



ISHLT

A Society that Includes Basic Science, the Failing Heart, & Advanced Lung Disease

ISHLT2021

Scientific Program

ishlt.org/ishlt2021

Saturday, April 24, 2021

1:15 PM - 2:45 PM

**ORAL SESSION 01: Novel Approaches for the Early Identification of Heart Rejection
(RES-IMM, AN-CC, CT-SURG, PULM)**

Chairs:

1:15 PM

(47) Using Selective Bcl2 Inhibition to Induce Cardiac Allograft Tolerance; P. M. Patel¹, T. Hirose¹, J. M. O¹, C. L. Miller¹, T. Costa¹, A. Dehnadi¹, I. Hanekamp¹, G. Lassiter¹, T. Kawai¹, J. C. Madsen². ¹Surgery, Center for Transplantation Sciences, Massachusetts General Hospital/Harvard Medical School, Boston, MA, ²Surgery, Center for Transplantation Sciences, Division of Cardiac Surgery, Massachusetts General Hospital/Harvard Medical School, Boston, MA

1:25 PM

(48) Endothelial Stromal PD-L1 Modulates CD8⁺ T Cell Infiltration after Heart Transplantation; W. Bracamonte-Baran¹, N. A. Gilotra², T. Won¹, K. M. Rodriguez², M. Talor¹, B. C. Oh², J. Griffin³, J. Skinner⁴, R. A. Johns², S. D. Russell², R. A. Anders¹, Q. Zhu², M. K. Halushka¹, G. Brandacher⁵, D. Cihakova¹. ¹Pathology, Johns Hopkins University, Baltimore, MD, ²Johns Hopkins University, Baltimore, MD, ³Medicine, Johns Hopkins University, Baltimore, MD, ⁴Department of Anesthesiology and Critical Care Medicine, Johns Hopkins University, Baltimore, MD, ⁵Plastic and Reconstructive Surgery, Johns Hopkins University, Baltimore, MD

1:35 PM

(49) Natural Killer Cells are Essential for Allograft Vasculopathy in a Model of CD4⁺ T Cell-Mediated Chronic Rejection; C. M. Lin¹, B. Mehrad¹, R. G. Gill². ¹Medicine, University of Florida, Gainesville, FL, ²Surgery, University of Colorado, Aurora, CO

1:45 PM

(50) Low Dose Interleukin-2 Induces Exosomes with Tolerance Markers (PDL1, CD73) and Significantly Delays Development of Chronic Rejection Following Murine Heterotopic Cardiac Transplantation; R. Ravichandran, Y. Itabashi, W. Liu, C. Poulson, T. Fleming, T. Mohanakumar. Norton Thoracic Institute, St. Joseph's Hospital and Medical Center, Phoenix, AZ

1:55 PM

(51) Core Signature of Rejection-Specific Cytokines and Chemokines in Heart Biopsies after Transplantation; L. M. Radomsky¹, J. F. Kuehne¹, K. Beushausen¹, J. Keil¹, Y. Scheibner², C. Bara², C. S. Falk¹. ¹Institute of Transplant Immunology, Hannover Medical School, Hannover, Germany, ²Department of Cardiothoracic, Transplantation and Vascular Surgery, Hannover Medical School, Hannover, Germany

2:05 PM

(52) Blockade of the IL-21 Pathway: A New Perspective for the Treatment of T and B Cell Mediated Allogeneic Responses after Transplantation; C. C. Baan. Internal Medicine, Erasmus MC, Rotterdam, Netherlands

1:15 PM - 2:45 PM

**ORAL SESSION 02: Immunosuppression and Other Therapeutics in Lung Transplantation
(PHARM, AN-CC, NURS-AH, PEDS, PULM)**

Chairs:

1:15 PM

(161) Inhaled Selective Pulmonary Vasodilators for Adult Lung Transplantation; K. Ghadimi¹, J. Cappiello², M. Cooter¹, J. Haney³, J. Reynolds⁴, B. A. Bottiger¹, J. Klapper³, B. McLendon-Arvik⁵, J. H. Levy¹, M. G. Hartwig³. ¹Anesthesiology & Critical Care, Duke University Medical Center, Durham, NC, ²Respiratory Care, Duke University Medical Center, Durham, NC, ³Surgery, Duke University Medical Center, Durham, NC, ⁴Medicine,

Duke University Medical Center, Durham, NC, ⁵Pharmacy, Duke University Medical Center, Durham, NC

- 1:25 PM** (162) ***A Single Nucleotide Polymorphism in the SLC01B3 Gene is Associated with Dose-Normalized Mycophenolic Acid AUC₁₂***; L. K. Tague¹, B. Gage², R. Hachem¹, A. Gelman³. ¹Internal Medicine, Pulmonary and Critical Care Medicine, Washington University in St. Louis, Saint Louis, MO, ²Internal Medicine, General Internal Medicine, Washington University in St. Louis, Saint Louis, MO, ³Surgery, Pathology & Immunology, Washington University in St. Louis, Saint Louis, MO
- 1:35 PM** (163) ***Time to Therapeutic Tacrolimus Levels and Association with Acute Cellular Rejection and De Novo Donor-Specific Antibody Development in Lung Transplant Recipients***; C. V. Dinunno¹, C. Pham¹, B. Pierce¹, D. T. Nguyen², E. A. Graviss², H. J. Huang³, A. Goodarzi³, S. W. Yau³, J. G. Youssef³. ¹Department of Pharmacy, Houston Methodist Hospital, Houston, TX, ²Department of Pathology and Genomic Medicine, Houston Methodist Hospital, Houston, TX, ³Department of Medicine, Houston Methodist Hospital, Houston, TX
- 1:45 PM** (164) ***Rituximab Induction Reduces Donor Specific Antibody Incidence in Pediatric Lung Transplant Recipients***; S. C. Sweet¹, B. Armstrong², J. Blatter¹, H. Chin², C. Conrad³, S. Goldfarb⁴, D. Hayes⁵, P. S. Heeger⁶, E. Melicoff-Portillo⁷, T. Mohanakumar⁸, J. Odum⁹, M. Schecter⁵, G. A. Storch¹, G. Visner¹⁰, N. M. Williams⁹, L. Danziger-Isakov⁵. ¹Washington University, St. Louis, MO, ²Rho Federal Systems, Durham, NC, ³Lucile Packard Children's Hospital, Palo Alto, CA, ⁴Children's Hospital of Philadelphia, Philadelphia, PA, ⁵Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ⁶Icahn School of Medicine at Mount Sinai, New York, NY, ⁷Texas Children's Hospital, Houston, TX, ⁸Norton Thoracic Institute, St. Joseph's Hospital and Medical Center, Phoenix, AZ, ⁹NIAID, National Institutes of Health, Bethesda, MD, ¹⁰Boston Children's Hospital, Boston, MA
- 1:55 PM** (165) ***Impact of AMR Treatment: Responders vs Non-Responders Characteristics***; C. Mutebi¹, L. Ponor², A. Cochrane³, D. Levine⁴, M. Jang⁵, H. Luikart⁶, P. Shah², J. Mathew², A. W. Brown³, H. Kong⁵, G. Berry⁶, C. Marboe⁷, A. Iacono⁸, S. Nathan³, K. Khush⁶, J. Orens², H. Valentine⁵, S. Agbor-Enoh². ¹Genomic Research Alliance for Transplantation (GRAfT), Bethesda, MD, ²Division of Pulmonary and Critical Care Medicine, The Johns Hopkins School of Medicine, Baltimore, MD, ³Inova Fairfax Hospital, Fairfax, VA, ⁴University of Texas at San Antonio, San Antonio, TX, ⁵Division of Intramural Research, National Heart, Lung and Blood Institute, Bethesda, MD, ⁶Stanford University, Palo Alto, CA, ⁷Department of Pathology and Cell Biology, Columbia University Vagelos College of Physicians & Surgeons, New York, NY, ⁸Division of Pulmonary and Critical Care, University of Maryland Medical Center, Baltimore, MD
- 2:05 PM** (166) ***Does Belatacept Provide a Safe Renal Sparing Immunosuppression in Lung Transplant Recipients? A Single-Center Experience***; L. Benninger, M. Chizinga, V. Scheuble, S. Nandavaram, A. Shahmohammadi, M. Pipkin, M. Rackauskas, T. N. Machuca, H. Alnuaimat, C. M. Lin, A. Emtiazjoo, A. Pelaez, S. Chandrashekar. University of Florida, Gainesville, FL

1:15 PM - 2:45 PM

ORAL SESSION 03: When the Going Gets Tough: MCS Complications (CT-SURG, AN-CC, CARD, ID, NURS-AH)

Chairs:

- 1:15 PM** (167) ***Neurological Complications in Patients Requiring Durable VAD Systems after ECLS Support. On Behalf of ECLS- Durable MCS Study Group***; D. Saeed¹, E. Potapov², A.

Loforte³, M. Morshuis⁴, D. Schibilsky⁵, D. Zimpfer⁶, J. Riebandt⁶, F. Pappalardo⁷, M. Attisani⁸, M. Rinaldi⁸, A. Haneya⁹, F. Ramjankhan¹⁰, D. Donker¹⁰, U. Jorde¹¹, J. Stein², D. Tsyganenko², K. Jawad¹, R. Wieloch¹², R. Ayala⁵, J. Cremer⁹, M. Borger¹, A. Lichtenberg¹², J. Gummert¹³. ¹Leipzig Heart Center, Leipzig, Germany, ²German Heart Center Berlin, Berlin, Germany, ³Bologna University, Bologna, Italy, ⁴Heart and Diabetes Center NRW, Bad Oeynhausen, Germany, ⁵Freiburg University, Freiburg, Germany, ⁶Medical University Vienna, Vienna, Austria, ⁷San Raffaele Hospital, Milan, Italy, ⁸University of Turin, Turin, Italy, ⁹University Hospital Schleswig Holstein, Kiel, Germany, ¹⁰University Medical Center Utrecht, Utrecht, Netherlands, ¹¹Montefiore Medical Center, New York, NY, ¹²Duesseldorf University Hospital, Dusseldorf, Germany, ¹³Heart and Diabetes Center NRW, Bad Oeynhausen, Germany

- 1:25 PM** (168) *The ABC's of Stroke Prevention: Reduction in Stroke Frequency Following a Quality Improvement Intervention by the Action Learning Network*; J. Murray¹, D. Rosenthal², F. Zafar³, A. Lorts⁴, C. Connelly⁵, P. Krack⁴, C. Vanderpluym⁶, B. Hawkins⁶, R. Niebler⁷, M. Mehegan⁸, R. Gajarski⁹, D. Sutcliffe¹⁰, C. Villa⁴. ¹Lucile Packard Children's Hospital, Palo Alto, CA, ²Stanford University, Palo Alto, CA, ³Cincinnati Children's Hospital, Cincinnati, CA, ⁴Cincinnati Children's Hospital, Cincinnati, OH, ⁵Cincinnati Children's Hospital, Cincinnati, OH, ⁶Boston Children's Hospital, Boston, MA, ⁷Children's Hospital of Wisconsin, Milwaukee, WI, ⁸St. Louis Children's Hospital, St. Louis, MO, ⁹Nationwide Children's Hospital, Columbus, OH, ¹⁰UT Southwestern, Dallas, TX
- 1:35 PM** (169) *Incidence and Clinical Significance of Aortic Regurgitation in HeartMate 3 Continuous Flow Left Ventricular Assist Device Recipients: An Analysis from the Momentum 3 Trial Portfolio*; N. Uriel¹, M. Mehra². ¹Columbia University Irving Medical Center, New York, NY, ²Mandeep Mehra, New York
- 1:45 PM** (170) *Mortality Following Durable Left Ventricular Assist Device Implant by Timing and Category of First Infection*; S. Zhou¹, G. Yang², M. Zhang², M. Pienta³, C. E. Chenoweth¹, K. D. Aaronson¹, M. D. Fetters⁴, P. Chandanabhumma⁴, H. Hou³, P. N. Malani¹, L. Cabrera³, F. D. Pagani³, D. S. Likosky³. ¹Internal Medicine, Michigan Medicine, Ann Arbor, MI, ²University of Michigan School of Public Health, Ann Arbor, MI, ³Cardiac Surgery, Michigan Medicine, Ann Arbor, MI, ⁴Family Medicine, Michigan Medicine, Ann Arbor, MI
- 1:55 PM** (171) *Pseudomonas aeruginosa Infection Predicts Need for Surgical Incision and Drainage in LVAD Patients with Driveline Infection*; H. Lumish¹, E. Chaudhary¹, B. Cagliostro¹, A. Javaid¹, G. M. Mondellini¹, L. Braghieri¹, A. Sweat¹, J. Murphy¹, A. Pinsino², K. Takeda¹, Y. Naka¹, G. T. Sayer¹, N. Uriel¹, J. G. Aaron¹, P. C. Colombo¹, M. Yuzefpolskaya¹. ¹Columbia University Irving Medical Center, New York, NY, ²Albert Einstein College of Medicine Health + Hospitals/Jacobi, Bronx, NY
- 2:05 PM** (172) *Changes of Strategy between Bridge to Transplant and Destination Therapy after Implant of Contemporary LVADs: An Analysis of the STS-INTERMACS Database*; C. Inampudi¹, A. S. Rali², S. K. Zalawadiya², A. S. Shah³, J. J. Teuteberg⁴, G. C. Stewart⁵, R. S. Cantor⁶, L. Deng⁶, J. P. Jacobs⁷, J. K. Kirklin⁸, L. W. Stevenson². ¹Internal Medicine - Cardiology, Medical University of South Carolina, Charleston, SC, ²Internal Medicine - Cardiology, Vanderbilt University Medical Center, Nashville, TN, ³Cardiothoracic surgery, Vanderbilt University Medical Center, Nashville, TN, ⁴Internal Medicine - Cardiology, The Stanford University Medical Center, Stanford, CA, ⁵Internal Medicine - Cardiology, Brigham and Women's Hospital, Boston, MA, ⁶University of Alabama at Birmingham, Birmingham, AL, ⁷Department of Surgery, University of Florida, Gainesville, FL, ⁸Cardiac Surgery, University of Alabama at Birmingham, Birmingham, AL

1:15 PM - 2:45 PM

ORAL SESSION 04: Soup to Nuts: Pulmonary Arterial Hypertension, Treatments and Beyond (PULM, CARD, ID)

Chairs:

- 1:25 PM** **(234) *The Relationship between Anticoagulation and Mortality in Pulmonary Arterial Hypertension: The Pulmonary Hypertension Association Registry (PHAR)***; J. Garry¹, N. Kolaitis¹, N. Kime², R. Kronmal³, M. Chikinala⁴, T. Thenappan⁵, D. Grinnan⁶, E. Horn⁷, A. Hemnes⁸, M. Simon⁹, T. Bull¹⁰, T. De Marco¹. ¹University of California, San Francisco, San Francisco, CA, ²University of Washington, Seattle, CA, ³University of Washington, Seattle, WA, ⁴Washington University in St. Louis, Saint Louis, MO, ⁵University of Minnesota, Minneapolis, MN, ⁶Virginia Commonwealth University, Richmond, VA, ⁷Weill Cornell, New York, NY, ⁸Vanderbilt University, Nashville, TN, ⁹University of Pittsburgh, Pittsburgh, PA, ¹⁰University of Colorado, Aurora, CO
- 1:45 PM** **(236) *Initial Triple Oral Therapy in Pulmonary Arterial Hypertension (PAH): Extended Long-Term Outcome Data from TRITON***; V. McLaughlin¹, K. Chin², M. Doelberg³, N. Galiè⁴, M. M. Hoeper⁵, S. C. Mathai⁶, L. Perchenet³, G. Simonneau⁷, O. Sitbon⁷, N. Martin³, J. S. R Gibbs⁸. ¹University of Michigan Medical Center, Ann Arbor, MI, ²UT Southwestern Medical Center, Dallas, TX, ³Actelion Pharmaceuticals Ltd., Allschwil, Switzerland, ⁴Università di Bologna, Bologna, Italy, ⁵Hannover Medical School and German Centre for Lung Research, Hannover, Germany, ⁶Johns Hopkins University School of Medicine, Baltimore, MD, ⁷Hôpital Bicêtre, Université Paris-Sud, Le Kremlin Bicêtre, France, ⁸National Heart & Lung Institute, Imperial College London, London, United Kingdom
- 1:55 PM** **(237) *PH Care COVID Survey: An International Patient Survey on the Care for Pulmonary Hypertension Patients during the Early Phase of the COVID-19 Pandemic***; L. Godinas¹, K. Iyer², G. Meszaros³, R. Quarck¹, M. Delcroix¹. ¹University Hospitals Leuven, Leuven, Belgium, ²Assistance Publique - Hôpitaux de Paris, Paris, France, ³PHA Europe, Vienna, Austria
- 2:05 PM** **(238) *Characterisation of Pulmonary Arterial Hypertension (PAH) Patients Initiating a New PAH Specific Therapy in the Context of Age: Insights from EXPOSURE***; P. Escribano¹, S. Gaine², P. Biedermann³, A. Muller³, M. Valge⁴, T. Lange⁵, S. Söderberg⁶. ¹Pulmonary Hypertension Unit, Cardiology Department, CIBERCV, Hospital 12 de Octubre, Madrid, Spain, ²National Pulmonary Hypertension Unit, Mater Misericordiae University Hospital, Dublin, Ireland, ³Actelion Pharmaceuticals Ltd, Allschwil, Switzerland, ⁴StatFinn Estonia OÜ, Tartu, Estonia, ⁵University Medical Center Regensburg, Regensburg, Germany, ⁶Department of Public Health and Clinical Medicine, Cardiology and Heart Centre, Umeå University, Umeå, Sweden
- 2:15 PM** **(432) *Temporal Patterns of Pulmonary Vascular Leading during Exercise in Patients with Pre versus Post Capillary Pulmonary Hypertension*** E. Karvasarski¹, R. F. Bentley¹, T. A. Buchan², F. H. Valle³, S. P. Wright⁴, S. Mak⁵. ¹University of Toronto, Toronto, ON, Canada, ²University Health Network, Toronto, ON, Canada, ³Hospital de Clínicas de Porto Alegre, Porto Alegre, Brazil, ⁴University of British Columbia, Kelowna, BC, Canada, ⁵Mount Sinai Hospital/University Health Network, Toronto, ON, Canada

1:15 PM - 2:45 PM

SYMPOSIUM 01: Controversial Debates in Valvular and Structural Heart Disease and Heart Failure (CARD, AN-CC, CT-SURG, NURS-AH, PATH, PEDS, PHARM, PULM)

Chairs: Richard C Daly, MD, and Ivan Knezevic, MD

Session Summary: Despite advances in the treatment of valvular heart disease and the emergence of TAVR and MitraClip, questions remain regarding patient selection and therapeutic options for left ventricular dysfunction and right-sided valves. This session will include rapid fire debates on challenging questions in the field, including valve repair versus advanced HF therapies in severe LV dysfunction, whether LV remodeling techniques have a role in the modern era, and valve options for the right heart. Audience polling will be used before and after each debate in this session.

- 1:15 PM** ***DEBATE: Device-Directed Left Ventricular Remodeling Improves Patient Outcomes (PRO)***
Geetha Bhat, MD, Penn State Health Hershey MC, Hershey, PA, United States
- 1:27 PM** ***DEBATE: Device-Directed Left Ventricular Remodeling Improves Patient Outcomes (CON)***
Steven SL Tsui, MD, FRCS, Royal Papworth Hospital, Cambridge, United Kingdom
- 1:39 PM** ***DEBATE: Remembering the Right Heart: Percutaneous Options are Ideal for the Tricuspid and Pulmonic Positions (PRO)***
Valluvan Jeevanandam, MD, University of Chicago Medical Center, Chicago, IL, United States
- 1:51 PM** ***DEBATE: Remembering the Right Heart: Percutaneous Options are Ideal for the Tricuspid and Pulmonic Positions (CON)***
Renata Shih, MD, University of Florida, Gainesville, FL, United States
- 2:03 PM** ***DEBATE: Valve Repair/Replacement is Always a Good Option Regardless of LV Function (PRO)***
JoAnn Lindenfeld, MD, Vanderbilt University, Nashville, TN, United States
- 2:15 PM** ***DEBATE: Valve Repair/Replacement is Always a Good Option Regardless of LV Function (CON)***
Alejandro M Bertolotti, MD, Favaloro Foundation University Hospital, Buenos Aires, Argentina

1:15 PM - 2:45 PM

SYMPOSIUM 02: ECMO and Lung Failure from Recovery to Transplant (PULM, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, RES-IMM)

Chairs: Sandeep Attawar, MD, Jasleen Kukreja, MD, MPH, and Matthew G Hartwig, MD

Session Summary: There is continued push from pulmonary and critical care teams to bridge sick patients to lung transplant with mechanical support. For most centers these patients pose a prohibitive risk due to poor 1-year survival, however, select programs are able to show equipoise between the mechanical support population and their standard transplant patients. This session will discuss best practices in respiratory ECMO as well as who, when, and how to bridge to lung transplant.

- 1:15 PM** *Building a Successful Bridge to Transplant Program: Pitfalls and Traps*
Nathalie Roy, MD, Boston Children's Hospital, Boston, MA, United States
- 1:30 PM** *The Expanding Pool of ECMO Programs: Patient Selection Criteria and Ethical Considerations*
Jens Gottlieb, MD, Hannover Medical School, Hannover, Germany
- 1:45 PM** *Successfully Transitioning from Pre-Operative to Intra-Operative to Post-Operative Mechanical Support*
Mani A Daneshmand, MD, Emory University, Atlanta, GA, United States
- 2:00 PM** *ECLS in Pediatric Patients*
Brigitte W Willemse, MD, PhD, Univ Med Ctr Groningen, Groningen, Netherlands
- 2:15 PM** *In Vivo vs Ex Vivo Lung Perfusion: Should We Perfuse Marginal Organs Prior to Transplant or Support Recipients After?*
Pablo G Sanchez, MD PhD, University of Pittsburgh, Pittsburgh, PA, United States

1:15 PM - 2:45 PM

SYMPOSIUM 03: Everybody Else is Doing It So Why Can't We? MCS in Adult Congenital Heart Disease (PEDS, AN-CC, CARD, CT-SURG, NURS-AH, PATH, PHARM, PULM, RES-IMM)

Chairs: David Crossland, MRCP, Angela Lorts, MD, and Jodie Lantz, MSN, RN, PCNS-BC

Session Summary: Durable mechanical circulatory support (MCS) has revolutionized care for end-stage heart failure patients, however remains rarely used in adults with congenital heart disease (ACHD). This session will present the most recent data on MCS use in ACHD generally including patient and device selection and post MCS outcomes. The session will include a debate on the optimal MCS strategy to be used in the most complex patient group: Fontan-palliated single ventricle patients.

- 1:15 PM** *How Soon is Now? Timing of Referral for Advanced Heart Failure Care in Adult Congenital Heart Disease*
Susan Lucy Roche, MB ChB, University of Toronto, Toronto, ON, Canada
- 1:30 PM** *Realizing the Promise of VAD Technology in Adult Congenital Heart Disease*
Ari M Cedars, MD, Johns Hopkins Medical School, Dallas, TX, United States
- 1:45 PM** *Use of MCS in the Fontan Patient*
David Morales, MD, Cincinnati Children's Hospital, Cincinnati, OH, United States
- 2:05 PM** *The ACTION Network: Acceleration Group Learning in Congenital MCS*
Kurt Schumacher, MD, University of Michigan, Ann Arbor, MI, United States

3:00 PM - 4:00 PM

**WORKSHOP 01: Primary Graft Dysfunction after Heart Transplantation
(CARD, AN-CC, CT-SURG, NURS-AH, PATH, PEDS, PHARM, RES-IMM)**

Chairs: Monica M Colvin, MD, Fabiana G Marcondes-Braga, MD, PhD, and Daniel H Kim, MD

Session Summary: This session will describe and explore the range of acute graft dysfunction seen following heart transplantation. The talks outlines the definition, diagnostic tools, treatment options and outcomes for primary graft dysfunction. The speakers will examine the limitations of current understanding and review potential new or innovative approaches to tackle this important problem. A panel discussion with all speakers will conclude this session.

3:00 PM

Primary Graft Dysfunction: What's in a Name?

Maryjane Farr, MD, Columbia University, New York, NY, United States

3:15 PM

Primary Graft Dysfunction: Who's to Blame?

Jong-Chan Youn, MD, PhD, Seoul St. Mary's Hospital, The Catholic University of Korea, Seoul, Korea, Republic of

3:30 PM

Management of Primary Graft Dysfunction: What Works, What Doesn't

Pedro Catarino, MD, Royal Papworth Hospital, Cambridge, United Kingdom

3:00 PM - 4:00 PM

**WORKSHOP 02: When the Going Gets Tough: Special Lung Transplant Considerations in Connective Tissue Diseases
(PULM, AN-CC, CT-SURG, PEDS, RES-IMM)**

Chairs: Marie M Budev, DO, MPH, Maria M Crespo, MD, and Marshall I. Hertz, MD

Session Summary: This symposium will address the unique considerations in patients with connective tissue diseases, including unique evaluation and selection criteria considerations, GI issues, and non-GI post-transplant complications.

3:00 PM

Evaluation and Selection Criteria Considerations in Lung Transplant Candidates with CTD

Sofya Tokman, MD, Norton Thoracic Institute, St. Joseph Hospital and Medical Center, Phoenix, AZ, United States

3:15 PM

Esophageal Dysmotility: When is it a Contraindication? Treatment Options, Tricks and Pitfalls of the Upper Gastrointestinal Track

Usman Ahmad, MD, The Cleveland Clinic, Cleveland, OH, United States

3:30 PM

Non-GI Post-Transplant Complications and Outcomes: What to Look for When a Patient with CTD Lives beyond Their Lung Fibrosis

Osnat Shtraichman, M.D, Rabin Medical Center Belinson Campus, Petach Tikva, Israel

3:00 PM - 4:00 PM

**WORKSHOP 03: Challenges in the Field of Pediatric Heart Transplantation: Are We Solving Them?
(PEDS, CARD, CT-SURG, NURS-AH, PATH, PULM, RES-IMM)**

Chairs: Shah Nawaz Amdani, MD, Estela Azeka, MD, and Jennifer Conway, MD

Session Summary: While numerous advances have been made in the field of pediatric heart transplantation, there are a few topics that are still controversial. Over the last 4 decades, there have been enough studies to support each side of the argument. This session aims to discuss the greatest controversies that pediatric transplant providers have debated over the last decade.

