

54TH ANNUAL MEETING

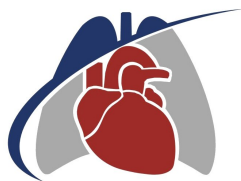
OCTOBER 19 – 22, 2016



Loews Don CeSar Hotel
St. Pete Beach, FL

EASTERN CARDIOTHORACIC SURGICAL SOCIETY

54th Annual Meeting



Loews Don CeSar Resort

St. Pete Beach, Florida

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Upstate Medical University
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Director, Aortic Institute at Yale-New Haven
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Mount Sinai Health System
New York, New York

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Perelman School of Medicine
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Columbia University College of
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Ridgewood, New Jersey
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The University of Pennsylvania School of Medicine
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Surgical Director
Mechanical Circulatory Support
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Lung Transplant Program
Chapel Hill, North Carolina

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Philadelphia, Pennsylvania

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Perelman School of Medicine at the
University of Pennsylvania
Philadelphia, Pennsylvania

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Allegheny General Hospital
Pittsburgh, Pennsylvania

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Division of Cardiac Surgery
Johns Hopkins University
President & Executive Director
Foundation for the Advancement of
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Baltimore, Maryland

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Sanger Heart and Vascular Institute
Levine Children's Hospital
Charlotte, North Carolina

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Division of Cardiothoracic Surgery
East Carolina Heart Institute
The Brody School of Medicine at
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Baltimore, Maryland

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The Valley Health System
Paramus, New Jersey

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PinnacleHealth Cardiovascular Institute
Harrisburg, Pennsylvania

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Associate Professor of Surgery
Northwell Health System
Lenox Hill Hospital
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Research and Education
Co-Director of Robotic and Minimally
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Vice Chair, Clinical Practice
Mayo Clinic
Rochester, Minnesota

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Southern Ohio Medical Center
Portsmouth, OH

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FACS, FESC
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Reif Cardiovascular Institute
Doylestown, Pennsylvania
Professor of Surgery Emeritus
Temple University
Philadelphia, Pennsylvania

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Director of Thoracic Aortic and Arrhythmia Surgery
Surgical Director of the CTEPH Program
Associate Professor of Surgery
Department of Thoracic and Cardiovascular Surgery
Allegheny General Hospital
Pittsburgh, Pennsylvania

Konstadinos A. Plestis, MD, FACS
System Chief, Cardiothoracic & Vascular Surgery
Lankenau Heart Institute
Main Line Health
Wynnewood, Pennsylvania

Basel Ramlawi, MD, MMSc, FACC, FACS
Chairman, Heart & Vascular Center
Director, Advanced Valve and Aortic Center
Valley Health System
Winchester, Virginia

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Co-Director, Esophageal & Lung Surgery Institute
University of Pittsburgh Medical Center
Pittsburgh, Pennsylvania

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Director, Cardiovascular Intensive Care Unit
University of Mississippi Medical Center
Jackson, Mississippi

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General Thoracic Surgery
Director, Price Center for
Comprehensive Chest Care
New York Presbyterian Hospital
Columbia University Medical Center
New York, New York

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Co-Director, Valve Reference Center
Mount Sinai Hospital
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Director of Coronary Revascularization
Director of Thoracic Aorta Surgery
University of Maryland Medical Center
Baltimore, Maryland

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Michigan State College of Human Medicine
East Lansing, Michigan
Cardiothoracic Surgeon
Spectrum Health Medical Group
Grand Rapids, Michigan

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Medical Director, Cancer Program
Main Line Health System
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Clinical Associate Professor
Sydney Kimmel Medical College
Philadelphia, Pennsylvania

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Brody School of Medicine at
East Carolina University
Greenville, North Carolina

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Thoracic Surgeon
Piedmont Heart Institute
Atlanta, Georgia

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MedStar Washington
Professor of Surgery
Georgetown University
Washington, DC

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Thoracic Oncology
Chief, Division of Thoracic Surgery
University of Tennessee Health Science Center
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University of Cincinnati Medical Center
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Department of Thoracic Surgery
The Icahn School of Medicine at Mount Sinai
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Cardiothoracic Surgeon
Jersey Shore University Medical Center
Neptune, New Jersey

David Zeltsman, MD, FACS
Associate Professor of Surgery
Chief, Division of Thoracic Surgery
Director of Minimally Invasive Thoracic Surgery
Long Island Jewish Medical Center
Hofstra-Northwell School of Medicine
New Hyde Park, New York

ECTSS SCHOLARSHIP RECIPIENTS

The David Campbell Scholarship for Residents and Fred Weber Scholarship for Medical Students were created in 2016 to support the interests of general surgery residents and medical students in cardiothoracic surgery. Both Dr. Campbell and Dr. Weber became involved in this society when it was still known as the Pennsylvania Association of Thoracic Surgeons. Dr. Campbell served as president in 1995 and Dr. Weber served in 2011. Both of them have proven to be leaders in cardiothoracic surgery. They have fostered and continue to foster resident and medical student involvement in the society so that these residents and medical students are now becoming leaders in this field.

David Campbell Scholarship for Residents

2016 – Rami E. Michael, MD, *Greenville Memorial Hospital*

Fred Weber Scholarship for Medical Students

2016 – Corbin Earl Muettert, BS, Temple University School of Medicine

JAMES A. MAGOVERN, MD MEMORIAL LECTURERS

2007 – William S. Pierce, MD

2008 – Benjamin C. Sun, MD

2009 – Bartley P. Griffith, MD

2010 – Ralph J. Damiano, Jr., MD

2011 – L. Wiley Nifong, MD

2012 – William E. Cohn, MD

2013 – Jonathan B. Clark, MD

2014 – W. Randolph Chitwood, Jr., MD

2015 – Shaf Keshavjee, MD, MSc, FRCSC

2016 – John A. Elefteriades, MD

***We Gratefully Acknowledge and Extend a
Special Thank You to Our Convention
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Exhibitors

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KLS Martin Ltd.
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PROGRAM DESCRIPTION

This three-day program is the 54th 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 format consists of faculty and resident didactic oral presentations with moderated discussion periods, poster presentations and surgical videos 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.

TARGET AUDIENCE

The 54th Annual Meeting of the Eastern Cardiothoracic Surgical Society is designed for cardiothoracic surgeons, including physicians, residents, physician assistants, fellows and other cardiology health care providers.

ACTIVITY GOAL

This activity is designed to address the following core and team competencies: *Patient Care, Medical Knowledge, Practice-based learning, Professionalism, Employ evidence-based practice, Apply quality improvement, Value / ethics and Teams & teamwork.*

LEARNING OBJECTIVES

At the conclusion of the 54th Annual Meeting, the participants will be able to:

- Access the effectiveness of existing and evolving treatment options.
- Identify key factors in selecting appropriate treatment for patients.
- Discuss the technical challenges in the use of new technologies and techniques.
- Demonstrate improved competency in cardiothoracic techniques.
- Identify the relevant challenges facing the field of cardiothoracic surgery and the possible solutions to those challenges.

DISCLOSURE

Ciné-Med adheres to accreditation requirements regarding industry support of continuing medical education. Disclosure of the planning committee and faculty's commercial relationships will be made known at the activity. Speakers are required to openly disclose any limitations of data and/or discussion of any off-label, experimental, or investigational uses of drugs or devices in their presentations.

All Ciné-Med employees in control of content have indicated that they have no relevant financial relationships to disclose.

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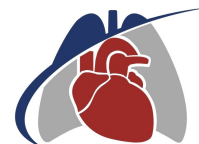
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Ciné-Med designates this live activity for a maximum of *13.0 AMA PRA Category 1 Credit(s)™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

EASTERN CARDIOTHORACIC SURGICAL SOCIETY

54TH ANNUAL MEETING



SCHEDULE OF EVENTS

WEDNESDAY, OCTOBER 19, 2016

4:00 p.m. - 6:00 - p.m. **Check-In and Registration**

4:00 p.m. - 5:30 - p.m. **Executive Session**

6:00 p.m. - 7:30 - p.m. **Welcome Reception**

THURSDAY, OCTOBER 20, 2016

6:30 a.m. – 1:00 p.m. **Registration**

7:00 a.m. - 7:45 a.m. **Resident/Medical Student Breakfast**

7:00 a.m. - 8:30 a.m. **Breakfast Buffet**

8:00 a.m. - 8:15 a.m. **Opening Remarks**

Robert J. Moraca, MD
President, Eastern Cardiothoracic Surgical Society
Allegheny General Hospital, Pittsburgh, PA

8:15 a.m. - 9:25 a.m. **Expert Session I**

Moderators: Robert J. Moraca, MD
Allegheny General Hospital, Pittsburgh, PA
Michael J. Walker, MD, FACS
Main Line Health System, Bryn Mawr, PA

8:15 a.m. - 9:00 a.m. **The Role of the CT Surgeon in the Open ICU Model**

Nevin M. Katz, MD, *Johns Hopkins Hospital, Baltimore, MD*

The Train Has Left the Station – The Role of the CT Surgeon in the Closed ICU Model

Jay Shake, MD, *The University of Mississippi Medical Center, Jackson, MS*

9:00 a.m. - 9:20 a.m. **Healthcare Disparities in Cardiac Surgery**

Robert F. Dunton, MD, *Upstate Medical University, Syracuse, NY*

9:30 a.m. – 10:30 a.m. **Expert Session II**

Moderators:

Barry R. Davis, MD
Greenville Memorial Hospital
Greenville, SC

Eric J. Lehr, MD, PhD, FRCSC
Swedish Heart & Vascular Institute
Seattle WA

William D. Bolton, MD
University of South Carolina at Greenville
Greenville, SC

John F. Lazar, MD
PinnacleHealth Cardiovascular Institute
Harrisburg, PA

Cardiovascular

9:30 a.m. - 9:37 a.m.

How to Do an Aortic Dissection Repair

Konstadinos A. Plestis, MD, FACS
*Lankenau Heart Institute
Wynnewood, PA*

9:37 a.m. - 9:44 a.m.

Mini AVR

Scott M. Goldman, MD
*Lankenau Heart Institute
Wynnewood, PA*

9:44 a.m. – 9:51 a.m.

Conscious Sedation for TAVR

Basel Ramlawi, MD, MMSc, FACS, FACC
*Valley Health System
Winchester, VA*

9:51 a.m. – 9:58 a.m.

Cox Maze IV Lesion Set

Andy C. Kiser, MD, FACS, FACC, FCCP
*East Carolina Heart Institute
Greenville, NC*

9:58 a.m. – 10:05 a.m.

Cannulation for ECMO (perc vs femoral)

Zachary N. Kon, MD
University of Maryland School of Medicine, Baltimore, MD

10:05 a.m. – 10:12 a.m.

Goretex Neochords

W. Clark Hargrove, III, MD
*Penn Presbyterian Medical Center
Philadelphia, PA*

10:15 a.m. - 11:15 a.m.

Refreshments

11:00 a.m. - 12:05 p.m.

