EASTERN 2013

51st ANNUAL MEETING

October 23 - 26

Sandpearl Resort, Clearwater Beach Florida
2013 LEADERSHIP

Board of Directors
President………………………….Benjamin A. Youdelman, MD
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Chief, Division of Thoracic Surgery  
Director of Thoracic and Foregut Surgery  
Associate Professor of Surgery  
Temple University School of Medicine  
Philadelphia, Pennsylvania

Pavan Atluri, MD  
Assistant Professor of Surgery  
Division of Cardiovascular Surgery  
Department of Surgery  
University of Pennsylvania  
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Joseph E. Bavaria, MD  
Vice Chief, Division of Cardiovascular Surgery  
Brooke Roberts-William M. Measey  
Professor of Surgery  
Director, Thoracic Aortic Surgery Program  
Hospital of University of Pennsylvania  
Philadelphia, Pennsylvania

Faiz Y. Bhora, MD  
Director of Thoracic Surgical Oncology  
Co-Director Airway Program  
Associate Program Director General Surgery  
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Associate Clinical Professor of Surgery  
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New York, New York

Costas Bizekis, MD  
Assistant Professor of Cardiothoracic Surgery  
Director of Esophageal Surgery  
Division of Thoracic Surgery  
Department of Cardiothoracic Surgery  
New York University Langone Medical Center  
New York, New York

Derek R. Brinster, MD  
Associate Professor of Surgery  
Director of the Thoracic Aortic Surgery Program  
Surgical Director, Structural Heart Valve Disease Program  
Virginia Commonwealth University Medical Center  
Richmond, Virginia

Jonathan B. Clark, MD, MPH  
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Chair, Department of Thoracic Surgery  
Professor of Oncology  
Roswell Park Cancer Center  
Professor of Surgery  
State University of New York at Buffalo  
Buffalo, New York

Leonard N. Girardi, MD  
O. Wayne Isom Professor of Cardiothoracic Surgery  
Attending Cardiothoracic Surgeon  
New York Presbyterian-Weill Cornell Medical Center  
New York, New York

Riple J. Hansalia, MD  
Director, Cardiac Rhythm Management  
Shore Heart Group  
Jersey Shore University Medical Center  
Neptune, New Jersey

Joseph Lamelas, MD  
Chief of Cardiac Surgery  
Mount Sinai Medical Center  
Miami, Florida

Michael Lanuti, MD  
Assistant Professor of Surgery  
Harvard Medical School  
Director of Thoracic Oncology  
Division of Thoracic Surgery  
Massachusetts General Hospital  
Boston, Massachusetts

Virginia Litle, MD  
Associate Professor  
Director Translational Research and Barretts Program  
Boston University  
Boston, Massachusetts
<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Affiliation</th>
</tr>
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<tbody>
<tr>
<td>Sanjay M. Mehta, MD</td>
<td>Associate Professor of Surgery, Pennsylvania State University, Allentown, Pennsylvania</td>
</tr>
<tr>
<td>Michael F. Szwerc, MD</td>
<td>Chief Section of Thoracic Surgery, Lehigh Valley Health Network, Allentown, Pennsylvania</td>
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<tr>
<td>Darroch W. O. Moores, MD</td>
<td>Clinical Associate Professor Surgery, Albany Medical College, Albany, New York</td>
</tr>
<tr>
<td>Vinod H. Thourani, MD</td>
<td>Associate Professor of Cardiothoracic Surgery, Co-Director, Structural Heart and Valve Center, Associate Director, CT Surgery Clinical Research Unit, Emory University School of Medicine, Atlanta, Georgia</td>
</tr>
<tr>
<td>Narain Moorjani, MB ChB, MRCS, MD, FRCS</td>
<td>Consultant Cardiac Surgeon, Papworth Hospital, Associate Lecturer, University of Cambridge, United Kingdom, England</td>
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<tr>
<td>Bhavik Vora, MD</td>
<td>Associate Professor of Surgery, Rutgers New Jersey Medical School, Newark, New Jersey</td>
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<tr>
<td>Ifan E. Khuri, MD</td>
<td>Chief of Thoracic Surgery, Hackensack University Medical Center, Hackensack, New Jersey</td>
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<tr>
<td>Bernard J. Park, MD</td>
<td>Chief of Thoracic Surgery, Saint Thomas Heart Hospital, Nashville, Tennessee</td>
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<tr>
<td>Evelio Rodriguez, MD</td>
<td>Director of Robotic Cardiac Surgery, Saint Thomas Heart Hospital, Nashville, Tennessee</td>
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<tr>
<td>John O. Wee, MD</td>
<td>Co-Director of Minimally Invasive Thoracic Surgery, Brigham and Women's Hospital, Boston, Massachusetts</td>
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<tr>
<td>Susan Schnell, BSN, MSN, ACNP-c</td>
<td>Valve Program Clinical Manager, Jersey Shore University Medical Center, Neptune, New Jersey</td>
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<tr>
<td>Benny Weksler, MD</td>
<td>Associate Professor of Cardiothoracic Surgery, Director, Robotic Thoracic Surgery, University of Pittsburgh Medical Center, Section Chief, Thoracic Surgery VAPHS, Pittsburgh, Pennsylvania</td>
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<tr>
<td>Matthew J. Schuchert, MD, FACS</td>
<td>Assistant Professor of Surgery, Department of Cardiothoracic Surgery, University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania</td>
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<tr>
<td>Glenn J.R. Whitman, MD</td>
<td>Associate Professor of Surgery, Johns Hopkins Hospital, Baltimore, Maryland</td>
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<tr>
<td>Walter J. Scott, MD, FACS</td>
<td>Chief, Division of Thoracic and Esophageal Surgery, Fox Chase Cancer Center, Philadelphia, Pennsylvania</td>
</tr>
<tr>
<td>Bryan A. Whitson, MD, Ph.D</td>
<td>Assistant Professor of Surgery, Division of Cardiac Surgery, Wexner Medical Center at The Ohio State University, Columbus, Ohio</td>
</tr>
<tr>
<td>James P. Slater, MD</td>
<td>Surgical Director Mechanical Circulatory Support, Morristown Medical Center, Morristown, New Jersey</td>
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We Gratefully Acknowledge and Extend a Special Thank You to Our Convention Exhibitors and Sponsors

**Exhibitors**

Abiomed Inc.
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**Sponsors**

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PROGRAM DESCRIPTION

This three-day program is the 51st in a series of annual programs offering a realistic view of current clinical topics in cardiovascular and thoracic surgery, customary and prevailing, controversial and/or investigational, including basic and clinical research. A faculty of leaders are invited to share their knowledge and experience of complex cases of new technology relevant to surgeons practicing this specialty. The program consists of faculty and peer-reviewed didactic presentations with moderated discussion periods focusing on basic research, quality assurance, ischemic heart disease, valvular heart disease, congestive heart failure and treatment, treatment of thoracic aneurysms, lung cancer, esophageal cancer, and thoracic trauma. Physicians will have an enhanced understanding of the latest techniques and current research specifically related to adult cardiovascular surgery and general thoracic surgery. Physicians will be able to utilize the results presented to select appropriate surgical procedures for their own patients and integrate state-of-the-art knowledge into their practice.

NEEDS ASSESSMENT

The Board of the Eastern Cardiothoracic Surgical Society meets regularly to discuss issues relevant to the cardiothoracic surgeon. Needs are also developed from previous programs.

ACTIVITY GOAL

This activity is designed to address the following ABMS / IOM competencies: Patient Care and Medical Knowledge.

LEARNING OBJECTIVES

At the conclusion of the 51st Annual Meeting, the participants will be able to:

- Contrast and compare emerging clinical research in cardiac and thoracic surgery, as it relates to each abstract.
- Discuss or demonstrate “How I Would Do It” as part of unique or complex case reports.
- Assess individual practice in light of information and discussion during meeting to identify specific strategies to implement in improving process within their practice.
- Review the newest innovations in the staging and treatment of cardiothoracic surgical and non-surgical options to maximize outcomes.

OUTCOMES

At the conclusion of the 51st Annual Meeting, the participants should:

- Gain new knowledge which will allow them to integrate state-of-the-art knowledge into their practice and increase the effectiveness of the care they render to the cardiothoracic patient.
- Have an enhanced understanding of the latest techniques and current research specifically related to adult cardiovascular surgery and general thoracic surgery.
- Have had the opportunity to hear the pros and cons of each paper presented to gain an overall perspective of current relevant practices.

NON ENDORSEMENT STATEMENT

The content and views presented in this educational activity are those of the faculty and do not necessarily reflect the opinions or recommendations of or Cine-Med. Inclusion in this activity does not constitute approval or endorsement of any commercial products or services. These materials have been prepared based on the best available information, but are not exhaustive of the subject matter. Participants are advised to critically appraise the information presented and encouraged to consult the available literature for any commercial products mentioned. Accreditation status does not imply endorsement by the Cine-Med of any commercial products displayed in conjunction with an activity.

ACCREDITATION

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of Ciné-Med and Eastern Cardiothoracic Surgical Society. Ciné-Med is accredited by the ACCME to provide continuing medical education for physicians. Ciné-Med designates this live activity for a maximum of 11.25 AMA PRA Category 1Credit(s)™. Physicians should only claim credit commensurate with the extent of their participation in the activity.
### SCHEDULE OF EVENTS

#### WEDNESDAY, OCTOBER 23, 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>4:00 p.m.</td>
<td>Check-In and Registration</td>
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<tr>
<td>6:00 p.m.</td>
<td>Welcome Reception</td>
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#### THURSDAY, OCTOBER 24, 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:00 a.m.</td>
<td>Executive Session</td>
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<tr>
<td>7:30 a.m.</td>
<td>Breakfast Buffet</td>
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<tr>
<td>8:00 a.m.</td>
<td>Expert Session I</td>
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<tr>
<td>8:00 a.m.</td>
<td>Approaching the Hilar Malignancy: Pneumonectomy or Bronchoplasty?</td>
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<td></td>
<td>Michael Lanuti, MD</td>
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<td>Massachusetts General Hospital, Boston, MA</td>
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<tr>
<td>8:15 a.m.</td>
<td>Surgeon’s Role in Mediastinal Disease</td>
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<td>Bernard J. Park, MD</td>
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<td>Hackensack University Medical Center, Hackensack, NJ</td>
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<tr>
<td>8:30 a.m.</td>
<td>When Ventricular Assist Devices Last Longer than Transplanted Hearts</td>
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<td>Bryan A. Whitson, MD, Ph.D.</td>
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<td>The Ohio State University, Columbus, OH</td>
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<tr>
<td>8:45 a.m.</td>
<td>Realities of a Destination LVAD Program in a Private Practice Hospital</td>
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<td>James P. Slater, MD</td>
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<td>Morristown Medical Center, Morristown, NJ</td>
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<td>9:00 a.m.</td>
<td>Opening Remarks</td>
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<td>Benjamin A. Youdelman, MD</td>
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<td>President, Eastern Cardiothoracic Surgical Society</td>
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<td>Jersey Shore University Medical Center</td>
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<tr>
<td>9:15 a.m.</td>
<td>Scientific Session</td>
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</table>