3:00 PM *Why Be Positive When You Can Be Negative? The Utility of Virtual Crossmatch*
Chesney D Castleberry, MD, University of Texas at Austin Dell Medical School, Austin, TX, United States

3:15 PM *To Be Old and Wise or Young and Stupid: Biopsy vs. Novel Non-Invasive Means to Diagnose Rejection*
Charles Canter, MD, St. Louis Children's, St. Louis, MO, United States

3:30 PM *Referring the Fontan for Advanced Therapies: When, How, Why?*
Leigh C Reardon, MD, UCLA Medical Center, Los Angeles, CA, United States

3:00 PM - 4:00 PM

**WORKSHOP 04: Treatment of Pulmonary Arterial Hypertension: New Pathways, New Opportunities
(PULM, PATH, RES-IMM)**

Chairs: Alexandra Rice, FRCPath, Roberto Badagliacca, MD, PhD, and Sern Lim, MD

Session Summary: Advances in the understanding about the pathobiology of pulmonary arterial hypertension has provided the opportunity to exploit novel pathways to address the perturbations in cell growth, differentiation and regulation. Targeting these pathways may provide a more fundamental approach to the treatment of pulmonary arterial hypertension and fill a gap for those patients who progress in the face of current therapies.

3:00 PM *It's All about Inflammation*
Mark R. Nicolls, MD, Stanford University, Palo Alto, CA, United States

3:10 PM *It's All about Abnormal Cell Growth and Apoptosis*
Francois Potus, PhD, Laval University, Kingston, ON, Canada

3:20 PM *Metabolism: Fat or Carbs?*
Lisa M Mielniczuk, MD, Univ of Ottawa Heart Institute, Ottawa, ON, Canada

3:30 PM *Omics: Signatures of RV and Pulmonary Vascular Disease*
Stephen Y. Chan, MD, PhD, University of Pittsburgh Medical Center, Pittsburgh, PA, United States

4:00 PM - 6:00 PM

PLENARY 1: Opening Plenary Session

(ALL, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Peter M Hopkins, FRACP, and Joseph G Rogers, MD

- 4:00 PM** *ISHLT2021 Scientific Program Chair Report*
Peter M Hopkins, FRACP, The Prince Charles Hospital, Brisbane, Australia
- 4:05 PM** *President's Report*
Joseph G Rogers, MD, Duke University Medical Center, Durham, NC, United States
- 4:20 PM** *The Tham Luang Cave Rescue - Mission Impossible to Overcoming Adversity*
Richard Harris, MD, Adelaide, Australia
- 5:00 PM** *(1) International Experience with Lung Transplantation for COVID-19 Associated Acute Respiratory Distress Syndrome; T. N. Machuca¹, A. Bharat², C. Kurihara², R. Garza-Castillon Jr², S. Kim², A. Manerikar², A. Pelaez³, M. Pipkin³, A. Shahmohammadi³, M. Rackauskas³, S. KG⁴, K. Balakrishnan⁴, A. Jindal⁴, L. Schaheen⁵, S. Hashimi⁵, B. Bhuddhdev⁵, A. Arjuna⁵, L. Rosso⁶, A. Palleschi⁶, C. Lang⁷, P. Jaksch⁷, M. Nosotti⁶, K. Hoetzenecker⁷. ¹University of Florida, Gainesville, FL, ²Northwestern University Feinberg School of Medicine, Chicago, ³University of Florida, Gainesville, ⁴MGM Chennai, Chennai, India, ⁵St. Joseph's Hospital and Medical Center, Phoenix, ⁶Foundation IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy, ⁷Medical University of Vienna, Vienna, Austria*
- 5:10 PM** *Featured Abstract Q&A*
Andrew J. Fisher, PhD, FRCP
- 5:15 PM** *2020 Lifetime Achievement Commemoration of Michael Hess*
Jack G Copeland, MD, UCSD Medical Center, San Diego, CA, United States
- 5:25 PM** *2020 Lifetime Achievement Award Recipient Lecture - Historical Perspective of ISHLT*
James K Kirklin, MD, University of Alabama at Birmingham, Birmingham, AL, United States

6:15 PM - 7:45 PM

MINI ORAL 01: Extended Organ Criteria and Changes in Organ Allocation in Heart Transplantation (CARD, AN-CC, CT-SURG)

Chairs:

- 6:15 PM** *(239) Can the Heart Donor Pool be Expanded? Outcomes with "Borderline" Hearts Using a Novel Donor Utilization Score; Y. Moayed¹, B. Mueller², S. Fan², F. Billia¹, J. G. Duero Posada¹, J. J. Teuteberg³, H. Ross¹, K. Khush³. ¹Cardiology, University Health Network, Toronto, ON, Canada, ²Ted Rogers Computational Program, University Health Network, Toronto, ON, Canada, ³Cardiology, Stanford University, Stanford, CA*
- 6:20 PM** *(240) Outcomes of Heart Transplant from Donors with a History of Heavy Alcohol Use: Don't Throw the Baby Out with the Bathtub Gin; Y. Moayed¹, J. Amadio¹, S. Fan², K. Runeckles², K. Black³, S. Kozuzsko³, L. Carey³, J. Stehlik⁴, F. Billia¹, J. G. Duero Posada¹, H. J. Ross¹. ¹Cardiology, University Health Network, Toronto, ON, Canada, ²Ted Rogers Computational Program, University Health Network, Toronto, ON, Canada, ³Heart Transplantation, University Health Network, Toronto, ON, Canada, ⁴Cardiology, University of Utah, Salt Lake City, UT*

- 6:25 PM** (241) *Effect of the New Donor Heart Allocation System on Waitlist and Post-Transplant Mortality in Candidates and Recipients with a Durable Left Ventricular Assist Device*; T. Nordan, S. H. Mahrokhian, C. Liang, F. Y. Chen, M. S. Kiernan, A. Vest, D. DeNofrio, G. S. Couper, M. Kawabori. *Tufts Medical Center, Boston, MA*
- 6:30 PM** (242) *Is Increased Utilization of Intra-Aortic Balloon Pump Support in Heart Transplant Recipients after OPTN Allocation Policy Change Warranted?*; J. P. Skendelas¹, D. Phan¹, S. R. Patel², U. P. Jorde², D. J. Goldstein¹, S. J. Forest¹. ¹*Cardiothoracic and Vascular Surgery, Montefiore Medical Center, Bronx, NY*, ²*Internal Medicine, Division of Cardiology, Advanced Heart Failure and Transplant, Montefiore Medical Center, Bronx, NY*
- 6:35 PM** (243) *Impact of 2018 UNOS Allocation Policy Change on VAD Outcomes*; R. O. Lee Jr.¹, S. Hashmi¹, A. S. Vaidya², A. M. Wolfson³, E. C. DePasquale². ¹*Internal Medicine, Keck School of Medicine of the University of Southern California, Los Angeles, CA*, ²*Cardiology, Keck School of Medicine of the University of Southern California, Los Angeles, CA*, ³*Cardiology, University of Arizona Sarver Heart Center, Tucson, AZ*
- 6:40 PM** (244) *Comparison of Intra-Aortic Balloon Pump Use and Survival before and after the 2018 UNOS Allocation Policy Change*; C. P. Bradley¹, R. Lee¹, S. Hashmi¹, P. Kingsford¹, A. S. Vaidya², A. M. Wolfson³, E. C. DePasquale¹. ¹*Department of Cardiology, Keck Medical Center of USC, Los Angeles, CA*, ²*Department of Cardiology, Keck School of Medicine of USC, Los Angeles, CA*, ³*Department of Cardiology, University of Arizona Sarver Heart Center, Tucson, AZ*
- 6:45 PM** (245) *Trends in Outcomes of Extended Criteria Donors for Heart Transplants*; A. Critsinelis¹, T. Nordan², C. Hironaka², Y. Zhan², F. Y. Chen², G. S. Couper², M. Kawabori². ¹*Department of Surgery, Mount Sinai Medical Center, Miami Beach, FL*, ²*Tufts Medical Center, Boston, MA*
- 6:50 PM** (246) *Predicted Heart Mass in Obese Heart Transplant Donors and Recipients: An Analysis of the ISHLT Registry*; N. Aleksova¹, C. S. Fan², F. Foroutan², Y. Moayed¹, J. Duero Posada¹, C. McGuinty³, A. Luk¹, J. Stehlik⁴, H. J. Ross¹, A. C. Alba¹. ¹*Peter Munk Cardiac Centre, Toronto General Hospital, University Health Network, Toronto, ON, Canada*, ²*Ted Rogers Centre for Heart Research, University Health Network, Toronto, ON, Canada*, ³*University of Ottawa Heart Institute, Ottawa, ON, Canada*, ⁴*Division of Cardiovascular Medicine, University of Utah School of Medicine, Salt Lake City, UT*
- 6:55 PM** (247) *Use of Extended Criteria Donor Hearts in Simultaneous Heart-Kidney Transplantation*; M. R. Helmers, P. Altshuler, M. Shin, A. Iyengar, D. Herbst, B. Smood, J. Kelly, J. J. Han, P. Atluri. *Division of Cardiovascular Surgery, Department of Surgery, Hospital of the University of Pennsylvania, Philadelphia, PA*
- 7:00 PM** (248) *Risk Factors and Prognostic Implications of Perioperative Stroke after Heart Transplantation: An Analysis of the United Network for Organ Sharing Database 2009-2019*; T. Kitai¹, T. Okamoto², A. Briasoulis³, H. Niikawa⁴, K. McCurry², P. Alvarez². ¹*Kobe City Medical Center General Hospital, Kobe, Japan*, ²*Cleveland Clinic, Cleveland, OH*, ³*University of Athens, Athens, Greece*, ⁴*Tohoku University, Sendai, Japan*
- 7:05 PM** (249) *Landscape of Heart Transplantation Following Changes in UNOS Donor Allocation Policy*; D. Ramzy¹, A. Akhmerov², F. Esmailian¹, D. Megna¹, D. Emerson¹, R. Levine¹, R. Cole¹, C. Runyan¹, J. Kobashigawa¹, J. Moriguchi¹. ¹*Cedars-Sinai Medical Center, Los Angeles, CA*, ²*Surgery, Cedars-Sinai Medical Center, Los Angeles, CA*

7:10 PM

(250) Scoring System: Survival to Transplant and Death While on Waitlist for Patients without LVADs; A. Critsinelis¹, T. Nordan², C. Hironaka², Y. Zhan², F. Y. Chen², G. S. Couper², M. Kawabori². ¹Department of Surgery, Mount Sinai Medical Center, Miami Beach, FL, ²Tufts Medical Center, Boston, MA

6:15 PM - 7:45 PM

ORAL SESSION 05: Time Heals All: Longer Term Surveillance and Complications in Pediatric Heart Transplant and Cardiomyopathy (PEDS, CARD, RES-IMM)

Chairs:

6:15 PM

(53) Posterior Reversible Encephalopathy Syndrome (PRES) after Pediatric Heart Transplantation: A Multi-Center Study; M. S. Kemna¹, D. Shaw¹, R. Ameduri², E. Azeka³, T. Bradford⁴, N. Jorgensen¹, K. Y. Lin⁵, J. D. Menteer⁶, T. Moller⁷, L. Reardon⁸, K. Schumacher⁹, R. Shih¹⁰, G. Stendahl¹¹, S. West¹², B. Wisotzkey¹³, S. Zangwill¹³. ¹Seattle Children's Hospital, Seattle, WA, ²University of Minnesota Masonic Children's Hospital, Minneapolis, MN, ³University Hospital Sao Paulo, Sao Paulo, Brazil, ⁴Children's Hospital New Orleans, New Orleans, LA, ⁵Children's Hospital of Philadelphia, Philadelphia, PA, ⁶Children's Hospital Los Angeles, Los Angeles, CA, ⁷Oslo University Hospital Rikshospitalet, Oslo, WA, ⁸UCLA Mattel Children's Hospital, Los Angeles, CA, ⁹CS Mott Children's Hospital, Ann Arbor, MI, ¹⁰Congenital Heart Center, University of Florida, Gainesville, FL, ¹¹Children's Hospital of Wisconsin, Milwaukee, WI, ¹²Children's Hospital of Pittsburgh, Pittsburgh, PA, ¹³Phoenix Children's Hospital, Phoenix, AZ

6:25 PM

(54) Cardiac Allograft Vasculopathy in Pediatric Heart Transplant Recipients: Does Early Onset Portend a Worse Prognosis?; M. Khoury¹, J. Conway¹, J. Gossett², E. Edens³, S. Soto¹, R. Cantor⁴, D. Koehl¹, A. Barnes⁵, V. Exil⁶, L. Glass⁷, J. Kirklin⁸, W. Zuckerman⁹. ¹Pediatrics, University of Alberta, Edmonton, AB, Canada, ²Pediatrics, University of California, San Francisco, San Francisco, CA, ³Pediatrics, Children's Minnesota, Minneapolis, MN, ⁴Pediatrics, University of Alabama at Birmingham, Birmingham, AL, ⁵Pediatrics, Children's Mercy Hospital and Clinics, Kansas City, MO, ⁶Pediatrics, University of Iowa Children's Hospital, Iowa, IA, ⁷Pediatrics, Mount Sinai Medical Center, New York City, NY, ⁸Pediatrics, University of Alabama at Birmingham, Alabama, MO, ⁹Pediatrics, Columbia University, New York City, NY

6:45 PM

(56) ATIR-Ab: A New Player in Pediatric Heart Transplant AMR?; J. A. Spinner¹, M. Philogene², S. Nicholas¹, P. Jindra³, S. Choudhry¹, K. D. Hope¹, K. Puri¹, H. P. Tunuguntla¹, J. Price¹, S. W. Denfield¹, W. J. Dreyer¹. ¹Pediatrics, Baylor College of Medicine, Houston, TX, ²Johns Hopkins, Baltimore, MD, ³Surgery, Baylor College of Medicine, Houston, TX

6:55 PM

(57) Sudden Cardiac Death and ICD Use in Rasopathy-Associated Hypertrophic Cardiomyopathy; A. Lynch¹, S. Ahuja¹, A. Miron¹, S. Nakano², T. Howard³, C. Villa⁴, K. Armstrong⁵, B. Kaufman⁶, L. Gardin⁷, R. Whitehill⁸, J. Parent⁹, J. Godown¹⁰, H. Henderson¹¹, P. Aziz¹², S. Colan¹³, B. Seshadri¹⁴, P. Kantor¹⁵, M. Russell¹⁶, A. Lal¹⁷, R. Butts¹⁸, M. Richmond¹⁹, J. Conway²⁰, R. Weintraub²¹, J. Rossano²², S. Mital¹. ¹The Hospital for Sick Children, Toronto, ON, Canada, ²Department of Pediatrics, Division of Cardiology, Children's Hospital Colorado, Aurora, CO, ³Texas Children's Hospital, Texas, TX, ⁴Cincinnati Children's Hospital, Cincinnati, OH, ⁵BC Children's Hospital, Vancouver, BC, Canada, ⁶Lucile Packard Children's Hospital Stanford, Palo Alto, CA, ⁷Children's Hospital Eastern Ontario, Ottawa, ON, Canada, ⁸Children's Healthcare Atlanta, Atlanta, GA, ⁹Riley Hospital for Children at Indiana University Health, Indianapolis, IN, ¹⁰Monroe Carrell Jr Children's Hospital at Vanderbilt, Nashville, TN, ¹¹Paediatrics, Medical University of South Carolina, Charleston, SC, ¹²Center for Pediatric and Congenital Heart Disease, Pediatric Electrophysiology and Pacing, Cleveland Clinic Children's Hospital, Cleveland, OH,

¹³Department of Cardiology, Boston Children's Hospital, Boston, MA, ¹⁴OHSU Doernbecher Children's Hospital, Portland, OR, ¹⁵Division of Cardiology, Children's Hospital of Los Angeles, Los Angeles, CA, ¹⁶C.S. Mott Children's Hospital, Ann Arbor, MI, ¹⁷Division of Paediatric Cardiology, University of Utah Primary Children's Hospital, Salt Lake City, UT, ¹⁸Children's Medical Centre of Dallas, Dallas, TX, ¹⁹Columbia University College of Physicians and Surgeons/Morgan Stanley Children's Hospital, New York, NY, ²⁰Stollery Children's Hospital, Edmonton, AB, Canada, ²¹Department of Cardiology, The Royal Children's Hospital Melbourne, Melbourne, Australia, ²²Division of Cardiology, Children's Hospital Philadelphia, Philadelphia, PA

7:05 PM

(58) Long-Term Survival in Pediatric Heart Transplantation: A 35-Year Single-Center Experience; J. W. Wen, M. E. Richmond, S. P. Law, T. M. Lee, I. D. Lytrivi, B. S. Mantell, L. J. Addonizio, W. A. Zuckerman. *New York Presbyterian-Columbia University, New York, NY*

6:15 PM - 7:45 PM

ORAL SESSION 06: Immune Determinants of Acute and Chronic Rejection of the Lung Allograft (PULM, AN-CC, CT-SURG, RES-IMM)

Chairs:

6:15 PM

(119) IL-17 Receptor on Donor Cells Regulates Acute and Chronic Lung Allograft Rejection Potentiated by Repeated Endotoxin Inhalations; T. Watanabe¹, Z. Guan¹, M. Horie², B. Joe¹, M. U. Juan¹, H. Buhari¹, D. Hwang³, J. K. Kolls⁴, M. Liu¹, S. Keshavjee¹, S. Juvet¹, S. Juvet¹, T. Martinu¹. ¹Latner Thoracic Surgery Research Laboratories, Toronto Lung Transplant Program / University Health Network, Toronto, ON, Canada, ²Joint Department of Medical Imaging, University Health Network, Toronto, ON, Canada, ³Department of Laboratory Medicine and Molecular Diagnostics, Sunnybrook Hospital, Toronto, ON, Canada, ⁴Medicine and Pediatrics, Tulane School of Medicine, New Orleans, LA

6:25 PM

(120) Pretransplant GERD-Induced Immune Response Predisposes to CLAD; D. Razia, S. K. Mittal, R. M. Bremner, S. Bansal, R. Ravichandran, M. A. Smith, R. Walia, T. Mohanakumar, S. Tokman. *Norton Thoracic Institute, Phoenix, AZ*

6:35 PM

(121) The Pulmonary Microbiome after Lung Transplantation is Associated with Gastroesophageal Reflux Disease, Inflammation, and Allograft Dysfunction; P. H. Schneeberger¹, C. Zhang², J. Santilli¹, Z. Wijesinha², L. Levy², B. Chen³, W. Xu³, Y. Lee¹, E. Huszti⁴, M. Ahmed², K. M. Boonstra², S. Moshkelgosha², S. Weigt⁵, P. Shah⁶, M. Budev⁷, C. Frankel⁸, J. L. Todd⁸, L. D. Snyder⁸, S. M. Palmer⁸, J. C. Yeung², S. Keshavjee², L. G. Singer², B. Coburn¹, T. Martinu². ¹Departments of Medicine and Laboratory Medicine & Pathobiology, University of Toronto, Toronto, ON, Canada, ²Toronto Lung Transplant Program, University Health Network, Toronto, ON, Canada, ³Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada, ⁴Biostatistics Research Unit, University Health Network, Toronto, ON, Canada, ⁵UCLA Medical Center, Los Angeles, CA, ⁶Johns Hopkins University Hospital, Baltimore, MD, ⁷Cleveland Clinic, Cleveland, OH, ⁸Duke University Medical Center, Durham, NC

6:45 PM

(122) Chronic Lung Allograft Dysfunction: Role for Tumor Suppressor Gene Liver Kinase B1; M. Rahman¹, R. Ravichandran¹, S. Bansal¹, W. Liu¹, S. Perincheri², S. Angara¹, T. Fleming¹, A. Bharat³, R. Hachem⁴, M. Smith¹, R. M. Bremner¹, T. Mohanakumar¹. ¹Norton Thoracic Institute, St. Joseph's Hospital and Medical Center, Phoenix, AZ, ²Pathology, Yale University School of Medicine, West Haven, CT, ³Northwestern University, Chicago, IL, ⁴Department of Medicine, Washington University School of Medicine, St. Louis, MO

6:55 PM (123) *The Role of Immune Checkpoint Molecules in Lung Transplantation*; T. Kaiho¹, H. Suzuki¹, H. Matsumoto¹, T. Toyoda¹, T. Inage¹, K. Tanaka¹, Y. Sakairi¹, T. Nakajima¹, M. Kiuchi², S. Motohashi³, T. Nakayama², I. Yoshino¹. ¹General Thoracic Surgery, Chiba University, Chiba, Japan, ²Immunology, Chiba University, Chiba, Japan, ³Medical Immunology, Chiba University, Chiba, Japan

7:05 PM (124) *Lung Transplant Recipients with Idiopathic Pulmonary Fibrosis and Telomere Dysfunction Have Impaired Donor-Specific Immune Responses*; P. Wang¹, J. Leung², A. Lam², J. Lee¹, D. R. Calabrese¹, S. R. Hays¹, J. A. Golden¹, J. Kukreja², J. P. Singer¹, P. J. Wolters¹, Q. Tang², J. R. Greenland¹. ¹Pulmonary, Critical Care, Allergy and Sleep, U. California SF, San Francisco, CA, ²Surgery, U. California SF, San Francisco, CA

6:15 PM - 7:45 PM

ORAL SESSION 07: Using HCV+ Donors in Heart and Lung Transplantation: Where Are We Now? (ID, AN-CC, CARD, CT-SURG, PULM)

Chairs:

6:15 PM (155) *Long-Term Outcomes in Heart and Lung Transplants from HCV-Viremic Donors to Uninfected Recipients: The Donate HCV Trial*; A. E. Woolley¹, H. J. Goldberg², S. K. Singh³, M. R. Mehra⁴, M. M. Givertz⁴, A. Coppolino⁵, N. S. Sharma², M. A. Keshk⁶, D. E. Rinewalt⁶, A. Kim¹, H. Rutherford¹, J. Fanikos⁷, D. Harrington⁸, H. R. Mallidi⁶, L. R. Baden¹. ¹Infectious Diseases, Brigham and Women's Hospital, Boston, MA, ²Pulmonary, Brigham and Women's Hospital, Boston, MA, ³Cardiac Surgery, Trillium Health Partners, Toronto, ON, Canada, ⁴Cardiology, Brigham and Women's Hospital, Boston, MA, ⁵Thoracic Surgery, Brigham and Women's Hospital, Boston, MA, ⁶Cardiac Surgery, Brigham and Women's Hospital, Boston, MA, ⁷Pharmacy, Brigham and Women's Hospital, Boston, MA, ⁸Biostatistics, Harvard T.H. Chan School of Public Health, Boston, MA

6:25 PM (156) *Should Lungs from Hepatitis C NAT+ Donors Continue to Be Transplanted? A UNOS Registry Analysis*; Y. Xia¹, N. Airhart¹, W. Ragalie¹, M. Carlson², D. Sayah³, A. Ardehali¹. ¹Surgery, Division of Cardiac Surgery, UCLA, Los Angeles, CA, ²Medicine, Infectious Disease, UCLA, Los Angeles, CA, ³Medicine, Pulmonary Disease, UCLA, Los Angeles, CA

6:35 PM (157) *Factors Influencing Acceptance and Transplantation of Hearts from Hepatitis C+ Donors*; S. S. Li¹, A. Osho¹, P. Moonsamy¹, S. Wolfe¹, D. A. D'Alessandro¹, M. A. Villavicencio¹, T. M. Sundt¹, M. Funamoto². ¹Department of Surgery, Massachusetts General Hospital, Boston, MA, ²Department of Cardiothoracic Surgery, Methodist Health Center, San Antonio, TX

6:45 PM (158) *Effect of Hepatitis C Donor Status on Heart Transplantation Outcomes in the United States*; I. P. Doulamis¹, A. Tzani², P. N. Kampaktis³, A. Briasoulis⁴. ¹Department of Cardiac Surgery, Boston Children's Hospital, Boston, MA, ²Division of Cardiovascular Medicine, Brigham and Women's Hospital, Boston, MA, ³Department of Cardiology, New York University Langone Medical Center, New York, NY, ⁴Division of Cardiovascular Diseases, University of Iowa Hospitals and Clinics, Iowa City, IA

7:05 PM (160) *Increased Rates of Rejection in Discordant Hepatitis C Heart Transplantation*; K. L. Morris¹, A. James¹, N. Beaudrie², A. Patel¹, R. Garcia-Cortes¹, M. Walsh¹, S. Chaudhry¹, M. Bochan³, A. Ravichandran¹. ¹Cardiology, St. Vincent Hospital, Indianapolis, IN, ²Internal Medicine, St. Vincent Hospital, Indianapolis, IN, ³Infectious Disease of Indiana, Ascension St. Vincent Hospital, Indianapolis, IN

6:15 PM - 7:45 PM

**SYMPOSIUM 04: Joint ISHLT/AST Challenges in Heart/Kidney Transplantation
(CARD, AN-CC, CT-SURG, NURS-AH, PATH, PEDS, PHARM, RES-IMM)**

Chairs: Darshana Dadhania, MD, and Jignesh K. Patel, MD, PhD

Session Summary: In collaboration with the American Society of Transplantation (AST), this joint symposium will provide an overview of the pathophysiological basis of cardiorenal syndrome and treatment strategies, and indicators of irreversible kidney disease that lead to dual organ transplantation. Contrasting views from cardiology and nephrology regarding treatment of sensitized candidates and graft monitoring after dual transplantation will be discussed, as will ethical concerns surrounding dual organ transplantation and various allocation strategies.