Scientific Session

Moderators: Zachary Kon, MD, *University of Maryland School of Medicine, Baltimore, MD*

Africa F. Wallace, MD, *Piedmont Heart Institute, Atlanta, GA*

SA1 – In-Hospital Outcome and Complications of Coronary Artery Bypass Grafting in the United States between 2008 and 2012

Elena Dolmatova, Kasra Moazzami, James Maher, Christine Gerula, Marc Klapholz, Justin Sambol, Alfonso H. Waller
Rutgers New Jersey Medical School, Newark, NJ, USA

Thoracic

Anastomotic Technique for Ivor-Lewis Robotic Assisted Minimally Invasive Esophagectomy: How I Do It

Inderpal S. Sarkaria, MD, FACS
*University of Pittsburgh Medical Center
Pittsburgh, PA*

MIE Ivor Lewis VATS Linear Stapled Anastomosis

Joshua R. Sonnett, MD
*New York Presbyterian Hospital
Columbia University Medical Center
New York, NY*

Endoscopic Management of Benign Central Airway Obstruction: A Changing Paradigm

Faiz Y. Bhora, MD, FACS
*Mount Sinai Roosevelt and
Mount Sinai St. Luke's Hospitals
New York, NY*

Surgical Management of Tracheal Stenosis

Pierre de Delva, MD
*University of Mississippi Medical Center
Jackson, MS*

Robotic Segmentectomy Made Simple

Richard S. Lazzaro, MD
*Northwell Health System
Lenox Hill Hospital, New York, NY*

Uniportal VATS Segmentectomy: Emphasis is on Minimally Invasive

David Zeltsman, MD, FACS
*Long Island Jewish Medical Center
New Hyde Park, NY*

SA2 – Comparative Outcome Analysis of Minimally Invasive Ivor Lewis and Open Transhiatal Esophagectomy

Mark Crye, Mathew Van Deusen, Frances Philip, Rodney J. Landreneau, Blair Jobe, Lana Y. Schumacher
Allegheny Health Network, Pittsburgh, PA, USA

SA3 – Aortic Valve Replacement in Patients with Severe Aortic Insufficiency Improves Symptoms and Ejection Fraction at Late Follow-Up

Matthew R. Schill, Farah Musharbash, Vivek Hansalia, Timothy S. Lancaster, Richard B. Schuessler, Keki R. Balsara, Akinobu Itoh, Hersh S. Maniar, Muhammad Faraz Masood, Michael K. Pasque, Marc R. Moon, Ralph J. Damiano Jr., Spencer J. Melby
Washington University in St. Louis, St. Louis, MO, USA

SA4 – Use of Cryoablation in Treatment of Subglottic Tracheal Stenosis in Pediatric Patients with Wegener's Granulomatosis

Amie Kent¹, Lee Smith², Jeffrey Cheng³, David Zeltsman¹
¹*Northwell Health Long Island Jewish Hospital, New Hyde Park, NY, USA*, ²*Northwell Health Cohen's Children's Medical Center, New Hyde Park, NY, USA*, ³*Duke University Medical Center, Durham, NC, USA*

SA5 – Risk factors for Recurrent Regurgitation Following Mitral Valve Repair in Degenerative Disease

William K. Childers, Mubashir Mumtaz, Nathaniel Melton, John Lazar, David Loran, William Apollo
Pinnacle Health System, Harrisburg, PA, USA

SA6 – Electromagnetic Navigation Bronchoscopy for Peripheral Lung Lesions: Factors Associated with Improved Diagnostic Yield

Summer N. Rochester¹, William D. Bolton², John S. Richey¹, Joseph A. Ewing¹, Allyson L. Hale¹, Tiffanie Aiken³, Beatriz Bassaco¹, Benjamin C. Powell¹, James E. Stephenson¹, Sharon Ben-Or²
¹*Greenville Health System, Greenville, SC, USA*, ²*Greenville Health System, USC School of Medicine Greenville, Greenville, SC, USA*, ³*USC School of Medicine Greenville, Greenville, SC, USA*

SA7 – Concomitant Carotid Endarterectomy and Transcatheter Aortic Valve Replacement Technique and Outcomes

Robert J. Moraca, Harper L. Padolsky, Anil A. Shah, Stephen H. Bailey, Diane Berger, George Magovern, Jr., Daniel Benckart
Allegheny General Hospital, Pittsburgh, PA, USA

SA8 – Traumatic Esophageal Injury: a 27 Year Experience in a Large Trauma Registry

Cameron Stock, Bruce Simon, Karl F. Uy, Geoffrey Graeber
University of Massachusetts Medical School, Worcester, MA, USA

12:15 p.m. - 1:15 p.m.

David B. Campbell / Fred Weber Scholarship Luncheon

5:00 p.m. - 6:00 p.m.

Movie Night

Moderators: Abbas E. Abbas, MD, MS, FACS
Temple University School of Medicine, Philadelphia, PA
Basel Ramlawi, MD, MMSc, FACC, FACS
Valley Health System, Winchester, VA

Supravalvular Aortic Stenosis in the Adult Patient: Modified Three-Patch Reconstruction of the Aortic Root

Jonathan Hemli, Dror Perk, Yuriy Dudiy, Derek Brinster, *Lenox Hill Hospital, New York, NY, USA*

Esophageal Duplication Cyst with Absent Pericardium

Sean McGrath, Sharon Ben-Or, James Stephenson, William D. Bolton, *USC School of Medicine Greenville, Greenville, SC, USA*

Successful Management of Annulus Rupture in Transcatheter Aortic Valve Implantation

Daniel Watson, Steven Yakubov, *Riverside Methodist Hospital, Columbus, OH, USA*

Thoracoscopic Management of Lung Abscess Before Empyema

Carlos Anciano, Ryan Jones, Mark Bowling, James Speicher, Mark Iannettoni, *East Carolina University, Greenville, NC, USA*

Repair of Type V TAAA Using a Selective Celiac, Superior Mesenteric and Renal Artery Perfusion in a Patient

Konstadinos Plestis, Oleg I. Orlov, Sotia Zenios, Arman Saeedi, Alon Aharon, *Lankenau Medical Center, Wynnwood, PA, USA*

A Case of Dual Esophageal Diverticula With Associated Aberrant Right Subclavian Artery

James Speicher, Carlos Anciano, Mark Iannettoni, *East Carolina University, Greenville, NC*

6:00 p.m. - 7:30 p.m.

Case Bowl

Moderators: Sharon Ben-Or, MD
University of South Carolina at Greenville, Greenville, SC

David B. Campbell, MD
Hershey Medical Center, Hershey, PA

Fred Weber, MD, JD
Emeritus, Ocean City, NJ

FRIDAY, OCTOBER 21, 2016

7:00 a.m. - 3:00 p.m.

Registration

7:00 a.m. - 7:45 a.m.

Scientific Poster Rounds

7:00 a.m. - 8:30 a.m.

Breakfast Buffet

8:00 a.m. - 8:40 a.m.

Expert Session I

Moderators: Jeremiah T. Martin, MBBCh, FRCSI, FACS
Southern Ohio Medical Center, Portsmouth, OH

Benjamin A. Youdelman, MD
Jersey Shore University Medical Center, Neptune, NJ

8:00 a.m. - 8:20 a.m.

Pulmonary Thromboendarterectomy

Robert J. Moraca, MD, *Allegheny General Hospital, Pittsburgh, PA*

8:20 a.m. - 8:40 a.m.

Innovation from Idea to Device and How to Obtain a Patent

William E. Cohn, MD, *Texas Heart Institute, Houston, TX*

9:00 a.m. - 10:45 a.m.

Expert Session II

Moderators:

Scott M. Goldman, MD
*Lankenau Heart Institute
Wynnewood, PA*

David J. Finley, MD, FACS, FCCP
*Dartmouth-Hitchcock Medical Center
Lebanon, NH*

Konstadinos A. Plestis, MD, FACS
*Lankenau Hospital
Wynnewood, PA*

Benny Weksler, MBA, MD, FACS
*University of Tennessee Health Science
Center, Memphis TN*

Cardiovascular

Thoracic

9:00 a.m. - 9:45 a.m.

TAVR in the Low Risk Patient

Susheel Kodali, MD
*New York Presbyterian Hospital
Columbia University Medical Center
New York, NY*

Curtis Anderson, MD
*REX UNC Health Care
Raleigh, NC*

The Optimal Therapy for Early Stage Esophageal Cancer: the Endoscope or the Knife

Robert J. Cerfolio, MD, MBA, FACS, FCCP
*University of Alabama at Birmingham
Birmingham, AL*

Thomas J. Watson, MD
*Georgetown University
Washington, DC*

9:45 a.m. - 10:05 a.m.

Surgical Management of Hypertrophic Cardiomyopathy in the Adult

Richard-Tien Ha, MD
*Stanford University Hospitals
and Clinics, Stanford, CA*

Pain Won't Kill You, Complications Will... So, Walk It Off!

Sandeep J. Khandhar, MD
*Inova Health System
Falls Church, VA*

10:05 a.m. - 10:25 a.m.

Anomalous Coronary Arteries

Paul M. Kirshbom, MD
*Sanger Heart & Vascular Institute
Seattle, WA*

End-Stage Achalasia: Remedy or Resect?

Valerie A. Williams, MD
*University of Cincinnati Medical Center
Cincinnati, OH*

10:25 a.m. - 10:45 a.m.

Development of a PERT Program

Eric J. Lehr, MD, PhD, FRCSC
*Swedish Heart & Vascular Institute
Seattle WA*

Management of Thymoma

Robert J. Korst, MD
*The Valley Health System
Paramus, NJ*

10:15 a.m. - 11:15 a.m.

Refreshments

11:00 a.m. - 11:55 a.m.

Scientific Session

Moderators: John A. Eleftheriades, MD
Yale School of Medicine, New Haven, CT

Doraid Jarrar, MD, FACS
*Perelman School of Medicine at the University of Pennsylvania,
Philadelphia, PA*

SA9 – Computational Fluid Dynamics Wall-Stress Assessment of Root, Ascending Aorta and Arch Supports the Preservation of the Dissected Arch with Treatment of Type-A Dissections

Domenico Calcaterra¹, Liza Shrestha², Mohammad Bashir², Kalpaj Parek²

¹Hennepin Medical Center, Minneapolis, MN, USA, ²University of Iowa, Iowa City, IA, USA

SA10 – Utilization of the Esophageal Wound VAC to Treat Esophageal Luminal Disruption

Uday Dasika, Wassim Abi Jaoude

Reading Health System, West Reading, PA, USA

SA11 – Patient Age, Cost and Readmission of Heart Transplantation in the U.S. Medicare Population

Amanda L. Chin, Danielle Savino, Danielle Spragan, Fenton H. McCarthy, Taylor Dibble, Ashley Hoedt, Katherine McDermott, Keith Dufendach, Peter Groeneveld, Joseph Bavaria, Wilson Szeto, Nimesh D. Desai

University of Pennsylvania, Philadelphia, PA, USA

SA12 – Recurrence of Breast Cancer in the Chest Wall -Our Experience with Successful Resection and Reconstruction

Sanaz Leilabadi¹, Karl F. Uy², Cameron Stock², B. Marie Ward², Anne Larkin², Raymond Dunn², Geoffrey Graeber²

¹University of Massachusetts Medical School, Worcester, MA, USA, ²UMass Memorial, Worcester, MA, USA

SA13 – Role of Coronary Artery Disease in Clinical Outcomes Following Transcatheter Aortic Valve Replacement

Mark A. Groh¹, Ivan Diaz², William B. Abernethy³, Joshua P. Leitner³, Gerard L. Champsaur⁴

¹Asheville Heart, Asheville, NC, USA, ²Cornell University, New York, NY, USA,

³Asheville Cardiology Associates, Asheville, NC, USA, ⁴Mission Hospital Asheville, NC, USA

SA14 – Pneumonectomy is Necessary Following Pulmonary Artery Compromise: Case Series and Literature Review

Ambria Moten, Abbas Abbas

Temple University School of Medicine, Philadelphia, PA, USA

12:15 p.m. - 1:15 p.m.

**James A. Magovern, MD Memorial Lectureship Luncheon
Thoracic Aortic Aneurysm: Reading the Enemy's Playbook**

John A. Elefteriades, MD

Yale School of Medicine, New Haven, CT

1:15 pm – 2:00 pm

Membership Business Meeting

6:00 p.m. - 7:30 p.m.

President's Reception

SATURDAY, OCTOBER 22, 2016

7:00 a.m. - 12:00 p.m.

Registration

7:30 a.m. - 9:00 a.m.

Breakfast Buffet

8:00 a.m. - 9:40 a.m.

Expert Session I

Moderators:

Mark B. Anderson, MD
*Einstein Healthcare Network
Philadelphia, PA*

Stephen H. Bailey, MD
*Allegheny General Hospital
Pittsburgh, PA*

Sharon Ben-Or, MD
*University of South Carolina at Greenville
Greenville, SC*

Thomas Fabian, MD, FCCP
*Albany Medical College
Albany, NY*

Cardiovascular

Thoracic

8:00 a.m. - 8:20 a.m.

CABG Total Arterial Revascularization

Management of Diaphragmatic Paralysis

Thomas J. Watson, MD
*Georgetown University
Washington, DC*

8:20 a.m. - 8:40 a.m.

Developing a LVAD Program

Simon Maltais, MD, PhD
*Mayo Clinic
Rochester, MN*

Radical Resections of Thoracic Tumors

Jason Long, MD
*University of North Carolina at Chapel Hill
Chapel Hill, NC*

8:40 a.m. - 9:00 a.m.

Managing Mitral Annular Calcification

Thomas G. Caranasos, MD
*University of North Carolina at
Chapel Hill, Chapel Hill, NC*

**Sublobar Resection for Lung Cancer:
An Oncologically Sound Procedure**

Raja M. Flores, MD
*Mount Sinai Health System
New York, NY*

9:00 a.m. - 9:20 a.m.

