Unless otherwise noted in this Abstract Book or by the speakers, speakers have no commercial relationships to disclose and will be presenting information only on devices, products, or drugs that are FDA approved for the purposes they are discussing.

Friday, January 26

3:00 PM - 6:00 PM Atrium Lobby, First Floor

Registration

Saturday, January 27

Atrium Lobby, First Floor 6:30 AM - 6:00 PM

Registration

7:00 AM - 6:30 PM **Grand Ballroom Foyer**

Tech-Con Exhibits

7:00 AM - 8:00 AM Grand Ballroom Foyer

BREAKFAST—Visit Tech-Con Exhibits

8:00 AM - 9:30 AM **Grand Ballroom C-H**

Adult Cardiac Track I: Innovations in Aortic Valve and Aortic Aneurysm Management Moderators: Edward P. Chen, Atlanta, GA, and Nimesh Desai, Philadelphia, PA

8:00 AM

Overview: Current Challenges in Aortic and Endovascular Surgery

Nimesh Desai, Philadelphia, PA

8:04 AM

A Practical Approach to Aortic Valve Repair

Emmanuel Lansac, Paris, France

COMMERCIAL RELATIONSHIPS E. Lansac: Ownership Interest, Coroneo; Consultant/Advisory Board, Coroneo

REGULATORY DISCLOSURE This presentation describes the use of the Coroneo Extra Aortic Ring, which has an FDA status of Investigational.

8:12 AM

Sutureless Aortic Valve Replacement: Prosthesis Selection and Challenging Scenarios

Malakh Shrestha, Hanover, Germany

8:20 AM

Submitted Presentation: Bioprosthetic Valve Fracture to Facilitate Valve-in-Valve Transcatheter Aortic Valve Replacement (TAVR)

Keith B. Allen, Kansas City, MO

COMMERCIAL RELATIONSHIPS K. B. Allen: Research Grant, Abbott, Edwards Lifesciences, Medtronic, Zimmer Biomet; Consultant/Advisory Board, Zimmer Biomet; Speakers Bureau/Honoraria, Edwards Lifesciences

REGULATORY DISCLOSURE This presentation describes the off-label use of the Tru balloon to fracture bioprosthetic surgical valves.







8:28 AM

Navigating Complex TAVR Scenarios: Managing Left Ventricular Outflow Tract Calcium, Isolated Aortic Insufficiency, Bicuspid Valve, and Others

Arash Salemi, New York, NY

COMMERCIAL RELATIONSHIPS A. Salemi: Consultant/Advisory Board, Edwards Lifesciences, Medtronic

8:36 AM

Panel Discussion

8:47 AM

Submitted Presentation: Advanced Aortic Root Surgery Techniques via Right Minithoracotomy

Joseph Lamelas, Houston, TX

COMMERCIAL RELATIONSHIPS J. Lamelas: Ownership Interest, Miami Instruments; Speakers Bureau/Honoraria, Edwards Lifesciences, Medtronic, Abbott

8:55 AM

Endovascular Repair in the Ascending Aorta: Is Endo Bentall a Reality?

Ali Khoynezhad, Los Angeles, CA

COMMERCIAL RELATIONSHIPS A. Khoynezhad: Research Grant, AtriCure; Consultant/Advisory Board, AtriCure

9:03 AM

Frozen Elephant Trunk and Evolving Arch Surgery Techniques

Eric E. Roselli, Cleveland, OH

COMMERCIAL RELATIONSHIPS E. E. Roselli: Research Grant, W. L. Gore & Assoc, Consultant/Advisory Board, LivaNova, Medtronic; Speakers Bureau/Honoraria, LivaNova, Medtronic, Vascutek, W. L. Gore & Assoc

REGULATORY DISCLOSURE This presentation describes the use of investigational branched and hybrid stentgraft devices for proximal aortic repair. This presentation describes the off-label use of commercially available aortic stentgraft devices for proximal aortic repair.