- 6:15 PM** *The Pathophysiology of Cardio-Renal Disease Leading to End Organ Failure*
Juan B. Ivey-Miranda, MD, Instituto Mexicano del Seguro Social, Ciudad de Mexico, Mexico
- 6:27 PM** *Reversible or Irreversible Kidney Damage: How Do I Know? Indications for Heart-Kidney Transplantation*
Richard Formica, MD, Yale School of Medicine, New haven, CT, United States
- 6:39 PM** *Sensitization in Heart-Kidney Transplantation*
Darshana Dadhania, MD, Weill Cornell Medicine, New York, NY, United States
- 6:51 PM** *Interdisciplinary Management Strategies for Cardio-Renal Syndrome: Tools in Our Arsenal*
Michael M. Givertz, MD, Brigham & Women's Hospital, Boston, MA, United States
- 7:03 PM** *The Ethics of Dual Organ Transplantation: Evaluating Fairness in Organ Allocation*
Jayme Locke, MD, MPH, University of Alabama at Birmingham, Birmingham, AL, United States
- 7:15 PM** *Partners for Life: Monitoring and Caring for the Heart and Kidney Allografts*
Luciano Potena, MD, PhD, University of Bologna, Bologna, Italy

6:15 PM - 7:45 PM

**SYMPOSIUM 05: Great Debates in MCS and Transplant Care
(NURS-AH, AN-CC, CARD, CT-SURG, PEDS, PHARM, PULM)**

Chairs: Gregory P Macaluso, MD, and Desiree Robson, RN BSc (Hons)

Session Summary: Clinicians face daily challenges and debates in the care of our patients. Hot discussion topics among our teams and colleagues will include strategies around anticoagulation in MCS, device implantation or transplantation without social support, and decisions related to stopping life-sustaining treatments. This symposium will feature 3 debates from multidisciplinary clinicians on these burning topics. A panel discussion with all speakers will conclude this session.

- 6:15 PM** *DEBATE: Every MCS Patient Needs Anticoagulation (PRO)*
Andrew Woods, BSc, Newcastle upon Tyne NHS Foundations Trust, Newcastle upon Tyne, United Kingdom
- 6:27 PM** *DEBATE: Every MCS Patient Needs Anticoagulation (CON)*
Sara Strout, PharmD, Johns Hopkins Hospital, Baltimore, MD, United States
- 6:39 PM** *DEBATE: We Can and Should Implant or Transplant without Social Support (PRO)*
Sarah E Schroeder, ACNP-BC, MSN RN, Bryan Heart, Lincoln, NE, United States

- 6:51 PM** *DEBATE: We Can and Should Implant or Transplant without Social Support (CON)*
Mary Amanda Dew, PhD, Univ of Pittsburgh Sch Med, Pittsburgh, PA, United States
- 7:03 PM** *DEBATE: The Final Decision to Turn off the Pump Lies with the Patient (PRO)*
Karen Meehan, MSN, University of Chicago Medical Center, Chicago, IL, United States
- 7:15 PM** *DEBATE: The Final Decision to Turn off the Pump Lies with the Patient (CON)*
Shunichi Nakagawa, MD, Columbia University Medical Center, New York, NY, United States

6:15 PM - 7:45 PM

SYMPOSIUM 06: Like A Bridge Over Troubled Waters: Perioperative Assessment and Management of Pulmonary Hypertension (AN-CC, CARD, CT-SURG, PEDS, PULM)

Chairs: Marc Simon, MD and Helen M. Whitford, MBBS, FRACP

Session Summary: Patients with PH are at higher risk for adverse outcomes in elective and non-elective surgery. This session reviews pre-operative risk assessment and the evaluation and management of patients and the intra-operative and post-operative consideration to minimize adverse outcomes. The role of peri-operative MCS is explored. The session will include a debate on the role of PAC monitoring. This symposium heralds the ISHLT expert consensus document currently under development. A panel discussion with all speakers will conclude this session.

- 6:15 PM** *The Calm before the Storm: Preoperative Evaluation and Management*
Dana McGlothlin, MD, Kaiser Permanente, San Francisco, CA, United States
- 6:27 PM** *The Raging Storm: Intraoperative Considerations and Management*
Karen M McRae, MD, Toronto General Hospital, Toronto, ON, Canada
- 6:39 PM** *The Aftermath: Postoperative Considerations and Management*
Oksana A Shlobin, MD, Inova Fairfax Hospital, Falls Church, VA, United States
- 6:51 PM** *Tread Carefully: Patient with Eisenmenger's Undergoing Surgery*
Erika B Rosenzweig, MD, Columbia University Hospital, New York, NY, United States
- 7:03 PM** *DEBATE: PAH is an Absolute Contraindication for Pregnancy (PRO)*
Anna Hemnes, MD, Vanderbilt University, Nashville, TN, United States
- 7:15 PM** *DEBATE: PAH is an Absolute Contraindication for Pregnancy (CON)*
John Granton, MD, University of Toronto, Toronto, ON, Canada

Sunday, April 25, 2021

6:15 AM - 7:45 AM

**ORAL SESSION 08: Dysfunction Junction in Heart Transplantation
(CARD, CT-SURG, RES-IMM)**

Chairs:

- 6:15 AM** (95) *Proteomic Profiling of Heart Transplant Recipients Identifies CLE4C Expression as a Novel Biomarker of Primary Graft Dysfunction*; L. K. Truby, L. C. Kwee, R. Agarwal, E. Grass, A. D. Devore, C. B. Patel, J. G. Rogers, D. Chen, J. Schroder, C. Milano, S. H. Shah, C. L. Holley. *Duke University Medical Center, Durham, NC*
- 6:25 AM** (96) *The Hemodynamic Physiology of Primary Graft Dysfunction*; S. Lim. *University Hospital Birmingham, Birmingham, United Kingdom*
- 6:35 AM** (97) *Development of an International Consortium on Primary Graft Dysfunction: Redefining Clinical Risk Factors in the Contemporary Era of Heart Transplantation*; L. K. Truby¹, F. Foroutan², Y. Moayedi², J. Han³, J. Guzman⁴, M. Farrero⁴, E. Baughan⁵, M. Farr⁵, H. Zafar⁶, J. Felius⁶, J. S. van Zyl⁶, S. Hall⁶, D. Law⁷, S. Chih⁷, P. Angleitner⁸, M. Sabatino⁹, A. D. Devore¹, R. Miller¹⁰, L. Potena⁹, A. Zuckermann⁸, H. J. Ross², K. K. Khush³. ¹*Duke University Medical Center, Durham*, ²*University of Toronto, Toronto, Canada*, ³*Stanford University, Palo Alto*, ⁴*Hospital Clinic, Barcelona, Spain*, ⁵*Columbia University Irving Medical Center, New York*, ⁶*Baylor Medical Center, Dallas*, ⁷*Ottawa Heart, Ottawa, Canada*, ⁸*University of Vienna, Vienna, Austria*, ⁹*University of Bologna, Bologna, Italy*, ¹⁰*University of Calgary, Calgary, Canada*
- 6:45 AM** (98) *Long-Term Effects of Primary Graft Dysfunction after Heart Transplantation*; E. Settepani¹, G. L. Pedrazzini², A. Sciortino¹, M. Lanfranconi¹, B. Merlanti¹, A. Cannata¹, M. Mondino², M. Frigerio³, M. Cazzaniga¹, C. F. Russo¹. ¹*Cardio-Thoraco-Vascular Department, Cardiac Surgery Unit, Niguarda Hospital, Milano, Italy*, ²*Cardio-Thoraco-Vascular Department, Cardiothoracic Anesthesiology Unit, Niguarda Hospital, Milano, Italy*, ³*Cardio-Thoraco-Vascular Department; Cardio Center and Transplant Center, Niguarda Hospital, Milano, Italy*
- 6:55 AM** (99) *Extracorporeal Membrane Oxygenation for Primary Graft Failure Following Heart Transplantation*; S. Conte¹, S. Scheuer², S. Emmanuel², C. Bragg², C. Hayward¹, E. Granger², P. Macdonald¹, P. Jansz². ¹*Cardiology, St Vincent's Hospital Sydney, Darlinghurst, NSW, Australia*, ²*Cardiothoracic Surgery, St Vincent's Hospital Sydney, Darlinghurst, NSW, Australia*
- 7:05 AM** (100) *Donor Heart Preservation by Hypothermic Ex Vivo Perfusion - Improved Recipient Survival and Successful Prolongation of Ischemic Time*; L. E. See Hoe¹, K. Wildi¹, K. Skeggs², M. Bouquet¹, K. Sato¹, J. Jung³, C. Ainola¹, K. Hyslop¹, S. Heinsar¹, G. Abbate¹, S. M. Colombo⁴, M. Passmore¹, E. S. Wood¹, M. Wells⁵, N. Bartnikowski⁶, H. O'Neill¹, J. Reid¹, T. Shuker¹, A. Haymet¹, S. Livingstone¹, N. Sato⁷, N. Obonyo⁸, L. James², T. He², C. McDonald⁷, D. Mullins⁷, S. Engkilde-Pedersen⁷, S. Diab⁷, J. E. Millar⁹, M. Malfetherheiner¹⁰, L. Marshall⁷, L. Nair⁷, S. Rozenchwajg⁷, X. Wang⁷, Y. Shek⁷, D. Platts¹, J. Chan¹¹, C. Boon¹, D. Black¹, L. Helms⁷, L. Bradbury¹, H. Haqqani¹, P. Molenaar¹², G. Li Bassi¹, J. Suen¹, D. C. McGiffin¹³, J. F. Fraser¹. ¹*Faculty of Medicine, University of Queensland, Brisbane, Australia*, ²*Princess Alexandra Hospital, Brisbane, Australia*, ³*Department of Thoracic & Cardiovascular Surgery, Korea University Medical Center, Seoul, Korea, Republic of*, ⁴*University of Milan, Milan, Italy*, ⁵*School of Medical Science, Griffith University, Southport, Australia*, ⁶*Faculty of Science and Engineering, Queensland University of Technology, Brisbane, Australia*, ⁷*Critical Care Research Group, The Prince Charles Hospital, Brisbane, Australia*, ⁸*Wellcome Trust Centre for Global Health Research, Imperial College London*,

London, United Kingdom, ⁹Roslin Institute, University of Edinburgh, Midlothian, United Kingdom, ¹⁰Department of Internal Medicine II, Cardiology and Pneumology, University Medical Center Regensburg, Regensburg, Germany, ¹¹School of Medicine, Griffith University, Southport, Australia, ¹²Faculty of Health, Queensland University of Technology, Brisbane, Australia, ¹³Department of Cardiothoracic Surgery and Transplantation, The Alfred Hospital, Melbourne, Australia

6:15 AM - 7:45 AM

ORAL SESSION 09: Novel Phenotypes and Endotypes of CLAD (PULM, CT-SURG, RES-IMM)

Chairs:

- 6:15 AM** (113) *CD26+ Epithelial Cell Clusters as a Novel Biomarker and Therapeutic Target in Chronic Lung Allograft Dysfunction*; Y. Yamada¹, H. Oda¹, A. Yoshizawa², S. Tanaka¹, Y. Yutaka¹, M. Hamaji¹, D. Nakajima¹, A. Ohsumi¹, H. Date¹. ¹Department of Thoracic Surgery, Kyoto University Hospital, Kyoto, Japan, ²Department of Pathology, Kyoto University Hospital, Kyoto, Japan
- 6:25 AM** (114) *Pulmonary Markers of Epithelial Cell Activity and Injury in Chronic Lung Allograft Dysfunction*; L. Levy¹, S. Moshkelgosha², E. Huszti², S. Hunter², B. Renaud-Picard², G. Berra², M. Kawashima², A. Takahagi², J. Fernandez-Castillo², E. Fuchs², S. Keshavjee², L. Singer², J. Tikkanen², T. Martinu². ¹Sheba Medical Center, Ramat Gan, Israel, ²Toronto General Hospital / University Health Network, Toronto, ON, Canada
- 6:35 AM** (115) *Humoral Risk Factors Associated to Allograft Dysfunction after Lung Transplantation: The Alert of Non-HLA Auto Antibody and HLA-Donor Specific Antibody (DSA) with Non-DSA HLA Antibody*; A. Zhang¹, Y. Sun², D. Thomas¹, J. Allen¹, D. Good¹, K. McCurry³, R. Pei⁴, M. Budev³. ¹Allogen Laboratories, Cleveland Clinic, Cleveland, OH, ²Pathology, Summa Health, Akron, OH, ³Transplantation Center, Cleveland Clinic, Cleveland, OH, ⁴Thermo Fisher Scientific, West Hills, CA
- 6:45 AM** (116) *Intra-Subject Variance of Respiratory Oscillometry Reflects Graft Injury and is Associated with Acute Rejection and Chronic Lung Allograft Dysfunction (CLAD) Post Lung Transplant (LTx)*; A. Vasileva¹, N. Hanafi¹, J. Matelski², J. Wu¹, E. deHaas¹, Q. Huang¹, R. Nadj¹, A. Cheung¹, T. Martinu³, R. Ghany³, S. Keshavjee³, M. Cypel³, J. Tikkanen³, C. Ryan¹, C. Chow³. ¹Medicine, University Health Network, Toronto, ON, Canada, ²Biostatistics Research Unit, University Health Network, Toronto, ON, Canada, ³Toronto Lung Transplant Program, University of Toronto, Toronto, ON, Canada
- 6:55 AM** (117) *Characterisation of Baseline and Chronic Lung Allograft Dysfunction by Airway Oscillometry: Results of a Multi-Centre Cross-Sectional Study*; D. R. Darley¹, J. P. Sim², K. Nilsen³, R. Shirol¹, B. Borg³, J. Vazirani³, B. Levvey⁴, G. Snell³, M. Plit¹, K. Tonga⁵. ¹Lung Transplant Unit, St Vincent's Hospital, Sydney, Australia, ²Lung Transplant Unit, University of New South Wales, Sydney, Australia, ³Lung Transplant Service, The Alfred Hospital, Melbourne, Australia, ⁴Lung Transplant Service, The Alfred Hospital, Sydney, Australia, ⁵Thoracic Medicine Department, St Vincent's Hospital Darlinghurst, Sydney, Australia
- 7:05 AM** (118) *Interferon-beta (IFN β) Reprograms Pathogenic Lung Dendritic Cells in Human Chronic Lung Allograft Dysfunction (CLAD)*; A. M. Emtiazjoo¹, S. Mansouri¹, D. Katikaneni¹, A. Pelaez¹, S. Chandrashekar¹, A. Shahmohammadi¹, S. Nandavaram¹, C. Lin¹, H. Alnuaimat¹, V. Scheuble¹, M. Rackauskas², M. Pipkin², T. Machuca², L. Jin¹. ¹Medicine, University of Florida, Gainesville, FL, ²Surgery, University of Florida, Gainesville, FL

6:15 AM - 7:45 AM

**ORAL SESSION 10: Looking Over the Rainbow: Creating the Yellow Brick Road in LVAD Care
(NURS-AH, CARD, CT-SURG, RES-IMM)**

Chairs:

- 6:15 AM** (197) *Psychosocial Factors and Adverse Clinical Events in Patients with Ventricular Assist Device - A National Multi-Center Study*; M. Seemann¹, H. Spielmann¹, V. Lauenroth², R. Wacker³, W. Albert³, C. Spitz-Köberich⁴, S. Semmig-Könze⁵, M. Neubert⁵, M. von Cube⁶, K. Tigges-Limmer², C. Kugler¹. ¹University of Freiburg, Medical Faculty, Institute of Nursing Science, Freiburg, Germany, ²Heart and Diabetes Center North-Rhine Westphalia, Bad Oeynhausen, Germany, ³German Heart Center Berlin, Berlin, Germany, ⁴University Heart Center Freiburg - Bad Krozingen, Freiburg, Germany, ⁵Leipzig Heart Center, Leipzig, Germany, ⁶University of Freiburg, Institute of Medical Biometry and Statistics, Freiburg, Germany
- 6:25 AM** (198) *CardioMEMS Pulmonary Artery Pressure Guided Management of Advanced HF Patients Supported with a HeartMate LVAD: INTELLECT 2-HF Study*; V. Thohan¹, J. Abraham², A. Burdorf³, D. J. Farrar⁴, N. Dirckx⁴, A. T. Baker⁴, S. G. Drakos⁵. ¹Mission Health System/HCA, Asheville, NC, ²Center for Cardiovascular Analytics, Research, and Data Science, Providence St. Vincent Medical Center, Portland, OR, ³University of Nebraska Medical Center, Omaha, NE, ⁴Abbott, Inc., Abbott Park, IL, ⁵University of Utah Health, Salt Lake City, UT
- 6:35 AM** (199) *A Sparse Approximation Based Algorithm to Detect Aortic Valve Opening from HVAD Waveforms Acquired via Monitor Snapshot*; A. Dorken Gallastegi¹, U. Dorken Gallastegi², B. Yagmur³, S. Karaca¹, Ü. Kahraman¹, S. Nalbantgil³, Ç. Engin¹, T. Yagdi¹, M. Özbaran¹. ¹Cardiovascular Surgery, Ege University School of Medicine, Izmir, Turkey, ²Electrical and Computer Engineering, Boston University, Boston, MA, ³Cardiology, Ege University School of Medicine, Izmir, Turkey
- 6:45 AM** (200) *Change in Health-Related Quality of Life from before to 2 Years after Surgery: Findings from the Sustaining Quality of Life of the Aged: Heart Transplant or Mechanical Support (SUSTAIN-IT) Study*; K. L. Grady¹, A. Andrei², C. Elenbaas¹, A. Warzecha¹, A. Kao³, J. Spertus⁴, E. Hsich⁵, M. Dew⁶, C. Sciortino⁷, D. Pham¹, J. Hartupee⁸, M. Petty⁹, W. Cotts¹⁰, S. V. Pamboukian¹¹, F. Pagani¹², B. Lampert¹³, M. Johnson¹⁴, M. Murray¹⁴, K. Takeda¹⁵, M. Yuzefpolskaya¹⁵, S. Silvestry¹⁶, J. Kirklin¹¹, S. C. Collum¹¹, C. Yancy¹⁷. ¹Surgery, Northwestern University, Chicago, IL, ²Preventive Medicine, Northwestern University, Chicago, IL, ³Saint Luke's Medical Center, Kansas City, MO, ⁴University of Missouri - Kansas City, Kansas City, MO, ⁵Cleveland Clinic, Cleveland, OH, ⁶University of Pittsburgh, Pittsburgh, PA, ⁷Surgery, University of Pittsburgh, Pittsburgh, PA, ⁸Washington University, St. Louis, MO, ⁹University of Minnesota Medical Center, Minneapolis, MN, ¹⁰Advocate Christ Medical Center, Oak Lawn, IL, ¹¹University of Alabama - Birmingham, Birmingham, AL, ¹²University of Michigan, Ann Arbor, MI, ¹³Ohio State University, Columbus, OH, ¹⁴University of Wisconsin, Madison, WI, ¹⁵Columbia University, New York, NY, ¹⁶Florida Hospital, Orlando, FL, ¹⁷Northwestern University, Chicago, IL
- 6:55 AM** (201) *Unplanned Readmission Burden Impacts Survival in Patients with Contemporary Continuous-Flow Left Ventricular Assist Device: STS Intermacs Analysis*; V. K. Randhawa, E. G. Soltesz, L. Thuita, E. Lieber, J. Rajeswaran, M. Z. Tong, R. C. Starling, W. W. Tang, E. Blackstone, J. D. Estep. Cleveland Clinic Foundation, Cleveland, OH

7:05 AM (202) *A Varied Approach to LVAD Follow-Up Improves Cost-Effectiveness*; M. M. Ahmed¹, P. Li², L. E. Meece¹, J. Bian³, H. Shao². ¹Cardiovascular Medicine, University of Florida, Gainesville, FL, ²Pharmaceutical Outcomes and Policy, University of Florida, Gainesville, FL, ³Health Outcomes and Biomedical Informatics, University of Florida, Gainesville, FL

6:15 AM - 7:45 AM

ORAL SESSION 11: Perioperative Strategies for Success After Lung Transplantation (CT-SURG, AN-CC, PULM)

Chairs:

6:15 AM (131) *Lung Transplantation with Pulmonary Artery Reconstruction Using Donor Aorta for Pulmonary Hypertension with Giant Pulmonary Arterial Aneurysm: Intermediate-Term Result*; T. Watanabe¹, O. Adachi², Y. Watanabe¹, T. Hirama¹, Y. Matsuda¹, M. Noda¹, H. Niikawa¹, H. Oishi¹, Y. Suzuki¹, Y. Ejima³, H. Toyama³, T. Kondo⁴, Y. Saiki⁵. ¹Department of Thoracic Surgery, Institute of Development, Aging and Cancer, Tohoku University, Serndai, Japan, ²Department of Cardiovascular Surgery, Institute of Development, Aging and Cancer, Tohoku University, Serndai, Japan, ³Department of Anesthesiology and Perioperative Medicine, Tohoku University Graduate School of Medicine, Serndai, Japan, ⁴Department of Thoracic Surgery, Tohoku Medical and Pharmaceutical University, Serndai, Japan, ⁵Department of Cardiovascular Surgery, Tohoku University Graduate School of Medicine, Serndai, Japan

6:25 AM (132) *Impact of Cold Ischemic Time on Morbidity and Mortality after Lung Transplantation. An Updated Analysis of the International Multicenter Extracorporeal Life Support in Lung Transplantation Registry*; M. A. Villavicencio¹, M. A. Kashem², G. Loor³, M. Hartwig⁴, B. Bottinger⁵, F. Ius⁶, D. Daoud³, G. Warnecke⁷, Q. Wei³, S. Chandrashekar⁸, T. Machuca⁸, D. Van Raemdonck⁹, A. Neyrinck¹⁰, S. Huddleston¹¹, M. Myers¹¹, P. Moonsamy¹, Y. Toyoda². ¹Cardiac Surgery, Massachusetts General Hospital, Boston, MA, ²Cardiac Surgery, Temple University, Philadelphia, PA, ³Cardiac Surgery, Baylor College of Medicine, Houston, TX, ⁴Cardiac Surgery, Duke University Hospital, Durham, NC, ⁵Cardiac Surgery, Duke University Hospital, Duke, NC, ⁶Cardiac Surgery, Hannover Medical School, Hannover, Germany, ⁷Cardiac Surgery, Heidelberg University, Heidelberg, Germany, ⁸Cardiac Surgery, University of Florida, Gainesville, FL, ⁹Thoracic Surgery, University Hospitals Leuven, Leuven, Belgium, ¹⁰University Hospitals Leuven, Leuven, Belgium, ¹¹Cardiac Surgery, University of Minnesota, Minneapolis, MN

6:35 AM (133) *Optimizing Short Stature Patients Access to Transplantation through Surgical Downsizing of Donor Lungs*; E. Y. Pruitt, M. Gerber, M. Pipkin, D. Neal, V. Scheuble, M. Rackauskas, A. Shahmohammadi, S. Chandrashekar, A. Emtiazjoo, H. Alnuaimat, A. Sharma, A. Palaez, T. Machuca. Department of Surgery, University of Florida, Gainesville, FL

6:45 AM (134) *Fast-Tracking in Lung Transplantation: OR-Extubation*; J. Fessler¹, J. Ouattara², A. Vallee³, E. Sage¹, M. Fischler¹, M. Le Guen¹. ¹Foch Lung Transplant Team, Suresnes, France, ²Groupe Hospitalier Paris Saint-Joseph, Paris, France, ³Diagnosis and Therapeutic Center, Hypertension and Cardiovascular Prevention Unit, Hôtel-Dieu Hospital, Assistance Publique, Paris, France

6:55 AM (135) *Lung Transplantation on Cardiopulmonary Bypass: Time Matters*; K. S. Ayyat, H. Elgharably, T. Okamoto, I. Sakanoue, S. A. Said, J. J. Yun, M. M. Budev, G. P. Pettersson, K. R. McCurry. Cleveland Clinic Foundation, Cleveland, OH

7:05 AM

(136) Interim Results - The Effect of Donor Type (Donor after Cardiac Death vs Donor after Brain Death) and Use of Intraoperative Extracorporeal Lung Support on Survival after Lung Transplantation; M. A. Kashem¹, G. Loo², M. Hartwig³, M. Villavicencio-Theoduloz⁴, A. L. Axtell⁴, P. Sanchez⁵, N. Ryssel⁵, S. Huddleston⁶, B. Bottiger³, D. Daoud², H. Zhao⁷, Q. Wei², A. S. Bussetty⁷, F. Ius⁸, G. Warnecke⁹, T. Machuca¹⁰, D. Van Raemdonck¹¹, A. E. Frick¹¹, A. Neyrinck¹¹, S. Chandrashekar¹⁰, Y. Toyoda⁷.
¹Cardiovascular Surgery, Temple University School of Medicine, Philadelphia, PA, ²Baylor College of Medicine, Houston, TX, ³Duke University Health System, Durham, NC, ⁴Massachusetts General Hospital, Boston, MA, ⁵University of Pittsburgh Medical Center, Pittsburgh, PA, ⁶Cardiovascular Surgery, University of Minnesota Medical School, Minneapolis, MN, ⁷Temple University School of Medicine, Philadelphia, PA, ⁸Hannover Medical School, Hannover, Germany, ⁹Heidelberg University Hospital, Heidelberg, Germany, ¹⁰University of Florida Health System, Gainesville, FL, ¹¹University Hospital Leuven, Leuven, Belgium

6:15 AM - 7:45 AM

SYMPOSIUM 07: We Are The World: Building Transplant Programs Internationally (CARD, AN-CC, CT-SURG, ID, NURS-AH, PEDS, PHARM, PULM)

Chairs: Tomoko S Kato, MD, PhD, Javier Segovia, MD, PhD, and Kyung-Hee Kim, MD, PhD

Session Summary: Heart transplant (HTx) volume has plateaued internationally, yet the waiting lists continue to grow. This dilemma affects both HTx-developed and developing countries uniquely. Developing countries struggle with ethical/legal/cultural factors to establish socially-acceptable programs. This session aims to identify barriers and solutions to dilemmas that various HTx programs face worldwide.