**Moderators:**
- Abbas Abbas, MD, MS  
  *Temple University School of Medicine, Philadelphia, PA*
- Walter J. Scott, MD, FACS  
  *Fox Chase Cancer Center, Philadelphia, PA*

**SA1 - CT Annular Measurements of the Aortic Valve by M2S Software Provide Optimal Sizing and Valuable Preoperative Case Planning Information in TAVR**
- Gilbert H L Tang, Amar Shah, Tanya Dutta, Andrea Cronin, Hasan Ahmad, Linda Cuomo, Martin Cohen, Cenap Undemir, Steven L. Lansman  
  *Westchester Medical Center, Valhalla, NY*
SA10 - Preoperative Identification of Aortic Root Calcium Landmark on 3D CT Image on M2S Imaging Software Optimizes Valve Deployment in TAVR
Gilbert H L Tang, Amar Shah, Hasan Ahmad, Linda Cuomo, Martin Cohen, Tanya Dutta, Cenap Undemir, Andrea Cronin, Steven L. Lansman
Westchester Medical Center, Valhalla, NY

SA4 - Effect of Pulmonary Function Tests on Peri-Operative Outcomes after Robotic-Assisted Pulmonary Lobectomy: Retrospective Analysis of 234 Consecutive Cases
Kathryn Rodriguez¹, Frank O. Velez-Cubian¹, Wei Wei Zhang¹, Matthew R. Thau¹, Jacques-Pierre Fontaine², Joseph R. Garrett², Carla C. Moodie², Lary A. Robinson², Eric M. Toloza³
¹University of South Florida College of Medicine, Tampa, FL, ²Moffitt Cancer Center, Tampa, FL

SA5 - Effect of Small Body Habitus on Peri-Operative Outcomes after Robotic-Assisted Pulmonary Lobectomy: Retrospective Analysis of 200 Consecutive Cases
Frank O. Velez-Cubian¹, Wei Wei Zhang¹, Kathryn Rodriguez¹, Matthew R. Thau¹, Jacques-Pierre Fontaine², Joseph R. Garrett², Carla C. Moodie², Lary A. Robinson², Eric M. Toloza³
¹University of South Florida College of Medicine, Tampa, FL, ²Moffitt Cancer Center, Tampa, FL

SA13 - The Role of the Surgical Robot in an Advanced VATS Program
Chukwumere Nwogu¹, Miriam Huang¹, Winston Wong², Sai Yendamuri¹, Elisabeth Dexter¹, Mark Hennon¹, Anthony Picone¹, Todd Demmy¹
¹Roswell Park Cancer Institute, Buffalo, NY, ²State University of New York At Buffalo, Buffalo, NY

SA16 - Univariate Comparison of Patients Going on Cardiopulmonary Bypass During Transcatheter Aortic Valve Replacement
University of Pennsylvania, Philadelphia, PA

10:40 a.m. - 11:00 a.m.  Refreshment Break

11:00 a.m. - 12:00 p.m.  Expert Session II

11:00 a.m. - 11:15 a.m.  Minimized Cardiopulmonary Bypass for Cardiac Surgery
Narain Moorjani, MB ChB, MRCS, MD, FRCS (C-Th), Papworth Hospital
University of Cambridge, United Kingdom

11:15 a.m. - 11:30 a.m.  Post-Operative Ventricular Fibrillation Risk, Life Vests, AICDs, and Outcomes
Riple J. Hansalia, MD
Jersey Shore University Medical Center, Neptune, NJ

11:30 a.m. - 11:45 a.m.  Incisionless Surgery for the Esophagus
Abbas Abbas, MD, MD
Temple University Hospital, Philadelphia, PA
11:45 a.m. - 12:00 p.m. The Surgeon’s Role in Pleural Space Problems and Infections
Todd L. Demmy, MD, FACS
Roswell Park Cancer Center, Buffalo, NY

1:30 p.m. Golf Tournament, Belleair Country Club, Clearwater, Florida

FRIDAY, OCTOBER 25, 2013

7:30 a.m. - 2:00 p.m. Check-In and Registration

7:30 a.m. - 8:30 a.m. Breakfast Buffet

8:00 a.m. - 9:00 a.m. Expert Session I

8:00 a.m. - 8:15 a.m. Implementing Useful Protocols in the Cardiothoracic Surgical ICU
Glenn J.R. Whitman, MD
Johns Hopkins Hospital, Baltimore, MD

8:15 a.m. - 8:30 a.m. The First Year of Clinical Rollout of Transcatheter Aortic Valve Replacement (TAVR) in a Community Hospital
Susan Schnell, BSN, MSN, ACNP-c
Jersey Shore University Medical Center, Neptune, NJ

8:30 a.m. - 8:45 a.m. Update on Surgical Management of Esophageal Cancer
Walter J. Scott, MD, FACS
Fox Chase Cancer Center, Philadelphia, PA

8:45 a.m. - 9:00 a.m. Mesothelioma: Surgical Management
Costas Bizekis, MD
New York University Langone Medical Center, New York, NY

9:00 a.m. - 10:25 a.m. Scientific Session

Moderators: Michael F. Szwerc, MD
Lehigh Valley Heart & Lung Surgeons, Allentown, PA

Vinoth H. Thourani, MD
Emory University School of Medicine, Atlanta, GA

SA11 - Propensity-Matched Comparison of Open Aortic and Mitral Replacement or Repair Versus Transcatheter Aortic Valve Replacement in Patients with Significant Mitral Regurgitation
Fenton McCarthy, Nimesh Desai, Prashanth Vallabhajosyula, Zachary Fox, Rohan Menon, Justin George, Saif Anwaruddin, Howard Hermann, Joseph Bavaria, Wilson Szeto
Hospital of the University of Pennsylvania, Philadelphia, PA

SDA9 - Perioperative Outcomes and Survival Patterns After Resection of Primary Salivary Gland Tumors of the Lung and Trachea
Chad S. Eckard, Matthew J. Schuchert, James R. Landreneau, David D. Odell, Joseph J. Wizorek, Kristen N. McCormick, James D. Luketich, Rodney J. Landreneau
University of Pittsburgh Medical Center, Pittsburgh, PA
SA6 - Is Surgical Ablation of Atrial Fibrillation Sustained Over the Long-Term?: Review of a Single Institution’s Experience
Candice Y. Lee¹, Shuyan Huang¹, Amber Melvin¹, Collin Bowen², Peter A. Knight¹
¹University of Rochester Medical Center, Rochester, NY, ²University of Rochester, Rochester, NY

SA17 - Wedge Resection Versus Lobectomy For Stage 1A Non-Small Cell Lung Cancer (NSCLC) In The Elderly: A Surveillance, Epidemiology and End Results (SEER) Database Analysis
Mohan M. John, Syed S. Razi, Sandeep Sainathan, Christos Stavropoulos
Bronx Lebanon Hospital Center, Bronx, NY

SA7 - Long-term Outcomes After Sinus Venosus Atrial Septal Defect Repair: Impact of Early Repair And Role of Autologous Atrial Appendage Advancement Flap
Kiran K. Mallula¹, Saad Siddique², Kanwar Multani², Ra-id Abdulla¹, Chawki F. El-Zein², Michel N. Ilbawi², Anastasios C. Polimenakos¹
¹Rush University Medical Center, Chicago, IL, ²Advocate Hope Children's Hospital, Oak Lawn, IL

Anna M. Soltys, Michael F. Szwerc, Victor Reis, Kyle M. Langston, PAC, Scott W. Beman, T Daniel Harrison, Richard C. Boorse
Lehigh Valley Health Network, Allentown, PA

10:25 a.m. - 11:00 a.m.
Refreshment Break

11:00 a.m. - 12:00 p.m.
Expert Session II

11:00 a.m. - 11:15 a.m.
Aortic Dissection as an Inherited Disease
Leonard N. Girardi, MD
New York Presbyterian-Weill Cornell Medical Center, New York, NY

11:15 a.m. - 11:30 a.m.
Minimally Invasive and Robotic Platform for Complex Mitral Valve Repair
Pavan Attnur, MD
University of Pennsylvania, Philadelphia, PA

11:30 a.m. - 11:45 a.m.
Non-surgical Ablation of Lung Tumors
Virginia Litle, MD
Boston Medical Center, Boston, MA

11:45 a.m. - 12:00 p.m.
Management of Esophageal Strictures
Jon O. Wee, MD
Brigham and Women’s Hospital, Boston, MA

12:00 p.m. - 1:15 p.m.
Magovern Lectureship Luncheon
Surviving a Supersonic Stratospheric Freefall: Medical Support for the Red Bull Stratos Project
Jonathan B. Clark, MD, Baylor College of Medicine, Houston, TX

1:15 p.m. - 2:30 p.m.
Membership Business Meeting
**EASTERN CARDIOTHORACIC SURGICAL SOCIETY**

**51ST ANNUAL MEETING**

**SCHEDULE OF EVENTS**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>5:45 p.m. - 7:00 p.m.</td>
<td>Case Bowl</td>
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<tr>
<td>7:00 p.m. - 10:00 p.m.</td>
<td>Banquet Dinner</td>
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**SATURDAY, OCTOBER 26, 2013**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:30 a.m. - 2:00 p.m.</td>
<td>Check-In and Registration</td>
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<tr>
<td>7:30 a.m. - 8:30 a.m.</td>
<td>Breakfast Buffet</td>
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<tr>
<td>8:00 a.m.- 9:00 a.m.</td>
<td>Expert Session I</td>
</tr>
<tr>
<td>8:00 a.m. - 8:15 a.m.</td>
<td>Update in Transcatheter Valve Technology</td>
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<td>Vinod H. Thourani, MD</td>
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<td>Emory University School of Medicine, Atlanta, GA</td>
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<td>8:15 a.m. - 8:30 a.m.</td>
<td>Aortic Valve Repair</td>
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<td>Joseph E. Bavaria, MD</td>
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<td>Hospital of University of Pennsylvania, Philadelphia, PA</td>
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<tr>
<td>8:30 a.m. - 8:45 a.m.</td>
<td>CT Surveillance, Diagnosis and Management of the Indeterminant Pulmonary Module</td>
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<td>Michael F. Szwerc, MD</td>
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<td>Lehigh Valley Heart &amp; Lung Surgeons, Allentown, PA</td>
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<tr>
<td>8:45 a.m. - 9:00 a.m.</td>
<td>Pulmonary Resection for High Risk Patients</td>
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<td>Faiz Y. Bhora, MD</td>
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<td>St. Lukes Roosevelt Hospital Center, New York, NY</td>
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<td>9:00 a.m. - 10:25 a.m.</td>
<td>Scientific Session</td>
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<td>Moderators:</td>
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<td>Faiz Y. Bhora, MD</td>
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<td>St. Lukes Roosevelt Hospital Center, New York, NY</td>
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<td>James P. Slater, MD</td>
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<td>Morristown Medical Center, Morristown, NJ</td>
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<td><strong>SA14</strong> - Thoracic Endovascular Stent Graft Repair for the Treatment of Ascending Aortic Pathologies in High Open Surgical Risk Patients</td>
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<td>University of Pennsylvania, Philadelphia, PA</td>
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<td><strong>SA12</strong> - Single Lung Transplantation with ABO Compatible Donors Results in Excellent Outcomes</td>
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<td>Sharven Taghavi(^1), Senthil Jayarajan(^1), Eugene Komaroff(^2), Akira Shiose(^1), Eros Leotta(^1), Kazuhiro Hisamoto(^3), Namrata Patel(^1), Francis Cordova(^1), Gerard Criner(^1), T. Sloane Guy(^1), Yoshiya Toyoda(^1).</td>
</tr>
<tr>
<td></td>
<td>(^1)Temple University Hospital, Philadelphia, PA, (^2)Temple University Department of Public Health, Philadelphia, PA</td>
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SA2 - Defining The Futility Point: Early and Late Outcomes of Surgical Repair of Type A Aortic Dissection in Octogenarians
Rohan S. Menon, Wilson Szeto, Y. Joseph Woo, Patrick Moeller, William Moser, Prashanth Vallabhajosyula, Joseph Bavaria, Nimesh Desai
University of Pennsylvania, Philadelphia, PA