9:11 AM

Branched Endografting Techniques in the Arch and Thoracoabdominal Aorta

Himanshu J. Patel, Ann Arbor, MI

COMMERCIAL RELATIONSHIPS H. J. Patel, Consultant/Advisory Board, Terumo, W. L. Gore & Assoc

9:19 AM

Panel Discussion

8:00 AM - 9:30 AM **Grand Ballroom A-B**

📠 General Thoracic Track I: Emerging and/or Game-Changing Technologies in the Management of Lung Cancer

Moderator: Lisa M. Brown, Sacramento, CA



8:00 AM

Submitted Presentation: Electromagnetic Navigational Video-Assisted Thoracoscopic Surgery (N-VATS) for Precision-Guided Resection of Intrathoracic Lesions

Wissam Raad, New York, NY

8:12 AM

Submitted Presentation: 3D Computed Tomography Reconstruction and Mix Reality for Sublobar Resection

Xinghua Cheng, Shanghai, China

8:24 AM

Submitted Presentation: Robotic Bronchoscopy

Kazuhiro Yasufuku, Toronto, Canada

REGULATORY DISCLOSURE This presentation describes the use of the Auris Surgical Robotics endoscopy platform, which is not FDA approved.

8:36 AM

Use of Ultrasound Imaging for Localizing Nodules Robotically

John F. Lazar, Mechanicsburg, PA

8:48 AM

Radiofrequency Ablation of Lung Tumors

Katie S. Nason, Pittsburgh, PA

9:00 AM

Cryoablation: Update on SOLSTICE Study—Is It Applicable to Primary Lung Cancer?

Matthew R. Callstrom, Rochester, MN

COMMERCIAL RELATIONSHIPS M. R. Callstrom: Research Grant, Galil Medical, EDDA; Consultant/Advisory Board, Johnson & Johnson, Thermedical

9:12 AM

Energy Sources for Pulmonary Resection

Moishe A. Liberman, Montreal, Canada

COMMERCIAL RELATIONSHIPS M. A. Liberman: Research Grant, Boston Scientific, Cook Medical, Ethicon

9:30 AM - 10:15 AM

Grand Ballroom Foyer

BREAK—Visit Tech-Con Exhibits

10:15 AM - 12:00 PM

Grand Ballroom C-H

🙉 Adult Cardiac Track II: Cutting-Edge Surgery for Heart Failure and Coronary Artery Disease

Moderators: Arash Salemi, New York, NY, and John M. Stulak, Rochester, MN COMMERCIAL RELATIONSHIPS A. Salemi: Consultant/Advisory Board, Edwards Lifesciences, Medtronic

10:15 AM

Overview: Current Challenges in Heart Failure and Coronary Artery Disease (CAD)

Arash Salemi, New York, NY

COMMERCIAL RELATIONSHIPS A. Salemi: Consultant/Advisory Board, Edwards Lifesciences, Medtronic



10:19 AM

HeartMate 3 Clinical Trial Update

Chris T. Salerno, Carmel, IN

10:27 AM

PREVENT II: Rationale and Trial Study Design

TBD

10:35 AM

Thoracotomy Implant of HeartWare HVAD: HVAD LATERAL Study

Simon Maltais, Rochester, MN

10:43 AM

Total Artificial Heart Clinical Trial Update

Francisco A. Arabia, Los Angeles, CA

COMMERCIAL RELATIONSHIPS F. A. Arabia: Consultant/Advisory Board, Medtronic; Other, Trainer for Medtronic and SynCardia

REGULATORY DISCLOSURE This presentation will describe the use of the SynCardia Total Artificial Heart as destination therapy, a use that has an FDA status of Investigational.

10:51 AM

Hemocompatibility of Fully Magnetically Levitated Pumps

Nir Uriel, Chicago, IL

COMMERCIAL RELATIONSHIPS N. Uriel: Research Grant, Abbott, HeartWare, Novartis; Consultant/Advisory Board, Medtronic, Novartis

10:59 AM

Panel Discussion

11:07 AM

Submitted Presentation: EpicHeart™ Soft Robotic Device to Support Heart Function

William C. Altman, Houston, TX

COMMERCIAL RELATIONSHIPS W. C. Altman: Employment, CorInnova; Ownership Interest, CorInnova

REGULATORY DISCLOSURE This presentation describes the use of the EpicHeart Soft Robotic Cardiac Assist Device, which is not FDA approved.