6:15 AM

Nothing's Gonna Stop Us Now: Challenges of Growing a Transplant Program
Sonia Mirabet, MD, PhD, Hospital Sant Pau, Barcelona, Spain

6:27 AM

Current Status and Challenges of Setting up Transplant Programs in India
Nandkishore Kapadia, MBBS MS MCh PhD, Kokilaben Dhirubhai Ambani Hospital & Research Institute, Mumbai, India

6:39 AM

Current Status and Challenges in the Management of Advanced Heart Failure in China and Southeast Asia
Cumara C Sivathanan, MBBS, FRCS, National Heart Centre, Singapore, Singapore

6:51 AM

Current Status and Challenges in the Management of Advanced Heart Failure in Korea and Japan
Takeshi Nakatani, MD, PhD, Maki Hospital / Maki Health Care Group, Osaka, Japan

7:03 AM

Current Status and Challenges in the Management of Advanced Heart Failure in South America
Adriana Torres, MD, Los Cobos Medical Center, Bogota, Colombia

7:15 AM

We Are Family: How Developed and Developing Nations Can Work Together
Stephen C Clark, FRCS, Freeman Hospital, Newcastle Upon Tyne, United Kingdom

6:15 AM - 7:45 AM

SYMPOSIUM 08: Ex-Vivo Perfusion Across the Organs: The Current State and Future Perspectives (PULM, AN-CC, CARD, CT-SURG)

Chairs: Clemens Aigner, MD, Michiel E. Erasmus, MD, PhD, and Anna L Meyer, MD

Session Summary: This session will review the use of ex-vivo perfusion across all solid organ transplants, including unique challenges, successes, limitations, as well as the application for prolonged preservation.

- 6:15 AM** *Ex-Vivo Lung Perfusion: Applications and Strategies*
Clemens Aigner, MD, Ruhrlandklinik - Univ Essen, Essen, Germany
- 6:27 AM** *Ex-Vivo Heart Perfusion: Where are We Now?*
Emily K Granger, MBBS, St Vincent's Hospital, Sydney, Australia
- 6:39 AM** *Use of Ex-Vivo in Abdominal Organs*
Markus Selzner, MD, University Health Network, Toronto, ON, Canada
- 6:54 AM** *DEBATE: Days-Long Preservation of Donor Lungs Can Only Be Achieved with Cross-Circulation, Not with EVLP (PRO)*
Matthew D Bacchetta, MD, Vanderbilt University Medical Center, Nashville, TN, United States
- 7:06 AM** *DEBATE: Days-Long Preservation of Donor Lungs Can Only Be Achieved with Cross-Circulation, Not with EVLP (CON)*
Marcelo Cypel, MD, Toronto General Hospital, Toronto, ON, Canada

6:15 AM - 7:45 AM

SYMPOSIUM 09: Pulmonary Hypertension in Left Heart Disease: Separating the Wheat from the Chaff (CARD, CT-SURG, PULM)

Chairs: Mardi Gomberg-Maitland, MD, MSc, and Matthew Lander, MD

Session Summary: Pulmonary hypertension in the setting of left heart disease is often multifactorial and can result from both passive or resistive changes in the pulmonary circuit. Careful attention to hemodynamics is required to tease out the etiology and help define appropriate treatments. Provocation testing (e.g. exercise or pulmonary vasodilator challenge) may help inform treatment options, eligibility for heart transplant and potentially identify patients who may be suitable for evaluating the role of traditional pulmonary vasodilators used in group I PAH.

- 6:15 AM** *Hemodynamics: Getting It Right Matters*
Susanna Mak, MD, PhD, Mount Sinai Hospital, Toronto, ON, Canada
- 6:27 AM** *Treatment of RV Failure in the Context of Group II PH*
Celine Dewachter, MD, Erasme Hospital, Brussels, Belgium
- 6:39 AM** *Vasodilator Testing in Risk Stratification: Is There a Role beyond PAH and Heart Transplant Evaluation? Can We Predict RHF or Recovery after LVAD?*
Ryan J Tedford, MD, Medical University of South Carolina, Charleston, SC, United States
- 6:51 AM** *PH in Valvular Heart Disease: Can/Should We Fix This? Who to Treat?*
Marco Guazzi, MD, PhD, IRCCS Pol San Donato, Milan, Italy
- 7:03 AM** *PH in Valvular Heart Disease: Can/Should We Fix This? How to Treat?*
JoAnn Lindenfeld, MD, Vanderbilt University, Nashville, TN, United States

7:15 AM *PH in Valvular Heart Disease: Can/Should We Fix This? Surgical Perspective - Heal with Steel*
Stephan M. Ensminger, MD, DPhil, University Herzzentrum Lubeck, Lubeck, Germany

8:00 AM - 9:30 AM

ORAL SESSION 12: The Tell Tale HEART: Rejection and Diagnostics
(CARD, CT-SURG, PHARM)

Chairs:

8:00 AM *(77) In-Hospital Outcomes of Admissions and 30-day Re-Admissions for Acute Allograft Rejection after Heart Transplantation; H. Ueyama¹, A. Malik², T. Kuno¹, P. Alvarez³, A. Briasoulis⁴. ¹Mount Sinai Beth Israel, New York, NY, ²Westchester Medical Center, New York, NY, ³Cleveland Clinic, Ohio, OH, ⁴University of Iowa, Iowa, IA*

8:10 AM *(78) The Impact of Grade 1R Endomyocardial Biopsies on Donor-Derived Cell-Free DNA, Higher-Grade Rejection and Development of Donor Specific Antibodies; A. Kao¹, D. Baran², S. Ghosh³, T. Wolf-Doty³, R. Dhingra⁴, P. J. Kim⁵. ¹St. Luke's Hospital, Kansas City, MO, ²Sentara Heart Hospital, Norfolk, VA, ³CareDx, Brisbane, CA, ⁴University of Wisconsin, School of Medicine & Public Health, Madison, WI, ⁵University of California, San Diego, San Diego, CA*

8:20 AM *(79) The Evaluation of Alterations in Myocardial Deformation during Therapy of Acute Cellular Rejection; K. Antonczyk¹, J. Malyszek-Tumidajewicz¹, M. O. Zembala¹, P. Przybylowski¹, M. Zembala¹, T. Kukulski². ¹Department of Cardiac, Vascular and Endovascular Surgery and Transplantology, Silesian Center for Heart Diseases in Zabrze, Zabrze, Poland, ²Department of Cardiology, Congenital Heart Diseases and Electrotherapy, Silesian Center for Heart Diseases in Zabrze, Zabrze, Poland*

8:30 AM *(80) Combining Donor Derived Cell-Free DNA and Gene Expression Profiling for Non-Invasive Surveillance after Heart Transplantation; E. J. Henricksen¹, S. Purewal², Y. Moayed³, K. Waddell², J. Gordon², D. P. Morales², H. Luikart², J. Han⁴, K. Y. Feng⁴, R. Lee¹, Y. Shudo⁵, S. Jimenez², K. K. Khush², J. J. Teuteberg². ¹Pharmacy, Stanford Health Care, Stanford, CA, ²Cardiology, Stanford University, Stanford, CA, ³Cardiology, University Health Network, Toronto, ON, Canada, ⁴Medicine, Stanford University, Stanford, CA, ⁵Cardiothoracic Surgery, Stanford University, Stanford, CA*

8:40 AM *(81) Establishment of Methods Identifying Genes Associated with Acute Cardiac Cellular Rejection Using a Small Thin Slice Specimen; N. Fukushima¹, M. Shirai², T. Watanabe¹, O. Seguchi¹, K. Yoshitake¹, M. Wakabayashi², N. Minamino², S. Fukushima³, T. Fujita³, N. Makita². ¹Department of Transplant Medicine, National Cerebral and Cardiovascular Center, Suita, Japan, ²Omics Research Center, National Cerebral and Cardiovascular Center, Suita, Japan, ³Department of Cardiovascular Surgery, National Cerebral and Cardiovascular Center, Suita, Japan*

8:50 AM *(82) Post-Transplant Outcome of the Highly Sensitized Patient Awaiting Heart Transplant Treated with Desensitization; J. A. Kobashigawa, M. Kittleson, C. Villa, T. Singer-Englar, N. Patel, E. Kransdorf, D. Chang, M. Hamilton, L. Czer, F. Esmailian, J. Patel. Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*

8:00 AM - 9:30 AM

ORAL SESSION 13: Beyond Lung Transplant: Organ Modification, Immunomodulation, and Regeneration (RES-IMM, AN-CC, CT-SURG, PULM)

Chairs:

- 8:00 AM** (101) *Anti-Non Gal Antibody Binding in Pig-to-Baboon and Pig-to-Human Lung Transplantation Models is Reduced by β 4GalKO*; L. Burdorf¹, Z. Habibabady¹, B. Cerel¹, K. Petitpas¹, C. Laird², M. R. Connolly¹, S. Pratts¹, X. Cheng², C. J. Phelps³, W. Eyestone³, D. L. Ayares³, R. N. Pierson III¹, A. M. Azimzadeh¹. ¹Surgery, Center for Transplantation Sciences, Charlestown, MA, ²Surgery, University of Maryland, Baltimore, MD, ³Revivacor, Blacksburg, VA
- 8:10 AM** (102) *High-Throughput Culture Method of Induced Pluripotent Stem Cell Derived Alveolar Epithelial Cells Using Floating Matrigel Droplets*; D. C. Becerra¹, S. Jeffs¹, T. Wu², H. Ott². ¹Surgery, Duke University, Durham, NC, ²Surgery, Massachusetts General Hospital, Boston, MA
- 8:20 AM** (103) *CRISPR/Cas9-Mediated Epigenome Editing of the IL-10 Gene for Targeted Whole Organ Gene Therapy for Lung Transplant*; K. Mesaki¹, S. Juvet¹, Z. Guan¹, J. Hu², A. R. Davidson³, M. Cypel¹, M. Liu¹, S. Keshavjee¹. ¹Latner Thoracic Surgery Research Laboratories, University Health Network, Toronto, ON, Canada, ²Laboratory Medicine and Pathobiology, Paediatrics, University of Toronto, Toronto, ON, Canada, ³Molecular Genetics, University of Toronto, Toronto, ON, Canada
- 8:30 AM** (104) *Development of a Regulatory T Cell-Permissive Immunosuppression Protocol in a Rat Model of Ex Vivo Lung Perfusion Followed by Lung Transplantation*; A. Takahagi¹, E. Miyamoto², B. Joe¹, T. Martinu¹, M. Cypel¹, S. Keshavjee¹, S. Juvet¹. ¹Latner Thoracic Surgery Research Laboratory, Toronto, ON, Canada, ²Latner Thoracic Surgery Research Laboratory, Tenri, Japan
- 8:40 AM** (105) *Multiplex Targeted Epigenome Editing Utilizing CRISPR/Cas9 for Potent Anti-Inflammatory Gene Therapy in Lung Transplant*; K. Mesaki¹, S. Juvet¹, Z. Guan¹, J. Hu², A. R. Davidson³, M. Cypel¹, M. Liu¹, S. Keshavjee¹. ¹Latner Thoracic Surgery Research Laboratories, University Health Network, Toronto, ON, Canada, ²Laboratory Medicine and Pathobiology, Paediatrics, University of Toronto, Toronto, ON, Canada, ³Molecular Genetics, University of Toronto, Toronto, ON, Canada
- 8:50 AM** (106) *Towards Biohybrid Lung Development - Extracellular Matrix Synthesis Increases Flow-Resilience of Endothelialized Hollow Fibre Membranes*; M. Pflaum, K. Katsirntaki, S. Jurmann, M. Mälzer, C. Hartl, Z. Vukadinovic-Nikolic, A. Haverich, B. Wiegmann. Hannover Medical School, Hannover, Germany

8:00 AM - 9:30 AM

ORAL SESSION 14: Getting Out of a Sticky Situation: Anticoagulation and MCS (PHARM, CARD, CT-SURG, PATH, RES-IMM)

Chairs:

- 8:00 AM** (185) *Early Pump Thrombosis Detection Algorithm in Patients Implanted with Heartware Pump*; M. Kryszinski¹, M. Gawlikowski², A. Bielka³, M. Krysińska¹, J. Malyszek-Tumidajewicz³, P. Przybyłowski³, M. Zembala³, M. Zembala³. ¹Silesian Centre for Heart Diseases, Zabrze, Poland, ²Biomedical Engineering, Silesian University of Technology, Zabrze, Poland, ³Department of Cardiac, Vascular and Endovascular Surgery and Transplantology in Zabrze, Silesian Centre for Heart Diseases, Zabrze, Poland

- 8:10 AM** (186) *Maximising Time in Therapeutic Range with Vitamin K Antagonists in LVAD Patients*; B. Schnegg, D. Robson, C. Hayward. *Heart and Lung Clinic, St.-Vincent Hospital, Darlinghurst, Australia*
- 8:20 AM** (187) *Safety and Efficacy of Warfarin Alone for the Prevention of Hemocompatibility-Related Adverse Events in Patients with a HeartMate III™ Left Ventricular Assist Device*; M. U. Yi¹, P. Iyer², M. Byku², I. B. Hollis². ¹UNC Eshelman School of Pharmacy, Chapel Hill, NC, ²UNC Medical Center, Chapel Hill, NC
- 8:30 AM** (188) *Impact of Using a Low Anti-Xa Target Heparin Protocol on Hemocompatibility-Related Outcomes after Implantation of a HeartMate 3 Device*; L. M. Peters, S. Ahmed, P. Lam, S. D. Rao, M. E. Rodrigo, M. Hofmeyer, S. S. Najjar, F. H. Sheikh, E. J. Molina. *MedStar Washington Hospital Center, Washington, DC*
- 8:40 AM** (189) *A Modified 4Ts Score for Heparin-Induced Thrombocytopenia in the Mechanical Circulatory Support Population*; T. Pong¹, K. Cyr¹, J. Aparicio-Valenzuela¹, C. Carlton¹, A. M. Lee². ¹Cardiothoracic Surgery, Stanford University, Stanford, CA, ²Cardiothoracic Surgery, Stanford University, Palo Alto, CA
- 8:50 AM** (190) *Incidence of Heparin Induced Thrombocytopenia in Patients Undergoing Implantation of Durable and Non-Durable Mechanical Circulatory Support Devices*; O. Volod¹, R. Cole², F. Esmailian², D. Emerson², C. Halprin¹, C. Hayes¹, L. Lam³, S. Kitahara¹, S. Martin-Stone⁴, D. Megna², J. Moriguchi³, D. Ramzy², J. Yur⁴, L. S. Czer³. ¹Pathology, Cedars Sinai Medical Center, Los Angeles, CA, ²Smidt Heart Institute, Cedars Sinai Medical Center, Los Angeles, CA, ³Cedars Sinai Comprehensive Transplant Center, Cedars Sinai Medical Center, Los Angeles, CA, ⁴Department of Pharmacy Services, Cedars Sinai Medical Center, Los Angeles, CA

8:00 AM - 9:30 AM

ORAL SESSION 15: Pulmonary Vascular Disease: The Clot Stops Here (PULM, CARD, CT-SURG)

Chairs:

- 8:00 AM** (227) *Pulmonary Endarterectomy (PEA) vs. Balloon Pulmonary Angioplasty (BPA) in Chronic Thrombo-Embolic Pulmonary Hypertension (CTEPH): Comparison of Improvements in Hemodynamics and Functional Capacity*; H. Ravnestad¹, R. Andersen², S. Birkeland³, M. Svalebjørg⁴, P. S. Lingaas³, E. Gude¹, L. L. Gullestad¹, K. Broch¹, A. K. Andreassen¹. ¹Department of Cardiology, Oslo University Hospital Rikshospitalet, Oslo, Norway, ²Department of Radiology, Oslo University Hospital Rikshospitalet, Oslo, Norway, ³Department of Cardiothoracic Surgery, Oslo University Hospital Rikshospitalet, Oslo, Norway, ⁴Department of Anesthesiology, Oslo University Hospital Rikshospitalet, Oslo, Norway
- 8:10 AM** (228) *VA-ECMO as a Bridge to Recovery after Pulmonary Endarterectomy in CTEPH Patients with Decompensated Right Heart Failure*; E. Abdelnour-Berchtold. Division of Thoracic Surgery, Toronto General Hospital, University of Toronto, Toronto, ON, Canada
- 8:20 AM** (229) *Macitentan in Pulmonary Hypertension (PH) Due to Chronic Lung Disease: Real-World Evidence from OPUS/OrPHeUS*; S. Sahay¹, R. Channick², K. Chin³, V. McLaughlin⁴, P. Agron⁵, R. Ong⁶, G. Wetherill⁶, N. H. Kim⁷. ¹Houston Methodist Hospital, Houston, TX, ²David Geffen School of Medicine at UCLA, Los Angeles, CA, ³UT Southwestern Medical Center, Dallas, TX, ⁴University of Michigan, Ann Arbor, MI, ⁵Actelion Pharmaceuticals US, Inc., South San Francisco, CA, ⁶Actelion Pharmaceuticals Ltd., Allschwil, Switzerland, ⁷University of California San Diego, La Jolla, CA

- 8:30 AM** *(230) Predictive Value of CT Pulmonary Angiography to Assess the Surgical Accessibility for Pulmonary Endarterectomy in Patients with Chronic Thromboembolic Pulmonary Hypertension; T. Frauenfelder¹, M. McInnis², M. Eberhard¹, M. de Perrot³, S. Ulrich⁴, I. Inci⁵, I. Opitz⁵. ¹Institute of Diagnostic and Interventional Radiology, University Hospital Zurich, Zurich, Switzerland, ²Joint Department of Medical Imaging, University of Toronto, Toronto, ON, Canada, ³Division of Thoracic Surgery, Toronto General Hospital and Princess Margaret Cancer Center, University Health Network, Toronto, ON, Canada, ⁴Department of Respiratory Diseases, University Hospital Zurich, Zurich, Switzerland, ⁵Department of Thoracic Surgery, University Hospital Zurich, Zurich, Switzerland*
- 8:40 AM** *(231) A Study to Assess Changes in Lung Perfusion Scan with Clinical and Haemodynamic Outcome in Patients Undergoing Pulmonary Thromboendarterectomy for CTEPH; B. Khan, P. M, H. Sunil, J. Punen, V. Shetty, D. Cherian, D. Shetty. Narayana Hirdulaya, Bangalore, India*
- 8:50 AM** *(232) Assessing Race and Socioeconomic Status Based Differences in Survival after Pulmonary Thromboendarterectomy for Chronic Thromboembolic Pulmonary Hypertension; A. Y. Su¹, E. B. Rosenzweig², A. Melehy¹, Y. Ning³, E. Abrahams², M. Bacchetta⁴, P. Kurlansky³, K. Takeda¹. ¹Department of Surgery, Division of Cardiothoracic and Vascular Surgery, Columbia University Medical Center, New York, NY, ²Division of Pediatric Cardiology, Department of Pediatrics, Columbia University Medical Center, New York, NY, ³Center of Innovation and Outcomes Research, Department of Surgery, Columbia University Medical Center, New York, NY, ⁴Departments of Thoracic and Cardiac Surgery, Vanderbilt University Medical Center, Nashville, TN*

8:00 AM - 9:30 AM

SYMPOSIUM 10: CMV: Great Debates on Prevention and Management Controversies (ID, CARD, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Michael Ison, MD, Lara Danziger-Isakov, MD, MPH, and Glen P Westall, FRACP, PhD

Session Summary: Despite advances in diagnostics and prevention strategies, cytomegalovirus (CMV) infection continues to be a significant management challenge in thoracic organ transplantation. This session involves two pro and con debates and a lecture related to 3 controversial issues: 1) the duration of universal anti-viral prophylaxis, 2) the use of CMV-specific immune monitoring assays as adjuncts to viral load testing, and 3) approaches to the management of resistant or recurrent CMV.

- 8:00 AM** *Resistance, Toxicities, and More: A Case-Based Approach to the Management of CMV in Lung Transplant Recipients*
Catherine Burton, MD, University of Alberta, Edmonton, AB, Canada
- 8:20 AM** *DEBATE: Universal CMV Prophylaxis Should Be Short or Not Used at All (PRO)*
Nicolas Mueller, MD, University of Zurich, Zurich, Switzerland
- 8:32 AM** *DEBATE: Universal CMV Prophylaxis Should Be Short or Not Used at All (CON)*
Emily A Blumberg, MD, University of Pennsylvania, Philadelphia, PA, United States
- 8:44 AM** *DEBATE: CMV-Specific Immune Monitoring Assays are Ready for Prime Time! (PRO)*
Laurie D Snyder, MD, Duke University Med Ctr, Durham, NC, United States
- 8:56 AM** *DEBATE: CMV-Specific Immune Monitoring Assays are Ready for Prime Time! (CON)*
Camille Kotton, MD, Mass General Hospital, Boston, MA, United States

8:00 AM - 9:30 AM

**SYMPOSIUM 11: Eye Ball Test! I Know My Patient is Frail: Now What?
(PULM, AN-CC, CARD, CT-SURG, NURS-AH, PEDS, PHARM)**

Chairs: Goran Dellgren, MD, Cassie Kennedy, MD, and Aleem Siddique, MBBS

Session Summary: Patients with end stage heart and lung disease are frequently identified as frail and this is predictive of worse outcomes. Currently the best management for these patients is unclear. This session will describe current evidence gleaned from across medical specialties to manage the frail patient in all facets of the phenotype. The session will highlight ongoing relevant trials and will culminate in a debate on the use of frailty as criteria to guide listing for transplant.

- 8:00 AM** *Iron Man (or Woman): Targeting Frailty before Lung Transplantation*
Aida Venado, MD, UCSF Medical Center, San Francisco, CA, United States
- 8:12 AM** *The Incredible Bulk: Addressing Obesity and Body Composition Pre-Transplant*
Michaela Anderson, MD, Columbia University, New York, NY, United States
- 8:24 AM** *Frontiers of the Mind: Psychologic Frailty*
Katharina Tigges-Limmer, PhD, Herz- und Diabeteszentrum NRW, Bad Oeynhausen, Germany
- 8:36 AM** *DEBATE: The Pre-Frail Patient Should Be Considered Earlier for Listing (PRO)*
Hanneke Kwakkel-van Erp, MD, University Hospital, Antwerp, Belgium
- 8:48 AM** *DEBATE: The Pre-Frail Patient Should Be Considered Earlier for Listing (CON)*
Allan Glanville, MD, St Vincent's Hospital, Sydney, Australia
- 9:00 AM** *Endgame: When to Delist*
Joshua Diamond, MD, University of Pennsylvania, Philadelphia, PA, United States

8:00 AM - 9:30 AM

**SYMPOSIUM 12: Challenges in Patient and Device Selection in Pediatric Heart Failure and MCS
(PEDS, AN-CC, CARD, CT-SURG, NURS-AH, PATH, PHARM, PULM, RES-IMM)**

Chairs: Aamir Jeewa, MD, and Neha Bansal, MD

Session Summary: This symposium will explore the complexity of patient and device selection in pediatric mechanical circulatory support through 3 case-based debates, each highlighting a clinical scenario for which there is currently no standard approach. The session will present competing views on the risks and benefits of various management approaches to 3 distinct pediatric advanced heart failure populations.