Aortic Debranching Procedures

Nimesh D. Desai, MD, PhD, FRCSC, FAHA
*Hospital of the University of
Pennsylvania
Philadelphia, PA*

**N2 Disease in Patients with Lung
Cancer: Is There an Optimal Treatment
Strategy?**

Richard J. Battafarano, MD, PhD
*Johns Hopkins University School of
Medicine
Baltimore, MD*

9:20 a.m. - 9:40 a.m.

Cardioplegia

Tomasz A. Timek, MD
*Spectrum Health Medical Group
Grand Rapids, MI*

**Lung Cancer Biomarkers and Immune
Therapy Trump Anatomy**

Paul R. Walker, MD, FACP
*East Carolina University
Greenville, NC*

10:00 a.m. - 10:45 a.m.

Expert Session II

Moderators: Nimesh D. Desai, MD, PhD, FRCSC, FAHA
Hospital of the University of Pennsylvania, Philadelphia, PA

Fred Weber, MD, JD
Emeritus, Ocean City, NJ

Public Reporting: Yes, But...Maybe?

Pro: Yes

Andrea S. Wolf, MD, MPH
The Icahn School of Medicine at Mount Sinai, New York, NY

Con: But...Maybe?

James B. McClurken, MD, FACC, FCCP, FACS, FESC
Doylestown Hospital, Doylestown, PA

10:45 a.m. - 11:40 a.m.

Scientific Session

SA15 – Del Nido Cardioplegia Simplifies Myocardial Protection Strategy for Minimally Invasive Aortic Valve Replacement

Michael S. Koeckert, Deane E. Smith, Thomas Beaulieu, Patrick F. Vining, Didier F. Loulmet, Elias A. Zias, Mathew R. Williams, Aubrey C. Galloway, Eugene A. Grossi
NYU Langone Medical Center, New York, NY, USA

SA16 – Current Treatment of Bronchopleural-Cutaneous Fistula

Cameron Stock, Nicole B. Cherng, Karl F. Uy, Geoffrey Graeber
University of Massachusetts Medical School, Worcester, MA, USA

SA17 – Is Partial Sternotomy a Viable Option in Patients with Concurrent Coronary Artery Disease and Aortic Valve Replacement?

Matthew Thomas, Oleg I. Orlov, Alon Aharon, Arman Saeedi, Sotia Zenios, Konstadinos Plestis
Lankenau Medical Center, Wynnewood, PA, USA

SA18 – Transverse Rectus Abdominis Flap in Pneumonectomy for Chronic Pulmonary Aspergillosis

Audrey C. Pendleton, Vadim Pisarenko, Jody Kaban
Jacobi Medical Center, Bronx, NY, USA

SA19 – Regional Availability of Low-Risk Donors Does Not Drive Organ Acceptance in Heart Transplantation

Ahmet Kilic, Asia McDavid, Larry Hromalik, Bryan Whitson, Don Hayes, Dmitry Tumin
Ohio State University Wexner Medical Center, Columbus, OH, USA

SA20 – Genetic Contribution to Non-Squamous, Non-Small Cell Lung Cancer in Non-Smokers

Shamus R. Carr¹, Wallace Akerley², Mia Hashibe², Lisa A. Cannon-Albright²
¹*University of Maryland School of Medicine, Baltimore, MD, USA*, ²*University of Utah, Salt Lake City, UT, USA*

11:40 a.m. - 12:00 p.m.

Awards / Closing Remarks

Robert J. Moraca, MD
President, Eastern Cardiothoracic Surgical Society
Allegheny General Hospital, Pittsburgh, PA

SCIENTIFIC ABSTRACT – SA1

SA1. In-Hospital Outcome and Complications of Coronary Artery Bypass Grafting in the United States Between 2008 and 2012

Elena Dolmatova, Kasra Moazzami, James Maher, Christine Gerula, Marc Klapholz, Justin Sambol, Alfonso H. Waller
Rutgers New Jersey Medical School, Newark, NJ, USA

Objective: To investigate the frequency and predictors of in-hospital complications among patients undergoing CABG in the United States (CABG).

Method: From 2008 to 2012, 1,970,661 CABG surgeries were identified using the National (Nationwide) Inpatient Sample database. Information regarding demographic details, including age, sex, race, insurance status, hospitalization outcome, total cost, and length of stay were collected. In-hospital complications including postoperative hemorrhage, cardiac complications (iatrogenic cardiac complications, pericardial complications, and acute myocardial infarction); pulmonary complications (pneumothorax, postoperative respiratory failure, and iatrogenic complications); neurological complications (stroke and transient ischemic attack); and postoperative infectious complications were investigated.

Result: There was a 21.38% ($P < 0.001$) decrease in the annual number of CABG surgeries between 2008 and 2012. The Deyo comorbidity index showed a steady increase from 2008 to 2012 ($P < 0.001$). The rate of in-hospital mortality decreased by 34.8% during the study period ($P < 0.001$). The most common in-hospital complication was postoperative hemorrhage (29.2%), followed by cardiac (11.89%) and respiratory complications (2.4%). During the 5-year period, the rates of in-hospital cardiac, respiratory and infectious complications decreased ($P < 0.001$), while the rate of postoperative hemorrhage showed a 36.1% relative increase in 2012 compared to 2008 ($P < 0.001$). Cost of hospitalizations and length of stay remained stable from 2008 to 2012.

Conclusion: The annual number of CABG operations is declining in the United States. While the burden of comorbidities is increasing, the rates of mortality and most in-hospital complications are improving. The increasing rate of postoperative bleeding necessitates the need to develop strategies to improve the risk of bleeding in this patient population.

SCIENTIFIC ABSTRACT – SA2

SA2. Comparative Outcome Analysis of Minimally Invasive Ivor Lewis and Open Transhiatal Esophagectomy

Mark Crye, Mathew Van Deusen, Frances Philip, Rodney J. Landreneau, Blair Jobe, Lana Y. Schumacher
Allegheny Health Network, Pittsburgh, PA, USA

Objective: Esophageal resection and reconstruction remains a mainstay of treatment with curative intent for esophageal cancer. The open transhiatal approach has been the mainstay of surgical resection within our system prior to the adoption of the minimally invasive Ivor Lewis (MIE) approach in recent years. We sought to evaluate the outcomes from our system to determine if there is a detrimental effect to patient outcomes by entering the chest cavity.

Method: A retrospective review of prospectively collected data utilizing the STS database from January 2009 through May 2016. Patients undergoing either MIE or open transhiatal esophagectomy from 2009-2016 were evaluated. Data collected and analyzed included: demographics, comorbidities, operative time, length of stay, in hospital and 30 day mortality, and post operative complications.

Result: Demographic data, comorbidities, and utilization of neoadjuvant therapy were equivalent between the two groups. In house and 30 day mortality in both groups were comparable, as were overall morbidity and pulmonary complications. Anastomotic leak rate trended higher for MIE, but did not reach statistical significance. Operative time, ICU and Hospital length of stay all were significantly longer in the MIE group. (Table SA2-1)

Conclusion: This retrospective review shows that the incidence of pulmonary complications associated with the MIE approach is not significantly different than those seen in the transhiatal approach. The leak rate trended higher in MIE, which is seen in other published data. Evaluation of length of stay and operative time may help improve these to levels comparable to our transhiatal results.

Table SA2-1
Patient Demographics and Outcomes for Open Transhiatal
and Minimally Invasive Ivor Lewis Esophagectomy

	Transhiatal (n=56)	MIE (n=70)	p-value
Age (mean, std deviation)	64.9 +/- 11.6	63.6 +/- 10.1	0.5
Sex (male/female)	89%/11%	84%/16%	0.5
Neoadjuvant chemo/XRT	24 (42.9%)	35 (50%)	0.47
Operative Time (min)	237.9 +/- 84.3	391.1 +/- 89.7	<0.05
Mortality- In House	1 (1.8%)	2 (2.9%)	1
30 Day	2/53 (3.8%)	2/58 (3.4%)	
Pulmonary Complications	12 (21.4%)	20 (28.6%)	0.41
Anastomotic Leak	4 (7.1%)	13 (18.6%)	0.07
Length of Stay (ICU/Overall, days)	5.4 +/- 7.6 // 10.5 +/-7.8	6.8 +/-7.5 // 13.9 +/-9.1	<0.05

SCIENTIFIC ABSTRACT – SA3

SA3. Aortic Valve Replacement in Patients with Severe Aortic Insufficiency Improves Symptoms and Ejection Fraction at Late Follow-Up

Matthew R. Schill, Farah Musharbash, Vivek Hansalia, Timothy S. Lancaster, Richard B. Schuessler, Keki R. Balsara, Akinobu Itoh, Hersh S. Maniar, Muhammad Faraz Masood, Michael K. Pasque, Marc R. Moon, Ralph J. Damiano Jr., Spencer J. Melby
Washington University in St. Louis, St. Louis, MO, USA

Objective: Surgeons have traditionally felt that severe aortic valve insufficiency (AI) is associated with high operative mortality and poor long-term survival after aortic valve replacement (AVR). This study investigated outcomes after AVR in patients with severe AI.

Method: A retrospective review was performed of 807 patients with severe AI who underwent aortic valve replacement at a single institution from 1996 to 2016. Patients with key data missing were excluded from long-term analysis. Long-term survival, echocardiographic and clinical follow-up data were obtained from medical records. Data were analyzed using the paired Student's t-test, the Wilcoxon signed-rank test, and Kaplan-Meier survival analysis.

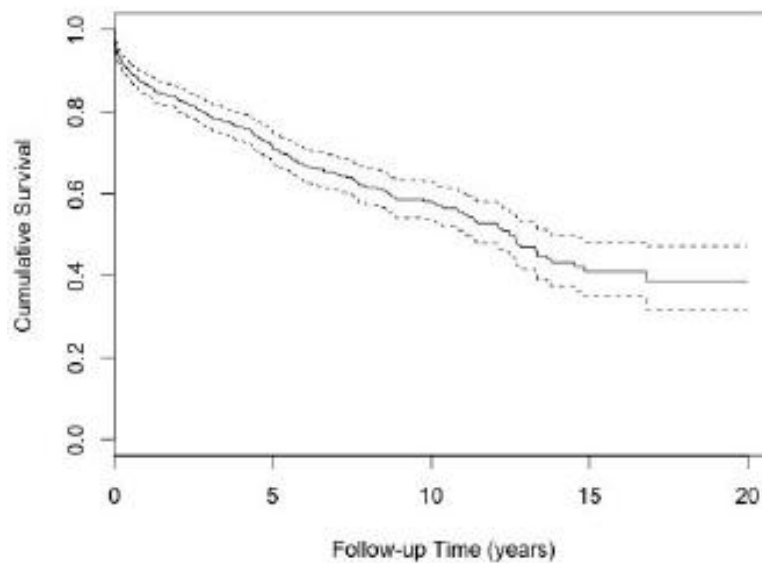
Result: Operative mortality was 6.5% (49/807). Most patients (678/807, 84.0%) received AVR alone; 129/807 (16.0%) also received aortic root repair. Bypass time and cross-clamp time were 158±69 and 108±49 minutes, respectively. Symptoms and preoperative echocardiography were captured in 689/807 (85.4%) of patients. Clinical and echocardiographic follow-up were available for 454/689 (65.9%) and 417/689 (60.5%) of patients at 4.88±4.66 and 4.93±4.42 years, respectively. NYHA class was improved at late follow-up (Table SA-3-1, $p<0.001$). EF improved from 48.3%±14.0% to 53.6%±13.7% ($p<0.001$). The postoperative mean aortic valve gradient was 15.6±9.5 mmHg. One-year survival was 86.9%. Median survival was 12.5 years (Figure SA-3-1).

Conclusion: AVR for severe AI has acceptable early mortality with significant improvements in both symptoms (as recorded by NYHA class) and left ventricular function at late follow-up.

Table SA-3-1. Demographics and Outcomes

	PREOPERATIVE	POSTOPERATIVE
AGE (Y)	54.5 ± 16.2	
MALE GENDER	554/807 (68.6%)	
NYHA CLASS I	42	232
NYHA CLASS II	81	70
NYHA CLASS III	142	52
NYHA CLASS IV	124	35
EF (%)	48.3 ± 14.0	53.6 ± 13.7
MAJOR COMPLICATIONS	138/807 (17.1%)	
OPERATIVE MORTALITY	49/807 (6.5%)	

Figure SA-3-1. Unadjusted Survival After AVR for Severe AI



SCIENTIFIC ABSTRACT – SA4

SA4. Use of Cryoablation in Treatment of Subglottic Tracheal Stenosis in Pediatric Patients with Wegener's Granulomatosis

Amie Kent¹, Lee Smith², Jeffrey Cheng³, David Zeltsman¹

¹Northwell Health Long Island Jewish Hospital, New Hyde Park, NY, USA, ²Northwell Health Cohen's Children's Medical Center, New Hyde Park, NY, USA, ³Duke University Medical Center, Durham, NC, USA

Objective: Subglottic stenosis is a potentially life threatening challenge for patients with Wegener's granulomatosis. Unlike many other types of airway stenosis, these patients present a very high risk of recurrence after traditional bronchoscopic assisted dilatation or resection procedures. As an alternative, we present our experience using cryoablation to resect subglottic stenosis in a series of pediatric patients with Wegener's granulomatosis.