11:15 AM

Submitted Presentation: First-in-Human Clinical Trial of a Minimally Invasive Left **Ventricular Assist Device**

Valluvan Jeevanandam, Chicago, IL

11:23 AM

Coronary Artery Bypass Grafting (CABG) or Percutaneous Coronary Intervention for **Ischemic Cardiomyopathy**

David P. Taggart, Oxford, United Kingdom

COMMERCIAL RELATIONSHIPS D. P. Taggart: Ownership Interest, VGS; Research Grant, Medistim, VGS; Consultant/ Advisory Board, Stryker; Speakers Bureau/Honoraria, Medistim, Medtronic, Stryker, VGS; Other Research Support, VGS

11:31 AM

External Stent for Saphenous Vein Grafts in CABG

David P. Taggart, Oxford, United Kingdom

COMMERCIAL RELATIONSHIPS D. P. Taggart: Ownership Interest, VGS; Research Grant, Medistim, VGS; Consultant/ Advisory Board, Stryker; Speakers Bureau/Honoraria, Medistim, Medtronic, Stryker, VGS; Other Research Support, VGS

11:39 AM

Robotic-Assisted Totally Endoscopic Coronary Artery Bypass for Multivessel CAD: **Beyond Most Surgeons' Reach?**

Husam H. Balkhy, Chicago, IL

COMMERCIAL RELATIONSHIPS H. H. Balkhy: Speakers Bureau/Honoraria, AtriCure, Intuitive Surgical

11:47 AM

Panel Discussion

Grand Ballroom A-B 10:15 AM - 12:00 PM

瘫 General Thoracic Track II: Emerging and/or Game-Changing Technologies in the Management of Esophageal Diseases

Moderators: Melanie A. Edwards, St Louis, MO, and James D. Luketich, Pittsburgh, PA

COMMERCIAL RELATIONSHIPS J. D. Luketich: Ownership Interest, Express Scripts, Intuitive Surgical, Johnson & Johnson, P&G; Research Grant, Accuray; Other, Elsevier Patent from University of Pittsburgh, The Annals of Thoracic Surgery Deputy Editor

10:15 AM

Endoscopic Approach to Zenker's Diverticulum

Ryan M. Levy, Pittsburgh, PA

10:30 AM

Update on Advances in Antireflux Surgery

Brian E. Louie, Seattle, WA

COMMERCIAL RELATIONSHIPS B. E. Louie: Research Grant, Intuitive Surgical, Torax Medical; Consultant/Advisory Board, Torax Medical

10:45 AM

Endoluminal Management of Esophageal Leaks

David C. Rice, Houston, TX

COMMERCIAL RELATIONSHIPS D. C. Rice: Speakers Bureau/Honoraria, Pacira Pharmaceuticals, Intuitive Surgical

11:00 AM

Advances in Peroral Endoscopic Myotomy Technology and Endoscopic Mucosal Closure

Shanda H. Blackmon, Rochester, MN

COMMERCIAL RELATIONSHIPS S. H. Blackmon: Ownership Interest, Boston Scientific; Consultant/Advisory Board, Dextera; Other Research Support, Medtronic

11:15 AM

Robotic Esophagectomy

Inderpal S. Sarkaria, Pittsburgh, PA

COMMERCIAL RELATIONSHIPS I. S. Sarkaria: Speakers Bureau/Honoraria, Intuitive Surgical









11:30 AM

Endoscopic Techniques in Esophageal Cancer

Wayne L. Hofstetter, Houston, TX

11:45 AM

Submitted Presentation: A Bioengineered Implant for Esophageal Replacement

Saverio La Francesca, Holliston, MA

COMMERCIAL RELATIONSHIPS S. La Francesca: Employment, Biostage; Ownership Interest, Biostage

REGULATORY DISCLOSURE This presentation describes the use of the Cellspan Esophageal Implant, which is not FDA approved.

12:00 PM - 1:00 PM

Floridian Ballroom

LUNCH

1:00 PM - 2:30 PM Grand Ballroom C-H

📠 Adult Cardiac Track III: Contemporary and Future Mitral Valve and Atrial Fibrillation Practice

Moderators: Vinay Badhwar, Morgantown, WV, and Tom C. Nguyen, Houston, TX COMMERCIAL RELATIONSHIPS T. C. Nguyen: Consultant/Advisory Board, Edwards Lifesciences; Speakers Bureau/ Honoraria, Abbott

1:00 PM

Overview: Advances in Surgical Therapy for Mitral Valve Disease and Atrial **Fibrillation**

Vinay Badhwar, Morgantown, WV

1:04 PM

Defining the Mitral Valve Surgeon of the Future: Time for an Honest Appraisal

T. Sloane Guy, New York, NY

COMMERCIAL RELATIONSHIPS T. S. Guy: Consultant/Advisory Board, Edwards Lifesciences, Verb Surgical

1:12 PM

MitraClip, Transcatheter Mitral Valve Repair (TMVR), Robotics, Port Access, and Open Surgery: Can We Do It All?