- 8:00 AM** *How Low Can We Get? The Use of Durable LVADs in Pediatric Patients*
Umar S. Boston, MD, Le Bonheur Children's Hospital, Memphis, TN, United States
- 8:10 AM** *DEBATE: All Neonates with DCM and Decompensated Heart Failure Should Receive a VAD as a Bridge to Transplant (PRO)*
Joshua Friedland-Little, MD, Seattle Children's Hospital, Seattle, WA, United States
- 8:20 AM** *DEBATE: All Neonates with DCM and Decompensated Heart Failure Should Receive a VAD as a Bridge to Transplant (CON)*
Michael Burch, MD, Great Ormond Street Hospital, London, United Kingdom

8:30 AM *DEBATE: All Patients with Fulminant Myocarditis Failing Medical Therapy Should Be Bridged with ECMO Support as First Line MCS (PRO)*
Sabrina P Law, MD, Columbia University Medical Center, New York, NY, United States

8:40 AM *DEBATE: All Patients with Fulminant Myocarditis Failing Medical Therapy Should Be Bridged with ECMO Support as First Line MCS (CON)*
Jacob Mathew, MD, Royal Children's Hospital, Melbourne, Australia

8:50 AM *DEBATE: A Child with a Glenn Palliation with Severe Right Ventricular Systolic Dysfunction Should Be Bridged Medically to Transplant (PRO)*
Kathleen Simpson, MD, Children's Hospital of Colorado, Aurora, CO, United States

9:00 AM *DEBATE: A Child with a Glenn Palliation with Severe Right Ventricular Systolic Dysfunction Should Be Bridged Medically to Transplant (CON)*
Antonio Amodeo, MD, Pediatric Hospital Bambino Gesù, Rome, Italy

9:45 AM - 11:15 AM

ORAL SESSION 16: Early Career and Trainees Clinical Case Dilemmas: The Best of the Best (ALL, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs:

9:45 AM *(1174) Donor Bicuspid Aortic Valve: Double Trouble or No Problem?; P. Day¹, K. Hope², K. Puri³, J. Spinner², S. Choudhry², H. Tunuguntla², J. Price², W. Dreyer², S. Denfield².
¹Pediatrics, Texas Children's Hospital, Houston, TX, ²Pediatric Cardiology, Texas Children's Hospital, Houston, TX, ³Pediatric Critical Care, Texas Children's Hospital, Houston, TX*

9:55 AM **Expert Discussant in Heart Failure and Transplantation**
Howard Eisen, MD, Penn State Hershey Medical Center, Hershey, PA, USA

10:05 AM *(1175) Extracorporeal Membrane Oxygenation Dependent COVID19 Hospital Transfers; A. Leal¹, W. Broyles², Z. A. Hashmi¹, N. H. Patel³, A. R. Patel³, O. Hernandez², G. Schwartz⁴, D. Meyer¹. ¹Cardiothoracic Surgery, Baylor University Medical Center Dallas, Dallas, TX, ²Surgery, Baylor University Medical Center Dallas, Dallas, TX, ³Heart Failure Cardiology, Baylor University Medical Center Dallas, Dallas, TX, ⁴Thoracic Surgery, Baylor University Medical Center Dallas, Dallas, TX*

10:15 AM **Expert Discussant in Mechanical Circulatory Support**
Mani A. Daneshmand, MD, Emory, Atlanta GA, USA

10:25 AM *(1176) Metastatic Signet Ring Cell Carcinoma Masquerading as Acute on Chronic Thromboembolic Pulmonary Hypertension Requiring ECMO; D. Beauchamp¹, C. A. Heid², C. Herbert³, C. Timmons⁴, M. Green³, M. Wait², T. Pirolli². ¹Pediatrics, Cincinnati Children's Hospital, Cincinnati, OH, ²Cardiovascular and Thoracic Surgery, University of Texas Southwestern, Dallas, TX, ³Pediatrics, University of Texas Southwestern, Dallas, TX, ⁴Pathology, University of Texas Southwestern, Dallas, TX*

10:35 AM **Expert Discussant in Pulmonary Vascular Disease (PAH & CTEPH)**
Laura Donahoe, MD, Toronto General Hospital, Toronto, ON, Canada

10:45 AM *(1177) Hermansky-Pudlak Syndrome and Lung Transplantation: A Single Center Case Series; S. Qayum, L. Benvenuto, S. Arcasoy. Pulmonary, Allergy, Critical Care Medicine, Columbia University Irving Medical Center, New York, NY*

10:35 AM

Expert Discussant in Advanced Lung Failure and Transplantation

Hilary J. Goldberg, MD, Brigham & Women's Hospital, Boston, MA, USA

9:45 AM - 11:15 AM

ORAL SESSION 17: Biomarkers: Risk Assessment and Monitoring of the Lung Allograft (PULM, ID, RES-IMM)

Chairs:

9:45 AM

(125) Molecular Pathway Analysis of Chronic Lung Allograft Dysfunction: Results from a Multicenter International Cohort; M. D. Parkes¹, K. M. Halloran², I. L. Timofte³, G. I. Snell⁴, G. P. Westall⁴, J. Havlin⁵, R. Lischke⁵, R. Hachem⁶, D. Kreisel⁶, D. Levine⁷, B. Kubisa⁸, M. Piotrowska⁸, S. Juvet⁹, S. Keshavjee⁹, P. Jaksch¹⁰, W. Klepetko¹⁰, A. Hirji², J. Weinkauf², P. F. Halloran². ¹University of Alberta, Edmonton, AB, Canada, ²Department of Medicine, University of Alberta, Edmonton, AB, Canada, ³University of Maryland, Baltimore, MD, ⁴Alfred Hospital Lung Transplant Service, Melbourne, Australia, ⁵University Hospital Motol, Prague, Czech Republic, ⁶Washington University in St. Louis, St. Louis, MO, ⁷University of Texas San Antonio, San Antonio, TX, ⁸Pomeranian Medical University of Szczecin, Szczecin, Poland, ⁹Toronto Lung Transplant Program, University Health Network, Toronto, ON, Canada, ¹⁰Medical University of Vienna, Vienna, Austria

9:55 AM

(126) Validation of CD4+ CD57+PDI+ T Cells in Bronchoalveolar Lavage as a Biomarker of Lung Allograft Dysfunction; S. Moshkelgosha, L. Levy, G. W. Wilson, S. Keshavjee, T. Martinu, J. Yeung, S. C. Juvet. *Latner Thoracic Surgery Research Laboratories, University Health Network, Toronto, ON, Canada*

10:05 AM

(127) Cell-Free DNA to Monitor Immunosuppression Adequacy in Lung Transplantation; A. Charya¹, M. Jang¹, C. Mutebi¹, H. Luikart², P. Shah³, J. Matthews³, A. W. Brown⁴, H. Kong¹, I. Tunc⁵, G. Berry², C. Marboe⁶, A. Iacono⁷, S. Nathan⁴, K. Khush², J. Orens³, H. Valentine¹, S. Agbor-Enoh¹. ¹Genomic Research Alliance for Transplantation (GRAfT), National Heart Lung and Blood Institute, Bethesda, MD, ²Stanford University School of Medicine, Stanford, CA, ³Division of Pulmonary and Critical Care, The Johns Hopkins School of Medicine, Baltimore, MD, ⁴Inova Fairfax Hospital, Fairfax, VA, ⁵Division of Intramural Research, National Heart Lung and Blood Institute, Bethesda, MD, ⁶Department of Pathology, New York Presbyterian University Hospital of Cornell and Columbia, New York, NY, ⁷Division of Pulmonary and Critical Care Medicine, University of Maryland Medical Center, Baltimore, MD

10:15 AM

(128) Bronchoalveolar Bile Acids are Associated with Acute Rejection, Inflammation, and Allograft Survival: A Multi-Center Study; L. Levy¹, M. Ahmed², E. Huszti³, C. K. Zhang², S. E. Hunter², K. M. Boonstra², A. T. Sage², R. Ghany², M. Budev⁴, P. Shah⁵, J. M. Reynolds⁶, L. D. Snyder⁶, J. Belperio⁷, L. G. Singer², S. M. Palmer⁶, S. Keshavjee², J. L. Todd⁶, S. S. Weigt⁷, T. Martinu¹. ¹Toronto Lung Transplant Program, Toronto, ON, Canada, ²Toronto Lung Transplant Program, Toronto, Canada, ³Biostatistics Research Unit, University Health Network, Toronto, Canada, ⁴Cleveland Clinic, Cleveland, ⁵Johns Hopkins University Hospital, Baltimore, ⁶Duke University Medical Center, Durham, ⁷UCLA Medical Center, Los Angeles

10:25 AM

(129) The Diagnostic and Prognostic Value of Bronchial Wash for Evaluating Microaspiration in Lung Transplant Recipients; C. Zhang¹, M. Ahmed¹, E. Huszti², L. Levy¹, S. E. Hunter¹, K. M. Boonstra¹, A. T. Sage¹, R. Ghany¹, M. Liu¹, J. C. Yeung¹, O. M. Crespin³, L. G. Singer¹, S. Keshavjee¹, T. Martinu¹. ¹Toronto Lung Transplant Program, University Health Network, Toronto, ON, Canada, ²Biostatistics Research Unit, University Health Network, Toronto, ON, Canada, ³Division of General Surgery, University Health Network, Toronto, ON, Canada

10:35 AM (130) *Non-Invasive Infections Diagnosis in Lung Transplant Recipients in Exhaled Breath Condensate*; E. Ibáñez-Martínez¹, M. López-Nogueroles², M. Alcoriza-Balaguer³, I. Pérez⁴, M. Roca-Marugán², J. Pemán-García¹, A. Lahoz-Rodríguez³, A. Solé-Jover⁴. ¹Clinical Microbiology, Hospital Universitari i Politècnic La Fe, València, Spain, ²Analytical Unit, Health Research Institute Hospital La Fe, València, Spain, ³Biomarkers and Precision Medicine Unit, Health Research Institute Hospital La Fe, València, Spain, ⁴Lung Transplant and Cystic Fibrosis Unit, Hospital Universitari i Politècnic La Fe, València, Spain

9:45 AM - 11:15 AM

ORAL SESSION 18: Is it True Less is More and Smaller is Better? Surgical Strategies in MCS (CT-SURG, AN-CC, CARD, PEDS)

Chairs:

9:45 AM (203) *Less Invasive LVAD Implantation Decreases Postoperative Right Ventricular Dysfunction*; M. Bjelic¹, B. Ayers², I. Goldenberg³, S. McNitt³, C. Cheyne⁴, B. Barrus¹, H. Vidula⁴, J. Alexis⁴, S. Prasad¹, I. Gosev¹. ¹Department of Surgery, University of Rochester Medical Center, Rochester, NY, ²Department of Surgery, Massachusetts General Hospital, Boston, MA, ³Clinical Cardiovascular Research Center, University of Rochester Medical Center, Rochester, NY, ⁴Department of Medicine, University of Rochester Medical Center, Rochester, NY

9:55 AM (204) *Less Invasive HeartMate 3 Implantation is a Safe and Effective Approach for Obese Patients*; M. Bjelic¹, B. Ayers², B. Barrus¹, H. Vidula³, J. Alexis³, F. Paic⁴, S. Prasad¹, I. Gosev¹. ¹Department of Surgery, University of Rochester Medical Center, Rochester, NY, ²Department of Surgery, Massachusetts General Hospital, Boston, MA, ³Department of Medicine, University of Rochester Medical Center, Rochester, NY, ⁴Department of Medical Biology and Genetics, University of Zagreb Medical School, Zagreb, Croatia

10:05 AM (205) *The Development and Clinical Impact of Aortic Regurgitation Following Left Ventricular Assist Device Surgery: An Analysis of the IMACS Database*; Y. C. Yalcin¹, J. Veenis², K. M. Veen³, O. Birim³, A. J. Bogers³, J. J. Brugts², K. Caliskan². ¹Cardiology & Cardiothoracic surgery, ErasmusMC University, Rotterdam, Netherlands, ²Cardiology, ErasmusMC University, Rotterdam, Netherlands, ³Cardiothoracic surgery, ErasmusMC University, Rotterdam, Netherlands

10:15 AM (206) *Outcomes in LVAD Implantation via Lateral Thoracotomy with Outflow Cannula Anastomosis to the Descending Aorta*; A. Dorken Gallastegi¹, E. B. Hoscoskun², Ü. Kahraman¹, B. Yagmur³, S. Nalbantgil³, Ç. Engin¹, T. Yagdi¹, M. Özbaran¹. ¹Cardiovascular Surgery, Ege University School of Medicine, Izmir, Turkey, ²Medical Student, Ege University School of Medicine, Izmir, Turkey, ³Cardiology, Ege University School of Medicine, Izmir, Turkey

10:25 AM (207) *Atrial Cannulation in Pediatric Mechanical Circulatory Support*; J. C. Dykes¹, D. N. Rosenthal¹, M. Ma², C. S. Almond¹, F. Zafar³, D. M. Peng⁴, A. Power⁵, J. Murray¹, A. P. Barnes⁶, R. J. Gajarski⁷, M. J. O'Connor⁸, K. Maeda⁹. ¹Pediatrics, Stanford University, Palo Alto, CA, ²Cardiothoracic Surgery, Stanford University, Palo Alto, CA, ³Cardiothoracic Surgery, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ⁴Pediatrics, C.S. Mott Children's Hospital, Ann Arbor, MI, ⁵Pediatrics, Children's Medical Center, Dallas, TX, ⁶Pediatrics, Children's Mercy Hospital, Kansas City, MO, ⁷Pediatrics, Nationwide Children's Hospital, Columbus, OH, ⁸Pediatrics, The Children's Hospital of Philadelphia, Philadelphia, PA, ⁹Cardiothoracic Surgery, The Children's Hospital of Philadelphia, Philadelphia, PA

10:35 AM **(208) Ventricular Assist Devices in Adults with Failing Systemic Right Ventricle: The Importance of Concomitant Tricuspid Valve Replacement;** O. Gonzalez Fernandez¹, F. De Rita², L. Coats², D. Crossland², M. Nassar², A. Hermuzi², B. Santos Lopez², A. Woods², N. Robinson-Smith², T. Petit², N. Seller², J. O'Sullivan³, A. McDiarmid², S. Schueler², A. Hasan³, G. MacGowan², K. Jansen². ¹Cardiology, Hospital La Paz, Madrid, Spain, ²Cardiology, Freeman Hospital, Newcastle upon Tyne, United Kingdom, ³Cardiothoracic Surgery, Freeman Hospital, Newcastle upon Tyne, United Kingdom

9:45 AM - 11:15 AM

ORAL SESSION 19: Pathological Insights in Heart and Lung Transplantation (PATH, ID, PEDS, PULM)

Chairs:

9:45 AM **(59) Atypical Infiltrates on Endomyocardial Biopsy are Associated with Adverse Outcomes in Pediatric Heart Transplantation;** K. D. Hope¹, S. A. Morris¹, S. Choudhry¹, K. Puri², J. A. Spinner¹, H. P. Tunuguntla¹, J. F. Price¹, W. J. Dreyer¹, S. K. Nicholas³, D. L. Kearney⁴, S. W. Denfield¹. ¹Pediatric Cardiology, Texas Children's Hospital, Houston, TX, ²Pediatric Critical Care, Texas Children's Hospital, Houston, TX, ³Pediatric Allergy and Immunology, Texas Children's Hospital, Houston, TX, ⁴Pediatric Cardiac & Surgical Pathology, Texas Children's Hospital, Houston, TX

9:55 AM **(60) Heart Allograft Quilty Lesions are Associates with a Tolerant Gene Profile and Normal Allograft Function;** J. R. Torrealba, Q. Cai, S. A. Moore, S. Sathirareunghai, L. De Las Casas, A. Hendricks. Pathology, UTSW Medical Center, Dallas, TX

10:05 AM **(61) Sarcolemmal Staining by Anti-C4d/C3d in Cardiac Transplant Endomyocardial Biopsies and Associated Serum HLA Antibodies and Pathologic Rejection;** R. P. Lau¹, R. A. Sosa², G. A. Fishbein¹. ¹Pathology, University of California, Los Angeles, Los Angeles, CA, ²Pathology & Immunogenetics, University of California, Los Angeles, Los Angeles, CA

10:15 AM **(62) Phenotypical Characterization of Airway Morphology in Post-Infectious vs Post-Lung Transplantation Bronchiolitis Obliterans;** A. Vanstapel¹, B. Weynand¹, A. De Zutter², A. Dubbeldam¹, L. De Sadeleer¹, J. Kaes¹, E. Verbeken¹, L. Ceulemans¹, V. Geudens¹, T. Goos¹, I. Gyselinck¹, D. Van Raemdonck¹, A. Neyrinck¹, L. Dupont¹, M. Boon³, M. Boone⁴, B. Vanaudenaerde¹, R. Vos¹, G. Verleden¹, S. Verleden¹. ¹Leuven Lung Transplant Unit, KU Leuven - UH Leuven, Leuven, Belgium, ²Department of Immunology and Transplantation, KU Leuven - Rega Institute, Leuven, Belgium, ³Department of Pediatrics, KU Leuven - UH Leuven, Leuven, Belgium, ⁴Department of Physics and Astronomy, Radiation Physics, University of Gent, Gent, Belgium

10:25 AM **(63) Spectrum of Chronic Lung Allograft Pathology in Human Lung Transplantation;** B. Renaud-Picard¹, G. Berra¹, D. Hwang², E. Miyamoto¹, G. Berry³, P. Pal⁴, S. Juvet¹, S. Keshavjee¹, T. Martinu¹. ¹Toronto Lung Transplant Program, Toronto General Hospital Research Institute, Toronto, ON, Canada, ²Department of Pathology, Sunnybrook Health Sciences Center, Toronto, ON, Canada, ³Department of Pathology, Stanford University School of Medicine, Stanford, CA, ⁴Department of Pathology, Toronto General Hospital, Toronto, ON, Canada

10:35 AM **(64) Assessment of Airway Epithelial Damage Related to B-grade Airway-Centered Acute Rejection;** B. Renaud-Picard¹, T. Daigneault¹, D. Hwang², G. Berra¹, P. Pal³, T. Martinu¹. ¹Toronto Lung Transplant Program, University Hospital Network, Toronto, ON, Canada, ²Department of Pathology, Sunnybrook Health Sciences Centre, Toronto, ON, Canada, ³Department of Pathology, Toronto General Hospital, Toronto, ON, Canada

9:45 AM - 11:15 AM

**SYMPOSIUM 13: HFpEF and Infiltrative Cardiomyopathies
(CARD, AN-CC, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)**

Chairs: Richard K Cheng, MD, MSc, Bojan Vrtovec, MD, PhD, and Carmela D. Tan, MD

Session Summary: This session focuses on heart failure with preserved ejection fraction, including etiologies and hemodynamics, and the utility of advanced imaging techniques in diagnosis. This session also will discuss infiltrative cardiomyopathies, particularly conditions that often present with RV involvement or right heart failure, including amyloidosis and sarcoidosis. The speakers will discuss how to manage the specific cardiomyopathy, and when to refer these patients for advanced HF therapies. A panel discussion with all speakers will conclude this session.

- 9:45 AM** *Case Presentation: A Challenging Case of Dyspnea in an Older Woman*
Thomas Cascino, MD, MSc, University of Michigan, Ann Arbor, MI, United States
- 9:50 AM** *Pathophysiology and Hemodynamics of Heart Failure with Preserved Ejection Fraction*
Sanjiv J. Shah, MD, Northwestern University, Chicago, IL, United States
- 10:02 AM** *Role of Imaging in Assessing HFpEF - Echocardiography, MRI, and PET: Is Ejection Fraction Overrated?*
Jerry D Estep, MD, Cleveland Clinic, Cleveland, OH, United States
- 10:14 AM** *HFpEF: Treatment Options in Different Clinical Settings*
Maria Frigerio, MD, Niguarda Great Metropolitan Hospital, Milan, Italy
- 10:26 AM** *Case Presentation: ATTR Amyloid Patient with Severe Restrictive Physiology/Right Heart Failure and Pulmonary Hypertension*
Viviana V Navas, MD, Cleveland Clinic Florida, Weston, FL, United States
- 10:31 AM** *Restrictive Physiology and Emerging Treatment Options in ATTR Amyloidosis*
Natasha Altman, MD, University of Colorado, Aurora, CO, United States
- 10:43 AM** *Case Presentation: Right Heart Failure and Pulmonary Hypertension in Sarcoidosis*
Stephen Pan, MD MS, Westchester Medical Center / NY Medical College, New York, NY, United States
- 10:48 AM** *Quest for Quiescence: Treating RV Dysfunction, Pulmonary Hypertension, and Arrhythmias in Sarcoidosis*
Maja Cikes, MD, PhD, University of Zagreb School of Medicine, Zagreb, Croatia

9:45 AM - 11:15 AM

**SYMPOSIUM 14: Jukebox Jives: Going Beyond the Fundamentals of Antifungal Therapy
(PHARM, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PULM, RES-IMM)**

Chairs: Thais Gift, PharmD, BCPS, Fernanda Silveira, MD, and Patricia Ging, MSc

Session Summary: Fungal infections are associated with high morbidity and mortality in thoracic transplant and MCS. This session will provide an overview of some less commonly encountered antifungal issues and provide guidance for clinicians enabling clinicians to make the most of currently available agents.

- 9:45 AM** *Stuck on You: Reviewing Unique Antifungal Dosing in ECMO*
Haifa Lyster, MSc, Royal Brompton and Harefield NHS Foundation Trust, Middlesex, United Kingdom

- 10:00 AM** *Billie 'Gene': Pharmacogenomics of Antifungals*
Christina Aquilante, PharmD, University of Colorado, Aurora, CO, United States
- 10:15 AM** *We Go Together: Synergy and Antagonism among Antifungal Agents*
Taylor Pasley, PharmD, UF Health Shands Hospital, Tampa, FL, United States
- 10:30 AM** *A Change is Gonna Come Armamentarium against Scedosporium and Fusarium*
Me-Linh Luong, MD, St. Luc Hospital, Montreal, QC, Canada
- 10:45 AM** *Bitter Pill: Outside the [Pill] Box Antifungal Administration Strategies*
Rickey A Evans, PharmD, University of North Carolina Healthcare, Chapel Hill, NC, United States

9:45 AM - 11:15 AM

SYMPOSIUM 15: Pediatric Pulmonary Hypertension: Management of Advanced Disease and Thoracic Transplant Referral (PEDS, CARD, CT-SURG, NURS-AH, PHARM, PULM)

Chairs: Melinda Solomon, MD, and Elina Heliövaara, MD, PhD

Session Summary: This session will bring together experts on pediatric pulmonary hypertension for a discussion that is much needed regarding the treatment of advanced pulmonary vascular diseases in children. In addition to medical management, discussions will include surgical management and referral for thoracic transplantation in refractory cases.

- 9:45 AM** *The Matrix: What to Do When Children with Eisenmenger Physiology become Adults*
Maurice Beghetti, HUG, Children's University Hospital, Geneva, Switzerland
- 9:57 AM** *Applying What We Know about Adult Therapies to Children*
Amy Kiskaddon, Johns Hopkins All Children's Hospital, St. Petersburg, FL, United States
- 10:09 AM** *Considerations for Managing the Failing Fontan*
Steven Kindel, MD, Children's Hospital of Wisconsin, Milwaukee, WI, United States
- 10:21 AM** *Surgical and Non-Invasive Management of Severe Pulmonary Hypertension in Children Prior to or Instead of Lung Transplantation*
Katsuhide Maeda, MD, Children's Hospital of Philadelphia, Philadelphia, PA, United States
- 10:33 AM** *When to Refer a Child with Pulmonary Hypertension for Thoracic Transplant*
Brigitte Willemsse, MD, Univ Med Ctr Groningen, Groningen, Netherlands
- 10:45 AM** *What Do Patients and Parents Want: A Family Interview*
Erika B. Rosenweig, MD, Columbia University Medical Center - NYP, New York, NY, United States

1:15 PM - 2:15 PM

WORKSHOP 05: I Never Thought I'd Live to Be a Hundred: Lessons Learned to Delay Cardiac Allograft Vasculopathy and Malignancy (CARD, AN-CC, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: David A Baran, MD, Elena Sandoval, MD FEBCTS, and Georgina Waldman, PharmD

Session Summary: In this session, lecturers will speak about complications that decrease long-term survival post heart transplant cardiac allograft vasculopathy and malignancy, focusing on updated clinical evidence to prevent their onset and/or delay their progression. Complications related to proliferation signal inhibitors and their impact to prevent long-term complications and improve survival post-transplant will be discussed. A panel discussion with all speakers will conclude this session.

1:15 PM *What's beyond Ten Years?*
Maria Rosa Costanzo, MD, Midwest Heart Specialists-Advocate Medical, Naperville, IL, United States

1:30 PM *Facing the Facts: What Really Works and What Doesn't to Prevent and Delay CAV?*
Livia Goldraich, MD, Hospital de Clínicas Porto Alegre, Porto Alegre, Brazil

1:45 PM *There Goes My Miracle: How Can We Prevent Post-Transplant Malignancies?*
Sandriogo Mangini, MD, PhD, Heart Institute, Sao Paulo, Brazil

1:15 PM - 2:15 PM

WORKSHOP 06: Making the Move: Accelerating Basic Science to Novel Clinical Trials in Transplant (RES-IMM, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM)

Chairs: John R Greenland, MD, PhD, Laurie D Snyder, MD, and Simon Pecha, MD

Session Summary: Despite a desperate need for novel therapies to prevent or reverse chronic rejection, there has been a paucity of clinical trials in this area. This symposium will discuss barriers to interventional trials in transplant and their potential solutions.

1:15 PM *Changing the Endgame: Surrogate Markers Instead of Clinical Endpoints?*
Jamie L Todd, MD, Duke University Medical Center, Durham, NC, United States

1:30 PM *Sharing the Love: Translating Pre-Clinical Discoveries and Borrowing from Other Therapeutic Areas to Transplantation*
Patricia Uber, PharmD, Virginia Commonwealth University, Richmond, VA, United States

1:45 PM *Maximizing Efficiency: Novel Clinical Trial Designs*
Finn Gustafsson, MD, PhD, Rigshospitalet, Copenhagen, Denmark

1:15 PM - 2:15 PM

WORKSHOP 07: Let's Talk about Sex, Baby! Intimacy in MCS and Transplant Patients (NURS-AH, AN-CC, CARD, CT-SURG, ID, PEDS, PHARM, PULM)

Chairs: Pamela Combs, PhD RN, and Tonya I Elliott, MSN, RN, CCTC, CHFN

Session Summary: This multidisciplinary symposium focuses on issues specific to sexual intimacy and fertility in patients receiving device therapies, cardiac or lung transplantation. Topics will include: impact of heart failure medication on sexual potency, ethical issues and decision making around unplanned pregnancies, sexually transmitted infections, and fertility treatment, and supporting patients with device therapies around intimacy concerns.

1:15 PM *I Can't Get No Satisfaction: Pharmacological Considerations*
Nathan Verlinden, PharmD, Allegheny General Hospital, Pittsburgh, PA, United States

1:30 PM *Papa Don't Preach: STI, Fertility and Pregnancy Dilemmas*
Vasiliki Gerovasili, MD, Queen Elizabeth Hospital, Oxford, United Kingdom

1:45 PM *Rock with You: Sexual Intimacy and Device-Therapy in MCS Patients*
Melissa Sanchez, BSc, PGDip, MSc, DClinPSy, Royal Brompton Hospital, Harefield, United Kingdom

1:15 PM - 2:15 PM

WORKSHOP 08: Portopulmonary Rhapsody: Everything You Need to Know About Portopulmonary Hypertension
(PULM , CARD, CT-SURG, PATH)

Chairs: Nicholas A Kolaitis, MD, Daniel H Kim, MD, and Richard D. Thompson, PhD, FRCP

Session Summary: This session will review the new topics in the literature regarding portopulmonary hypertension. It will review the pathogenesis of portopulmonary hypertension and other forms of PAH related to liver disease, it will review the emerging treatment options for patients with portopulmonary hypertension, and will include a great debate on role of liver transplantation in treatment of portopulmonary hypertension.

1:15 PM *Case Presentation: RVSP''itis'': Patient with Newly Diagnosed Portopulmonary Hypertension*
Sophia Airhart, MD, Providence Heart and Vascular Institute, Portland, OR, United States

1:20 PM *There Goes the Neighborhood: Updates in Pathogenesis, Epidemiology and Treatment of Portopulmonary Hypertension*
Olivier Sitbon, MD, PhD, Paris-Saclay University / Bicêtre Hospital, Paris Sud, France

1:35 PM *DEBATE: Liver Transplantation is a Treatment for Portopulmonary Hypertension (PRO)*
Thenappan Thenappan, MD, University of Minnesota, Minneapolis, MN, United States

1:50 PM *DEBATE: Liver Transplantation is a Treatment for Portopulmonary Hypertension (CON)*
Michael A Trotter, MD, The Prince Charles Hospital, Brisbane, Melbourne, Australia

4:00 PM - 6:00 PM

PLENARY 2: Plenary Session
(ALL, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Lori J West, MD, D.Phil, and John Dark, MB, FRCS

Session Summary: Transplant outcomes remain constrained by immunosuppressive protocols that in many respects have shown little change over the last decade. This Plenary session will explore the immunosuppressive drug pipeline in development and likely role of novel agents compared to traditional therapy in the future. Furthermore, access to transplantation remains a universal problem with an imbalance between numbers of patients on active waitlists and donor organ supply. The current status, barriers and ethical challenges in the development of interspecies chimeras will be outlined. Could the waitlist finally be abolished? Myocardial recovery during Mechanical Circulatory Support remains an elusive goal with few patients expected to achieve restitution of normal myocardial function. This Plenary will provide latest insights into mechanisms of myocardial recovery and therapeutic approaches. The highlight of this session will be the acknowledgement to the recipient of the ISHLT 2021 Lifetime Achievement Award.