Method: Three patients underwent bronchoscopy with cryoablation of subglottic stenosis. Patients were taken to the operating room and placed in suspension laryngoscopy under conditions of intermittent apnea. A six millimeter flexible bronchoscope with a two millimeter working channel was used for the ablation of the stenosis.

Result: All patients experienced immediate and symptomatic relief of subglottic stenosis. Two patients were discharged home the same day. One patient had an intraoperative pneumothorax. This child required a chest tube for 36 hours and was discharged home on postoperative day three with no further complications. Interval follow up surveillance bronchoscopy was performed six to twelve weeks later for all three patients and it showed no significant recurrence and demonstrated widely patent subglottic airways.

Conclusion: Cryoablation may be more effective than traditional techniques for managing subglottic stenosis in pediatric patients with Wegener's granulomatosis. Cryoablation may be used as a stand-alone therapy or in conjunction with other modalities. Despite our best efforts, one of our patients had a pneumothorax which was appropriately recognized and treated. Surgeons who regularly perform procedures using cryoablation should be able to recognize and manage this complication.

SCIENTIFIC ABSTRACT – SA5

SA5. Risk factors for Recurrent Regurgitation Following Mitral Valve Repair in Degenerative Disease

William K. Childers, Mubashir Mumtaz, Nathaniel Melton, John Lazar, David Loran, William Apollo
Pinnacle Health System, Harrisburg, PA, USA

Objective: In degenerative mitral valve disease, numerous repair techniques have been described, however, repair failure or recurrent mitral regurgitation (MR) after repair presents a unique situation that not be fully elucidated. Using multivariate analysis, further investigation of risk factors, concomitant procedures, and repair techniques will be evaluated at their propensity of influencing recurrent MR after surgical repair.

Method: A single institution, retrospective review of 263 patients with degenerative mitral valve disease from 2008-2014 who underwent mitral valve. Patients with follow up echocardiograms were included, and recurrence was described as moderate, moderate-severe, or severe. Pre-operative, peri-operative, post-operative complications, repair technique, 30-day mortality, overall mortality, and 30-day readmissions were all evaluated.

Result: 211 (80.2%) patients did not develop recurrent MR, and 42 (19.8%) patients had developed recurrent MR. With the multivariate analysis, the 2 endpoints of age >65 ($p=0.042$) and the use of a complete ring annuloplasty ($p=0.039$) demonstrated statistical significance in reducing the developing of recurrent MR. Factors involved in increasing the potential of developing recurrent MR with statistical significance included concomitant AVR ($p=0.022$), TVR ($p=0.028$), the use of blood products (0.027), and the repair technique of a neochord ($p=0.035$) and chordal transfer ($p=0.019$).

Conclusion: The development of recurrent MR is more common in patients with concomitant AVR, TVR, the use of blood products, and the use of the repair techniques neochord and chordal transfer. However, the patient older than 65, and the use of a complete ring annuloplasty has demonstrated to be protective in the development of recurrent MR.

SCIENTIFIC ABSTRACT – SA6

SA6. Electromagnetic Navigation Bronchoscopy for Peripheral Lung Lesions: Factors Associated with Improved Diagnostic Yield

Summer N. Rochester¹, William D. Bolton², John S. Richey¹, Joseph A. Ewing¹, Allyson L. Hale¹, Tiffanie Aiken³, Beatriz Bassaco¹, Benjamin C. Powell¹, James E. Stephenson¹, Sharon Ben-Or²
¹Greenville Health System, Greenville, SC, USA, ²Greenville Health System, USC School of Medicine Greenville, Greenville, SC, USA, ³USC School of Medicine Greenville, Greenville, SC, USA

Objective: The reported diagnostic yield of Electromagnetic navigation bronchoscopy (ENB) for peripheral nodules ranges from 59% to 93%. The aim of this study was to evaluate lesion factors and their impact on ENB yield.

Method: We reviewed all patients (N=268) who underwent ENB with biopsy between June 2010 and October 2015. Data collection included location, size, ENB pathology, confirmatory method and pathology, and nodule distance from both the pleura and the nearest major airway on the pathway created from preoperative imaging. Multivariate ordered logistic regression analysis was performed to identify predictive factors for a true positive (TP) biopsy.

Result: 284 lesions were biopsied. Total diagnostic yield for all lesions was 76%, with the middle (83%) and upper lobes (81%) having the best yield and the left lower lobe (LLL) having the worst (59%). Larger nodules (>2.1 cm) were 78% more likely to result in a TP than nodules <1 cm [odds ratio (OR)=1.78, confidence interval (CI)=0.97-3.28]. Nodules in the LUL were 3x more likely to result in a TP than those in the LLL (OR=3.06, CI=1.26-7.78). Distance from the closest airway was also significant, with every additional cm from the airway resulting in a 22% reduced likelihood of getting a TP (OR=0.78, CI=0.69-0.89) (Table SA-6-1).

Conclusion: We found the LLL location to be associated with a lower chance of successfully diagnosing malignancy when controlling for factors such as lesion size, airway and pleural distance. We also found distance to the closest major airway (based on preoperative imaging) to be predictive of higher success.

Table SA-6-1. Diagnostic Yield by Lesion Size and Distance from Airway

	N	TP (%)	TN (%)	Diagnostic Yield
N	284			
Lesion Size, cm				
0.5-1	18	4 (22.2)	7 (38.9)	61.1
1.01-1.5	63	24 (38.1)	24 (38.1)	76.2
1.51-2.0	58	34 (58.6)	11 (19.0)	77.6
>2.1	144	78 (54.2)	33 (22.9)	77.1
Distance from Airway, cm				
<1.0	69	46 (66.7)	11 (15.9)	82.6
1.01-2.0	24	15 (62.5)	5 (20.8)	83.3
2.01-3.0	55	30 (54.6)	11 (20.0)	74.6
3.01-4.0	56	23 (41.1)	21 (37.5)	78.6
4.01-5.0	34	8 (23.5)	15 (44.1)	67.6
>5.01	46	18 (39.1)	13 (28.2)	67.4

TP, true positive; TN, true negative

SCIENTIFIC ABSTRACT – SA7

SA7. Concomitant Carotid Endarterectomy and Transcatheter Aortic Valve Replacement Technique and Outcomes

Robert J. Moraca, Harper L. Padolsky, Anil A. Shah, Stephen H. Bailey, Diane Berger, George Magovern, Jr., Daniel Benckart
Allegheny General Hospital, Pittsburgh, PA, USA

Objective: Stroke is a devastating and multifactorial complication after transcatheter aortic valve replacement (TAVR) for patients with severe aortic stenosis. One key correctable risk factor for a neurological event is severe carotid stenosis. In this series we review the technique and outcomes of concomitant carotid endarterectomy and transcatheter aortic valve replacement CEA/TAVR.

Method: We reviewed the all patients at a single institution through December 2012 through May 2016 who underwent a concomitant CEA/TAVR. Prospectively collected demographic, clinical and outcome data were reviewed and surgical techniques are described.

Result: There were 458 patients who underwent TAVR at a single institution of which 11 patients underwent successful concomitant CEA/TAVR procedures for severe carotid and severe aortic stenosis. 54.5% (n=6) of patients were male with a mean age of 82.6 years (range 72-92 years). The mean Society of Thoracic Surgeons (STS) Risk Score was 7.29 (± 4.02). All patients had severe carotid stenosis as identified by carotid duplex imaging and confirmed by computed tomography angiography (CTA). The mean length of stay was 4.5 days (range 2-11 days). 30 day mortality was 0% and there were no postoperative neurological events (Table SA7-1).

Conclusion: We report the first series of concomitant CEA /TAVR with severe critical aortic stenosis and severe carotid stenosis. The combined approach may potentially reduce the risk of postoperative stroke in this subgroup of high risk patients.

Table SA7-1. Patient Outcomes of Concomitant CEA/TAVR (n=11)

Median Length of Stay (Range 2-11 days)	4.5 Days
Hospital Mortality	0% (n=0)
30 day Mortality	0% (n=0)
Neck Hematoma	9.1% (n=1)
Stroke	0% (n=0)
Respiratory Failure	0% (n=0)
GI Bleed	9.1% (n=1)
CHF	0% (n=0)
Bradycardia	9.1% (n=1)
Tachycardia	9.1% (n=1)

SCIENTIFIC ABSTRACT – SA8

SA8. Traumatic Esophageal Injury: a 27 Year Experience in a Large Trauma Registry

Cameron Stock, Bruce Simon, Karl F. Uy, Geoffrey Graeber
University of Massachusetts Medical School, Worcester, MA, USA

Objective: Traumatic esophageal injury exclusive of iatrogenic or spontaneous rupture is a rare event. We sought to define our experience with 15 patients from a large trauma registry who experienced traumatic esophageal injury.

Method: We examined patient records from a single institution, level one trauma registry from 1989-2016 who had a traumatic esophageal injury. Out of 56,346 patients, 15 patients met criteria for inclusion.

Result: The most common injury was an esophageal laceration (6/15) followed by esophageal rupture (4/15) and esophageal hematoma (4/15). There was one patient with a caustic injury to the esophagus. The mechanism of injury was blunt in 9 patients (60%) and penetrating in 5 patients (33%). The average age was 37 [14-68] and the majority were male (11/15). Eighty percent of patients had other associated injuries. There was one patient mortality which occurred on hospital day number one. Seven patients required an operative procedure. Procedures ranged from exploration (4/7) or endoscopy (2/7) to formal surgical repair of the injury (1/7). All patients with penetrating injuries underwent a surgical procedure. Four patients received enteral nutrition (27%) with a surgically placed feeding tube.

Conclusion: Traumatic esophageal injury is a rare event as confirmed by our experience. The majority of patients have other associated injuries and a large percentage of patients with blunt injuries can be managed non-operatively (78%). The overall mortality of 6.7% was low in this series.

SCIENTIFIC ABSTRACT – SA9

SA9. Computational Fluid Dynamics Wall-Stress Assessment of Root, Ascending Aorta and Arch Supports the Preservation of the Dissected Arch with Treatment of Type-A Dissections

Domenico Calcaterra¹, Liza Shrestha², Mohammad Bashir², Kalpaj Parek²

¹Hennepin Medical Center, Minneapolis, MN, USA, ²University of Iowa, Iowa City, IA, USA

Objective: A persistent controversy exists in the literature in relation to the need to proceed with total arch replacement in type-A dissections with arch involvement. Total arch replacement in the setting of type-A dissection carries high morbidity and mortality. Observational studies and some experts' opinion seem to suggest that preserving the arch and performing hemiarch reconstruction offers the best results without exposing to the possible risks associated with a total arch replacement. Using computational fluid dynamics assessment we aim at providing the scientific bases in support of the choice for this surgical strategy.

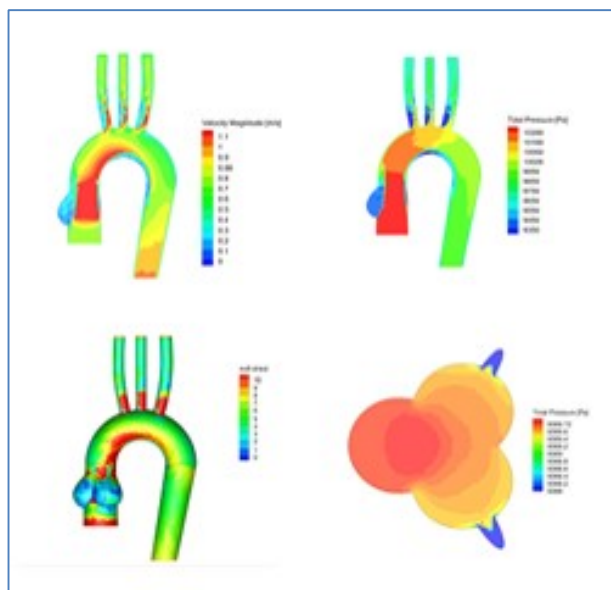
Method: We reviewed 74 consecutive patients treated for acute type-A dissection in a 8-year period. Sixty-two patients (83.7%) had distal aortic involvement (DeBakey type-1).