SA15 - Transbronchial and Surgical Lung Biopsies in Bone Marrow Transplant Patients with Pulmonary Disease
Kathleen M. Lamb¹, Lily C. Chang², John Wagner¹, Nathaniel R. Evans¹, Rohit Kumar¹, Boyd Hehn¹, John Farber¹, Abhinav Gabbetta¹, Scott W. Cowan¹.
¹Thomas Jefferson University Hospital, Philadelphia, PA, ²Jefferson Medical College, Philadelphia, PA

SA8 - Operative Outcomes After Open Repair of Descending Thoracic Aortic Aneurysms in the Era of Endovascular Surgery
Mostafa Sadek, Djamila Abjigitova, Yonni Pellet, Aditya Rachakonda, Georgia Panagopoulos, Konstadinos Plestis
Lenox Hill Hospital, New York, NY

10:25 a.m. - 10:55 a.m.  Refreshment Break
10:55 a.m. - 12:15 p.m.  Expert Session II
10:55 a.m. - 11:10 a.m.  Sutureless Aortic Valve Replacement
Joseph Lamelas, MD
Mount Sinai Medical Center, Miami, FL

11:10 a.m. - 11:25 a.m.  Endovascular Treatment of Complex Aortic Pathologies
Derek R. Brinster, MD
Virginia Commonwealth University, Richmond, VA

11:25 a.m. - 11:40 a.m.  Sublobar Resections: What's the New Standard?
Matthew J. Schuchert, MD, FACS
University of Pittsburgh, Pittsburgh, PA

11:40 a.m. - 12:15 p.m.  The Surgeon’s Role in GERD
Darroch W. O. Moores, MD
Albany Medical College, Albany, NY

12:15 p.m. - 12:30 p.m.  Closing Remarks
Benjamin A. Youdelman, MD
President, Eastern Cardiothoracic Surgical Society
Jersey Shore University Medical Center
ON DEMAND PRESENTATIONS
(Available in Hunter B & C via flat screen monitor and online at www.ectss.org)

P1. Acute Kidney Injury Requiring Renal Replacement Therapy Increases Mortality in Patients Undergoing Extracorporeal Membrane Oxygenation Therapy
Shyamasundar Balasubramanya, Francisco Arabia, Danny Ramzy, Alfredo Trento, Jaime Moriguchi, Jon Kobashigawa, Fardad Esmailian
Cedars Sinai Medical Center, Los Angeles, CA

Zachary Fox, Lauren DiBiase, Wilson Szeto, Nimesh Desai, Robert Li, Saif Anwaruddin, Prashanth Vallabhajosyula, Jay Giri, Pavan Atluri, Dinesh Jagasia, Elizabeth Walsh, Howard Herrmann, Joseph Bavaria
The Hospital of the University of Pennsylvania, Philadelphia, PA

P3. Aortic Remodeling After Endovascular Repair of the Descending Thoracic Aorta
Lauren Sinnenberg, Wilson Szeto, Patrick Moeller, Prashanth Vallabhajosyula, G. William Moser, Nimesh Desai, Joseph Bavaria
Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA

P4. Clinical Outcomes of Surgical Management of Malignant Solitary Fibrous Tumors of the Pleura
James R. Landreneau, Matthew J. Schuchert, Chad S. Eckard, David D. Odell, Joseph J. Wizorek, Kristen N. McCormick, Peter F. Ferson, James D. Luketich, Rodney J. Landreneau
University of Pittsburgh Medical Center, Pittsburgh, PA

P5. Coronary Sinus and PA Vent Complications During Minimally Invasive Cardiac Surgery
Robert S. Farivar, Jon Parmet, Nimesh Desai, Homare Okamura
1Pennsylvania Hospital, Philadelphia, PA, 2University of Pennsylvania, Philadelphia, PA

P6. Deep Breathing Exercises After Cardiac Surgery - Is It Necessary After Discharge?
Elisabeth Westerdahl, Charlotte Urell, Marcus Jonsson, Ing-Liss Bryngelsson, Hans Hedenström, Margareta Emtner
1Örebro University Hospital, Örebro, Sweden, 2Uppsala university, Uppsala, Sweden

P7. Demographic Analysis of a Single Center Transcatheter Aortic Valve Replacement Practice Reveals Racial Disparities in Access to New Medical Technologies
Laura Gallagher, Rohan Menon, Prashanth Vallabhajosyula, Emil Pitkin, Wilson Szeto, Howard Herrmann, Jay Giri, Saif Anwaruddin, Lisa Walsh, Madeleine Walsh, Joseph Bavaria
University of Pennsylvania, Philadelphia, PA

Alex J. Werner, Michael F. Szwerc, Kyle M. Langston, Victor Reis, Raymond L. Singer, Timothy Misselbeck
Lehigh Valley Health Network, Allentown, PA

P9. Execution and Management of a Complex Clinical Trial
Elizabeth K. Walsh, Caroline Komlo, Zachary Fox, Lauren DiBiase, Rachel Callahan, Laura Schuck, Julia McGrath, Nimesh Desai, Howard C. Herrmann, Wilson Szeto, Joseph E. Bavaria
The University of Pennsylvania Hospital, Philadelphia, PA
P10. HTK Cardioprotection in Ross Procedure for Native/Prosthetic Valve Endocarditis
   Yoshiya Toyoda, Mohammed Kashem, Akira Shiose, Eros Leotta, Kazuhiro Hisamoto, Sloane Guy
   Temple University, Philadelphia, PA

P11. Impact of Concomitant Pulmonary Disease on Outcomes of Patients Undergoing TAVR
   Kelly Sutter, Rohan Menon, Lisa Walsh, Madeline Walsh, Wilson Szeto, Saif Anwaruddin, Prashanth Vallabhajosyula, Howard Hermann, Joseph E. Bavaria, Nimesh Desai
   Hospital of the University of Pennsylvania, Philadelphia, PA

P12. Impact of Preoperative Anemia on Early and Late Outcomes After Surgical Aortic Valve Replacement
   Rohan S. Menon, Wilson Szeto, Kanika Gupta, Prashanth Vallabhajosyula, Patrick Moeller, William Moser, Michael Acker, Joseph Bavaria, Nimesh Desai
   University of Pennsylvania, Philadelphia, PA

P13. Left Ventricular Thrombus Found During Veno-arterial Extracorporeal Membrane Oxygenation (ECMO) in a Patient with Acute Leukemia Related Hypercoagulable State, ARDS, and Stress-induced Cardiomyopathy
   Hitoshi Hirose, Shreya Gupta, Joseph Miessau, Harrison Pitcher, Michael Baram, Nicholas Cavarocchi
   Thomas Jefferson University, Philadelphia, PA

P15. Malignant Pleural Mesothelioma Post-Irradiation Treatment for Hodgkin’s Lymphoma
   Thea P. Price, Renganaden V. Soopen, Michael J. Walker
   Thomas Jefferson University Hospitals, Philadelphia, PA

P16. Management Algorithm for Aortoesophageal Fistula (AEF)
   Joseph D. Whitlark, Lydia D. Rotondo, Alex Su
   Thoracic & Vascular Associates of Kinston, Kinston, NC

P17. Metastasectomy for Melanoma in the VATS Era
   University of Pittsburgh Medical Center, Pittsburgh, PA

P18. Miliary Interstitial Disease from Foreign Body Injection
   Roy Temes, Joseph Lahorra, Inderjit Gill, Joseph Tomashefski, Thomas Rice
   Cleveland Clinic, Cleveland, OH

P19. MRSA Sepsis and ARDS; Is It Indication for Extracorporeal Membrane Oxygenation (ECMO)?
   Hitoshi Hirose, Philip Hsiao, Joseph Miessau, Harrison Pitcher, Qiong Yang, Michael Baram, Nicholas Cavarocchi
   Thomas Jefferson University, Philadelphia, PA

P20. Novel Repair of Disruption of the Costal Margin Without Associated Diaphragmatic Hernia
   Renee M. Tholey¹, Christine E. Feldmeier¹, Michael J. Walker²
   ¹Thomas Jefferson University Hospital, Philadelphia, PA, ²Bryn Mawr Hospital, Bryn Mawr, PA
P21. On-pump vs Off-pump CABG Surgery: A Single Center Outcome
Temple University Hospital, Philadelphia, PA

P22. Postoperative Morbidity In Patients With Chronic Viral Hepatitis Undergoing Cardiac Surgery: A Retrospective Study
Wan Chin Hsieh, IV
Institute for Cardiovascular Disease, Iasi, Romania

P23. Pulmonary Complications Adversely Affect Long-term Mortality Following Descending and Thoracoabdominal Aneurysm Repair
Mostafa Sadek, Agamemnon Pericleous, Jamie Eridon-Olbrei, Georgia Panagopoulos, Konstadinos Plestis
Lenox Hill Hospital, New York, NY

P24. Repair of Chest Wall Hernias: Case Series and Report of Rare Complication after Surgical Repair of Chest Wall Hernia
Syed M. Quadri, Karl F. Uy, Geoffrey M. Graeber
UMass Memorial Health Care, Worcester, MA

P25. Sternal Cable Closure: A Word of Caution
Louis Samuels
Lankenau Medical Center, Wynnewood, PA

P26. Surgical Removal of a Large Mobile Left Ventricular Thrombus via Left Atriotomy
Daizo Tanaka, Shinya Unai, James T. Diehl, Hitoshi Hirose
Thomas Jefferson University Hospital, Philadelphia, PA

P27. The 'Untapped' Potential of Tunneled Pleural Catheters
Mrinalini Krishnan, Troy Moritz.
Pinnacle Health Harrisburg Hospital, Harrisburg, PA

P28. Thoracoscopic Right Middle Lobectomy for a Centrally Located AV Fistula
Michael R. Reidy¹, Rodney Landreneau², Douglas Kwazneski¹, Omar Awais¹
¹UPMC Mercy, Pittsburgh, PA, USA, ²UPMC, Pittsburgh, PA

P29. Totally Endoscopic Robotic Treatment of Hypertrophic Obstructive Cardiomyopathy with Septal Myomectomy and Anterior Mitral Valve Leaflet Augmentation
Thomas Kelley, Jr.¹, T. Sloane Guy¹, Abul Kashem², Sheela Pai³, Yanfu Shao³, Yoshiya Toyoda², Mohamad Alkhouli³, James McCarthy², Kaiser Larry R.¹, Shiose Akira²
¹Temple University School of Medicine, Philadelphia, PA, ²Temple University Hospital Division of Cardiovascular Surgery, Philadelphia, PA, ³Temple University Hospital Division of Anesthesiology, Philadelphia, PA, ⁴Temple University Hospital Division of Cardiology, Philadelphia, PA
SA1. **CT Annular Measurements of the Aortic Valve by M2S Software Provide Optimal Sizing and Valuable Preoperative Case Planning Information in TAVR**

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**OBJECTIVE:** Optimal TAVR valve sizing is critical to minimize paravalvular leak (PVL) and root complications. CT-based annular sizing may be superior to TEE with added advantages of anatomical landmarks available for software-based preoperative case planning. Our study is to evaluate the M2S software as a valid tool for CT annular sizing for TAVR.