4:00 PM **Welcome Introductions**
Lori J. West, MD, D.Phil., University of Alberta, Edmonton, AB, Canada

- 4:02 PM** *Laudation to 2021 Lifetime Achievement Award Recipient David Taylor*
Randall C. Starling, MD, MPH, Cleveland Clinic, Cleveland, OH, United States
- 4:17 PM** *Is the Well Dry: What Has Happened to the Immunosuppressive Drug Pipeline?*
Mandy L Ford, PhD, Emory University, Atlanta, GA, United States
- 4:42 PM** *(2) Inhaled Selective Pulmonary Vasodilators for Advanced Heart Failure Therapies; K. Ghadimi¹, J. Cappiello², M. Cooter¹, J. H. Levy¹, J. N. Schroder³, B. Bryner³, S. H. Shah⁴, S. Rajagopal⁴, A. D. Devore⁴, C. B. Patel⁴, C. A. Milano³. ¹Anesthesiology & Critical Care, Duke University Medical Center, Durham, NC, ²Respiratory Care, Duke University Medical Center, Durham, NC, ³Surgery, Duke University Medical Center, Durham, NC, ⁴Medicine, Duke University Medical Center, Durham, NC*
- 4:52 PM** *Featured Abstract Q&A with Invited Discussant*
John Dark, MD, FRCS, Freeman Hospital, Newcastle Upon Tyne, United Kingdom
- 4:57 PM** *Latest Insights into Myocardial Recovery during Mechanical Circulatory Support*
Bart Meyns, MD, PhD, UZ Leuven, Leuven, Belgium
- 5:22 PM** *(3) First Results of Soprano: Macitentan in Patients (pts) with Pulmonary Hypertension (PH) Post-Left Ventricular Assist Device (LVAD) Implantation; R. P. Frantz¹, S. Desai², G. Ewald³, V. Franco⁴, A. Hage⁵, E. M. Horn⁶, S. J. LaRue⁷, M. A. Mathier⁸, S. A. Mandras⁹, M. H. Park¹⁰, A. Ravichandran¹¹, I. Wang¹², R. Zolty¹³, M. Rocco¹⁴, M. Selej¹⁴, C. Zhao¹⁴, J. Rame¹⁵. ¹Mayo Clinic, Rochester, MN, ²Heart & Vascular Institute, Inova Fairfax Hospital, Falls Church, VA, ³Heart Failure and Heart Transplantation, Washington University School of Medicine, St. Louis, MO, ⁴The Ohio State University Wexner Medical Center, Columbus, OH, ⁵Cedars-Sinai, Beverly Hills, CA, ⁶Weill Cornell Medicine, New York, NY, ⁷Hannibal Clinic, Hannibal, MO, ⁸University of Pittsburgh Department of Medicine, Pittsburgh, PA, ⁹AdventHealth, Orlando, FL, ¹⁰CHI Franciscan, Tacoma, WA, ¹¹Ascension St. Vincent Heart Center, Indianapolis, IN, ¹²Memorial Healthcare System, Hollywood, FL, ¹³University of Nebraska Medical Center, Omaha, NE, ¹⁴Actelion Pharmaceuticals US, Inc, South San Francisco, CA, ¹⁵Thomas Jefferson University Hospital, Philadelphia, PA*
- 5:32 PM** *Featured Abstract Q&A with Invited Discussant*
Mardi Gomberg-Maitland, MD,MSc, GW Heart and Vascular Institute, Washington, DC, United States
- 5:35 PM** *Interspecies Chimeras and the End of the Waitlist: Fair Game or Fanciful Folly*
Pablo J Ross, PhD, University of California, Davis, CA, United States

Monday, April 26, 2021

6:15 AM - 7:45 AM

MINI ORAL 02: Forever Young: Pediatric MCS, LV Recovery After MCS, and More (PEDS, AN-CC, CARD, CT-SURG, NURS-AH, RES-IMM)

Chairs:

- 6:15 AM** (395) *Early Clinical Experience of a Novel Mobile Driving Unit for Pediatric VAD Support*; O. Miera¹, E. Sandica², S. Dittrich³, K. R. Schmitt¹, M. Hermann⁴, U. Blanz², R. Cesnjevar⁵, N. Haas⁴. ¹Department of Congenital Heart Disease / Pediatric Cardiology, Deutsches Herzzentrum Berlin, Berlin, Germany, ²Department of Surgery for Congenital Heart Defects, Heart and Diabetes Centre NRW, Bad Oeynhausen, Germany, ³Department of Pediatric Cardiology, University Hospital Erlangen, Erlangen, Germany, ⁴Department of Pediatric Cardiology and Pediatric Intensive Care, Ludwig-Maximilians-University Munich, Munich, Germany, ⁵Department of Pediatric Cardiac Surgery, University Hospital Erlangen, Erlangen, Germany
- 6:20 AM** (396) *Self-Reported Quality of Life in Children on Ventricular Assist Devices: A Pedimacs Analysis*; D. M. Peng¹, S. Yu¹, R. Lowery¹, C. Ventresco², E. D. Blume², K. Uzark¹. ¹Pediatrics (Cardiology), University of Michigan, CS Mott Children's Hospital, Ann Arbor, MI, ²Pediatric Cardiology, Harvard University, Boston Children's Hospital, Boston, MA
- 6:25 AM** (397) *Mechanical Circulatory Support in Pediatric Myocarditis: Utilization and Patient Outcomes*; A. M. Kamsheh¹, J. B. Edelson¹, W. Quarshie¹, J. Faerber¹, A. Mondal¹, D. S. Burstein¹, C. Wittlieb Weber¹, K. Y. Lin¹, K. Maeda¹, C. E. Mascio¹, J. W. Gaynor¹, J. M. Chen¹, S. M. Fuller¹, M. P. Goldsmith¹, M. J. O'Connor¹, E. Y. Birati², J. W. Rossano¹. ¹Children's Hospital of Philadelphia, Philadelphia, PA, ²Hospital of the University of Pennsylvania, Philadelphia, PA
- 6:30 AM** (398) *Initial Fitting Study of a Pediatric Continuous-Flow Total Artificial Heart*; C. Miyagi¹, J. H. Karimov¹, Y. Kado¹, D. Ray¹, T. Polakowski¹, M. Ahmad², T. Karamlow², H. K. Najm², K. Fukamachi¹. ¹Biomedical Engineering, Cleveland Clinic Lerner Research Institute, Cleveland, OH, ²Thoracic and Cardiovascular Surgery, Cleveland Clinic, Cleveland, OH
- 6:35 AM** (399) *The Adjudication Process at ACTION - Providing Real-World High-Quality Data*; M. E. Shezad¹, D. Rosenthal², C. Larkins³, T. Heile⁴, F. Zafar¹, A. Jeewa⁵, A. P. Barnes⁶, A. Lorts⁷, A. Joong⁸, D. Kwiatkowski⁹, D. Sutcliffe¹⁰, J. Sparks¹¹, K. E. Simpson¹², M. Ploutz¹³, N. Ghanayem¹⁴, R. Niebler¹⁵, R. Davies¹⁶, S. Auerbach¹². ¹Cardiothoracic Surgery, Cincinnati Children's Hospital, Cincinnati, OH, ²Pediatrics Cardiology, Stanford University, Lucile Packard Children's Hospital, Palo Alto, CA, ³Cincinnati Children's Hospital, Cincinnati, OH, ⁴Heart Institute Research Core, Cincinnati Children's Hospital, Cincinnati, OH, ⁵Cardiology, The Hospital for Sick Children, Toronto, ON, Canada, ⁶Pediatrics Cardiology, Children's Mercy Kansas City, Kansas City, KS, ⁷The Heart Institute, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ⁸Pediatrics Cardiology, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ⁹Pediatrics Cardiology, Lucile Packard Children's Hospital, Palo Alto, CA, ¹⁰Pediatrics Cardiology, UT Southwestern Medical Center, Dallas, TX, ¹¹Pediatrics Cardiology, University of Louisville - School of Medicine, Louisville, KY, ¹²Pediatrics Cardiology, Children's Hospital of Colorado, Aurora, CO, ¹³Pediatrics Cardiology, Primary Children's Hospital - University of Utah, Salt Lake City, UT, ¹⁴Pediatrics Cardiology, Comer Children's Hospital - The University of Chicago, Chicago, IL, ¹⁵Pediatrics Cardiology, Children's Wisconsin, Milwaukee, WI, ¹⁶Cardiovascular and Thoracic Surgery, UT Southwestern Medical Center, Dallas, OH

- 6:40 AM** (400) *Ventricular Assist Device Outcomes in Children and Young Adults with Muscular Dystrophy: An ACTION Analysis*; D. Nandi¹, S. Auerbach², N. Bansal³, B. D. Kaufman⁴, A. K. Lal⁵, S. Law⁶, A. Lorts⁷, L. May⁵, M. Mehegan⁸, D. Mokshagundam⁸, M. J. O'connor⁹, D. N. Rosenthal⁴, M. Shezad⁷, K. Simpson², D. L. Sutcliffe¹⁰, C. VanderPluym¹¹, C. Wittlieb-Weber⁹, F. Zafar⁷, L. Cripe¹, C. Villa⁷. ¹Nationwide Children's Hospital, Columbus, OH, ²Children's Hospital of Colorado, Aurora, CO, ³Montefiore Medical Center, Bronx, NY, ⁴Lucile Packard Children's Hospital Stanford, Palo Alto, CA, ⁵Primary Children's Hospital, Salt Lake City, UT, ⁶Morgan Stanley Children's Hospital, New York, NY, ⁷Cincinnati Children's Hosp, Cincinnati, OH, ⁸St. Louis Children's Hospital, Saint Louis, MO, ⁹Children's Hospital of Philadelphia, Philadelphia, PA, ¹⁰Children's Health Dallas, Dallas, TX, ¹¹Boston Children's Hospital, Boston, MA
- 6:45 AM** (401) *Preliminary Data on the Clinical Use of Infant Jarvik 2015 in Children with Dilated Cardiomyopathy; Recovery Will Be the New Therapeutic Goal?*; R. Adorisio, M. Grandinetti, C. Giorni, D. Selvaggio, S. Filippelli, M. Trezzi, R. Iacobelli, G. Brancaccio, A. Amodeo. *Pediatric Hospital bambino gesù, Rome, Italy*
- 6:50 AM** (402) *Contemporary Outcomes after Durable Left Ventricular Assist Device Explantation in Patients with Evidence of Cardiac Recovery*; Z. J. Il'Giovine¹, S. Legha², T. Marty¹, M. H. Drazner², J. D. Estep¹, E. G. Soltesz³, M. Peltz⁴, J. L. Grodin², R. C. Starling¹. ¹Cardiovascular Medicine, Cleveland Clinic Foundation, Cleveland, OH, ²Department of Internal Medicine, Division of Cardiology, University of Texas Southwestern Medical Center, Dallas, TX, ³Department of Thoracic and Cardiovascular Surgery, Cleveland Clinic Foundation, Cleveland, OH, ⁴Department of Cardiovascular and Thoracic Surgery, University of Texas Southwestern Medical Center, Dallas, TX
- 6:55 AM** (403) *Multicenter Study of Favorable Patient Characteristics Associated with Cardiac Reverse Remodeling in Left Ventricular Assist Device Patients*; L. Genovese¹, M. Yin², A. Michaels³, R. Singh⁴, D. Tang⁴, M. Indaram⁵, M. Kanwar⁵, J. Cowger³, S. Drakos², P. Shah¹. ¹Cardiology, Inova Heart and Vascular Institute, Falls Church, VA, ²Cardiology, University of Utah Health Hospitals and Clinics, Salt Lake City, UT, ³Cardiology, Henry Ford Health System, Detroit, MI, ⁴Cardiothoracic Surgery, Inova Heart and Vascular Institute, Falls Church, VA, ⁵Cardiology, Allegheny Health Network, Pittsburgh, PA
- 7:00 AM** (404) *Development of the Left Atrial Assist Device for Patients with Heart Failure with Preserved Ejection Fraction: First In Vivo Results*; C. Miyagi¹, J. H. Karimov¹, B. D. Kuban¹, T. Miyamoto¹, S. Sale², C. Flick¹, R. C. Starling³, K. Fukamachi¹. ¹Biomedical Engineering, Cleveland Clinic Lerner Research Institute, Cleveland, OH, ²Anesthesiology Institute, Cleveland Clinic, Cleveland, OH, ³Cardiovascular Medicine, Cleveland Clinic Miller Family Heart and Vascular Institute, Cleveland, OH
- 7:05 AM** (405) *Low Levels of Inflammation and Congestion at the First Outpatient Visit after LVAD Implant Predict Lower Risk for Readmission and More Days-Alive-out-of-Hospital*; G. M. Mondellini¹, Y. Brailovsky², L. Braghieri¹, A. Pinsino³, K. L. Antler¹, K. Takeda¹, Y. Naka¹, G. T. Sayer¹, N. Uriel¹, A. C. Kleet¹, A. J. Kim¹, A. Javaid⁴, R. T. Demmer⁵, M. Yuzefpolskaya¹, P. C. Colombo¹. ¹Columbia University Irving Medical Center, New York, NY, ²Thomas Jefferson University, Philadelphia, PA, ³Columbia University Irving Medical Center, Bronx, NY, ⁴Dartmouth Geisel School of Medicine, Hanover, NH, ⁵University of Minnesota - School of Public Health, Minneapolis, MN

7:10 AM (406) *Role of Left Atrial Appendage Occlusion in Patients with HeartMate 3*; A. Melehy¹, Y. Ning², P. Kurlansky², Y. Kaku¹, V. Topkara³, M. Yuzefpolskaya³, P. C. Colombo³, G. Sayer³, N. Uriel³, Y. Naka¹, K. Takeda¹. ¹*Division of Cardiothoracic and Vascular Surgery, Department of Surgery, Columbia University Medical Center, New York, NY*, ²*Center of Innovation and Outcomes Research, Department of Surgery, Columbia University Medical Center, New York, NY*, ³*Division of Cardiology, Department of Medicine, Columbia University Medical Center, New York, NY*

6:15 AM - 7:45 AM

ORAL SESSION 20: COVID and Changes in Cardiac Health Care Delivery (CARD, CT-SURG, ID, NURS-AH, RES-IMM)

Chairs:

6:15 AM (23) *Heart Transplant Activity in France during the COVID-19 Outbreak*; C. Cantrelle¹, C. Legeai¹, C. Jasseron¹, P. Leprince², M. Para³, E. Epailly⁴, S. Guendouz⁵, L. Sebbag⁶, R. Guillemain⁷, K. Nubret-Le-Coniat⁸, F. Kerbaul¹, R. Dorent¹. ¹*Agence de la Biomédecine, Saint-Denis La Plaine, France*, ²*Cardiovascular Surgery, Pitié-Salpêtrière Hospital, Paris, France*, ³*Cardiovascular Surgery, Bichat Hospital, Paris, France*, ⁴*Cardiovascular Surgery, Civil Hospital, Strasbourg, France*, ⁵*Cardiovascular Surgery, Henri Mondor Hospital, Créteil, France*, ⁶*Transplant Department, Louis Pradel Hospital, Bron, France*, ⁷*Anesthesiology Department, Georges Pompidou Hospital, Paris, France*, ⁸*Anesthesiology Department, Haut Lévêque Hospital, Bordeaux, France*

6:25 AM (24) *The Case Number Changes in Adult Heart Transplantation and Waitlist Addition Due to COVID-19*; S. H. Mahrokhian, C. Liang, T. Nordan, Y. Zhan, F. Y. Chen, G. S. Couper, M. Kawabori. *Tufts Medical Center, Boston, MA*

6:35 AM (25) *The Impact of COVID-19 on the Cardiopulmonary Transplant Journey*; E. Khoshbin¹, V. Pingle¹, G. Parry², S. Clark¹. ¹*Cardiothoracic Surgery, Newcastle Upon Tyne Hos NHS Foundation Trust, Newcastle Upon Tyne, United Kingdom*, ²*Transplantation, Newcastle Upon Tyne Hos NHS Foundation Trust, Newcastle Upon Tyne, United Kingdom*

6:45 AM (26) *Rapid Virtualization of a Heart Function Clinic in Response to the COVID-19 Pandemic*; M. Linghorne, M. O'Sullivan, Y. Moayedi, N. Aleksova, D. Delgado, A. C. Luk, M. A. McDonald, F. Billia, H. J. Ross, J. G. Duero Posada. *Cardiology, University Health Network, Toronto, ON, Canada*

6:55 AM (27) *Telemedicine (TM) during SARS-CoV-2 Outbreak*; M. Masetti, S. Toniolo, A. Adorno, L. Giovannini, P. Prestinenzi, M. Sabatino, A. Russo, S. Martin Suarez, A. Loforte, D. Pacini, L. Potena. *Bologna Academic Hospital, Bologna, Italy*

7:05 AM (28) *The Effect of Body Mass Index on Presentation of COVID-19 amongst Heart Transplant Recipients: A Multi-Institutional Study*; A. Iyengar¹, J. J. Han¹, M. R. Helmers¹, B. F. Smood¹, W. L. Patrick¹, J. Kelly¹, N. Moss², S. S. Najjar³, B. A. Houston⁴, R. J. Tedford⁴, S. Shore⁵, E. Vorovich⁶, E. Hsich⁷, K. M. Alexander⁸, S. Chaudhry⁹, H. Vidula¹⁰, A. Kilic¹¹, M. V. Genuardi¹², E. Y. Birati¹, P. Atluri¹. ¹*Penn Medicine, Philadelphia, PA*, ²*The Zena and Michael A. Wiener Cardiovascular Institute, Icahn School of Medicine at Mount Sinai, New York, NY*, ³*MedStar Washington Hospital Center, Washington, DC*, ⁴*Medical University of South Carolina, Charleston, SC*, ⁵*Cardiovascular Division, University of Michigan, Ann Arbor, MI*, ⁶*Division of Cardiology, Northwestern University, Chicago, IL*, ⁷*Heart and Vascular Institute at the Cleveland Clinic, Cleveland Clinic Lerner College of Medicine of Case Western Reserve University SoM, Cleveland, OH*, ⁸*Division of Cardiovascular Medicine and the Stanford Cardiovascular Institute, Stanford University School of Medicine, Stanford, CA*, ⁹*St. Vincent Medical Group, St. Vincent Heart Center,*

Indianapolis, IN, ¹⁰Division of Cardiology, University of Rochester School of Medicine and Dentistry, Rochester, NY, ¹¹Division of Cardiac Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA, ¹²Cardiovascular Division, Department of Medicine, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA

6:15 AM - 7:45 AM

**ORAL SESSION 21: Organ Acceptance and Assessment of Donor Lung Quality
(PULM, AN-CC, CT-SURG, PHARM)**

Chairs:

- 6:15 AM** (137) *The Complete Score for Assessment of Donor Lungs: A Comprehensive Evaluation System in Clinical Ex-Vivo Lung Perfusion*; K. S. Ayyat, T. Okamoto, I. Sakanoue, H. Elgharably, H. Niikawa, S. A. Said, J. J. Yun, A. S. Nowacki, K. R. McCurry. *Cleveland Clinic Foundation, Cleveland, OH*
- 6:25 AM** (138) *Impact of Prophylactic Ureaplasma-Directed Antimicrobials in Lung Donors*; C. Kurihara, A. Manerikar, V. Kandula, A. Bharat. *Northwestern University Feinberg School of Medicine, Chicago, IL*
- 6:35 AM** (139) *Impact of Donor Quality on Recipient Outcomes in Lung Transplantation: 10-year Single-Center Experience Using the Eurotransplant Lung Donor Score*; K. Flöthmann¹, J. Salman¹, K. Aburahma¹, T. Siemeni¹, M. Franz¹, M. Greer², M. Avsar¹, D. Bobylev¹, C. Müller³, J. Carlens³, N. Schwerk³, A. Niehaus¹, W. Sommer⁴, I. Tudorache⁵, G. Warnecke⁴, C. Kühn¹, A. Haverich¹, F. Ius¹. ¹Department of Cardiothoracic, Transplant and Vascular Surgery, Hannover Medical School, Hannover, Germany, ²Department of Respiratory Medicine, Hannover Medical School, Hannover, Germany, ³Department of Paediatrics, Hannover Medical School, Hannover, Germany, ⁴Department of Cardiac surgery, Heidelberg Medical School, Heidelberg, Germany, ⁵Department of Cardiac Surgery, University Hospital Düsseldorf, Düsseldorf, Germany
- 6:45 AM** (140) *Identification of Epstein-Barr Virus Related Risk Factors for the Occurrence of Post-Transplant Lymphoproliferative Disorder in Lung Transplant Recipients*; B. J. Pierce¹, E. Allen², C. Pham¹, D. T. Nguyen³, E. A. Graviss³, A. Goodarzi⁴, S. W. Yau⁴, J. G. Youssef⁴, H. J. Huang⁴. ¹Department of Pharmacy, Houston Methodist Hospital, Houston, TX, ²College of Pharmacy, University of Texas, Austin, TX, ³Department of Pathology and Genomic Medicine, Houston Methodist Hospital, Houston, TX, ⁴Department of Medicine, Houston Methodist Hospital, Houston, TX
- 6:55 AM** (141) *Center and Donor Factors Associated with Discrepant Responses to Donor Lung Offers*; C. C. Kennedy¹, K. Wille², D. J. Levine³, S. Chandrashekar⁴, D. Nunley⁵, K. M. Chan⁶, E. D. Lease⁷, M. Wilson⁸, N. Shigemura⁹, J. Hayanga¹⁰, A. Kumar¹¹, R. Girgis¹¹, M. Budev¹². ¹Mayo Clinic, Rochester, MN, ²University of Alabama (UAB), Birmingham, AL, ³UTHSCSA, San Antonio, TX, ⁴University of Florida, Gainesville, Gainesville, FL, ⁵Ohio State, Toledo, OH, ⁶University of Michigan, Ann Arbor, MI, ⁷UW Medicine, Seattle, WA, ⁸Halifax Medical Center, Daytona Beach, FL, ⁹Temple University, Philadelphia, PA, ¹⁰West Virginia University, Morgantown, WV, ¹¹Spectrum Health, Grand Rapids, MI, ¹²Cleveland Clinic Foundation, Cleveland, OH
- 7:05 AM** (142) *Development of a Donor-Recipient Matching Algorithm for Lung Transplantation in Australia*; B. Hwang¹, E. Granger², P. Jansz², M. Malouf², A. Watson², A. Iyer², A. Havryk², M. Plit², M. Connellan². ¹St Vincent's Clinical School, University of New South Wales, Sydney, Australia, ²St Vincent's Hospital, Sydney, Australia

6:15 AM - 7:45 AM

**ORAL SESSION 22: EVLP and Lung Preservation: Markers of Organ Quality
(RES-IMM, AN-CC, CT-SURG, PHARM, PULM)**

Chairs:

- 6:15 AM** (143) *Characterization of Extracellular Vesicles from Ex Vivo Perfused Human Lungs and Their Relationship with Allograft Injury*; G. C. Madu¹, S. Moshkelgosha², M. Cypel², S. Keshavjee², S. Juvet². ¹University Health Network, Toronto, ON, Canada, ²Toronto Lung Transplant Program, University Health Network, Toronto, ON, Canada
- 6:25 AM** (144) *Cold Storage of Lung Allograft Modulates microRNA-223 Expression & NF-κB-Mediated Reperfusion Response*; H. Elgharably¹, D. D. Kish², K. Keslar², T. Okamoto¹, K. S. Ayyat¹, K. R. McCurry¹, F. L. Fairchild². ¹Thoracic & Cardiovascular Surgery, Cleveland Clinic, Cleveland, OH, ²Inflammation & Immunology, Lerner Research Institute at Cleveland Clinic, Cleveland, OH
- 6:35 AM** (145) *Addition of Dialysis to Ex-Vivo Lung Perfusion Maintains Homeostasis and Stability of Donor Lungs: A Proof of Concept Study*; O. Hough¹, X. Gao¹, C. Yang¹, M. Takahashi¹, A. Mariscal¹, M. Chen¹, H. Gokhale¹, H. Shan¹, A. Nykanen¹, B. Gomes¹, A. Ali¹, M. Cypel¹, C. Chan², S. Keshavjee¹, M. Liu¹. ¹Latner Thoracic Research Laboratories, University Health Network, Toronto, ON, Canada, ²Division of Nephrology, University Health Network, Toronto, ON, Canada
- 6:45 AM** (146) *Heat Shock Protein 70 Performs as Pharmacological Preconditioning to Protect against Lung Ischemia Reperfusion Injury through Toll-Like Receptor 4 Signaling*; A. Shimamoto, E. Matsuo, S. Kaneda, A. Ito, K. Kawaguchi, M. Takao. *Thoracic and Cardiovascular Surgery, Mie Univ Graduate School of Medicine, Tsu, Japan*
- 6:55 AM** (147) *Real-Time Lung Weight Measurement during Ex Vivo Lung Perfusion: Clinical Importance of Early Weight Gain*; I. Sakanoue, T. Okamoto, K. S. Ayyat, J. J. Yun, H. Niikawa, K. R. McCurry. *Thoracic and Cardiovascular Surgery, Cleveland Clinic, Cleveland, OH*
- 7:05 AM** (148) *Lipopolysaccharide Levels in Ex Vivo Lung Perfusion are Associated with Lung Function and Suitability for Transplantation*; B. T. Chao, A. T. Sage, M. Rathod, X. Bai, M. Cypel, M. Liu, S. Keshavjee. *Latner Thoracic Surgery Research Laboratories, University Health Network, Toronto, ON, Canada*

6:15 AM - 7:45 AM

**SYMPOSIUM 16: From PGD to CLAD: The Lifespan of a Lung Allograft
(PULM, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, RES-IMM)**

Chairs: John Dark, MD, Allison Carroll, MD, and Christine Lau, MD

Session Summary: Lung allografts survive numerous damaging insults, with the recipient ultimately succumbing to chronic lung allograft dysfunction (CLAD). The initial insult occurs at the time of transplant surgery leading to primary graft dysfunction (PGD). Over months to years, cumulative damage to the allograft from PGD, rejection, infection, and antibody production results in irreversible CLAD. In this session, we will review mechanistic data regarding these critical events limiting lung allograft longevity.