Result: Of the 62 patients surgically treated for DeBakey type-1, 4 (6.4%) had a total arch replacement. Thirty-day mortality was 14.5% (9). A mean follow up of 40 months was completed on 46 patients. One patient (1.6%) required reoperation of total arch replacement and 4 patients (6.5%) required distal thoracic aortic replacement. Using computational fluid dynamics simulation on an idealized model of the aorta we determined that pressure distribution, wall-shear stress and velocity magnitude are all greater in the root and ascending aorta compared to the arch (Figure SA9-1).

Conclusion: Computational fluid dynamic model of aortic flow shows that the aortic arch is subject to less hemodynamic stress compared to ascending aorta and root. This finding supports the choice of preserving the uncomplicated dissected arch in the setting of aortic replacement for type-A dissection with arch involvement.

Figure SA-9-1

Computational Fluid Dynamics Assessment of Wall Stress Distribution on an Idealized Aortic Model



SCIENTIFIC ABSTRACT – SA10

SA10. Utilization of the Esophageal Wound VAC to Treat Esophageal Luminal Disruption

Uday Dasika, Wassim Abi Jaoude
Reading Health System, West Reading, PA, USA

Objective: This is a clinical review of the patients that we have treated utilizing esophageal wound VAC at our institution. The esophageal wound VAC is a novel therapy for treatment of esophageal luminal disruption. This would include spontaneous esophageal perforation and postoperative esophageal anastomotic leak. This study is a review of our clinical experience with the esophageal wound VAC for treatment of esophageal luminal disruptions.

Method: The patient's clinical status and outcomes were reviewed. Techniques for successful utilization of the esophageal wound VAC for treatment of esophageal disruptions will be presented.

Result: Esophageal wound VAC resulted in successful treatment of esophageal anastomotic disruption in all instances.

Conclusion: Esophageal wound VAC therapy is a novel and minimally invasive technique for treatment of esophageal luminal disruption. We present our techniques for initiation and management of patients in this series and believe that this is a novel method to treat patients with this difficult clinical condition.

SCIENTIFIC ABSTRACT – SA11

SA11. Patient Age, Cost and Readmission of Heart Transplantation in the U.S. Medicare Population

Amanda L. Chin, Danielle Savino, Danielle Spragan, Fenton H. McCarthy, Taylor Dibble, Ashley Hoedt, Katherine McDermott, Keith Dufendach, Peter Groeneveld, Joseph Bavaria, Wilson Szeto, Nimesh D. Desai
University of Pennsylvania, Philadelphia, PA, USA

Objective: Given the increasing number of heart transplants performed in patients over age 70, it is important to assess the costs, readmission rates and long-term outcomes in these patients.

Method: All Medicare fee-for-service patients undergoing heart transplantation between 2008 and 2013 were identified using the International Classification of Diseases, Ninth Revision (ICD-9) 37.51 procedure code. Denominator files were used to collect patient demographics and mortality. A modified Elixhauser comorbidity index was used to identify comorbidities present on index hospitalization using ICD-9 diagnosis codes.

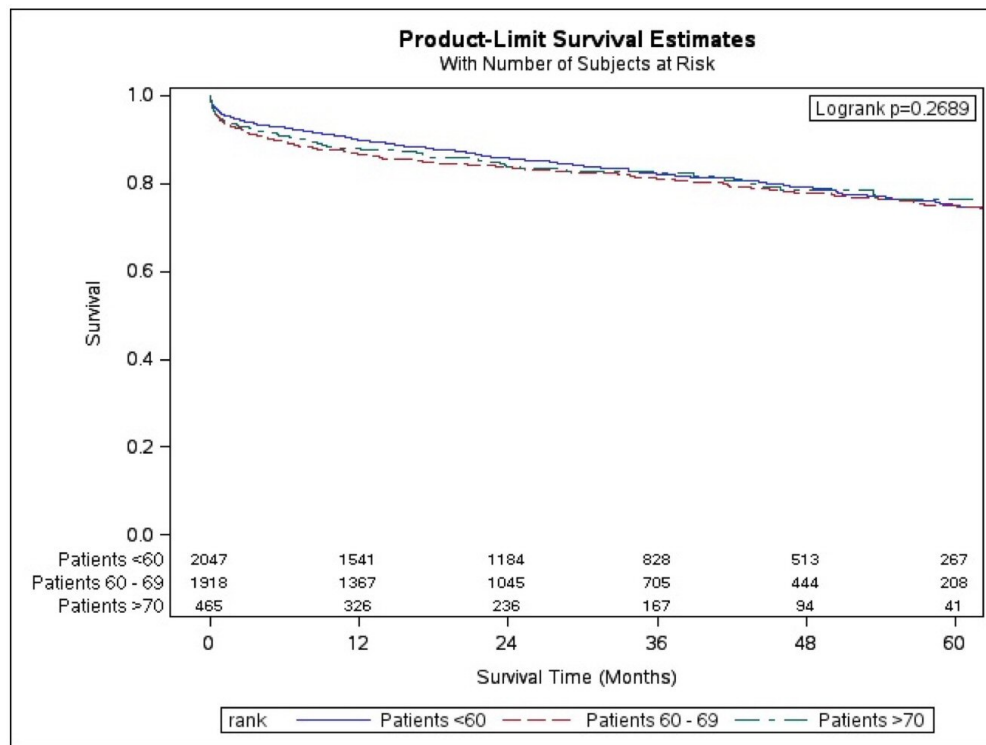
Result: A total of 4,431 heart transplant patients were included in this study. Patients were broken down into categories of age <60, 60-69 and >70. Patients >70 were more likely to be male and have hypertension, PVD, and renal failure than patients <60, but less likely to have liver disease. In hospital mortality rates of patients <60 were significantly lower than patients 60-69 or >70 (5% vs. 7% vs. 7%, $p=0.03$). No difference in long-term mortality was seen in Kaplan-Meier survival estimates between age categories (Figure SA-11-1, $p=0.27$). No significant difference was seen in hospital length of stay or index hospitalization costs. 30 and 90-day readmission rates were also similar between age categories. Multivariate Cox regression models indicate that predictors of long-term mortality include hypertension and liver disease, but not age (Table SA11-1).

Conclusion: There appears to be no significant difference in costs, readmission rates or long-term outcomes following heart transplants between different age categories. Thus, heart transplantation may remain a viable option for heart failure patients over age 70.

Table SA-11-1. Cox Survival Model of Heart Transplant Recipients

	Hazard Ratio	Lower 95% CI	Upper 95% CI	p
Male	1.018	0.858	1.206	0.841
Age	1.004	0.997	1.011	0.2924
White	0.855	0.729	1.001	0.0521
Vavular Disease	0.883	0.755	1.033	0.1194
PVD	1.087	0.845	1.398	0.5181
COPD	0.894	0.741	1.078	0.2415
Renal Failure	0.967	0.828	1.128	0.6665
Liver Disease	1.745	1.299	2.344	0.0002
Hypertension	1.187	1.012	1.393	0.0354

Figure SA-11-1. Kaplan Meier Survival Estimate of Heart Transplant Recipients by Age



SCIENTIFIC ABSTRACT – SA12

SA12. Recurrence of Breast Cancer in the Chest Wall -Our Experience with Successful Resection and Reconstruction

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Objective: To document our experience with chest wall resection and reconstruction in treating localized recurrence of breast cancer.

Method: Retrospective review of cases done recently at our institution - a University Hospital with special interest and expertise in cancer treatment. Outcome was measured by freedom from local recurrence of breast cancer in the chest wall as witnessed by CT and PET scans. Four patients with recurrent breast cancer limited to the chest wall with no evidence of spread -underwent surgical removal of recurrence. Two patients had recurrence limited to the soft tissues beneath the breast but no clear evidence of penetration of the chest wall. Two patients required resection of the chest wall with stabilization and reconstruction to preserve thoracic integrity.

Result: All four patients had successful reconstructions without complications. Two required chest wall resection and stabilization due to the size of the breast cancer recurrence.

Conclusion: Resection of limited recurrent cancer of the breast involving the chest wall and/or the overlying soft tissues can be effectively conducted with good results if the entirety of the recurrence is resected with a clear margin and there is no evidence whatsoever that the breast cancer has recurred elsewhere.

SCIENTIFIC ABSTRACT – SA13

SA13. Role of Coronary Artery Disease in Clinical Outcomes Following Trans-catheter Aortic Valve Replacement

Mark A. Groh¹, Ivan Diaz², William B. Abernethy³, Joshua P. Leitner³, Gerard L. Champsaur⁴
¹Asheville Heart, Asheville, NC, USA, ²Cornell University, New York, NY, USA, ³Asheville Cardiology Associates, Asheville, NC, USA, ⁴Mission Hospital Asheville, NC, USA

Objective: Coronary artery disease (CAD) is present in up to 50% of patients with symptomatic aortic stenosis (AS). We assessed the impact of CAD on outcomes of patients undergoing Trans-catheter aortic valve replacement (TAVR) for AS.

Method: A series of 176 consecutive patients with AS receiving a TAVR from Jan 2012 to December 2015 were reviewed retrospectively. CAD was documented in 96 of them (Group I, 54.5%) by prior myocardial infarction (MI), coronary bypass intervention (CABG) or percutaneous coronary intervention (PCI), or presence of significant stenosis of main or proximal left anterior descending arteries. The 80 remaining patients (Group II, 45.5%) were considered free of CAD.

Result: Group I had a higher number of male patients, markers of CAD, hypertension, higher STS PROM score (Table SA13-1) and number of previous cardiac procedures. PCI was performed in 23 (39%) within 30 days of TAVR, with no differences in history or symptoms with patients receiving PCI in more than 30 days of TAVR (n=36). Early morbidity was represented by 5 strokes and one TIA in Group I and 3 strokes and 2 TIA in Group II. Early pre-discharge mortality was 7% and 3% in groups I and II, with an additional 30-day mortality of 2% and 3%, respectively.

Conclusion: Despite a higher STS risk score, patients with AS and CAD can be offered TAVR with a mortality risk equivalent to that of non-CAD patients as long as the ischemic burden is determined to be minimal or alleviated by an additional, immediately pre-TAVR PCI.

Table SA13-1: Baseline characteristics in CAD and non-CAD groups. Data in mean \pm SD or n (%)

Variable	CAD, n= 96	Non-CAD, n= 80	p value
Age, years	84.10 \pm 10.29	83.83 \pm 7.37	0.818
Gender, male	60 (62.50)	29 (36.25)	0.0005
Prior PCI	59 (61.45)	0 (0)	<0.001
Prior CABG	42 (43.75)	0 (0)	<0.001
Prior TIA	25 (4.03)	25 (5.31)	0.889
Prior stroke	10 (10.41)	9 (11.25)	0.879
STS PROM	8.00 \pm 3.50	6.84 \pm 3.09	0.0224
Discharge mortality	7 (7.29)	3 (3.75)	0.315
30-day mortality	2 (2.08)	3 (3.75)	0.511

SCIENTIFIC ABSTRACT – SA14

SA14. Pneumonectomy is Necessary Following Pulmonary Artery Compromise: Case Series and Literature Review

Ambria Moten, Abbas Abbas

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Objective: It has been previously suggested that lung tissue will remain viable without blood supply via the pulmonary artery. However, our experience demonstrates that this may not be true.

Method: We present two cases of pulmonary artery compromise causing decreased arterial flow to the lung tissue.

Result: Both patients became septic secondary to the presence of infarcted lung and subsequently required completion pneumonectomy.

Conclusion: The development of collateral circulation to bypass the occluded pulmonary artery may occur, but is insufficient to support the affected lung tissue. The lung may become abscess-ridden and nonfunctional, necessitating completion pneumonectomy. Perhaps the lung can be left in place in total pulmonary artery occlusion, but any sign of necrosis is an indication for surgery.

SCIENTIFIC ABSTRACT – SA15

SA15. Del Nido Cardioplegia Simplifies Myocardial Protection Strategy for Minimally Invasive Aortic Valve Replacement

Michael S. Koeckert, Deane E. Smith, Thomas Beaulieu, Patrick F. Vining, Didier F. Loulmet, Elias A. Zias, Mathew R. Williams, Aubrey C. Galloway, Eugene A. Grossi
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Objective: The longer dosing interval afforded by Del Nido cardioplegia (DNC) may simplify myocardial protection strategies. We analyzed the impact and safety of DNC in patients undergoing minimally invasive aortic valve replacement (MIAVR).