**METHODS:** From 12/2012-6/2013, 28 consecutive patients (aged 84+/-8 years, 68% female) underwent TTE and 64- or 256-slice CT for evaluation of TAVR with 23- or 26-mm Edwards Sapien valve. 3D aortic root measurements including annular area determined by our radiologist were prospectively compared with M2S imaging software. VARC2 outcomes were assessed.

**RESULTS:** M2S was able to process all CT studies except one due to motion artifact. Two studies had significant discrepancies with aortic valve annular area due to severe annular calcification and inadequate contrast in aortic root. Remaining 25 studies had highly correlated AV annular areas ($R^2 = 0.93$) with only 1 discrepancy in Sapien valve size recommendation (Figure). Procedural success was 100% in 19 eligible patients. 30-day outcomes were: 1 out-of-hospital death from unknown cause, 1 out-of-hospital stroke from subtherapeutic INR for AF, no MI, bleeding or access site complications and 17 had no or trivial PVL.

**CONCLUSIONS:** 3D CT aortic root measurements by M2S accurately determines Sapien valve size and provides new TAVR programs with valuable preoperative case planning information.
SA2. Defining the Futility Point: Early and Late Outcomes of Surgical Repair of Type A Aortic Dissection in Octogenarians

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University of Pennsylvania, Philadelphia, PA

OBJECTIVE: Octogenarians are frequently denied surgery for Stanford Type A Aortic Dissections due to high mortality and morbidity. We reviewed surgical outcomes of 52 octogenarians undergoing Type A dissection repair.

METHODS: Between 1995 and 2010, acute Type A aortic dissection repair was performed in 500 patients (52>80years: (17>85, 2>90). All patients underwent sternotomy, aortic valve resuspension and open distal hemiarch under circulatory arrest. Patients were cooled to 18C core temperature and had retrograde cerebral perfusion. Five underwent full root replacement and two underwent total arch replacement. Standard univariate, survival, logistic regression and Cox proportional hazards modeling methods were employed.

RESULTS: 30day mortality among all octogenarians was 17.3% (9/52): <85(11.4%(4/35), >85(29.1%(5/17)) [p=0.1]. Perioperative mortality among patients <80years was 10.7%(48/448), [p=0.16 for <80years vs >80years]. Complicated presentations (malperfusion, shock, arrest and/or hemopericardium/tamponade ) were similar in both groups(51% vs 54%[p=0.7]). Mortality within this group was: <85(16%(3/19)) and >85(57%(4/7)) [p=0.57]. Five year survival among all octogenarians was 44.8%: <85(60.4%) and >85(18.1%) [log rank p=0.04]. Patients <80 years: Five year survival was 71.5%[log rank p=0.001 for <80 years vs >80years comparison]. Median survival in patients >85 years was 20+/-12 months.

CONCLUSIONS: Octogenarians have favorable outcomes following repair for Type A aortic dissection. Patients <85 years have similar outcomes to the younger cohort. Patients >85 years with complicated presentations have poor outcomes and open aortic surgery may not be superior to medical therapy. These patients may be more suited to emerging therapies.

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OBJECTIVE: The incidence of adenocarcinoma of the esophagus is increasing. Although minimal invasive techniques are gaining increasing popularity, little comparative data exists between open (OE), VATS/Laparoscopic (VL) and robotic assisted (RAL) minimally invasive

METHODS: This is a single institution retrospective review of all esophagectomies (126) performed for primary malignant tumors of the mid and distal esophagus from January 2005 through April 2013 by either OE (68), VL (32) or RAL (26) techniques. Outcomes for OE were compared to those from VL and RAL combined (MIE group) using t-tests, Mann Whitney U and Fisher's Exact tests. Subanalyses then compared outcomes between RAL and VL.

RESULTS: Average patient average age was 66.21 years and 88% were male. The prevalence of induction therapy, preclinical stage and comorbidities did not vary between groups. Relative to OE, MIE was associated with a significant reduction in median hospital length of stay (LOS) (6 days vs. 11 days; p=0.023) without any change in 30-day readmission (22.4% vs. 22.1%; p=1.000) and a trend toward reduction in 30-day mortality was identified (0% vs. 7.5%; p=0.061). Similarly, MIE was associated with fewer complications than OE (5.3% vs. 19.1%, p=0.030 for anastomotic leaks; 12.1% vs. 35.3%, p=0.005 for stricture formation). Comparing outcomes from RAL to those of VL, a significant reduction in median LOS was noted (5 days vs. 7 days, p=0.031).

CONCLUSION: MIE improves procedural-related outcomes for esophagectomy over OE techniques resulting in a significant reduction in LOS, anastomotic leak rates and stricture formation. RAL resulted in the shortest LOS.

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¹University of South Florida College of Medicine, Tampa, FL, ²Moffitt Cancer Center, Tampa, FL

OBJECTIVE: The need to increase patient safety and expand surgical options for lung cancer patients with poor pulmonary function is evident in literature. Pulmonary function tests have been found to be predictors of respiratory complications after lung resection in thoracotomy procedures yet not in video-assisted thoracoscopic procedures. We seek to determine the predictive role of forced expired volume in one second (FEV1) and diffusion capacity for carbon monoxide (DLCO) for respiratory complications after robotic-assisted pulmonary lobectomy.

METHODS: We retrospectively analyzed preoperative pulmonary function tests and postoperative respiratory complications of 234 consecutive patients who underwent robotic-assisted pulmonary lobectomy at a single institution over 33 months. Logistic regression was used to determine whether DLCO and FEV1 are significant predictors of respiratory complications.

RESULTS: Of 234 consecutive patients (mean age 67±10yrs) undergoing robotic-assisted lobectomy, mean percent DLCO was 76%±18% and mean percent FEV1 was 87%±22%. There were 65/234 (28%) patients with postoperative respiratory complications. Logistic regression (see Figure) revealed that neither DLCO nor FEV1 were significant predictors of respiratory complications (p>0.05).

CONCLUSIONS: Pulmonary function is not a significant predictor of respiratory complications after robotic-assisted lobectomy. Thus, our study suggests that robotic-assisted pulmonary lobectomy is feasible and safe for patients with impaired pulmonary function.

Frank O. Velez-Cubian¹, Wei Wei Zhang¹, Kathryn Rodriguez¹, Matthew R. Thau¹, Jacques-Pierre Fontaine², Joseph R. Garrett², Carla C. Moodie², Lary A. Robinson², Eric M. Toloza²
¹University of South Florida College of Medicine, Tampa, FL, ²Moffitt Cancer Center, Tampa, FL

OBJECTIVE: Patients with smaller body surface area (BSA) have smaller pleural spaces, which limit visualization and instrument mobility during video-assisted thoracoscopic (VATS) surgery. We investigated the effects of BSA on outcomes with robotic-assisted VATS lobectomy.

METHODS: We retrospectively analyzed 200 consecutive patients who underwent robotic-assisted lobectomy by one surgeon over 32 months. Patients were separated into Group A (BSA<1.65m²) and Group B (BSA>1.65m²). Operative times, estimated blood loss (EBL), conversion to open lobectomy, perioperative complication rates, chest tube days, hospital length of stays (LOS), and in-hospital mortality were compared between the two groups.

RESULTS: Group A had 39 patients (BSA 1.25m²-1.65m²) and Group B had 161 patients (BSA range 1.66-2.86m²). Both groups had similar prolonged air leak rates (15% vs. 17%; p=1.0), median chest tube duration of 4 days, and median hospital LOS of 5 days. See Table for other outcomes results.

CONCLUSIONS: While patients with BSA<1.65m² have similar operative times, EBL, overall intraoperative complications, overall postoperative complications (such as atrial fibrillation, prolonged air leaks, and pneumonia), chest tube days, hospital LOS, and in-hospital mortality rates as patients with larger BSA, patients with BSA<1.65m² have a higher overall conversion rate than, but similar emergent conversion rate as, patients with larger BSA. Thus, our study suggests that robotic-assisted pulmonary lobectomy is feasible and safe in patients with small body habitus, although these patients require better preoperative selection to avoid non-emergent conversion to open lobectomy.

<table>
<thead>
<tr>
<th>Perioperative Outcome</th>
<th>Group A, N=39</th>
<th>Group B, N=161</th>
<th>p-value, significant at p&lt;0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Skin-to-Skin Operative Time (min+SEM)</td>
<td>168 + 16</td>
<td>178 + 7</td>
<td>0.45</td>
</tr>
<tr>
<td>Median EBL (mL+SEM)</td>
<td>150 + 90</td>
<td>175 + 40</td>
<td>0.60</td>
</tr>
<tr>
<td>Overall Intra-Operative Complications (n, %)</td>
<td>5 (13%)</td>
<td>12 (7%)</td>
<td>0.33</td>
</tr>
<tr>
<td>Overall Conversion to Open Lobectomy (n, %)</td>
<td>8 (21%)</td>
<td>13 (8%)</td>
<td>0.04</td>
</tr>
<tr>
<td>Emergent Conversion to Open Lobectomy (n, %)</td>
<td>2 (5%)</td>
<td>4 (2%)</td>
<td>0.33</td>
</tr>
<tr>
<td>Atrial Fibrillation (n, %)</td>
<td>2 (5%)</td>
<td>21 (13%)</td>
<td>0.26</td>
</tr>
<tr>
<td>Mucus Plugs Requiring Intervention (n, %)</td>
<td>1 (3%)</td>
<td>13 (8%)</td>
<td>0.31</td>
</tr>
<tr>
<td>Pneumonia (n, %)</td>
<td>2 (5%)</td>
<td>21 (13%)</td>
<td>0.26</td>
</tr>
<tr>
<td>In-Hospital Mortality (n, %)</td>
<td>0 (0%)</td>
<td>5 (3%)</td>
<td>0.58</td>
</tr>
</tbody>
</table>
SA6. Is Surgical Ablation of Atrial Fibrillation Sustained Over the Long-Term?: Review of a Single Institution’s Experience

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OBJECTIVE: Successful ablation of atrial fibrillation (AF) remains challenging. We reviewed our use of high-intensity focused ultrasound for AF ablation to determine its long-term effectiveness and safety.