- 6:15 AM** *Clinical Strategies for the Prevention of Primary Graft Dysfunction: What's New on the Horizon*
Jason Christie, MD, University of Pennsylvania, Philadelphia, PA, United States

- 6:27 AM** ***Primary Graft Dysfunction: Molecular Mechanisms***
 Ciara M Shaver, MD PhD, Vanderbilt University Medical Center, Nashville, TN, United States
- 6:39 AM** ***Novel Cellular Modulators of Allograft Inflammation and Injury***
 Daniel Chambers, MD, The Prince Charles Hospital, Brisbane, Australia
- 6:51 AM** ***Infectious Triggers of Increased Inflammation***
 Andrew J Fisher, PhD FRCP, Newcastle University, Newcastle Upon Tyne, United Kingdom
- 7:03 AM** ***CLAD: What's New in Terms of Clinical Risk?***
 Robin Vos, MD, PhD, University Hospitals Leuven, Leuven, Belgium
- 7:15 AM** ***CLAD: Molecular Mechanisms***
 Vibha N Lama, MD, MS, University of Michigan, Ann Arbor, MI, United States

6:15 AM - 7:45 AM

SYMPOSIUM 17: Seeing Through the VAD Patient with Multi-Modality Imaging: If You Know Your Enemy and Know Yourself, You Will Never Be Defeated (CARD, AN-CC, CT-SURG, ID, PEDS)

Chairs: Jerry D Estep, MD, Tomoko S Kato, MD, PhD, and Alexis E Shafii, MD

Session Summary: Cardiac imaging is indispensable in the management of patients supported by mechanical circulatory support (MCS) not only for hemodynamic assessment but also for prognostic surveillance and for a diagnosis of adverse events. In this session, we will discuss the role of echocardiography that has been considered as a primary imaging modality in the care of LVAD recipients and will also focus on intra-operative transesophageal echocardiography (TEE). In addition, we introduce advanced imaging techniques that guide the positioning of LVAD cannula, select the suitable MCS for pediatric patients considering body size, and detect subclinical infection associated with MCS.

- 6:15 AM** ***The Game Has Just Begun: Pre and Intra-Operative Echocardiography, Lessons Learned to Optimize Outcome***
 Koichi Akiyama, MD, PhD, Yodogawa Christian Hospital, Osaka, Japan
- 6:30 AM** ***Enhanced Imaging to Guide Placement: 3D Printed Exoskeleton to Guide the LVAD Inflow Cannula***
 Istvan Hartyanszky, MD, PhD, MSc, Semmelweis University, Budapest, Hungary
- 6:45 AM** ***DEBATE: Echocardiography is the Best Way to Monitor Patients Supported by Contemporary LVADs (PRO)***
 David Platts, MD, PhD, The Prince Charles Hospital, Brisbane, Australia
- 6:55 AM** ***DEBATE: Echocardiography is the Best Way to Monitor Patients Supported by Contemporary LVADs (CON)***
 Nir Uriel, MD, MSc, FACC, Columbia University Irving Medical Center, New York, NY, United States
- 7:05 AM** ***We Have a Clue: Cardiac CT and LVAD Troubleshooting in 2021***
 Mahwash Kassi, MD, Houston Methodist Hospital, Houston, TX, United States
- 7:17 AM** ***We Found It!: Identifying and Prognosticating LVAD Infections: Are FDG PET/CT Scans the Answer?***
 Marty Tam, MD, University of Michigan, Ann Arbor, MI, United States

6:15 AM - 7:45 AM

SYMPOSIUM 18: Joint ISHLT/PVRI Of Mice and Men

(PULM, AN-CC, CARD, CT-SURG, NURS-AH, PATH, PEDS, PHARM, RES-IMM)

Chairs: Paul Corris, MB FRCP, Trevor Williams, MD, and Mardi Gomberg-Maitland, MD, MSc

Session Summary: In collaboration with the Pulmonary Vascular Research Institute (PVRI), the ISHLT is pleased to offer this joint symposium. The management of PAH has evolved considerably in the past years; however, the development of disease-modifying therapies faces challenges witnessed by a high number of negative Phase II trials. Do we make the right choice of agents? Should we change our RCT paradigm? How do we measure success and how does this translate in real-life management? These are some key questions the symposium will try to answer with world-leading experts who will discuss how the future will look like. A panel discussion with all speakers will conclude this session.

6:15 AM

Journey to the Center of the Cell: New Pathways and Beyond

Sebastien Bonnet, PhD, FAHA, Pulmonary Hypertension Research Group, Quebec, QC, Canada

6:35 AM

Intolerable Cruelty or Why Phase II Trials Failed

Olivier Sitbon, MD, Université Paris-Saclay, Hôpital Bicêtre, Paris Sud, France

6:55 AM

Facing the Void: How Do We Define Success in PAH?

Jean-Luc Vachiery, MD, Erasme University Hospital, Brussels, Belgium

7:10 AM

The Full Monty: Tools and Tricks for a Better Management

Raymond L. Benza, MD, Ohio State University, Columbus, OH, United States

8:00 AM - 9:00 AM

WORKSHOP 09: Considering Sex and Race: Strategies for the Non-Typical Transplant Recipient

(CARD, AN-CC, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Yael Peled, MD, Lynn Punnoose, MD, and Wandy Chan, PhD, FRACP

Session Summary: This symposium will focus on sex, gender, and race-specific strategies in HTX: differences in advanced HF therapies (MCS vs inotropic support, complications of MCS, status listing); differences in HTX and implications of sex and race matching; cardiovascular risk factors in women (traditional and non-traditional); pregnancy in HTX recipients (preconception considerations, timing, cardiac assessment, maternal and fetal complications, breastfeeding, immunosuppression, contraception, ethics); gender awareness. A panel discussion with all speakers will conclude this session.

8:00 AM

The Woman in Red: Sex Differences in Advanced Heart Failure Therapies and Outcomes

Eileen M Hsich, MD, Cleveland Clinic Foundation, Cleveland, OH, United States

8:10 AM

Racial Differences in Advanced Heart Failure Therapies and Outcomes

Alanna A Morris, MD, MSc, Emory University, Atlanta, GA, United States

8:20 AM

Giving Birth after New Life: Pregnancy in Heart Transplant Recipients

Tuvia Ben Gal, MD, Rabin Medical Center, Petah Tikva, Israel

8:30 AM

He/She/They: Gender Identity and Heart Transplant

Morgan Faeder, MD, PhD., University of Pittsburgh Medical Center, Pittsburgh, PA, United States

8:00 AM - 9:00 AM

WORKSHOP 10: The Eternal Challenge: Difficult-to-Treat Organisms in Thoracic Transplantation (ID, AN-CC, CARD, CT-SURG, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Erik Verschuuren, MD, PhD, and Cecilia Chaparro, MD

Session Summary: Despite advances in surgical technique and immunosuppressive management, infection remains a significant cause of morbidity among thoracic transplant recipients. Multidrug-resistant Gram-negative bacteria and nontuberculous mycobacteria are challenging to treat due to a limited antimicrobial armamentarium and toxicities. The global spread of newer multidrug-resistant pathogens such as *Candida auris* poses challenges for thoracic transplant candidates and recipients.

8:00 AM *Expanding the Armamentarium: New Drugs and Novel Therapies for the Treatment of Multidrug-Resistant Gram-Negatives*

Stephanie Pouch, MD, MS, Emory University, Atlanta, GA, United States

8:15 AM *The New Fungal Threat: Candida auris Infections in Thoracic Transplant Candidates and Recipients*

Paolo A Grossi, MD, PhD, University of Insubria, Varese, Italy

8:30 AM *Draining the Abscess: Inside Mycobacterium abscessus*

Orla Morrissey, MD, The Alfred Hospital, Melbourne, Australia

8:00 AM - 9:00 AM

WORKSHOP 11: Cardiac Anesthesia: Tales from the Other Side of the Ether Screen (AN-CC, CARD, CT-SURG, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Anna Meyer, MD, Archer Martin, MD, and Sarvesh Pal Singh, MD, DM

Session Summary: The intraoperative management of patients undergoing mechanical circulatory support is challenging, multidisciplinary, and involves several aspects of patient care. This session addresses topics of paramount importance in the intraoperative period with tremendous impact on the outcome of the patients undergoing mechanical circulatory support. A panel discussion with all speakers will conclude this session.

8:00 AM *When the Right Goes Wrong: Right Ventricle Failure in VAD Placement - Intraoperative Pearls*

Alina Nicoara, MD, Duke University, Durham, NC, United States

8:15 AM *Management of Coagulopathy during VAD Placement: Bleed Now or Clot the Pump Later?*

Angela Maria Rajek, MD, Medical University Vienna, Vienna, Austria

8:30 AM *Vasoplegia Syndrome Complicating Failure*

Leonardo Salazar, MD, Fundacion Cardiovascular de Colombia, Bucaramanga, Colombia

8:00 AM - 9:00 AM

WORKSHOP 12: Rewinding the Antibodies: Managing Highly Sensitized Patients Pre-Transplant (PHARM, AN-CC, CARD, CT-SURG, NURS-AH, PATH, PEDS, PULM, RES-IMM)

Chairs: Amy Kiskaddon, PharmD, and Tereza Martinu, MD, MHS

Session Summary: This symposium will provide an overview of important topics regarding antibodies and desensitization for thoracic transplant recipients. Topics reviewed will include immunology, strategies for desensitization, and sensitization considerations with regard to prioritization and allocation of organs.

- 8:00 AM** ***Blues Brothers: HLA and Non-HLA Antibodies***
Adriana Zeevi, PhD, Univ of Pittsburgh Med Ctr, Pittsburgh, PA, United States
- 8:15 AM** ***Ghostbusters: Strategies for Desensitization***
Fay S Burrows, BPharm, St. Vincent's Hospital, Sydney, Australia
- 8:30 AM** ***Stand by Me: Organ Allocation and Sensitized Patients***
Scott Silvestry, MD, Florida Hospital Transplant Institute, Orlando, FL, United States

2:15 PM - 3:45 PM

MINI ORAL 03: Novel Therapeutic Strategies in Heart Failure and Transplantation (CARD, AN-CC, CT-SURG, ID, PHARM, RES-IMM)

Chairs:

- 2:15 PM** ***(311) Clinical Effects of CD34⁺ Cell Therapy in Advanced Chronic Heart Failure Patients Listed for Heart Transplantation; G. Poglajen***, S. Frljak, G. Zemljic, R. Okrajsek, A. Cerar, M. Šebeštjen, V. Andročec, B. Vrtovec. *Advanced Heart Failure and Transplantation Center, Dept. of Cardiology, University Medical Center, Ljubljana, Slovenia*
- 2:20 PM** ***(312) Impact of Beta-blockers Use on Ventricular Arrhythmias and ICD Shocks in Patients on Long-Term Inotropic Therapy; R. Zaghlo¹***, A. Ghazzal¹, S. Radwan¹, S. Ahmed², M. Hofmeyer², M. Rodrigo², A. Kadakkal², P. Lam², S. Rao², W. Weintraub², E. Molina², F. Sheikh², S. S. Najjar². ¹*Internal Medicine, Georgetown University Hospital/ Medstar Washington Hospital Center, Washington, DC*, ²*Advanced Heart Failure Program, MedStar Heart and Vascular Institute, Washington, DC*
- 2:25 PM** ***(313) Effects of IL-2 and/ or Anti-IL6R Therapy on Long-Term Cardiac Allograft Survival in Non-Human Primates; K. J. Ahrens¹***, C. L. Miller², J. M. O², P. M. Patel², W. Sommer³, J. A. Morrisette², D. Becerra², T. Costa², A. Dehnadi², I. M. Hanekamp², G. Benichou², J. C. Madsen⁴. ¹*Department of Surgery, University of Massachusetts Medical School, Worcester, MA*, ²*Center for Transplantation Sciences, Department of Surgery, Massachusetts General Hospital, Boston, MA*, ³*Department of Cardiothoracic, Transplantation, and Vascular Surgery, Hannover Medical School, Hanover, Germany*, ⁴*Division of Cardiac Surgery and Center for Transplantation Sciences, Department of Surgery, Massachusetts General Hospital, Boston, MA*
- 2:30 PM** ***(314) Lower Titers of IgA Antibodies to Pneumococcal Polysaccharide Antigens after Vaccination are a Risk Factor for Development of Bacterial Infection after Heart Transplantation; E. Sarmiento¹***, E. Zatarain², M. Jaramillo³, J. Navarro¹, I. Sousa², C. Ortiz², P. Navas², **J. Carbone¹**. ¹*Clinical Immunology, Hospital General Universitario Gregorio Marañón, Madrid, Spain*, ²*Cardiology, Hospital General Universitario Gregorio Marañón, Madrid, Spain*, ³*Haematology, Universidad Austral, Valdivia, Chile*
- 2:35 PM** ***(315) Infective Endocarditis Following Heart Transplantation: A Systematic Review; A. M. Jordan¹***, S. V. Patel¹, E. J. Maynes¹, M. P. Weber¹, S. Moss², T. L. Royer², V. Tchantchaleishvili¹, H. T. Massey¹, J. E. Rame³, J. J. Zurlo², N. Aburjania². ¹*Division of Cardiac Surgery, Thomas Jefferson University, Philadelphia, PA*, ²*Division of Infectious Disease and Environmental Medicine, Thomas Jefferson University, Philadelphia, PA*, ³*Division of Cardiology, Thomas Jefferson University, Philadelphia, PA*

- 2:40 PM** (316) *Process Implementation to Improve Vaccination Rates in Solid Organ Transplant Candidates*; S. Metz, S. Brooks. *Heart Failure & Transplant, Intermountain Medical Center, Murray, UT*
- 2:45 PM** (317) *Inducing Donor MHC Chimerism with Bone Marrow Derived Exosomes in Non-Human Primates*; P. M. Patel¹, B. Gonzalez-Nolasco¹, J. A. Morrisette¹, A. Prunevieuille¹, K. J. Ahrens¹, J. M. O¹, C. L. Miller¹, T. Costa¹, A. Dehnadi¹, I. Hanekamp¹, G. Benichou¹, J. C. Madsen². ¹*Surgery, Center for Transplantation Sciences, Massachusetts General Hospital/Harvard Medical School, Boston, MA*, ²*Surgery, Center for Transplantation Sciences, Division of Cardiac Surgery, Massachusetts General Hospital/Harvard Medical School, Boston, MA*
- 2:50 PM** (318) *Identifying Right Ventricular Dysfunction Increases the Predictive Value of SCAI Staging: A Case for an 'R' Modifier*; P. Jain¹, K. Thayer¹, E. Whitehead², K. Everett¹, B. Schwartz¹, M. Pahuja³, M. Kanwar⁴, S. Sinha⁵, A. Garan⁶, J. Hernandez-Montfort⁷, C. Mahr⁸, D. Burkhoff⁹, N. K. Kapur¹. ¹*The CardioVascular Center, Tufts Medical Center, Boston, MA*, ²*Massachusetts General Hospital, Boston, MA*, ³*MedStar Georgetown University, Washington, DC*, ⁴*Allegheny General Hospital, Pittsburgh, PA*, ⁵*Inova Heart and Vascular Institute, Falls Church, VA*, ⁶*Beth Israel Deaconess Medical Center, Boston, MA*, ⁷*Cleveland Clinic Florida, Weston, FL*, ⁸*UW Medicine, Seattle, WA*, ⁹*Cardiovascular Research Foundation, New York, NY*
- 2:55 PM** (319) *Inducible Nitric Oxide Synthase Gene Expression and Diastolic Function in Heart Transplant Recipients*; M. Kobediona, J. Bartunek, L. Delrue¹, F. Van Durme, S. Verstreken, M. Vanderheyden. *Cardiovascular Center OLV Hospital, Aalst, Belgium*
- 3:05 PM** (321) *Intracoronary Delivery of Mitochondrial DNA Aggravates Cardiac Post-Ischemic Functional and Metabolic Dysfunction in a Preclinical Model of Donation after Circulatory Death*; M. N. Sanz, A. Segiser, T. P. Carrel, S. L. Longnus. *Cardiovascular Surgery, Berne University Hospital, Berne, Switzerland*
- 3:10 PM** (322) *Lower Gene Expression Profiling Score Post-Orthotopic Heart Transplant is Associated with Higher Composite Infection and Malignancy*; V. K. Randhawa, L. Moennich, A. Mentias, E. G. Soltesz, M. Z. Tong, R. C. Starling, E. Hsich, J. D. Estep. *Cleveland Clinic Foundation, Cleveland, OH*

2:15 PM - 3:45 PM

**ORAL SESSION 23: Organ Allocation in Heart Transplantation
(CARD, AN-CC, CT-SURG, RES-IMM)**

Chairs:

- 2:15 PM** (11) *The Waiting Game: Waitlist Times and Outcomes for Highly Sensitized Patients in the New Heart Transplant Allocation System*; Y. Kaka, A. Ganapathi, S. Emani, R. Kahwash, A. Hasan, V. Franco, G. Haas, A. Vallakati, M. Henn, R. Benza, N. A. Mokadam, B. A. Whitson, B. C. Lampert. *Ohio State University, Columbus, OH*
- 2:25 PM** (12) *Changes in Wait List Mortality, Transplantation Rates and Early Post-Transplant Outcomes in LVAD BTT with New Heart Transplant Allocation Score. A UNOS Database Analysis*; M. Jani¹, S. Lee¹, S. Hoeksema², D. Acharya³, T. Boeve⁴, N. Manandhar-Shrestha⁵, M. Leacche⁴, S. Jovinge⁶, R. Loyaga-Rendon¹. ¹*Advanced Heart Failure Cardiology, Spectrum Health, Grand Rapids, MI*, ²*Cardiology, Spectrum Health, Grand Rapids, MI*, ³*Division of Cardiovascular Diseases, Sarver Heart Center, University of Arizona, Tucson, AZ*, ⁴*Cardiothoracic Surgery, Spectrum Health, Grand Rapids, MI*, ⁵*Department of*

Cardiovascular Research, Spectrum Health, Grand Rapids, MI, ⁶Frederik Meijer Heart and Vascular Institute, Spectrum Health, Grand Rapids, MI

- 2:35 PM** (13) *Use of Declined Donor Hearts: Is Quality Important?*; T. Singer-Englar, M. Kittleson, J. Patel, K. Tor, N. Patel, A. Velleca, D. Chang, R. Cole, L. Czer, D. Ramzy, F. Esmailian, J. A. Kobashigawa. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*
- 2:45 PM** (14) *Use of Impella in Patients Listed for Heart Transplantation*; J. R. Trivedi, S. Pahwa, H. Alwair, K. Whitehouse, C. Dunbar-Matos, M. S. Slaughter. *University of Louisville, Louisville, KY*
- 2:55 PM** (15) *Impact of Predicted Heart Mass-Based Size Matching for Donor-Recipient Selection on Transplant Outcomes*; A. Loforte, G. Gliozzi, G. Cavalli, M. Fiorentino, V. Santamaria, L. Botta, C. Mariani, L. Potena, S. Martin Suarez, D. Pacini. *Cardio-Thorac-Vascular Department, S. Orsola Hospital, University of Bologna, Bologna, Italy*

2:15 PM - 3:45 PM

ORAL SESSION 24: Outcomes in Lung Transplantation: What Really Matters?
(PULM, AN-CC, CT-SURG, RES-IMM)

Chairs:

- 2:15 PM** (149) *Bronchiolitis Obliterans Syndrome Following Lung Transplantation: Economic Burden by Chronic Lung Allograft Dysfunction (CLAD) Stage*; A. Sheshadri¹, B. Healey², N. Sacks², E. Wu², P. Cyr², G. Boerner³, H. Huang⁴. ¹Department of Pulmonary Medicine, University of Texas MD Anderson Cancer Center, Houston, TX, ²PRECISIONheor, Boston, MA, ³Breath Therapeutics, a Zambon Company, Munich, Germany, ⁴Division of Pulmonary, Critical Care and Sleep Medicine, Houston Methodist Hospital, Houston, TX
- 2:25 PM** (150) *mHealth to Improve Emergent Frailty after Lung Transplantation*; J. M. Diamond¹, A. Courtwright¹, P. Balar¹, M. Oyster¹, D. Zaleski¹, J. Adler¹, S. Hays², N. Sutter², C. Garvey², J. Kukreja², Y. Gao², A. Bruun³, P. Smith⁴, J. Singer². ¹University of Pennsylvania, Philadelphia, PA, ²UCSF, San Francisco, CA, ³Aidecube, San Francisco, CA, ⁴Duke University, Durham, NC
- 2:35 PM** (151) *Differential Outcomes of Lung Transplant Recipients as They Age: Is over 70 Too Old? No!*; D. Benissan-Messan¹, A. Ganapathi¹, M. Henn¹, B. Keller², M. Howsare², J. Rosenheck², S. E. Kirkby³, N. A. Mokadam¹, N. David², B. Whitson¹. ¹Department of Surgery, The Ohio State University, Columbus, OH, ²Department of Pulmonary, Crit Care, & Sleep, The Ohio State University, Columbus, OH, ³Department of Pediatrics, The Ohio State University, Columbus, OH
- 2:45 PM** (152) *Single Lung Transplant Remains a Viable Alternative to Double Lung Transplantation for the Patients with Severe Secondary Pulmonary Hypertension*; G. Sunagawa, H. Kehara, M. Kashem, C. Mangukia, S. Brann, E. Leotta, R. Yanagida, K. Minakata, F. Cordova, Y. Toyoda, N. Shigemura. *Temple University Hospital, Philadelphia, PA*
- 2:55 PM** (153) *Association between Esophageal Dysmotility and Long-Term Outcomes in Lung Transplant Recipients*; J. Fernandez-Castillo¹, E. Huszti², L. Levy¹, R. Ghany¹, P. Riddell¹, C. Chaparro¹, S. Keshavjee¹, L. G. Singer¹, J. C. Yeung¹, T. Martinu¹. ¹Toronto Lung Transplant Program, University Health Network, University of Toronto, Toronto, ON, Canada, ²Biostatistics Research Unit, University Health Network, University of Toronto, Toronto, ON, Canada

3:05 PM (154) *Panel Reactive Antibody and Donor-Recipient Sex Differences Do Not Affect Long-Term Lung Transplant Outcomes*; J. P. Skendelas¹, D. Phan¹, S. J. Forest¹, S. A. Scheinin¹, H. Seethamraju². ¹Cardiothoracic and Vascular Surgery, Montefiore Medical Center, Bronx, NY, ²Cardiothoracic and Vascular Surgery, Division of Advanced Pulmonary Failure and Lung Transplantation, Montefiore Medical Center, Bronx, NY

2:15 PM - 3:45 PM
ORAL SESSION 25: MCS Potpourri
(CARD, CT-SURG)

Chairs:

2:15 PM (221) *Percutaneous Coronary Interventions in Patients Supported with Left Ventricular Assist Devices*; V. Blumer¹, M. Rivera-Maza², K. A. Friede¹, L. K. Truby¹, R. J. Mentz¹, M. R. Patel¹, J. N. Schroder¹, A. Zajarias², A. Amin², S. J. Russell¹, J. N. Katz¹, R. Agarwal¹. ¹Cardiology, Duke University Hospital, Durham, NC, ²Cardiology, Washington University, St. Louis, MO

2:25 PM (222) *Effect of Mechanical Circulatory Support on Exercise Hemodynamics among Individuals with Advanced Heart Failure*; W. K. Cornwell. University of Colorado, Denver, CO

2:45 PM (224) *Effective Diastolic Mechanical Support Using a New Implantable Cardiac Compression Device*; G. V. Letsou¹, B. Leschinsky², E. Hord², C. Bolch², J. Criscione³. ¹Baylor College of Med, Houston, TX, ²CorInnova, Inc, Houston, TX, ³Engineering & Medicine, Texas A&M School of Medicine, Houston, TX

2:55 PM (225) *Progress in the Development of the Pulsatile CorWave LVAD*; C. Botterbusch¹, N. Barabino¹, F. Cornat¹, N. Jem¹, R. Pruvost¹, D. Marino¹, S. Benoit¹, E. Monticone¹, L. Polverelli¹, T. Snyder¹, V. Loobuyck², A. Rauch³, S. Susen⁴, A. Vincentelli². ¹CorWave, Clichy, France, ²Department of Cardiac Surgery, CHU Lille, Lille, France, ³Inserm U1011, Université de Lille, Lille, France, ⁴Department of Hematology and Transfusion, CHU Lille, Lille, France

3:05 PM (226) *Low Left Ventricular Stroke Work Index is Associated with a Poor Prognosis in LVAD Patients*; A. J. Kanelidis¹, T. Miller¹, M. Belkin¹, U. Siddiqi¹, D. Rogers¹, N. Uriel², T. Song¹, T. Ota¹, S. Kalantari¹, N. Sarswat¹, A. Nguyen¹, B. B. Chung¹, G. Kim¹, B. Smith¹, V. Jeevanandam¹, S. Pinney¹, J. Grinstein¹. ¹University of Chicago, Chicago, IL, ²Columbia University, New York, NY

2:15 PM - 3:45 PM
SYMPOSIUM 19: Shaping the Future of Thoracic Transplant Pathology: Multiplex, Multidisciplinary and Multimodality
(PATH, CARD, CT-SURG, ID, NURS-AH, PEDS, PULM, RES-IMM)

Chairs: Jan H von der Thüsen, MD PhD, Fiorella Calabrese, MD, and David M. Hwang, MD, PhD

Session Summary: Ancillary techniques are set to refine, rather than replace, histopathologic diagnosis in transplant pathology, including expression profiling, miRNA, cfDNA, multiplex immunohistochemistry, image analysis, integration with radiology, and integration of complex data using algorithms (including artificial intelligence processing). The aim of this symposium is to provide an overview of these techniques, and to describe their role in modern transplant pathology practice, including both lung and heart transplantation.