Method: Institutional use of DNC began in May 2013; we analyzed all isolated MIAVR replacements during this transition (5/2013–6/2015), excluding re-operative sternotomy patients. The approach was hemi-median sternotomy in all patients. Prospectively collected local and STS database data were utilized. Patients were divided into two cohorts, those who received 4:1 crystalloid:blood DNC solution and those in whom standard 1:4 Buckberg-based cardioplegia (BC) was used. One-to-one propensity case matching of DNC to BC was performed based on standard risk factors and differences between groups were analyzed using chi-square and non-parametric methods.

Result: MIAVR was performed in 181 patients; DNC was used in 59 and BC in 122. Case matching resulted in 59 patients per cohort. DNC was associated with reduced re-dosing (5/59 (8.5%) vs 39/59 (61.0%), $p < 0.001$) and less total cardioplegia volume ($1290\text{ml} \pm 347\text{ml}$ vs $2284\text{ml} \pm 828\text{ml}$, $p < 0.001$). Antegrade cardioplegia alone was used in 89.8% (53/59) of DNC patients versus 33.9% (20/59) of BC patients ($p < 0.001$). Median bypass and aortic cross-clamp times were similar. Clinical outcomes were similar with respect to post-operative hematocrit, transfusion requirements, need for inotropic/pressor support, duration of ICU stay, re-intubation, length of stay, new onset atrial fibrillation, and mortality. The table contains demographics, cardioplegia delivery methods and results.

Conclusion: DNC usage markedly simplifies cardioplegia strategy for MIAVR. Patient safety was not compromised with this technique.

Table SA15-1
Select Demographic, Intraoperative and Outcomes Data

Case Matched Patients	BC (n=59)	DNC (n=59)	p value
Age (years)	68.4 \pm 10.8	69.1 \pm 11.8	0.746
STS Mortality (range)	1.44 % (0.43 – 7.01)	1.54 % (0.35 - 7.50)	0.629
Severe AI	8 (13.6%)	13 (22.0%)	0.336
Antegrade Cardioplegia Only	20 (33.9%)	53 (89.8%)	<0.001
# of Cardioplegia Injections	2.1 \pm 1.1	1.1 \pm 0.5	<0.001
Cardioplegia Volume (ml)	2284 \pm 828	1290 \pm 347	<0.001
pRBC Use (units)	0.46 \pm 1.24	0.81 \pm 2.41	0.316
Cross-clamp time (min)	56.6 \pm 11.8	58.1 \pm 17.7	0.591
>24h Inotropes	3 (5.1%)	9 (15.3%)	0.125

SCIENTIFIC ABSTRACT – SA16

SA16. Current Treatment of Bronchopleural-Cutaneous Fistula

Cameron Stock, Nicole B. Cherng, Karl F. Uy, Geoffrey Graeber
University of Massachusetts Medical School, Worcester, MA, USA

Objective: To review our management of bronchopleural-cutaneous fistula (BPF) following pulmonary resection.

Method: A case-series was performed at a tertiary medical center of patients who developed a BPF following pulmonary resection from 2013-2015. Anatomy and operative techniques were analyzed. Outcome measures included successful BPF closure and mortality.

Result: Three patients met criteria. Two cases developed a bronchial stump leak following right pneumonectomy for lung adenocarcinoma. The third patient developed a BPF following left lower lobectomy for pulmonary sequestration. In all cases, after performing an Eloesser window to allow the infected pleural space to drain, we closed the fistula by direct suture repair of the bronchus combined with pedicled muscle flap reinforcement. Once we confirmed closure of the fistula by resolution of the air leak and bronchoscopic examination, either a secondary Clagett procedure or negative pressure wound therapy (NPWT) was used to close the Eloesser flap and residual infected thoracic cavity. In the post-pneumonectomy patients, serratus anterior muscle flaps were used to cover the stump followed by a secondary Clagett procedure. For the BPF following a lobectomy, both serratus anterior and intercostal muscle flaps were used to provide complete coverage of the bronchial stump. The residual pleural cavity was smaller and therefore closed with NPWT. All cases had successful closure without mortality.

Conclusion: Closure of a BPF requires direct repair of the bronchus followed by muscle flap reinforcement. Closure of the remaining cavity is successful when no infection is present, the air leak is completely abolished, and adequate nutrition is maintained.

SCIENTIFIC ABSTRACT – SA17

SA17. Is Partial Sternotomy a Viable Option in Patients with Concurrent Coronary Artery Disease and Aortic Valve Replacement?

Matthew Thomas, Oleg I. Orlov, Alon Aharon, Arman Saeedi, Sotia Zenios, Konstadinos Plestis
Lankenau Medical Center, Wynnewood, PA, USA

Objective: Aortic valve replacement performed via partial sternotomy decreases morbidity and reduces hospital stay. We compared outcomes in patients with asymptomatic CAD who undergone isolated mini-AVR (mAVR-Group) compared to full conventional sternotomy AVR and CABG (CABG-Group).

Method: This is a retrospective review of prospectively collected data in 150 patients with concurrent one or two vessel disease, not involving the left main coronary artery who underwent AVR at our institution from January 2006 to June 2016. mAVR-group included 69 patients (mean age 74.1 ± 8.57 years, 69.6% men) and CABG-Group included 94 patients (mean age 72.36 ± 9.66 years, 70.2% men). mAVR-Group had an increased incidence of congestive heart failure [20(29%) vs. 14(14.89%)($p < 0.05$)] and preoperative PCI[24(34.78%) vs. 14(14.89%)($p < 0.05$)]. Otherwise, both groups were equivalent with respect to preoperative risk factors.

Result: There was no significant difference in postoperative incidence of stroke [2(2.90%) vs. 2(2.13%)], intraoperative blood transfusion, renal insufficiency [5(7.25%) vs. 4(4.26%)], atrial fibrillation [23(33.33%) vs. 33(35.11%)], reoperation for bleeding, ICU stay (5.1 ± 5.77 vs. 5.05 ± 8.16 days), intubation time(1.55 ± 4.46 vs. 1.33 ± 4.74 days), and hospital stay (8.57 ± 6.81 vs. 9.67 ± 9.08 days). Cardiopulmonary bypass and cross-clamp times were shorter for mAVR vs. CABG-groups [(116.01 ± 26.53 vs. 145.19 ± 28.41 and 87.78 ± 18.49 vs. 119.98 ± 22.53 minutes, respectively ($p < 0.0001$)). Five early deaths occurred in the mAVR-group and none in the CABG-group. No early deaths were attributed to coronary ischemia. Six late mortalities (8.7%) occurred in the mAVR-group and nine (9.6%) in the CABG-group (survival was 98.1% vs. 97.8% one-year, 82.2% vs. 92.2% five-year, 74.0% vs. 81.0% ten-years, mean follow-up 1115 vs.1801 days).

Conclusion: Minimally-invasive aortic valve replacement with concomitant one or two vessel coronary artery disease can safely be performed without increased incidence of ischemic related complications. Long-term survival is similar to conventional aortic valve CABG.

SCIENTIFIC ABSTRACT – SA18

SA18. Transverse Rectus Abdominis Flap in Pneumonectomy for Chronic Pulmonary Aspergillosis

Audrey C. Pendleton, Vadim Pisarenko, Jody Kaban, *Jacobi Medical Center, Bronx, NY, USA*

Objective: We report two cases of patients with chronic pulmonary aspergillosis (CPA) who were managed with pneumonectomy and TRAM flap.

Method: Case One: A 43 year old man with a history of treated tuberculosis and CPA for which he received a course of Itraconazole. He presented with hemoptysis. Chest CT revealed left lung reduced volume with parenchymal destruction. He underwent a left pneumonectomy with a latissimus dorsi and transverse rectus abdominis myocutaneous (TRAM) flap. The patient experienced no complications and was discharged. Case Two: A 49 yr old woman with a history of treated tuberculosis, aspergilloma and CPA, extensive scarring, who underwent pneumonectomy and TRAM flap, course complicated by flap edema, which ultimately resolved.

Result: Surgical resection is the mainstay of treatment when there is extensive parenchymal destruction in CPA but is associated with postoperative morbidity, especially in patients who require pneumonectomy since empty thoracic space predisposes them to recurrent infections. Several approaches are described to address this issue. One is thoracoplasty with a breast implant. While this fills the cavity, it leaves a foreign body in a previously infected area, risking recurrent infection. Another method uses the pectoralis major or trapezius muscle as the flap. This also eliminates the empty space but risks chest wall deformity. Our approach with TRAM flap obliterates the empty hemithorax, decreasing the risk of chest wall deformities and recurrence.

Conclusion: TRAM flap augments the structural integrity of chest wall using native tissue while obliterating the empty space and reducing the risk of infection after pneumonectomy for aspergillosis.

SCIENTIFIC ABSTRACT – SA19

SA19. Regional Availability of Low-Risk Donors Does not Drive Organ Acceptance in Heart Transplantation

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Objective: Decisions to accept hearts from donors with known risk factors may be influenced by the regional availability of low-risk donors. In this study, we sought to test associations between donor risk factors and acceptance of donor hearts in the context of availability of low-risk donors in each United Network for Organ Sharing (UNOS) region.

Method: The UNOS registry was queried for deceased donors recovered between 2006-2015. The outcome was acceptance of donor hearts for transplantation. Six donor risk factors were included: age >50 years; female gender; hypertension; diabetes; cerebrovascular accident as cause of death; and left ventricular (LV) ejection fraction <50%. Donors with none of the 6 risk factors were considered low-risk. Regional monthly percentages of low-risk donors were interacted with donor risk factors in multivariable mixed-effects logistic regression.

Result: Hearts were recovered for transplantation from 23,522 (29%) of 80,002 donors. Region-specific monthly percentages of low-risk donors were 25±6%. The most and least common risk factors were female gender (41%) and LV dysfunction (11%), respectively. Each donor risk factor, but not the availability of low-risk donors in the prior month, was associated with odds of heart utilization (Table SA-19-1). LV dysfunction most strongly predicted heart non-utilization. LV dysfunction was more predictive of heart non-utilization when there have been more low-risk donors in the prior month, as indicated by the significant interaction term.

Conclusion: Decisions regarding organ acceptance in heart transplantation were mostly not sensitive to recent shortages of low-risk donors. The single most important factor for organ utilization was left ventricular function.

Table SA19-1
Multivariable mixed-effects logistic regression of heart utilization for transplantation, 2006-2015 (N = 80,002)

Variable	Model 1 ^a		Model 2 ^a	
	OR (95% CI)	P	OR (95% CI)	P
<i>Donor risk factors</i>				
Age >50	0.12 (0.12, 0.13)	<0.001	0.12 (0.12, 0.13)	<0.001
Female gender	0.72 (0.69, 0.75)	<0.001	0.72 (0.69, 0.75)	<0.001
Hypertension	0.37 (0.35, 0.39)	<0.001	0.37 (0.35, 0.39)	<0.001
Diabetes	0.39 (0.35, 0.42)	<0.001	0.39 (0.35, 0.42)	<0.001
Cerebrovascular COD	0.74 (0.71, 0.77)	<0.001	0.74 (0.71, 0.78)	<0.001
LVEF <50%	0.08 (0.07, 0.09)	<0.001	0.08 (0.07, 0.09)	<0.001

^a Mixed effects logistic regression models include random effects for UNOS region and month.

OR, odds ratio; CI, confidence interval; COD, cause of death; LVEF, left ventricle ejection fraction; UNOS, United Network for Organ Sharing

SCIENTIFIC ABSTRACT – SA20

SA20. Genetic Contribution to Non-Squamous, Non-Small Cell Lung Cancer in Non-Smokers

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Objective: Lung cancer demonstrates significant excess relatedness for both close and distant relationships. This provides strong evidence for both environmental and more importantly genetic contributions. It is not known if the heritable contribution varies by histology for lung cancer.

Method: We analyzed a population-based computerized genealogy resource linked to a statewide cancer registry of lung cancer cases (n=5,408) for evidence of a genetic contribution based upon specific histology. Cases were grouped by histology (carcinoid, small cell, and non-small cell). Non-small cell lung cancer was further broken into subtypes. The genealogical index of familiarity test (GIF) was used. This tests for excess pairwise relatedness of familial clustering and is used to consider the average relatedness measure by comparing 1,000 sets of matched controls to the cases. This test was also performed while ignoring for close, less than first cousins, relationships (dGIF).