Robert L. Smith, Plano, TX

1:20 PM

Robotic Reconstruction for Complex Primary Mitral Regurgitation: No Limits

Vinay Badhwar, Morgantown, WV

1:28 PM

Robotic/Minimally Invasive Cardiac Surgery Treatment Options for Atrial Fibrillation: **Better Than Catheter Ablation?**

Evelio Rodriguez, Nashville, TN

COMMERCIAL RELATIONSHIPS E. Rodriguez: Research Grant, Abbott, Boston Scientific, Edwards Lifesciences, Medtronic; Consultant/Advisory Board, Abbott, Boston Scientific; Speakers Bureau/Honoraria, Abbott

1:36 PM

Panel Discussion







1:46 PM

Are Apically Delivered Chords Really the Answer?

Tirone E. David, Toronto, Canada

1:54 PM

Transcatheter Mitral Valve Replacement: Global and Early US Experience

Gilbert H. L. Tang, New York, NY

COMMERCIAL RELATIONSHIPS G. H. L. Tang: Consultant/Advisory Board, Abbott Vascular, NeoChord; Speakers Bureau/ Honoraria, Abbott Vascular, Edwards Lifesciences, Medtronic

REGULATORY DISCLOSURE This presentation describes the off-label use of several devices (Intrepid, Tendyne, CardiAQ, Sapien 3, Caisson, Highlife, Tiara, Cephea) for TMVR.

2:02 PM

Pipeline of TMVR: The Train Has Left the Station!

Michael J. Mack, Plano, TX

COMMERCIAL RELATIONSHIPS M. J. Mack: Research Grant, Abbott Vascular, Edwards Lifesciences, Medtronic

REGULATORY DISCLOSURE This presentation will describe approximately 12 devices that are not FDA approved.

2:10 PM

Pipeline of Tricuspid Devices: Fumbling In the Dark or Zeroing In on an Indication?

Steven F. Bolling, Ann Arbor, MI

2:18 PM

Panel Discussion

1:00 PM - 2:30 PM Grand Ballroom A-B

📠 General Thoracic Track III: Emerging and/or Game-Changing Minimally Invasive Surgery and Other Technologies

Moderators: Michael F. Reed, Hershey, PA, and Inderpal S. Sarkaria, New York, NY COMMERCIAL RELATIONSHIPS M. F. Reed: Consultant/Advisory Board, Spiration; I. S. Sarkaria: Speakers Bureau/ Honoraria, Intuitive Surgical

1:00 PM

Novel Suture Technologies

Michael F. Reed, Hershey, PA

COMMERCIAL RELATIONSHIPS M. F. Reed: Consultant/Advisory Board, Spiration

1:12 PM

Chest Wall Reconstruction Technologies

Shanda H. Blackmon, Rochester, MN

COMMERCIAL RELATIONSHIPS S. H. Blackmon: Ownership Interest, Boston Scientific; Consultant/Advisory Board, Dextera; Other Research Support, Medtronic

1:24 PM

Advanced Imaging Technologies

Yolonda L. Colson, Boston, MA







1:36 PM

Submitted Presentation: Articulated Minimally Invasive Surgery Instrumentation

Joel Dunning, Middlesbrough, United Kingdom

COMMERCIAL RELATIONSHIPS J. Dunning: Research Grant: Dextera Surgical

1:48 PM

Submitted Presentation: Immersive Video Operating Room Training

Douglas R. Johnston, Cleveland, OH

COMMERCIAL RELATIONSHIPS D. R. Johnston: Ownership Interest, JACE Medical; Research Grant, Edwards Lifesciences; Consultant/Advisory Board, LivaNova, Abbott

2:00 PM

Submitted Presentation: Autonomous Camera System

Traves D. Crabtree, Springfield, IL

COMMERCIAL RELATIONSHIPS T. D. Crabtree: Ownership Interest, CK Surgical Simulation; Consultant/Advisory Board, CK Surgical Simulation

2.12 pm

Submitted Presentation: Alternate New Device for Chest Access

Daniel L. Miller, Marietta, GA

COMMERCIAL RELATIONSHIPS D. L. Miller: Research Grant, Medela; Consultant/Advisory Board, Ethicon; Speakers Bureau/Honoraria, Medtronic

REGULATORY DISCLOSURE This presentation describes the use of the AOK K-CAD: Chest Access Device, which is not FDA approved.