METHODS: Between 5/2007 and 6/2012, 61 patients who underwent cardiac surgery with concomitant MAZE procedure using this ablation system were included in an IRB-approved study involving retrospective chart review, telephone interview, and AFEQT questionnaire.

RESULTS: The mean age was 71.8 ± 8.2 years. Mean pre-operative AF duration was 30.5 months—49% paroxysmal, 18.9% persistent, and 32.1% long-term persistent. Concomitant cardiac procedures included isolated valve surgery (27), isolated coronary artery bypass grafting (CABG) (17), CABG + valve surgery (11), and other (6). Off-pump pulmonary vein isolation with or without creation of a mitral isthmus line was performed using the ablation system, prior to initiation of cardiac repair. No device-related complications occurred. Peri-operative adverse events included heart block (6), re-exploration for bleeding (2), prolonged ventilator dependence (2), renal failure (2), stroke (1), and death (1). Rhythm monitoring was captured by Holter monitor, electrocardiogram, or pacemaker recordings. Freedom from AF (FAF) was 83.1% at six-, 78.7% at 12-, 71% at 24-, 67.3% at 36-, and 48.8% at 48-months follow-up. Median FAF was 45.9 months. On AFEQT questionnaires, patients reported low AF symptom interference with daily activities and high treatment satisfaction.

CONCLUSIONS: Our FAF results at six and 12 months were consistent with prior studies; however, FAF was poorly sustained long-term. Despite marginal long-term success rates with this modality, patients reported minimal AF symptoms and high treatment satisfaction.
SA7. Long-term Outcomes After Sinus Venosus Atrial Septal Defect Repair: Impact of Early Repair and Role of Autologous Atrial Appendage Advancement Flap

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OBJECTIVE: Surgical correction of sinus venosus atrial septal defect (SVASD) carries substantial risk for dysrhythmias and systemic or pulmonary venous (PV) channels obstruction. Anomalous pulmonary veins (APV) are, often, associated with SVASD. Operative approach remains a matter of debate. Modified single-patch repair (MSP) with autologous atrial appendage advancement flap (MSP-AAF) is underutilized and long-term outcome, yet, to be determined.

METHODS: From January 1990 to December 2011 44 patients with SVASD repair were identified and data reviewed. Thirty-nine (89%) had superior SVASD and 38 APV. Operative approach was consistent with predominant use of MSP-AAF (n=36). In APV inserted high into the superior vena cava (SVC) MSP with caval division and cavo-atrial reconstruction (MSP-Warden) was applied. Perioperative and long-term outcomes were analyzed.

RESULTS: Mean age and weight at repair were 11.9+/−16.5 years and 31.2+/−25.2 Kg, respectively. There were no early or late deaths. One (2.6%) dysrhythmia (sick sinus syndrome) requiring pacemaker was accounted at hospital discharge. PV flow remained unobstructed. One (2.6%) patient (MSP-Warden) with SVC stenosis required intervention within 12 months after repair. Mean follow-up was 72.2+/−52.3 months. Older age (>10 years) at repair was associated with more late morbidity cardiac events (p<0.05). Freedom from re-intervention or dysrhythmias at last follow-up was statistically different (p<0.05) between the two age groups.

CONCLUSIONS: Surgical correction of SVASD with MSP-AAF carries low early and late cardiac morbidity with the added advantage of growth potential, particularly critical during early repair. Age at repair impacts freedom from late adverse cardiac phenomena. In APV inserted high into the SVC MSP-Warden is advocated.
**SA8. Operative Outcomes After Open Repair of Descending Thoracic Aortic Aneurysms in the Era of Endovascular Surgery**

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Lenox Hill Hospital, New York, NY

**OBJECTIVE:** Since the advent of endovascular repair of descending thoracic aortic aneurysms (DTAA), there has been a paucity of open repairs data. This study details operative and long term outcomes in a contemporary series of open DTAA repairs.

**METHODS:** We conducted a retrospective review of prospectively collected data of 68 patients (63±14.5 years) who underwent DTAA repairs between (January-1999) and (December-2010).

**RESULTS:** Forty-two (62%) patients were male, 16 (24%) had chronic obstructive pulmonary disease, 11 (16%) contained rupture, 25 (37%) previous cardio-aortic surgery, and 10 (15%) had previous aortic arch replacement. Cardiopulmonary bypass was used in 64 (94%) and deep hypothermic arrest in 22 (32%). In-hospital mortality was 3% (2 patients). There was no immediate paraplegia, and one (1.5%) delayed paraplegia. Three (4.4%) patients experienced a postoperative stroke, and 20 (29%) required prolonged ventilatory support (≥48 hours). Six (9%) patients developed postoperative new onset renal insufficiency (creatinine ≥2.5 mg/dL). The median follow-up time was 5.8±3.8 years. Sixteen patients (24.2%) of the 66 operative survivors died during follow-up. Probability of survival was 82±0.05% at 5 and 67±0.07% at 10 years. Reintervention was necessary in 4 (6%) patients. Freedom from reintervention was 98±0.02% at 5 and 89±0.06% at 10 years. Univariable predictors of long term mortality was postoperative reintubation (P<.05).

**CONCLUSIONS:** In the era of endovascular repair of DTAAs, operative mortality and morbidity outcomes for open repairs are observed to be low. In addition to good long term survival rates, the open repairs are durable as evidenced by low reintervention rates.
SA9. Perioperative Outcomes and Survival Patterns After Resection of Primary Salivary Gland Tumors of the Lung and Trachea

Chad S. Eckard, Matthew J. Schuchert, James R. Landreneau, David D. Odell, Joseph J. Wizorek, Kristen N. McCormick, James D. Luketich, Rodney J. Landreneau
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OBJECTIVE: Primary salivary gland tumors of the respiratory system represent a rare constellation of low grade neoplasms that can arise as an endobronchial lesion or a solitary parenchymal nodule. There are multiple histologic variants of this tumor, including adenoid cystic carcinoma, epithelial-myoepithelial carcinoma, and mucoepidermal carcinoma. This study evaluates the clinical outcomes after operative resection of primary salivary gland tumors involving the airway and lung parenchyma.

METHODS: We retrospectively reviewed 20 cases of primary salivary gland tumors involving the lung (n=11) and airways (n=9) from 1994-2012. Operative interventions in this study included YAG laser ablation (n=3), wedge resection (n=1), lobectomy (n=6), sleeve resection with bronchoplasty (n=5), bi-lobectomy (n=1), and tracheal resection (n=4). Survival was calculated utilizing the Kaplan-Maier method.

RESULTS: Mean patient age was 55±16 years. Gender distribution was 7 males:13 females. Tumor histology was adenoid cystic (n=7, 35%), epithelial-myoepithelial (n=3, 15%), and mucoepidermal carcinomas (n=10, 50%). Complications occurred in 11 (55%) patients, with no peri-operative deaths. Recurrence was seen in 4 (20%) patients. The majority of recurrences were local (n=3 adenoid cystic, 75%), with only one case of metastatic disease (epithelial-myoepithelial, parenchymal). Freedom from recurrence and overall survival was 73% and 85% at ten years, respectively (Figure).

CONCLUSIONS: Complete surgical ablation/resection affords excellent oncologic outcomes in this group of rare tumors, which exhibit a low histologic grade and reduced metastatic potential. Adenoid cystic carcinoma is associated with a higher local recurrence rate.
SA10. Preoperative Identification of Aortic Root Calcium Landmark on 3D CT Image on M2S Imaging Software Optimizes Valve Deployment in TAVR

Gilbert H L Tang, Amar Shah, Hasan Ahmad, Linda Cuomo, Martin Cohen, Tanya Dutta, Cenap Undemir, Andrea Cronin, Steven L. Lansman
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OBJECTIVE: Optimal TAVR valve positioning depends on accurately deploying the prosthesis with respect to a calcified landmark on the aortic valve. Preoperative 3D imaging of aortic root may help identify a calcium landmark best suited for this purpose and its ideal relationship to the prosthesis. Our study is to evaluate the M2S imaging software in preoperative planning for TAVR valve positioning.

METHODS: From 2/2013-6/2013, 19 patients (aged 83+-8 years, 83% female) underwent TAVR with Edwards Sapien valve (11 TF, 8 TA). Preoperative determination of valve size was based on TTE and CT. Using 3D reconstruction of the aortic root generated by M2S, the extent and location of AV calcification is easily visualized, permitting identification of a convenient calcium landmark. Furthermore, a virtual Sapien valve can be generated and maneuvered to an optimal position within the AV annulus, displaying the relationship of the valve to the pre-selected calcium. These preoperative identifications were used intraoperatively. VARC2 outcomes were assessed.

RESULTS: Procedural success was 100%. In all cases, the pre-selected calcium landmark was identified and tracked, optimizing valve positioning and deployment (Figure). 30-day outcomes were: 1 out-of-hospital mortality from unknown cause, 1 out-of-hospital stroke, no MI, bleeding or access site complications and 17 patients had no or trivial paravalvular leak. 5 patients had new heart block requiring pacemaker. All had improved NYHA class symptoms and KCCQ-12 scores.

CONCLUSIONS: 3D CT reconstruction of the aortic root by M2S can identify a calcium landmark preoperatively that facilitates optimal valve positioning and deployment during TAVR.
SA11. Propensity-Matched Comparison of Open Aortic and Mitral Replacement or Repair Versus Transcatheter Aortic Valve Replacement in Patients with Significant Mitral Regurgitation

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Hospital of the University of Pennsylvania, Philadelphia, PA

OBJECTIVE: For patients being considered for Transcatheter Aortic Valve Replacement (TAVR), significant pre and postoperative mitral regurgitation (MR) has been associated with worse outcomes. It remains unknown whether isolated TAVR or combined aortic valve and mitral valve replacement/repair (AVR/MVR) is better. We propensity-matched patients to compare AVR/MVR to TAVR in patients presenting with significant MR.

METHODS: We evaluated all patients presenting with greater than mild MR undergoing either TAVR or AVR and MVR at a single institution from 2002-2012. Patients with pre-operative endocarditis were excluded. Out of 306 patients in the AVR/MVR group and 147 patients in the TAVR group, propensity analysis matched 40 pairs of patients. Standard univariate, logistic regression, Cox regression, and propensity matching techniques were used.

RESULTS: There was no difference in the preoperative average age (76±7.4 v 78±6.9, p=0.68), ejection fraction (53±15 v 51±17, p=0.68), STS score (9.9±3.1 v 9.3±3.4, p=0.61) or 30 day mortality (7.5% v 2.5%, p=0.60) between the matched pairs of open AVR/MVR and TAVR patients. There was an increased number of urgent operations in the open AVR/MVR versus TAVR group (87.5% v 67%, p=0.01), less NYHA III/IV (75% v. 95%, p=0.003), and less hypertension (70% v. 95%, p=0.03). Amongst 30-day survivors, long-term survival was significantly better in the AVR/MVR group compared to TAVR. (p=0.04). See Figure 1.