Result: Significant excess relatedness was observed for all lung cancer cases regardless of histology ($p < 0.001$); this supports a genetic contribution. Only non-small cell lung cancers remained significant when all pairwise relationships were considered ($p = 0.005$). When stratified by smoking status, only non-smoking-related, non-squamous lung cancer remained significant for both close and distant relations ($p = 0.043$).

Conclusion: Non-squamous cell carcinoma shows significant excess relatedness, even when close relationships are ignored only in non-smokers. This provides strong evidence for a genetic contribution in addition to the recognized environmental contribution. These findings were not observed for other histologies, for which the observed relatedness of cases did not differ from expected relatedness.

POSTER PRESENTATIONS

(Friday, October 21, 2016 – 7:00 am – 7:45 am – King Charles)

- P1. Air Lock Following Accidental Suctioning Event from Central Venous Access Port in the Neck in a Case of VenoArterial ExtraCorporeal Membrane Oxygenator**
Akshay Kumar, Suresh Keshavamurthy, *Temple University Hospital, Philadelphia, PA, USA*
- P2. A Minimally Invasive Approach to Rib Resections**
Vijay Singh, Nguyen Minh Le, *Northwell Health Long Island Jewish Hospital, New Hyde Park, NY, USA*
- P3. Anticoagulation for General Surgery in Patients with a Left Ventricular Assist Device**
Nicholas Searcy, Peter Knight, Amber Melvin, Juan Siordia, Joshua Wong, Sunil Prasad, *University of Rochester, Rochester, NY, USA*
- P4. Association of Intensivist Staffing with Clinical Outcomes Among Older Patients Undergoing Cardiac Surgery**
Babatunde A. Yerokun¹, Judson B. Williams, Jr.¹, Eric D. Peterson¹, Shuang Li¹, T. Bruce Ferguson², Peter K. Smith³, Renato D. Lopes¹, ¹*Duke Clinical Research Institute, Durham, NC, USA*, ²*East Carolina University, Greenville, NC, USA*, ³*Duke University School of Medicine, Durham, NC, USA*
- P5. A Ten Year Assessment of the Thoracic Endovascular Aortic Repair Procedure**
Youssef Zaki, Jacob Fink, James Wu, *Lehigh Valley Health Network, Allentown, PA, USA*
- P6. Does Thoracic Aortic Disease Protect Against Abdominal Aortic Aneurysm Formation?**
Corbin E. Muetterties, Nina Owen-Simon, Daohai Yu, Grayson H. Wheatley, *Temple University School of Medicine, Philadelphia, PA, USA*
- P7. Effect of Body Mass Index (BMI) on Outcomes in Cardiac Valve Surgery**
Siavash Saadat, Viktor Dombrovskiy, Anthony Lemaire, Aziz Ghaly, George Batsides, Leonard Y. Lee, *Rutgers - Robert Wood Johnson Medical School, New Brunswick, NJ, USA*
- P8. Evaluating Quality of Life Metrics for Patients Undergoing TAVR**
Ross Micciche¹, Jaimin Trivedi¹, Dana Settles², Michael P. Flaherty¹, Kendra J. Grubb¹, *University of Louisville, Louisville, KY, USA*, ²*Jewish Hospital, Louisville, KY, USA*
- P9. Evaluation of a Novel Nitrous Oxide Cryoprobe for Atrial Ablation in a Chronic Ovine Model**
Matthew R. Schill¹, Rebecca Rose², May Breitbart³, Spencer J. Melby¹, Richard B. Schuessler¹, Ralph J. Damiano, Jr.¹, ¹*Washington University in St. Louis, Saint Louis, MO, USA*, ²*Rose Pathology Services, St. Paul, MN, USA*, ³*University of Minnesota, St. Paul, MN, USA*
- P10. Extracorporeal Membrane Oxygenation After Acute Type A Aortic Dissection Repair Decreases Mortality and Enhances Survival**
Joshua B. Goldberg, Masashi Kai, Ramin Malekan, Gilbert Tang, Steven Lansman, David Spielvogel, *Westchester Medical Center, Valhalla, NY, USA*
- P11. Heparin-Induced Thrombocytopenia: Can We Improve Diagnostic Accuracy**
Jenna Davino, Christopher Lizardo, Stephanie Salinas, Christine Waldhof, Carrie Wyskiel, Michael A. DeMaio, Rachael N Durie, Alejandro L Rodriguez, Benjamin A Youdelman, *Jersey Shore University Medical Center, Neptune, NJ, USA*
- P12. Impact of Chronic Opioid and Benzodiazepine Use on Postoperative Outcomes in Patients Undergoing Coronary Artery Bypass Grafting**
Peyjen Yu, Allan M. Mattia, Hugh Cassiere, Frank Manetta, Alan Hartman, *Northwell Health, Great Neck, NY, USA*

POSTER PRESENTATIONS

(Friday, October 21, 2016 – 7:00 am – 7:45 am – King Charles)

- P13. Impact of Distal Fenestrations on Remodeling of Chronic Type B Dissection after TEVAR**
Mary A. Siki¹, Ibrahim Sultan², Taylor Dibble¹, Prashanth Vallabhajosyula¹, Wilson Szeto¹, Joseph Bavaria¹, Nimesh D. Desai¹, ¹University of Pennsylvania, Philadelphia, PA, USA, ²University of Pittsburgh, Pittsburgh, PA, USA
- P14. Improvement in Ejection Fraction Immediately after Transcatheter Aortic Valve Replacement is Not Associated with Improved Survival**
Dhaval Chauhan¹, Alexis K. Okoh², Nicky Haik², Chris Pettit², Chunguang Chen³, Marc Cohen³, Mark J. Russo¹, ¹Rutgers - New Jersey Medical School, New Brunswick, NJ, USA, ²Barnabas Heart Hospitals, Newark, NJ, USA, ³Newark Beth Israel Medical Center, Newark, NJ, USA
- P15. Incidence of Deep Vein Thrombosis in Patients Undergoing Right Internal Jugular Vein Cannulation for Veno-Venous Extracorporeal Membrane Oxygenation**
Taryn H. Samet, Nicole Stansbury, Rita Pechulis, James Burke, James Wu, Lehigh Valley Health Network, Allentown, PA, USA
- P16. Incidental Findings on Computed Tomography Scans in Patients Evaluated for Transcatheter Aortic Valve Replacement**
Alexandra Maryashina, Sydney M. Pickering, Erik Sylvan, Raymond L. Singer, James Wu, Lehigh Valley Health Network, Allentown, PA, USA
- P17. Invasive Pulmonary Adenocarcinoma in the Setting of Lymphangioleiomyomatosis (LAM)**
Jonathan M. Stem, Michael J. Walker, Main Line Health, Bryn Mawr, PA, USA
- P18. Left Atrial Hematoma from Blunt Trauma**
Katy A. Marino¹, Darryl S. Weiman², Tai-Hwang M. Fan², Nancy A. Appling², Ganpat Valaulikar², ¹University of Tennessee Health Science Center, Memphis, TN, USA, ²Memphis VA Medical Center, Memphis, TN, USA
- P19. Liposarcoma Recurrence at Port Site after Video Assisted Thoracoscopic Surgery**
Chinenye Iwuchukwu, Robert F. Dunton, SUNY Upstate University Hospital, Syracuse, NY, USA
- P20. LVAD Patient Survival Outcomes**
Gundars Katlaps, Benita Dharmaraj, Mohammed Quader, Lisa Martin, Hunter Holmes McGuire VAMC, Richmond, VA, USA
- P21. Malignant Perivascular Epithelial Cell Tumor (PEComa) Arising in the Pectoralis Major Muscle: a Case Report**
Valerie E. Takyi¹, Ned Z. Carp², Michael J. Walker², ¹Thomas Jefferson University Hospital, Philadelphia, PA, USA, ²Main Line Health, Bryn Mawr, PA, USA
- P22. Minimally Invasive Reoperative Surgery is the Preferred Approach after Previous Sternotomy**
Anthony Lemaire, George Batsides, Aziz Ghaly, Rutgers - Robert Wood Johnson Medical School, New Brunswick, NJ, USA
- P23. Open Repair of Descending Thoracic and Thoracoabdominal Aortic Aneurysms in Patients with Preoperative Non-Dialysis Dependent Renal Failure**
Erin Mills, Mario Gaudino, Christopher Lau, Mohamed Elsayed, Monical Munjal, Ivan Carmine Gambardella, Leonard Girardi, Weill Cornell Medicine, New York, NY, USA

POSTER PRESENTATIONS

(Friday, October 21, 2016 – 7:00 am – 7:45 am – King Charles)

- P24. Outcomes Comparison of Mini to Full Conventional Sternotomy in Bentall and David Procedures**
Alon Aharon, Oleg I. Orlov, Matthew Thomas, Armann Saeedi, Sotia Zenios, Konstadinos Plestis, *Lankenau Medical Center, Wynnewood, PA, USA*
- P25. Outcomes of Convergent Ablation Procedure Using a Cryo-balloon Catheter for Treatment of Atrial Fibrillation**
Rosalie Mattiola, Avery Cox, James Wu, *Lehigh Valley Health Network, Allentown, PA, USA*
- P26. Outcomes of the Penn Classification in Over 700 Type A Dissections**
Taylor Dibble, Fenton H. McCarthy, Danielle Spragan, Danielle Savino, Keith Dufendach, Katherine McDermott, Matthew L. Williams, Prashanth Vallabhajosyula, Wilson Szeto, Joseph Bavaria, John G. Augoustides, Nimesh D. Desai, *University of Pennsylvania, Philadelphia, PA, USA*
- P27. Outcomes of Tricuspid Valve Surgery: 5 Year Experience of the Forgotten Valve**
Anthony Lemaire, George Batsides, Aziz Ghaly, Leonard Y. Lee, *Rutgers - Robert Wood Johnson Medical School, New Brunswick, NJ, USA*
- P28. Prosthetic Valve Endocarditis: The More Bitter Flavor**
Todd C. Crawford, Alejandro Suarez-Pierre, J. Trent Magruder, Joshua C. Grimm, David C. Lehenbauer, Kenton J. Zehr, Glenn J. Whitman, John V. Conte, *Johns Hopkins University School of Medicine, Baltimore, MD, USA*
- P29. Rapid Development of a Left Main Coronary Artery Aneurysm After Implantation of a Bare-Metal Stent in a 60 Year Old-Patient**
Giuseppe Petrone, Nicola Avossa, Dario Pirone, Mario Fabbrocini, *Heart Centre, City of Alessandria, Alessandria, Italy*
- P30. Right Lower Lobe Intralobar Pulmonary Sequestration With Large Sub-diaphragmatic Feeding Artery Proximal to the Celiac Trunk: A Case Report And Literature Review**
Ashish Pulikal, Benjamin Haithcock, Staci Beamer, *University of North Carolina, Chapel Hill, NC, USA*
- P31. Robotic Total Pericardiectomy In Constrictive Pericarditis: Midterm Results in Eleven Patients**
Zewditu Asfaw¹, Mackenzie McCrorey¹, Brooke Patel¹, Susan Arnsdorf², Dorothy Kreinbring¹, Husam H. Balkhy¹, ¹*University of Chicago, Chicago, IL, USA,* ²*Medical College of Wisconsin, Milwaukee, WI, USA*
- P32. RP: Survival to Recovery**
Mark B. Anderson, Tim Robbins, *Albert Einstein Healthcare Network, Philadelphia, PA, USA*
- P33. Successful Use of Venous Arterial Extracorporeal Membrane Oxygenation in Management of Patient with Necrotizing Fasciitis**
Akshay Kumar, Suresh Keshavamurthy, *Temple University Hospital, Philadelphia, PA, USA*
- P34. The Effect of Patient Age on Cost and Outcomes in Lung Transplant Recipients in the U.S. Medicare Population**
Fenton McCarthy, Danielle Savino, Danielle Spragan, Taylor Dibble, Keith Dufenbach, Katherine McDermott, Edward Cantu, Christian Bermudez, Peter Groeneveld, Nimesh D. Desai, *University of Pennsylvania, Philadelphia, PA, USA*
- P35. The Evolution of Clinical Research: Complex Trials Equals Increased Cost and Burden**
Elizabeth K. Walsh, Martine Matlawski, Zachary Fox, Rachel Callahan, Ashley Hoedt, Grace LaCorte, Mary A. Siki, Madeleine Walsh, Virginia Buckley-Blaskovich, Laura Schuck, Marisa Konig, Krimi Patel, Nimesh D. Desai, Wilson Szeto, Joseph Bavaria, *The University of Pennsylvania, Philadelphia, PA, USA*

POSTER PRESENTATIONS

(Friday, October 21, 2016 – 7:00 am – 7:45 am – King Charles)