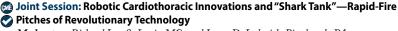
2:30 PM - 3:00 PM

Grand Ballroom Foyer

BREAK—Visit Tech-Con Exhibits

3:00 PM - 5:00 PM

Grand Ballroom C-H



Moderators: Richard Lee, St Louis, MO, and James D. Luketich, Pittsburgh, PA

"Shark Tank" Judges: Rick Anderson, Austin, TX, Steven F. Bolling, Ann Arbor, MI, and William E. Cohn, Houston, TX

COMMERCIAL RELATIONSHIPS J. D. Luketich: Ownership Interest, Express Scripts, Intuitive Surgical, Johnson & Johnson, Proctor and Gamble; Research Grant, Accuray; Other, Elsevier Patent from University of Pittsburgh, *The Annals of Thoracic Surgery* Deputy Editor

3:00 PM

DEBATE: Robotic Mitral Valve Repair Is a Critical Part of the Future of Our Specialty

CON: TBD

PRO: T. Sloane Guy, New York, NY

COMMERCIAL RELATIONSHIPS T. S. Guy: Consultant/Advisory Board, Edwards Lifesciences, Verb Surgical



3:30 PM

DEBATE: Robotic Thoracic Surgery Is a Critical Part of the Future of Our Specialty

CON: Mark S. Allen, Rochester, MN PRO: Robert J. Cerfolio, New York, NY

COMMERCIAL RELATIONSHIPS M. S. Allen: Ownership Interest, Medtronic; Speakers Bureau/Honoraria, Medtronic; Nonremunerative Position of Influence, Chair of STS Finance Committee, General Thoracic Surgical Club Executive Committee; R. J. Cerfolio: Consultant/Advisory Board, Acelity, Bard/Davol, Bovie, Community Health Systems, C-SATS, Myriad Genetics; Speakers Bureau/Honoraria, Bard/Davol, Intuitive, Myriad Genetics; Other, Covidien Teacher

3:50 PM

What's New in Robotic Cardiothoracic Surgical Technology: Updates From Robotic Companies That Are Leading the Way—Intuitive Surgical

Catherine Mohr, Sunnyvale, CA

COMMERCIAL RELATIONSHIPS C. Mohr: Employment, Intuitive Surgical

4:00 PM

What's New in Robotic Cardiothoracic Surgical Technology: Updates From Robotic Companies That Are Leading the Way—Medtronic

Paul Hermes, North Haven, CT

4:10 PM

What's New in Robotic Cardiothoracic Surgical Technology: Updates From Robotic Companies That Are Leading the Way—Verb Surgical TRD

4:20 PM

Submitted Presentation: Novel Nanoparticle for Enhanced Pulmonary Nodule Identification

Jeffrey Port, New York, NY

COMMERCIAL RELATIONSHIPS J. Port: Ownership Interest, Angiocrine Bioscience, Nanocyte

4.30 pm

Submitted Presentation: Left Ventricular Inflow Stent Reduces Suction Events and **Improves Mechanical Circulatory Support**

James H. Mehaffey, Charlottesville, VA

REGULATORY DISCLOSURE The presentation includes a description of a product or device that is not FDA approved.

4:40 PM

Submitted Presentation: Videoscope Cleaning Trocar for Minimally Invasive Surgery

Bryan M. Burt, Houston, TX

COMMERCIAL RELATIONSHIPS B. M. Burt: Consultant/Advisory Board, Medtronic

REGULATORY DISCLOSURE This presentation describes the off-label use of a minimally invasive surgery camera port; however, this device is in a preclinical stage of development and has not been used in humans to date.

5:00 PM - 6:30 PM

Grand Ballroom Foyer