CONCLUSIONS: In a propensity matched analysis of patients presenting with significant MR, open AVR/MVR and TAVR had equivalent perioperative outcomes, but open AVR/MVR had superior long-term survival when compared to TAVR.

LONG-TERM SURVIVAL
SA12. Single Lung Transplantation with ABO Compatible Donors Results in Excellent Outcomes

Sharven Taghavi¹, Senthil Jayarajan¹, Eugene Komaroff², Akira Shiose¹, Eros Leotta¹, Kazuhiro Hisamoto¹, Namrata Patel¹, Francis Cordova¹, Gerard Criner¹, T. Sloane Guy¹, Yoshiya Toyoda¹. ¹Temple University Hospital, Philadelphia, PA, ²Temple University Department of Public Health, Philadelphia, PA

OBJECTIVE: The goal of this study was to determine if carefully selected ABO compatible donors (ACD) in single lung transplantation (SLT) results in acceptable outcomes.

METHODS: The United Network for Organ Sharing (UNOS) database was reviewed for adult SLT from May 2005 to December 2011. Recipients of ACD were compared to those of ABO identical donors. Risk-adjusted multivariable Cox proportional hazards regression using significant univariate predictors examined mortality.

RESULTS: Of 3,572 SLT, 342 (9.6%) were from ACD. The two groups were evenly matched with regards to recipient age (60.8 vs. 60.2 years, p=0.28), recipient male gender (61.8 vs. 58.2%, p=0.10), lung allocation score (43.4 vs. 42.6, p=0.32), FEV1 (41.2 vs. 40.8%, p=0.32), ischemic time (4.2 vs. 4.0 hours, p=0.09), donor age (34.4 vs. 32.9, p=0.07), and donor male gender (61.5 vs. 65.5, p=0.14). ACD were less likely to be race mismatched (58.3 vs. 50.9%, p=0.01). Median survival was not different (figure). On multivariate analysis, ACD were not associated with mortality (HR: 1.02, 95%CI: 0.85-1.22, p=0.86). Prolonged ischemic time, increasing recipient creatinine, increasing recipient age, race mismatch, class I plasma reactive antigen panel >10%, and the use of mechanical ventilation or extracorporeal membrane oxygenation were associated with mortality (table). Peak post-transplant FEV1 (64.5 vs. 64.0%, p=0.69), and decrement in FEV1 over time were similar (p=0.82). Freedom from BOS was longer in the ACD group (1,146 vs. 1,424 days, p=0.01).

CONCLUSIONS: This multi-institutional analysis is the largest to study ACD in SLT and demonstrates that carefully selected ACD results in excellent outcomes.

Cox Proportional Hazards Regression Analysis Showing Variables Associated with Mortality

<table>
<thead>
<tr>
<th></th>
<th>Hazard Ratio</th>
<th>95% Confidence Interval</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ischemic Time 8-10 hours (Reference ≤ 6 hours)</td>
<td>2.02</td>
<td>1.11-3.67</td>
<td>0.02</td>
</tr>
<tr>
<td>Recipient Creatinine (per mg/dL)</td>
<td>1.25</td>
<td>1.09-1.43</td>
<td>0.002</td>
</tr>
<tr>
<td>Recipient Age (per year)</td>
<td>1.01</td>
<td>1.00-1.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Race Mismatch</td>
<td>1.20</td>
<td>1.07-1.35</td>
<td>0.002</td>
</tr>
<tr>
<td>Class I Plasma Reactive Antigen Panel &gt;10%</td>
<td>1.31</td>
<td>1.12-1.52</td>
<td>0.002</td>
</tr>
<tr>
<td>Mechanical Ventilation prior to Transplantation</td>
<td>2.58</td>
<td>2.02-3.30</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Extracorporeal Membrane Oxygenation prior to Transplantation</td>
<td>5.35</td>
<td>3.33-8.60</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>
SA13. The Role of the Surgical Robot in an Advanced VATS Program

Chukwumere Nwogu¹, Miriam Huang¹, Winston Wong², Sai Yendamuri¹, Elisabeth Dexter¹, Mark Hennon¹, Anthony Picone¹, Todd Demmy¹
¹Roswell Park Cancer Institute, Buffalo, NY, ²State University of New York At Buffalo, Buffalo, NY

OBJECTIVE: An ever-increasing proportion of thoracic procedures are being performed using minimally invasive techniques. Whether use of the Da Vinci surgical robot provides any additional benefits beyond conventional thoracoscopic techniques remains controversial. Given our prior establishment of an advanced VATS program, we reviewed our initial robot-assisted surgical experience with a focus on lobectomies as a prelude to a prospective comparison study.

METHODS: We conducted a retrospective review of all robot-assisted procedures performed at our institution from August 2005 to July 2013. Types of procedures were categorized as shown in Table 1. For ease of outcomes assessment, we focused on lobectomies. Outcome data collected included conversion rates to open procedures, mortality, operative times, blood loss, chest tube duration, length of hospital and ICU stay.

RESULTS: The procedures performed and the conversion rates are shown in Table 1. Intention-to-treat analysis of the lobectomy series yielded the following outcomes: no mortality, mean operative time 285 minutes (range 177-437); median blood loss 150 ml(range 10-1000); median chest tube duration 2.5 days (range 1-12); median ICU length of stay 1 day (range 0-3) and median hospital length of stay 3.5 days (range 2-12).

CONCLUSIONS: Progressive incorporation of surgical robot-assistance into an advanced thoracoscopic program is feasible. The outcomes of robot assisted thoracoscopic (RATS) lobectomy are similar to reported outcomes of VATS lobectomy. Prospective comparison of these 2 procedures would provide greater understanding of the precise benefits or lack thereof of the Da Vinci surgical robot system for minimally invasive thoracic surgery.

<table>
<thead>
<tr>
<th>Procedure Categories</th>
<th>Number of Cases</th>
<th>Number converted to open cases (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lobectomies</td>
<td>22</td>
<td>3 (14)</td>
</tr>
<tr>
<td>Pulmonary Wedge Resections</td>
<td>6</td>
<td>1 (17)</td>
</tr>
<tr>
<td>Esophagectomies</td>
<td>18</td>
<td>8 (44)</td>
</tr>
<tr>
<td>Benign Esophageal Disorders</td>
<td>7</td>
<td>1 (14)</td>
</tr>
<tr>
<td>Mediastinal lesion resections</td>
<td>11</td>
<td>1 (9)</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>14 (22)</td>
</tr>
</tbody>
</table>
Thoracic Endovascular Stent Graft Repair for the Treatment of Ascending Aortic Pathologies in High Open Surgical Risk Patients

University of Pennsylvania, Philadelphia, PA

OBJECTIVE: Treatment of ascending aortopathies in patients with prohibitive comorbid burden poses a major surgical challenge. We report the application of thoracic endovascular aortic repair (TEVAR) technology as alternative treatment modality in this high surgical risk cohort.

METHODS: From 2004 to 2012, 6 patients (age range 16 to 92 years; male n=3) presenting with emergent/urgent ascending aortic pathology deemed prohibitively high open surgical risk underwent TEVAR in the hybrid operating room. Indications included aortic dissection (n=2) and pseudoaneurysm formation after previous ascending aortic repair.

RESULTS: Access was obtained via transfemoral (n=1), left common carotid (n=1), and transapical (n=4) approaches. Cook-TX2 stent graft was utilized in 5 cases (dissection n=2, pseudoaneurysm n=3). Stent coverage extended from the sinotubular junction to innominate artery origin. In one patient, aortic pseudoaneurysm neck was occluded with an Amplatzer device. Completion angiography confirmed successful exclusion of all aortic lesions. Complication rates were stroke 17% (n=1) and respiratory failure 17% (n=1), in-hospital and 30-day mortality, renal failure, and coronary complication rates were all zero. Mean hospital stay was 9 days (range 5-15 days). Discharge CT imaging showed one type I endoleak (rate 17%) and no stent migration. Mean follow-up was 20 months (range 2-42 months). One patient developed type I endoleak at 7 months, and two patients died at 3 and 27 months from non-aortic related causes.

CONCLUSIONS: Current TEVAR platform designed for descending thoracic aorta can be safely translated for the treatment of ascending aortopathies in patients with prohibitive open surgical risk. Tailoring stent graft and delivery sheath technology to adapt to ascending aortic anatomy will be a necessity before this methodology can be more safely and widely applied.

![Figure 1: Transapical TEVAR treatment of ascending aorta pseudoaneurysm secondary to suture line dehiscence from previous ascending aorta replacement is shown. (A) CT imaging confirmed pseudoaneurysm formation (arrow) (B) Intraoperative diagnostic aortogram showing the pseudoaneurysm (arrow) (C) Transapical deployment of Cook TX2 stent graft, with proximal landing zone at sinotubular junction, and distal landing zone just proximal to innominate artery takeoff (D) Postoperative CT imaging confirms full exclusion of pseudoaneurysm](image-url)
SA15. Transbronchial and Surgical Lung Biopsies in Bone Marrow Transplant Patients with Pulmonary Disease

Kathleen M. Lamb1, Lily C. Chang2, John Wagner1, Nathaniel R. Evans1, Rohit Kumar1, Boyd Hehn1, John Farber1, Abhinav Gabbetta1, Scott W. Cowan1.

1 Thomas Jefferson University Hospital, Philadelphia, PA, 2 Jefferson Medical College, Philadelphia, PA

OBJECTIVE: pulmonary complications occur frequently after bone marrow transplantation (BMT) and are associated with increased morbidity and mortality. We reviewed our experience using transbronchial biopsy (TBB) and surgical biopsy (SB) for diagnosis of pulmonary disease in BMT patients.

METHODS: A retrospective review was conducted of BMT patients who had undergone lung biopsy between 1/2002 and 12/2012.

RESULTS: Seventy patients met inclusion criteria. Patients underwent either TBB (n=31) or SB (video assisted thoracoscopy, VATS, n=20 or thoracotomy, n=9). Ten patients required SB after initial TBB. Biopsies indications included: pulmonary infiltrates/opacities (n=49; 70%), infection (n=8; 11.4%), nodules (n=6; 8.6%), and respiratory failure (n=6; 8.5%). While all SBs were successfully diagnostic, TBB was diagnostic in 31/41 (75.6%); the remaining 10 required SB. Biopsy pathology revealed inflammatory processes (n=43; 61.4%), infection (n=13; 18.6%), lymphocytic bronchitis/alveolitis (n=8; 11.4%), and recurrence of hematologic malignancy (n=6; 8.5%). Complications after TBB included pneumothoraces requiring chest tube placement (n=2). In patients treated surgically +/- TBB, prolonged intubation was the most common complication (n=3 SB; n=2 TBB/SB). Thirty day mortality rates were 29% after TBB, 33.3% after SB. No mortalities were directly related to biopsies.