- P36. The Global Impact of a Nurse Practitioner Managed Complex Surgical Research Clinic**
Elizabeth K. Walsh, Grace LaCorte, Nimesh D. Desai, Joseph Bavaria, Virginia Buckley-Blaskovich,
The University of Pennsylvania, Philadelphia, PA, USA
- P37. The High Prevalence and Cost of Gastrointestinal Bleeding in Left Ventricular Assist Device Medicare Patients**
Danielle Savino, Danielle Spragan, Fenton McCarthy, Taylor Dibble, Ashley Hoedt, Keith Dufendach,
Katherine McDermott, Joseph Bavaria, Wilson Szeto, Nimesh D. Desai, *The University of Pennsylvania, Philadelphia, PA, USA*
- P38. The Impact of Language Barriers on Outcomes in Cardiac Surgery Patients**
Peyjen Yu, Allan M. Mattia, Hugh Cassiere, Frank Manetta, Alan Hartman, *Northwell Health, Great Neck, NY, USA*
- P39. The International Children's Heart Foundation Experience: Outcomes of Over 3,500 Humanitarian Congenital Cardiac Surgery Cases**
Tyler J. Wallen¹, George Arnaoutakis¹, Randa Blenden², Rodrigo Soto², ¹*University of Pennsylvania, Philadelphia, PA, USA*, ²*International Children's Heart Foundation, Memphis, TN, USA*
- P40. The Long-Term Outcomes of Permanent Pacemaker Placement in the Transcatheter Aortic Valve Replacement Medicare Population**
Danielle Spragan, Danielle Savino, Fenton McCarthy, Taylor Dibble, Keith Dufendach, Katherine McDermott, Wilson Szeto, Peter Groeneveld, Jay Giri, Nimesh D. Desai, *The University of Pennsylvania, Philadelphia, PA, USA*
- P41. The Problem with Pickwick: Postoperative Cardiac Surgical Outcomes in Patients with Obstructive Sleep Apnea**
Amalia Winters¹, Jose Binongo², Michael Halkos¹, Bradley Leshnower¹, Edward Chen¹, Vinod Thourani¹, Omar Lattouf¹, Robert Guyton¹, Brent Keeling¹, ¹*Emory University School of Medicine, Atlanta, GA, USA*, ²*Rollins School of Public Health, Atlanta, GA, USA*
- P42. Tracheal Injuries: Diagnosis, Surgical Management and Resolution**
Sanaz Leilabadi¹, Cameron Stock², Bruce Simon², Karl F. Uy², Geoffrey Graeber², ¹*University of Massachusetts Medical School, Worcester, MA, USA*, ²*UMass Memorial, Worcester, MA, USA*
- P43. Utility and Outcome of Beating Heart on-Pump (BHOP) Versus Off Pump Coronary Artery Revascularization**
Kendal Endicott¹, Richard Amdur², Gregory Trachiotis¹, ¹*Veterans Affairs Medical Center, Washington, DC, USA*, ²*George Washington University, Washington, DC, USA*

CONSTITUTION OF

THE EASTERN CARDIOTHORACIC SURGICAL SOCIETY

(Founded and also known as The Pennsylvania Association for Thoracic Surgery)

FIRST, The Eastern Cardiothoracic Surgical Society, founded and also known as 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, or to a state or local government, for a public purpose.

ARTICLE I. NAME

SECTION 1.

This Association shall be known as The Eastern Cardiothoracic Surgical Society, founded and also 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. Senior membership requires no annual dues to be paid, but full payment for the annual meeting will be expected. Members can apply for Senior membership status once he or she has retired from clinical practice. Candidate members are defined as those physicians on a pathway towards a career in cardiothoracic surgery. Honorary membership will be given at the discretion of the membership committee. Admission to membership in the Association shall be by election. The qualifications for membership shall be determined by the Bylaws. Only Active and Senior members have the privilege of voting. Only Active and Senior 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. Expulsion shall be by a 2/3 vote of members present and voting at the regularly scheduled annual meeting.

ARTICLE IV. OFFICERS AND GOVERNMENT

SECTION 1.

The officers of the Association, also known as the Executive Committee, shall be the President, a Vice President, a Secretary, a Treasurer, Program committee chair, Program committee member, Membership committee chair, and Membership committee member, Immediate Past-President to serve as a Councilor, and two Councilors-at-large. These eleven officers and councilors shall be the governing body of the Association, and shall have full power to act on all matters, except as follows:

- 1) 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.
- 2) They may in no ways change the Constitution or the Bylaws.
- 3) They may neither elect new members nor 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 a year or two in advance, and shall take office upon the conclusion of the meeting the following year. 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 Treasurer shall be elected for a one-year term of office and may be re-elected. The Secretary 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 two Councilors-at-Large shall be selected by the nominating committee one each year, for a two-year term of office but no Councilor may be re-elected.

SECTION 3.

Vacancies occurring among the officers and committees during the year shall be filled by nomination of the President (or VP if the Presidency is vacated) with approval from the Executive Committee. This person shall finish out the term of the vacated position but WILL be eligible for re-election with the exception of the office of the Vice President or President (in keeping with Article IV, Section 2.)

ARTICLE V. COMMITTEES

SECTION 1.

At the opening session of the annual meeting, the President shall appoint a Nominating Committee of three Past-Presidents, and two senior members chosen by the current President. Senior members of the nominating committee may serve consecutive terms.

This Nominating Committee shall select a slate of officers to be voted on in the Business Meeting of the Membership at the regularly scheduled annual meeting. Members of the Nominating Committee must be present at the annual meeting to vote.

SECTION 2.

The Council is empowered to appoint a Membership Committee, a Finance Committee, and a Program Committee. All committees shall render their report at the executive session of the Association.

SECTION 3.

An Ad-Hoc Committee may be assembled by the President to address an issue that benefits the organization.

ARTICLE VI. FINANCES

SECTION 1.

The fiscal year of the Association shall run from the end of one annual meeting to the end 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 Bylaws.

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.

SECTION 4.

The Finance Committee will be composed of the President, Vice President, Program Chairman, Treasurer, and an Ex-Officio member appointed by the Executive Committee. The Treasurer will Chair this committee of five members. The Finance Committee shall be responsible for setting a budget for the coming year and will specifically outline a budget for the annual meeting within the annual budget. All expenditures over \$1,000 that are outside of the accepted budget set forth by the Finance Committee need to be approved by a majority of the members of the Finance Committee.

SECTION 5.

The Eastern Cardiothoracic Surgical Society, founded and also known as The Pennsylvania Association for Thoracic Surgery 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).

SECTION 6.

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.

SECTION 7.

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).

SECTION 8.

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, or to a state or local government, for a public purpose.

ARTICLE VII. MEETINGS

SECTION 1.

The Council and the provisions of the Bylaws shall determine the time, place, duration, and procedure of the annual meeting of the Association two to three years in advance.

SECTION 2.

A special meeting of the Association may be called on three months' notice to the entire membership with a clearly stated purpose to allow members time to prepare for the meeting. 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.

This 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 or special meeting of the association (in keeping with Article VII, Section 2.), and that a reasonable effort has been made to circulate copies of the suggested alterations or amendments to the entire membership. The members shall have been specifically advised that such alteration or amendment will be voted upon during the business meeting of the membership at the annual meeting of the Association.

BY-LAWS OF

THE EASTERN CARDIOTHORACIC SURGICAL SOCIETY

(Founded and also known as The Pennsylvania Association for Thoracic Surgery)

ARTICLE I.

SECTION 1.

These Bylaws 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 non-members 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 or equivalent training if the applicant is from another country. 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 final action can take place two times a year. The names can be presented to the Membership at the end of the six months following the annual meeting for final action, or presented to those present 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 after retiring from clinical practice, or incapacitated by illness. Senior membership requires no annual dues to be paid, but full payment for the annual meeting will be expected.

SECTION 4.

Candidate members are defined as those physicians on a pathway towards a career in cardiothoracic surgery. They are encouraged to attend and participate in the Annual meetings. They are exempt from annual dues and voting. Candidate members 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 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 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 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.

There will be three Councilors of the Association who shall hold office as specified in the Constitution. One will be the Immediate Past-President who will serve for one year.

The two Councilors-at-Large shall be selected by the nominating committee one each year, for a two-year term of office but no Councilor may be re-elected.

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 two Active Members appointed in accordance with the provisions of Article V, Section 2, of the Constitution. One will serve as Chair. The Council may appoint no more than one of its own members to serve on this committee. The duty of the Membership Committee is to investigate all candidates for membership in the Association and to report their findings to the Council. Appointment to the Membership committee shall be for a period of two years, the second year as chairman.

SECTION 2.

The Program Committee shall consist of two members, chosen from the Active Membership. One will serve as chair. This shall be for a period of two years, the second year as chairman.

ARTICLE VI.

SECTION 1.

Honorary Members of the Association are exempt from all dues, but must pay to attend the annual meeting.

SECTION 2.

Annual dues for Active Members shall be set 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, but must pay to attend the annual meeting.

SECTION 5.

Membership fees and Meeting registration will be free to all active military personnel.

ARTICLE VII.

SECTION 1.

When the Association convenes for its annual meeting, the Executive Session must be attended by all officers present at the meeting. The business meeting of all members present at the annual meeting will be scheduled thereafter or on a subsequent day.

SECTION 2.

The business meeting of the entire membership will involve:

- (1.) Report of the Treasurer for the last fiscal year
- (2.) Action on amendments to the Constitution and Bylaws
- (3.) Action on recommendations emanating from the Council
- (4.) Unfinished business
- (5.) New Business
- (6.) Report of the Membership Committee
- (7.) Election of new members
- (8.) Report of the Nominating Committee
- (9.) Election of officers

ARTICLE VIII

SECTION 1.

These Bylaws 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 seven of the members in a properly convened annual or special meeting of the Association (in keeping with Article VIII, Section 1 of the Constitution.)

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. Bahnson, 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 & Glasbern 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
- 2013 - **Sandpearl Resort, Clearwater Beach, FL**
Benjamin A. Youdelman, MD
- 2014 - **Four Season's Resort, Palm Beach, FL**
Evelio Rodriguez, MD
- 2015 - **Four Season's Resort, Palm Beach, FL**
Benny Weksler, MD

IN MEMORIAM

* Founding Member ♥ Honorary Member

Alberto Adam, MD
William Atlee, MD
Henry T. Bahnson, MD
Rohinton K. Balsara, MD
Francis X. Bauer, MD
Donald E. Bowes, MD
Stanley Brockman, MD
Richard S. Brown, MD
James L. Buchanan, MD
Wilbur E. Burnett, MD*
Rudolph C. Camishion, MD
Michael G. Christy, MD*
William P. Coghlan, MD*
William J. Cushing, MD
Frederick W. Dasch, MD*
John J. DeTuerk, MD*
Joseph C. Donnelly, Jr., MD
Manucher Fallahnejad, MD
Javier Fernandez, MD
Charles Fineberg, MD*
James O. Finnegan, MD
William B. Ford, MD*
Alfred Frobese, MD*
John H. Gibbon, Jr., MD*
James L. Harrison, MD*
Brack Hattler, Jr., MD
George J. Haupt, MD*
H.R. Hawthorne, MD*
Stephen L. Hudacek, MD*
Julian Johnson, MD*
Robert G. Johnson, MD*
Eugene H. Kain, MD
N. Peter Kamilowicz, MD
Edward M. Kent, MD*

Charles K. Kirby, MD*
Melvin L. Knupp, MD
Amas S. Kyllonen, MD
Vincent W. Lauby, MD
William M. Lemmon, MD
George Liebler, MD
C. Walton Lillehei, MD♥
John B. Lovette, MD
George Magovern, Sr., MD*
James A. Magovern, MD
Albert Marrangoni, MD*
John Mitchell, MD
Clarence E. Moore, MD
Benjamin Musser, MD
Paul Reis, MD
George Rosemond, MD
Thomas C. Ryan, MD*
Charles L. Sacks, MD*
Gilmore Sanes, MD*
Victor P. Satinsky, MD*
William H. Sewell, MD
John M. Snyder, MD*
George N. J. Sommer, MD*
Paschal M. Spagna, MD
Joseph Stayman, MD
John T. Szypulski, MD*
John Templeton, III, MD*
William D. Todhunter, MD
Louis J. Wagner, MD
John A. Waldhausen, MD
Herbert W. Wallace, MD
Donald R. Watkins, MD*
George J. Willauer, MD*
Robert H. Witmer, MD*

NOTES FROM THE EASTERN 2016

