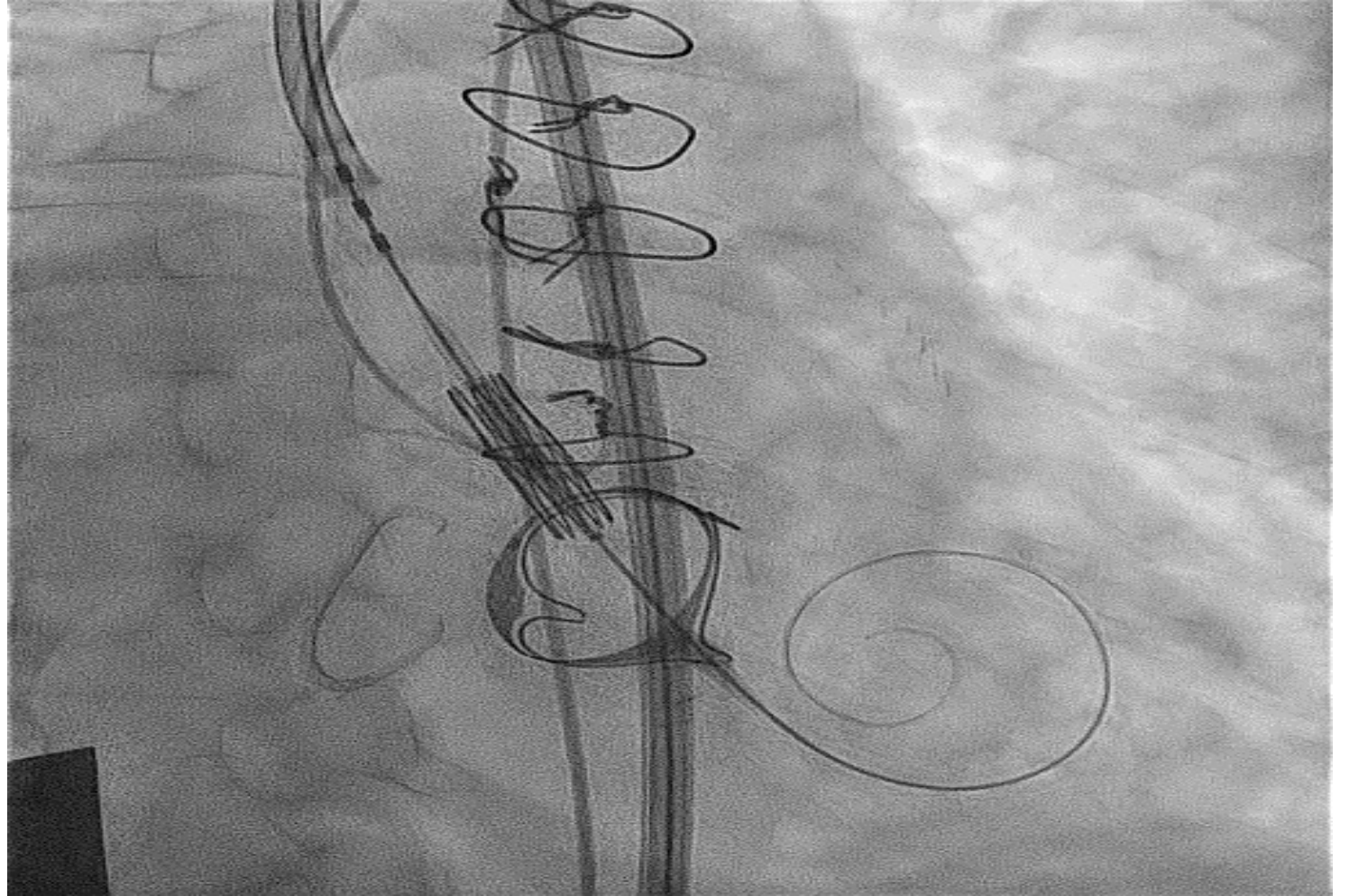
Edwards Lifesciences S3 Ultra RESILIA
Annular
Balloon-expandable



Medtronic Evolut R
Supra-annular
Self-expanding

Valve Deployment

- 83 Year Old, Male
- Patient Had Multiple Previous Admissions Related to Congestive Heart Failure
- Symptoms:
 - Shortness Of Breath
 - Fatigue
- Previous Open Heart Surgery in 2011
- Procedure Time: 30 Minutes
- Discharge Day After Procedure





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