CONCLUSION: Lung biopsy is safe and effective in BMT patients; however, prognosis is poor in patients requiring biopsy. TBB is diagnostic in 75.6% of patients with a low complication rate. SB can be performed with acceptable morbidity and mortality. Review of this data of patients who are on average 1 year from BMT suggests that TBB may be used as a first line diagnostic procedure.
SA16. Univariate Comparison of Patients Going on Cardiopulmonary Bypass During Transcatheter Aortic Valve Replacement

University of Pennsylvania, Philadelphia, PA

OBJECTIVE: Transcatheter aortic valve replacement (TAVR) is a new approach to aortic valve replacement. Along with severe aortic stenosis, these patients tend to be older and have more comorbidities. Cardiopulmonary Bypass (CPB) is not part of TAVR and instead used to salvage patients from difficult clinical/technical situations. Predicting which TAVR patients are more likely to require CPB remains unknown.

METHODS: Between November 2007 and June 2012, 334 patients underwent TAVR at a single institution. Out of those 334 procedures, 14 patients required CPB. Univariate comparisons are used to predict factors associated with CPB, and a Kaplan-Meier curve was used for long-term survival analysis.

RESULTS: Preoperative demographics: there was an increased previous myocardial infarction in the CPB group (71% vs 24%, p<.0004). Meanwhile being male was not (169 (52%) vs 4 (29%) [p<.1012]). No Differences including creatinine levels (non bypass: (1.25±.67 vs CPB: (1.29±.45 P<.825), Hypertension: (295 (92%)) vs (13 (92%) P<1.0), [EF<35%]:44 (13%) vs ( 3 (21%) P<.427). Differences between the Non CPB and CPB were Mild AI: (118 (36%)) vs ( 7 (50%)), Moderate MR: (123 (38%)) vs (11 (78%)). Postoperatively, increased operative mortality was significantly higher in bypass patients versus non bypass patients (5 {1.5%}) vs (8 {57%} p<.0001}. Adverse outcomes included Prolonged ventilation: (41 (12.8%) vs (8 {57%} P<.002)

CONCLUSIONS: Overall, relatively few TAVR patients required CPB. Factors such as prior MI, mild AI, and moderate MR are associated with utilizing CPB. For those patients who did go on bypass, there was increased prolonged ventilation and operative mortality.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Non CPB n=320</th>
<th>CPB n=14</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex male</td>
<td>169 (52%)</td>
<td>4 (29%)</td>
<td>.1012</td>
</tr>
<tr>
<td>Age</td>
<td>83±7</td>
<td>85±5</td>
<td>.9525</td>
</tr>
<tr>
<td>Creatinine Level</td>
<td>1.25 ± .67</td>
<td>1.29 ± .45</td>
<td>.825</td>
</tr>
<tr>
<td>Hypertension</td>
<td>295 (92%) vs P&lt;1.0</td>
<td>13 (92%)</td>
<td>1.00</td>
</tr>
<tr>
<td>Prior MI</td>
<td>77 (24%)</td>
<td>10 (71%)</td>
<td>.0004</td>
</tr>
<tr>
<td>EF &lt;35%</td>
<td>44 (13%)</td>
<td>3 (21%)</td>
<td>.427</td>
</tr>
<tr>
<td>Aortic Gradient</td>
<td>49.8 ± 14</td>
<td>46 ± 9.4</td>
<td>.9548</td>
</tr>
<tr>
<td>DC mortality</td>
<td>5 (1.5%)</td>
<td>8 (57%)</td>
<td>.0001</td>
</tr>
<tr>
<td>Neuro-Stroke</td>
<td>6 (1.8%)</td>
<td>2 (14%)</td>
<td>.0396</td>
</tr>
</tbody>
</table>
SA17. Wedge Resection Versus Lobectomy For Stage 1A Non-Small Cell Lung Cancer (NSCLC) in the Elderly: A Surveillance, Epidemiology and End Results (SEER) Database Analysis

Mohan M. John, Syed S. Razi, Sandeep Sainathan, Christos Stavropoulos
Bronx Lebanon Hospital Center, Bronx, NY

OBJECTIVE: There is limited data available regarding the long-term outcomes of lung resection for non-small cell lung cancer (NSCLC) in the elderly population (>75 years). We investigated the prognostic significance of wedge resection versus lobectomy in this group of patients with stage IA NSCLC using the SEER database.

METHODS: The SEER database was queried for patients >75 years of age who underwent limited lung resection for stage IA squamous cell carcinoma and adenocarcinoma of the lung from 1998 to 2005. Overall and cancer-specific survival rates were analyzed. Survival curves were constructed using the Kaplan-Meier survival analysis method and log-rank test was used to compare the survival curves.

RESULTS: A total of 1401 patients >75 years of age with stage IA NSCLC were included in this study. Lobectomy was performed in 1000 patients, and 401 patients underwent wedge resection. Age, female gender, black race and poorly differentiated tumors were found to be independent negative predictors of overall survival. The overall survival was lower in the wedge resection group (HR 1.37, CI 1.02-1.57, p<0.05). However, there was no significant difference in cancer-specific survival between the two groups (HR 1.13, CI 0.93-1.37, p=0.21).

CONCLUSIONS: Wedge resection is not inferior to lobectomy for stage IA NSCLC in the elderly, and should be considered a viable alternative in this high-risk population.
CONSTITUTION OF
Eastern Cardiothoracic Surgical Society
(formerly The Pennsylvania Association for Thoracic Surgery)

ARTICLE I. NAME

SECTION 1.
This Association shall be known as The Pennsylvania Association for Thoracic Surgery.

ARTICLE II. OBJECT

SECTION 1.
The object of the Association shall be to encourage and stimulate investigation and study that will increase the knowledge of intrathoracic physiology, pathology, and therapy, to correlate such knowledge and disseminate it, and to act as a common bond for physicians practicing this specialty and represent them in problems related thereto.

SECTION 2.
To attain this object, the Association shall hold at least one scientific meeting each year and shall undertake such other activities as the Council or Association as a whole may decide.

ARTICLE III. MEMBERSHIP

SECTION 1.
There shall be four classes of membership: Active, Senior, Candidate, and Honorary. Admission to membership in the Association shall be by election. The qualifications for membership shall be determined by the By-Laws. Only Active and Senior members have the privilege of voting. Only Active members may hold elective office.

SECTION 2.
Election of Active, Senior, and Honorary members shall be for life, subject to the provisions of Section 3, following.

SECTION 3.
Members in good standing may voluntarily terminate Membership at any time. The Council, acting as a Board of Censors, may recommend the expulsion of a member on the grounds of moral or professional delinquency, and submit his name, together with the grounds of complaint, to the Association as a whole at any of the regularly convened meetings, after giving the member so accused ample opportunity to appear in his own behalf.

ARTICLE IV. OFFICERS AND GOVERNMENT

SECTION 1.
The officers of the Association shall be a President, a Vice President, a Secretary, a Treasurer, and three Councilors. These seven officers and councilors shall be the governing body of the Association, and shall have full power to act on all matters, except as follows:

a) They may not alter annual dues, nor levy and general assessments against the membership, except that they may, in individual cases, remit annual dues or assessments.

b) They may in no ways change the Constitution or the By-Laws.

c) They may neither elect new members or alter the status of existing members, other than to apply the provisions of Article III, Section 3.
SECTION 2.
Officers and Councilors shall be elected at the annual meeting of the Association, and shall take office upon the conclusion of the meeting. The President and Vice President shall be elected for a one-year term of office and neither may be re-elected to succeed himself in the same office. The Secretary and Treasurer shall be elected for a one-year term of office and may be re-elected. The outgoing President shall automatically become a Councilor for a one-year term of office. The other two Councilors shall be elected each year, for a two-year term of office, but no Councilor may be re-elected to succeed himself.

SECTION 3.
Vacancies occurring among the officers and councilors during the year shall be temporarily filled by action of the Council, subject to approval of the Association at the next regularly convened meeting.

ARTICLE V. COMMITTEES

SECTION 1.
At the opening session of the annual meeting, the President shall appoint a Nominating Committee of three, preferably from among the past-presidents of the organization. This Nominating Committee shall select a slate of officers to be voted on in the closing session of the annual meeting.

SECTION 2.
The Council is empowered to appoint a Membership Committee, a Necrology Committee, an Auditing Committee, a Program Committee, an Economics Committee, and such other committees as may in its opinion be necessary. All such committees shall render their report at the executive session the Association.

SECTION 3.
The Association as a whole may authorize the Council to appoint scientific or research committees for the purpose of investigating thoracic problems and may authorize the Council to support financially such committees to a limited degree.

ARTICLE VI. FINANCES

SECTION 1.
The fiscal year of the Association shall run from the beginning of one annual meeting to the beginning of the next annual meeting. The books of the Association shall be kept and audited on this basis.

SECTION 2.
The membership shall contribute to the financial maintenance of the Association through the medium of annual dues and special assessments. The amount of annual dues shall be determined by the By-Laws.

SECTION 3.
To meet the current expenses of the Association, there shall be available all revenue derived from annual dues, special assessments, and any other income to the Association.

ARTICLE VII. MEETINGS

SECTION 1.
The Council and the provisions of the By-Laws shall determine the time, place, duration, and procedure of the annual meeting of the Association.

SECTION 2.
A special meeting of the Association may be called on one month’s notice at the written request of twenty-five percent of the members. The specific purposes of the meeting must be stated in the request and in the official call for the meeting.
ARTICLE VIII. AMENDMENTS

SECTION 1.
The Constitution shall in no ways be changed except by a three-fourths vote of the members present at an annual meeting, and further provided that the proposed alteration or amendment shall have been moved and seconded at a previous annual meeting, and that copies of all suggested alteration or amendment shall have been circulated among the members, and that the members shall have been specifically advised that such alteration or amendment will be voted upon.

BY-LAWS

ARTICLE I

SECTION 1
These By-Laws shall merely interpret the Constitution and specifically apply its principles. They shall set forth no principles not included in the Constitution.

ARTICLE II

SECTION 1
The Council may set the length of time for the presentation and discussion of scientific papers.

SECTION 2.
Members are urged to cooperate with all committees of the Association.

SECTION 3.
Attendance at annual meetings is expected.

SECTION 4.
While the scientific session of the annual meeting is held primarily for the benefit of the members of the Association, it may be thrown open to nonmembers who are able to submit satisfactory credentials, who register in a specific manner, and who pay such registration fee as may be determined by the Council from year to year.

ARTICLE III

SECTION 1.
Applicants for membership in this Association must have completed a formal thoracic surgical training program recognized by The American Board of Thoracic Surgery. Applicants must be formally nominated and seconded, in an approved manner, by at least two Active or Senior Members. The Membership Committee must approve the application for membership and the names presented to the Association at a regularly convened annual meeting for final action.

SECTION 2.
There is no limit to the number of Active Members.

SECTION 3.
Active Members may become Senior Members upon specific request at age 65 or older, at retirement, or when incapacitated by illness.

SECTION 4.
The Candidate Membership is for residents interested in becoming active members. They are encouraged to attend and participate in the Annual meetings. They are exempt from annual dues and voting. Residents will progress to Active Membership status upon completion of their training.
SECTION 5.
Honorary Membership shall be reserved for such distinguished persons as may be deemed worthy of this honor by the Council with concurrence of the Association.

SECTION 6.
The report of the Membership Committee shall be rendered at the annual executive session of the Association.

ARTICLE IV

SECTION 1.
The President of the Association shall perform all duties customarily pertaining to the office of the President. He shall preside at the meetings of the Association and Council. The President shall be elected from the Active Members of the Association.

SECTION 2.
The Vice President of the Association shall perform all duties customarily pertaining to the office of the Vice-President. The Vice President shall be elected from the Active Members of the Association.

SECTION 3.
The Secretary of the Association shall perform all duties customarily pertaining to the office of the Secretary. The Secretary shall be elected from the Active Members of the Association.

SECTION 4.
The Treasurer of the Association shall perform all duties customarily pertaining to the office of Treasurer. The Treasurer shall be elected from the Active Members of the Association.

SECTION 5.
The Councilors of the Association shall hold office as specified in the Constitution. They shall be elected from the Active Members of the Association.

SECTION 6.
In the event of a vacancy occurring in the office of President, the Council shall advance the Vice President to the Presidency and appoint a new Vice President under the provisions of Article IV, Section 3 of the Constitution.

ARTICLE V

SECTION 1.
The Membership Committee shall consist of five Active Members appointed in accordance with the provisions of Article V, Section 2, of the Constitution. The Council may appoint no more than one of its own members to serve on this committee. The duties of the membership committee are to investigate all candidates for membership in the Association and to report their findings to the Council. Appointment to this committee shall be for a period of one year and not more than three of the members may be re-appointed to succeed themselves. A member may not serve more than two years in succession unless he is to serve at Chairman of the committee in his third and fourth years.

SECTION 2.
The Auditing Committee shall consist of three Active or Senior Members appointed in accordance with the provisions of Article V, Section 2, of the Constitution. None of these may be selected from the officers or councilors of the Association. Their duty shall be to audit the accounts of the Association at the end of each fiscal year and render their report to the Association. Appointments to this committee shall be made for a one-year term.

SECTION 3.
The Program Committee shall consist of three or more members, chosen from the Active Membership. The President and Secretary shall be ex officio members of this committee.
SECTION 4.
The Economics Committee shall consist of five members chosen from the Active Membership. (A.) These five members shall constitute the members of the Advisory Committee to the Pennsylvania State Medical Society. (B.) Members of the Advisory Committee to the Pennsylvania State Medical Society will be recommended by the acting President of the Pennsylvania Association for Thoracic Surgery following the annual meeting.

SECTION 5.
The Necrology Committee has been incorporated into the Membership Committee and shall consist of two members.

SECTION 6.
A Director of Governmental Affairs shall be elected from the Active Members of the Association. The Director, for continuity and familiarity with Government Affairs and Representatives shall be elected for a two-year term of office and may be re-elected.

SECTION 7.
When scientific or research committees are authorized by the Association, the Council shall appoint the chairman of these committees, with power to organize their committee in any way best calculated to accomplish the desired object, subject only to the approval of the Council. Financial aid rendered to such committees shall not succeed such annual or special appropriations as may be specifically voted for such purpose by the Association as a whole.

ARTICLE VI

SECTION 1.
Honorary Members of the Association are exempt from all dues and assessments.

SECTION 2.
Annual dues for Active Members shall be set at the annual meeting as recommended by the Council.

SECTION 3.
The Council shall recommend that any Active Members whose dues are in arrears for three years shall have his membership terminated, provided that prior notification has been forwarded to the member by the Secretary of the Association.

SECTION 4.
Senior members are exempt from all dues and assessments.

ARTICLE VII

SECTION 1.
When the Association convenes for its annual meeting, it shall immediately go into executive session, but the business at this session shall be limited to:
   a) Appointment of committees
   b) Miscellaneous business of an urgent nature

SECTION 2.
The second executive session of the annual meeting of the Association shall be held as the final session of the meeting and the order of business shall be as follows or as the President elects:
   a) Reading of the minutes of the preceding meeting of the Association of Council.
   b) Report of the Treasurer for the last fiscal year
   c) Report of the Auditing Committee
   d) Report of the Program Committee
   e) Report of the Economics Committee
f) Report of the Necrology Committee

g) Action on amendments to the Constitution and By-Laws

h) Action on recommendations emanating from the Council

i) Unfinished business

j) New Business

k) Report to the Membership Committee

l) Election of new members

m) Report of the Nominating Committee

n) Election of officers

ARTICLE VIII

SECTION 1.
These By-Laws shall in no ways be changed, except by a two-thirds vote of the members present at the annual meeting of a properly convened meeting of the Association, and further provided that the proposed action or amendment shall have been moved and seconded by not less than three of the members in a properly convened annual or special meeting of the Association.

SECTION 2.
These By-Laws shall be superseded in whole or in part for a period of not more than twelve hours by unanimous vote of those present as any regularly convened meeting of the Association.

CONSTITUTION OF THE PENNSYLVANIA ASSOCIATION FOR THORACIC SURGERY

FIRST, The Pennsylvania Association for Thoracic Surgery (Association) is organized exclusively for charitable, educational, and scientific purposes, including for such purposes, the making of distributions to organizations under Section 501 (c)(3) of the Internal Revenue Code (or the corresponding section of any future Federal tax code).

SECOND, no part of the net earnings of the Association shall insure the benefit of or be distributed to its members, trustees, directors, officers, or other private persons, except that the Association shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of Section 501 (c)(3) purposes. No substantial part of the activities of the Association shall be the carrying on of propaganda, or otherwise attempting to influence legislation, and the Association shall not participate in, or intervene in (including the publishing or distribution of statements) any political campaign on behalf of, or in opposition to, any candidate for public office.

Notwithstanding any other provision of these articles, the Association shall not carry on any other activities not permitted to be carried on (a) by an organization exempt from Federal income tax under Section 501 (c) (3) of the Internal Revenue Code (or corresponding section of any future Federal tax code) or (b) by an organization, contributions to which are deductible under Section 170 (c) (2) of the Internal Revenue Code (or corresponding section of any future Federal tax code).

THIRD, upon the dissolution of this Association assets shall be distributed for one or more exempt purposes within the meaning of Section 501 (c)(3) of the Internal Revenue Code (or corresponding section of any future Federal tax code), or shall be distributed to the Federal government, for a public purpose.
PAST MEETINGS AND PRESIDENTS

1963 - Pocono Manor, Pocono, PA
   Edward M. Kent, MD

1964 - Bedford Springs, Bedford, PA
   John H. Gibbon, Jr., MD

1965 - Buckhill Falls Inn, Buckhill Falls, PA
   Julian Johnson, MD

1966 - The Hotel Hershey, Hershey, PA
   Henry T. Bahnsen, MD

1967 - Bedford Springs Hotel, Bedford Springs, PA
   Wilbur E. Burnett, MD

1968 - Shawnee-on-the-Delaware, PA
   George Willauer, MD

1969 - The Hotel Hershey, Hershey, PA
   John M. Snyder, MD

1970 - Seven Springs Resort, Champion, PA
   Thomas C. Ryan, MD

1971 - Host Farm Motel, Lancaster, PA
   Paul Nemir, Jr., MD

1972 - Fernwood, Bushkill, PA
   George J. Magovern, Sr., MD

1973 - Buckhill Falls Inn, Buckhill, PA
   William R. DeMuth, MD

1974 - The Hotel Hershey, Hershey, PA
   George P. Rosemond, MD

1975 - Seven Springs Resort, Champion, PA
   George J. Haupt, MD

1976 - Buckhill Falls Inn, Buckhill Falls, PA
   William A. Atlee, MD

1977 - Bedford Springs Hotel, Bedford Springs, PA
   R. Robert Tyson, MD

1978 - The Hotel Hershey, Hershey, PA
   John A. Waldhausen, MD

1979 - Seven Springs Resort, Champion, PA
   James L. Harrison, MD

1980 - Buckhill Falls Inn, Buckhill Falls, PA
   John Y. Templeton, III, MD

1981 - Bellevue Stratford, Philadelphia, PA
   W. Winster Kunkel, Jr., MD

1982 - The Hotel Hershey, Hershey, PA
   Joseph C. Donnelly, Jr., MD

1983 - Inn at the Peak, Clymer, NY
   George J. Deangelo, MD

1984 - Skytop Lodge, Skytop, PA
   Horace Mac Vaugh, III, MD

1985 - Sheraton at Station Square, Pittsburgh, PA
   Benjamin G. Musser, MD

1986 - The Hotel Hershey, Hershey, PA
   Robert G. Trout, MD

1987 - Hamilton Princess Hotel, Bermuda
   Vincent D. Cuddy, MD

1988 - Seven Springs Resort, Champion, PA
   Vincent W. Lauby, MD

1989 - Toftrees Resort, State College, PA
   William S. Pierce, MD

1990 - Split Rock Resort, Pocono, PA
   Pascal Spagna, MD

1991 - Marco Island Resort, Marco Island, FL
   George A. Liebler, MD

1992 - Nemacolin Woodlands Resort, Farmington, PA
   John L. Pennock, MD

1993 - The Hotel Hershey, Hershey, PA
   Sang B. Park, MD

1994 - The Resort at Longboat Key, Longboat Key, FL
   Ronald V. Pellegrini, MD

1995 - The Four Seasons Hotel, Philadelphia, PA
   David B. Campbell, MD

1996 - Nemacolin Woodlands Resort, Farmington, PA
   Rohinton K. Balsara, MD

1997 - Le Chateau Frontenac, Quebec, Canada
   Jacob Kolff, MD

1998 - Penn State Conference Ctr., State College, PA
   Thomas Maher, MD

1999 - Skytop Lodge, Skytop, PA
   Manucher Fallahnejad, MD

2000 - Southampton Princess, Bermuda
   James A. Magovern, MD

2001 - Sheraton Station Square, Pittsburgh, PA
   Francis Sutter, DO

2002 - Loews Miami Beach Hotel, Miami, FL
   Edward L. Woods, MD

2003 - Geisinger Medical Center & Pine Barn Inn,
   Danville, PA
   Craig B. Wisman, MD

2004 - Lankenau Hospital, Wynnewood, PA
   & Sheraton Hotel Society Hill, Philadelphia, PA
   Scott M. Goldman, MD

2005 - Elbow Beach Resort, Bermuda
   Joseph E. Bavaria, MD

2006 - Lehigh Valley Hospital & Glaser Inn,
   Allentown, PA
   Raymond L. Singer, MD

2007 - Marriott Sea View Resort & Spa, Gallaway, NJ
   Rohinton J. Morris, MD

2008 - Amelia Island Plantation, Amelia Island, FL
   James B. McClurken, MD

2009 - Ritz-Carlton, Amelia Island, FL
   Ron D. Nutting, MD

2010 - Disney’s Boardwalk Inn, Lake Buena Vista, FL
   Sanjay Mehta, MD

2011 - Gaylord National, National Harbor, MD
   Fred Weber, MD, JD

2012 - Ritz-Carlton, Naples, FL
   Michael Szwerc, MD
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