- 2:15 PM** *Immunohistochemistry, Special Stains and Automated Image Analysis in Post-Transplant Follow-Up Cardiac Biopsies*
Gregory A Fishbein, MD, Ronald Reagan UCLA Medical Center, Los Angeles, CA, United States
- 2:27 PM** *Immunohistochemistry, Special Stains and Automated Image Analysis in Post-Transplant Follow-Up Transbronchial Biopsies*
Anja C Roden, MD, Mayo Clinic Rochester, Rochester, MN, United States
- 2:39 PM** *MicroRNA Signatures and Exosomes in Cardiac Biopsies and Detection of Allograft Rejection*
Marny Fedrigo, MD, University of Padua, Padua, Italy
- 2:51 PM** *Expression Profiling in Paraffin Material: A New Level of Understanding in Pathology*
Benjamin Adam, MD, University of Alberta, Edmonton, AB, Canada
- 3:03 PM** *Correlation of Histology with (Micro)CT Images in CLAD: A Reciprocal Relationship*
Stijn E Verleden, PhD, KU Leuven, Leuven, Belgium
- 3:15 PM** *Making Sense of Big Data: Integration of Complex Data Using Algorithms*
Alexandre Loupy, MD, PhD, Necker Hospital, Universite de Paris, Paris, France

2:15 PM - 3:45 PM

SYMPOSIUM 20: Greasing the Wheels: Antiplatelet Therapy for LVADs (PHARM, AN-CC, CARD, CT-SURG, NURS-AH, PEDS, RES-IMM)

Chairs: Ian B Hollis, PharmD, BCPS, and Peter Ivak, MD, PhD

Session Summary: Management of antiplatelet therapies in patients with or awaiting durable LVAD and/or heart transplant has become highly variable due to the absence of well-controlled clinical trials evaluating the risk vs. benefit ratio of these agents. The management of these agents can be very challenging in certain scenarios. This symposium will review the existing data and provide discussion on management of these agents.

- 2:15 PM** *More Than Warfarin: Oral Antiplatelet Therapy for Primary Prevention of Thromboembolic Events*
Andrew Mardis, PharmD, Prisma Health, Columbia, SC, United States
- 2:27 PM** *Putting out the Fire: Antiplatelet Agents for the Acute Management of Pump Thrombosis*
Phillip Weeks, PharmD, Memorial Hermann - Texas Medical Center, Houston, TX, United States
- 2:39 PM** *Down to the Nitty Gritty: Platelet Function-Guided Management of Antiplatelet Therapy*
Carlo R Bartoli, MD, PhD, University of Pennsylvania, Philadelphia, PA, PA, United States
- 2:51 PM** *Timing is Everything: Management of Dual Antiplatelet Therapy before or after LVAD*
Amanda Ingemi, PharmD, Sentara Norfolk General Hospital, Norfolk, VA, United States
- 3:03 PM** *DEBATE: Routine Use of Antiplatelet Agents Should Be Standard of Care for Durable LVADs (PRO)*
Ivan Netuka, MD, PhD, Institute for Clinical and Experimental Medicine, Prague, Czech Republic

3:15 PM *DEBATE: Routine Use of Antiplatelet Agents Should Be Standard of Care for Durable LVADs (CON)*
Christopher Michaud, PharmD, Spectrum Health, Grand Rapids, MI, United States

2:15 PM - 3:45 PM
SYMPOSIUM 21: Lean On Me: Mechanical Support of the Right Ventricle in Pulmonary Hypertension (PULM, AN-CC, CARD, CT-SURG)

Chairs: Arun Jose, MD, Maria G Crespo-Leiro, MD, and Christopher King, MD, FCCP

Session Summary: This session will focus on the role of mechanical circulatory support (ventricular assist devices, impeller devices, extracorporeal membranous oxygenation devices, etc) in the management of patients with advanced pulmonary hypertension with severe and complex heart failure physiology.

2:15 PM *Knowing When to Bail: Timing and Candidacy in MCS for End Stage Pulmonary Hypertension*
Manreet Kanwar, MD, Allegheny General Hospital, Pittsburgh, PA, United States

2:30 PM *Tickle Me ECMO: What is the Best Configuration to Support the Failing Right Ventricle?*
Sonja Bartolome, MD, UT Southwestern, Dallas, TX, United States

2:45 PM *Future of MCS in Management of RV Failure: Will it be Destination Therapy for Patients with PAH?*
Olaf Mercier, MD, Paris-Sud University, Paris, France

3:00 PM *DEBATE: ECMO Should Be Routine Perioperatively for PAH Patients Undergoing Transplant (PRO)*
Konrad Hoetzenecker, MD PhD, Medical University of Vienna, Vienna, Austria

3:15 PM *DEBATE: ECMO Should Be Routine Perioperatively for PAH Patients Undergoing Transplant (CON)*
Christopher H Wigfield, MD, FRCS, University of Pittsburgh Medical Center, Pittsburgh, PA, United States

4:00 PM - 5:30 PM
MINI ORAL 04: Interesting Things to Do To Improve Heart Pre- and Post-Transplant Outcomes (CT-SURG, AN-CC, CARD, RES-IMM)

Chairs:

4:00 PM *(275) Low AlloSure® Despite Discordance with High AlloMap® Associated with Low Risk of Moderate to Severe Cardiac Allograft Rejection; J. H. Kim¹, M. DeOliveira², M. Kassi¹, R. Yousefzai¹, I. Hussain¹, N. Fida¹, B. Trachtenberg¹, A. Bhimaraj¹, A. Guha¹. ¹Methodist DeBakey Cardiology Associates, Houston Methodist Hospital, Houston, TX, ²Houston Methodist Research Institute, Houston Methodist Hospital, Houston, TX*

4:05 PM *(276) Effect of Donor Simvastatin Treatment on Gene Expression Profiles in Human Cardiac Allografts during Reperfusion; R. Krebs, E. Holmström, K. Dhaygude, M. Kankainen, S. Syrjälä, J. Lukac, P. Mattila, A. Nykänen, K. Lemström. Transplantation Laboratory, University of Helsinki, Helsinki, Finland*

- 4:10 PM** (277) *What is High Risk? Hemodynamic Definitions of Pulmonary Hypertension and Heart Transplantation Outcomes: A Contemporary Cohort Analysis*; Y. Peled¹, R. Beigel¹, E. Ram¹, R. Klempfner¹, J. Lavee¹, J. Patel², E. Raanani¹. ¹Sheba Medical Center and Tel Aviv University, Ramat Gan, Israel, ²Cedars-Sinai Heart Institute and David Geffen School of Medicine, Los Angeles, CA
- 4:15 PM** (278) *High Donor Inotrope Requirements are Associated with Significantly Diminished Post-Transplant Outcomes*; D. Herbst, P. Altshuler, M. Helmers, J. Han, A. Iyengar, P. Atluri. *Division of Cardiovascular Surgery, University of Pennsylvania, Philadelphia, PA*
- 4:20 PM** (279) *Early and Long-Term Outcomes after Direct Bridge-to-Transplantation with Extracorporeal Membrane Oxygenation*; M. Hébert¹, P. Noly¹, Y. Lamarche¹, I. Bouhout¹, M. Mauduit², G. Giraldeau³, B. Lelong², J. Verhoye², E. Flécher², M. Carrier¹. ¹Cardiac Surgery, Montreal Heart Institute, Montreal, QC, Canada, ²Thoracic and Cardiovascular Surgery, Rennes Hospital, Rennes, France, ³Cardiology, Montreal Heart Institute, Montreal, QC, Canada
- 4:25 PM** (280) *Brain-Dead Donor-Derived Plasma Extracellular Vesicles May Induce Systemic Inflammation and Microvascular Dysfunction*; S. Joo¹, K. Dhaygude¹, M. Puhka², R. Krebs¹, E. Rouvinen¹, A. Suoranta³, P. Mattila³, S. Syrjälä¹, K. Lemström¹. ¹Transplantation Laboratory, University of Helsinki, Helsinki, Finland, ²EV core, Institute for Molecular Medicine Finland, University of Helsinki, Helsinki, Finland, ³Sequencing Unit, Institute for Molecular Medicine Finland, University of Helsinki, Helsinki, Finland
- 4:30 PM** (281) *Heart in the Box with Long Term Outcome Post-Heart Transplantation*; R. Salabat, D. Emerson, D. Megna, D. Ramzy, J. A. Kobashigawa, M. Thottam, T. Singer-Englar, J. Patel, M. Kittleson, L. Czer, A. Trento, J. Chikwe, F. Esmailian. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*
- 4:35 PM** (282) *Prognostic Value of Pre-Transplant Peak Oxygen Consumption on Post-Transplant Survival: ISHLT Registry Analysis*; Y. Peled¹, R. Klempfner¹, J. Lavee¹, J. Nativi-Nicolau², E. Raanani¹, W. S. Cherikh³, J. Stehlik². ¹Sheba Medical Center and Tel Aviv University, Ramat Gan, Israel, ²University of Utah School of Medicine, Salt Lake City, UT, ³United Network for Organ Sharing, Richmond, VA
- 4:40 PM** (283) *Patients with Severe Right Ventricular Dysfunction and Low Arterial Elastance Have Poor Prognosis Even after Heart Transplantation*; R. Ravikumar, K. R. Balakrishnan, K. G. Suresh rao, V. Srinath, T. Muralikrishna. *Heart and Lung Transplantation, MGM Hospital, Chennai, India*
- 4:45 PM** (284) *Impact of Donor and Recipient Age on 5-year Survival Following Heart Transplantation: A 24-year National Analysis from the United Kingdom*; J. M. Ali¹, L. Mumford², F. Smith², U. Stock³, J. Mascaro⁴, P. Curry⁵, R. Venkateswaran⁶, S. Clark⁷, J. Parameshwar¹, N. Al-Attar⁵, M. Berman¹. ¹Royal Papworth Hospital, Cambridge, United Kingdom, ²NHS Blood and Transplant, Bristol, United Kingdom, ³Royal Brompton and Harefield NHS Trust, London, United Kingdom, ⁴Universities Hospital Birmingham NHS Foundation Trust, Birmingham, United Kingdom, ⁵Golden Jubilee National Hospital Glasgow, Glasgow, United Kingdom, ⁶Manchester University NHS Foundation Trust, Manchester, United Kingdom, ⁷Newcastle Upon Tyne University Hospitals NHS Foundation Trust, Newcastle, United Kingdom
- 4:50 PM** (285) *First Report of the GUARDIAN Registry: An International Consortium Examining the Effect of Controlled Hypothermic Preservation in Heart Transplantation*; D. D'Alessandro¹, J. Philpott², T. Boeve³, S. Pham⁴, A. Zuckermann⁵. ¹Massachusetts General Hospital, Boston, MA, ²Sentara Norfolk General Hospital, Norfolk, VA, ³Spectrum Health,

Grand Rapids, MI, ⁴Mayo Clinic Florida, Jacksonville, FL, ⁵Medizinische Universität Wien, Vienna, Austria

4:55 PM

(286) Impact of Time Course of LVAD-Mediated Reverse Remodeling on Post Explantation Long-Term Sustainability of Favorable Clinical Response: Insights from RESTAGE-HF; M. Yin¹, E. Birks², J. Rame³, S. Patel⁴, B. Lowes⁵, C. Selzman¹, R. Starling⁶, J. Trivedi⁷, M. Slaughter⁷, P. Atluri⁸, D. Goldstein⁴, S. Maybaum⁹, J. Um⁵, K. Margulies⁸, J. Stehlik¹⁰, C. Cunningham⁷, D. Farrar¹¹, S. Drakos¹. ¹Cardiology, University of Utah School of Medicine, Salt Lake City, UT, ²Cardiology, University of Kentucky, Lexington, KY, ³Jefferson University Hospital, Philadelphia, PA, ⁴Montefiore Medical Center, Bronx, NY, ⁵University of Nebraska, Omaha, NE, ⁶Cleveland Clinic, Cleveland, OH, ⁷University of Louisville, Louisville, KY, ⁸University of Pennsylvania, Philadelphia, PA, ⁹Northwell Health, Manhasset, NY, ¹⁰University of Utah School of Medicine, Salt Lake City, UT, ¹¹Abbott Laboratories, Chicago, IL

4:00 PM - 5:30 PM

MINI ORAL 05: Outcomes: What Determines Success After Lung Transplantation? (PULM, AN-CC, CT-SURG, NURS-AH, RES-IMM)

Chairs:

4:00 PM

(359) Predicting PGD after Lung Transplantation; J. M. Diamond¹, E. Cantu¹, M. Oyster¹, J. Hsu¹, R. Localio¹, M. Shashaty¹, B. Koons¹, M. Crespo¹, L. Kalman¹, C. Calfee², J. Singer², J. Greenland², J. Kukreja², L. Snyder³, M. Hartwig³, J. McDyer⁴, P. Shah⁵, J. Orens⁵, K. Wille⁶, C. Hage⁷, A. Weinacker⁸, L. Benvenuto⁹, V. Lama¹⁰, J. Christie¹. ¹University of Pennsylvania, Philadelphia, PA, ²UCSF, San Francisco, CA, ³Duke University, Durham, NC, ⁴University of Pittsburgh, Pittsburgh, PA, ⁵Johns Hopkins, Baltimore, MD, ⁶UAB, Birmingham, AL, ⁷Indiana University, Indianapolis, IN, ⁸Stanford University, Palo Alto, CA, ⁹Columbia University, New York, NY, ¹⁰University of Michigan, Ann Arbor, MI

4:05 PM

(360) Airway Complications in Lung Transplant Recipients with Telomere-Related Interstitial Lung Disease; B. Choi¹, J. Messika², A. Courtwright³, J. Mornex⁴, S. Hirschi⁵, A. Roux⁶, J. Le Pavec⁷, S. Quétant⁸, A. Froidure⁹, R. Lazor¹⁰, M. Reynaud-Gaubert¹¹, A. Le Borgne¹², H. Goldberg¹, S. El-Chemaly¹, R. Borie². ¹Pulmonary and Critical Care, Brigham and Women's Hospital, Boston, MA, ²Service de Pneumologie B et Transplantation Pulmonaire, APHP.Nord-Université de Paris, Hôpital Bichat-Claude Bernard, Paris, France, ³Pulmonary and Critical Care, Hospital of the University of Pennsylvania, Philadelphia, PA, ⁴Service de Pneumologie, Centre Coordonnateur National de Référence des Maladies Pulmonaires Rares, Hôpital Louis Pradel, Université Claude Bernard Lyon 1, Université de Lyon, Lyon, France, ⁵Service de Pneumologie, Centre de Compétence des Maladies Pulmonaires Rares, Hôpitaux Universitaires de Strasbourg, Strasbourg, France, ⁶Service de Pneumologie, Hôpital Foch, Université Versailles Saint-Quentin-en-Yvelines, Suresnes, France, ⁷Service de Chirurgie Thoracique et de Transplantation Pulmonaire, Centre Chirurgical Marie Lannelongue, Le Plessis-Robinson, France, ⁸Service Hospitalier, Universitaire Pneumologie Physiologie, Pôle Thorax et Vaisseaux, CHU Grenoble Alpes, Université Grenoble Alpes, Grenoble, France, ⁹Service de Pneumologie, Cliniques Universitaires Saint-Luc, Université Catholique de Louvain, Brussels, Belgium, ¹⁰Service de Pneumologie, Hôpital Universitaire de Lausanne, Lausanne, Switzerland, ¹¹Service de Pneumologie, Centre de Compétences des Maladies Pulmonaires Rares, CHU Nord, AP-HM, Marseille, Aix-Marseille Université, IHU Méditerranée Infection, MEPHI, Marseille, France, ¹²Service de Pneumologie, Centre de Compétence des Maladies Pulmonaires Rares, Hôpital Larrey CHU Toulouse, Toulouse, France

- 4:10 PM** **(361) *Racial Differences in Immunosuppression and Lung Transplant Outcomes*; A. Charya¹, M. Jang¹, J. Sun², C. Mutebi¹, H. Luikart³, P. Shah⁴, J. Matthews⁴, A. W. Brown⁵, H. Kong¹, I. Tunc⁶, G. Berry³, C. Marboe⁷, A. Iacono⁸, S. Nathan⁵, K. Khush³, J. Orens⁴, H. Valentine¹, S. Agbor-Enoh¹. ¹*Genomic Research Alliance for Transplantation (GRAfT), National Heart Lung and Blood Institute, Bethesda, MD,* ²*Critical Care Medicine Department, Clinical Center, National Institutes of Health, Bethesda, MD, MD,* ³*Stanford University School of Medicine, Stanford, CA,* ⁴*Division of Pulmonary and Critical Care Medicine, The Johns Hopkins School of Medicine, Baltimore, MD,* ⁵*Inova Fairfax Hospital, Fairfax, VA,* ⁶*Division of Intramural Research, National Heart Lung and Blood Institute, Bethesda, MD,* ⁷*Department of Pathology, New York Presbyterian University Hospital of Cornell and Columbia, New York, NY,* ⁸*Division of Pulmonary and Critical Care, University of Maryland Medical Center, Baltimore, MD***
- 4:15 PM** **(362) *Measuring Quality in Lung Transplant Care: The QUILT Initiative*; A. Venado¹, J. P. Singer¹, L. E. Leard¹, R. Shah¹, M. E. Kleinhenz¹, J. Golden¹, A. Perez¹, N. Kolaitis¹, D. Calabrese¹, J. Maheshwari¹, B. Trinh², J. Kukreja², S. Hays¹. ¹*Department of Medicine, University of California, San Francisco, San Francisco, CA,* ²*Department of Surgery, University of California, San Francisco, San Francisco, CA***
- 4:20 PM** **(363) *Malignancy Risk in Lung Transplant Recipients with Short Telomere Length*; A. J. Trindade¹, K. Townsend², J. A. Rose², K. P. Kanach², T. Thaniyavarn², H. J. Goldberg², S. Y. El-Chemaly². ¹*Allergy, Pulmonary and Critical Care Division, Vanderbilt University Medical Center, Nashville, TN,* ²*Pulmonary and Critical Care Division, Brigham and Women's Hospital, Boston, MA***
- 4:25 PM** **(364) *Factors Associated with Very Long-Term Survival for Lung Transplant Recipients*; L. M. Piechura, F. Yazdchi, M. T. Harloff, H. Shim, N. S. Sharma, M. Keshk, A. Coppolino, D. E. Rinewalt, H. R. Mallidi. *Brigham and Women's Hospital, Boston, MA***
- 4:30 PM** **(365) *Still Valid: Reassessing A Lung Transplant Recipient Risk of Death Model*; E. Y. Chan¹, A. Goodarzi², E. A. Graviss³, R. K. Chihara¹, G. Youssef⁴, D. T. Nguyen³, S. W. Yau², E. E. Suarez⁵, T. E. MacGillivray⁵, H. J. Huang⁶, O. Gaber⁷. ¹*Division of Thoracic Surgery, Department of Surgery, Houston Methodist Hospital, Houston, TX,* ²*Division of Pulmonary, Critical Care and Transplant Medicine, Department of Medicine, Houston Methodist Hospital, Houston, TX,* ³*Department of Pathology and Genomic Medicine, Houston Methodist Hospital, Houston, TX,* ⁴*Department of Medicine, Houston Methodist Hospital, Houston, TX,* ⁵*Houston Methodist DeBakey Heart and Vascular Center, Houston Methodist Hospital, Houston, TX,* ⁶*Division of Pulmonary, Critical Care and Transplant Medicine, Department of Medicine, Houston Methodist Hospital, Houston, TX,* ⁷*J. C. Walter Jr. Transplant Center, Department of Surgery, Houston Methodist Hospital, Houston, TX***
- 4:35 PM** **(366) *Lung Transplantation Minimally Impacts Daily Physical Activity Post-Transplantation*; J. R. Walsh¹, D. C. Chambers¹, S. T. Yerkovich¹, P. M. Hopkins¹, N. R. Morris². ¹*Queensland Lung Transplant Service, The Prince Charles Hospital, Brisbane, Australia,* ²*School of Allied Health Sciences, Griffith University, Gold Coast, Australia***
- 4:40 PM** **(367) *Postoperative, Inpatient Rehabilitation after Lung Transplant Evaluation (PIRATE): A Feasibility Randomized Controlled Trial*; B. J. Tarrant¹, E. Quinn¹, R. Robinson¹, M. Poulsen¹, L. Fuller¹, G. Snell², B. Thompson³, B. Button¹, A. Holland⁴. ¹*Physiotherapy, Alfred Health, Melbourne, Australia,* ²*Lung Transplant, Alfred Health, Melbourne, Australia,* ³*School of Health Sciences, Swinburne University, Melbourne, Australia,* ⁴*Monash University, Melbourne, Australia***
- 4:45 PM** **(368) *Disparities are Present in Multiple Listing of Lung Transplant Candidates*; A. Moneme¹, C. Vivar Ramon¹, L. Dellara¹, M. T. Harmon¹, J. Diamond², M. Shashaty², J. D. Christie², R. Gallop³, E. Cantu¹. ¹*Surgery, University of Pennsylvania, Philadelphia, PA,***

²Medicine, University of Pennsylvania, Philadelphia, PA, ³Mathematics, West Chester University, West Chester, PA

4:50 PM

(369) Requests for Exceptional LAS in Eurotransplant; R. Vos¹, J. M. Smits², A. Strelniec², R. Buhl³, T. Deuse⁴, F. Dzibur⁵, P. Evrard⁶, M. Harlander⁷, R. Hoek⁸, D. Hoefler⁹, K. Hoetzenecker¹⁰, C. Knoop¹¹, H. Kwakkel-van Erp¹², G. Lang¹⁰, F. Langer¹³, B. D. Luijk¹⁴, I. Madurka¹⁵, B. Rondelet¹⁶, R. Schramm¹⁷, I. Seghers⁸, D. van Kessel¹⁸, G. Verleden¹, E. Verschuuren¹⁹, C. Witt²⁰, D. Green², J. Gottlieb²¹. ¹Pulmonology, University Hospital Leuven, Leuven, Belgium, ²Eurotransplant, Leiden, Netherlands, ³Pulmonology, University Hospital, Mainz, Germany, ⁴Thoracic Surgery, University Hospital, Hamburg, Germany, ⁵Pulmonology, University Hospital, Zagreb, Croatia, ⁶Pulmonology, University Hospital, Mont Godinne, Belgium, ⁷Pulmonology, University Medical Center, Zagreb, Slovenia, ⁸Pulmonology, Erasmus Medical Center, Rotterdam, Netherlands, ⁹Thoracic Surgery, Tirol Kliniken, Innsbruck, Austria, ¹⁰Thoracic surgery, Allgemeines Krankenhaus Wien, Vienna, Austria, ¹¹Pulmonology, University Hospital Erasme, Brussels, Belgium, ¹²Pulmonology, University Hospital Antwerp, Antwerp, Belgium, ¹³Pulmonology, University Hospital Saarlanden, Homburg, Germany, ¹⁴Pulmonology, University Medical Center Utrecht, Utrecht, Netherlands, ¹⁵Pulmonology, University Hospital Semmelweis, Budapest, Hungary, ¹⁶Thoracic Surgery, University Hospital, Mont Godinne, Belgium, ¹⁷Thoracic surgery, Herz und Diabeteszentrum Nordrhein-Westfalen, Bad Oeyenhausen, Germany, ¹⁸Pulmonology, University Hospital, Utrecht, Netherlands, ¹⁹Pulmonology, University Medical Center Groningen, Groningen, Netherlands, ²⁰Pulmonology, Charite Campus Mitte Medizinische Klinik, Berlin, Germany, ²¹Pulmonology, Medizinische Hochschule Hannover, Hannover, Germany

4:55 PM

(370) RAS-Like Radiological Findings in Lung Transplant Recipients with Preserved and Stable Lung Function; L. Perakyla¹, A. Nykanen¹, A. Piilonen², J. Tikkanen³, M. Halme³, P. Raivio¹. ¹Cardiac Surgery, Heart and Lung Center, Helsinki University Hospital and University of Helsinki, Helsinki, Finland, ²Radiology, Medical Imaging Center, Helsinki University Hospital and University of Helsinki, Helsinki, Finland, ³Pulmonology, Heart and Lung Center, Helsinki University Hospital and University of Helsinki, Helsinki, Finland

4:00 PM - 5:30 PM

ORAL SESSION 26: Does One Fit All? Effect of Gender, BMI and LV Size on MCS Outcomes (CARD, CT-SURG, RES-IMM)

Chairs:

4:00 PM

(215) Does Body Size or Left Ventricular Size Affect the Outcome of Continuous-Flow Ventricular Assist Device Implantation?; M. Ono, O. Kinoshita, M. Kimura, M. Ando, H. Yamauchi, S. Shimada, Y. Itoda. *Dept. of Cardiac Surg., Univ. of Tokyo, Tokyo, Japan*

4:10 PM

(216) Small Pre-Implant LV Size Mediates Worse Post-Implant Outcomes in Female CF-LVAD Recipients; S. A. Dual¹, A. Nayak², Y. Hu³, M. Schmid Daners⁴, A. A. Morris⁵, J. Cowger⁶. ¹Radiology, Stanford University, Palo Alto, CA, ²Emory Clinical Cardiovascular Research, Division of Cardiology, Emory University School of Medicine, Atlanta, GA, ³Department of Biostatistics and Bioinformatics, Emory University, Atlanta, GA, ⁴Mechanical and Process Engineering, ETH Zurich, Zurich, Switzerland, ⁵Emory Clinical Cardiovascular Research Institute, Division of Cardiology, Department of Medicine, Emory University, Atlanta, GA, ⁶Department of Internal Medicine, Wayne State University, Detroit, MI

4:20 PM

(217) The Impact of Obesity and LVAD-Bridging on Heart Transplant Candidate Outcomes: A Linked STS INTERMACS - UNOS Data Analysis; A. C. Alba¹, J. K. Kirklin², R. S. Cantor³, L. Deng³, J. P. Jacobs⁴, H. J. Ross¹, V. Rao¹, J. Stehlik⁵. ¹Peter Munk Cardiac Centre, University Health Network, Toronto, ON, Canada, ²Department of Surgery,

University of Alabama at Birmingham, Birmingham, AL, ³University of Alabama at Birmingham, Birmingham, AL, ⁴Department of Surgery, University of Florida, Gainesville, FL, ⁵Division of Cardiovascular Medicine, University of Utah School of Medicine, Utah, UT

4:40 PM (219) *Sex Specific Utilization and Outcomes in Patients Receiving Continuous-Flow Left Ventricular Devices*; H. K. Lamba, N. K. Mondal, S. Chatterjee, A. Civitello, A. Nair, S. Oberton, A. Mattar, A. Shafii, G. Loor, K. Liao. *Division of Cardiothoracic Transplantation and Mechanical Circulatory Support, Texas Heart Institute at Baylor College of Medicine, Houston, TX*

4:50 PM (220) *Worldwide Gender Differences during Mechanical Circulatory Support: An Analysis of the International Society for Heart and Lung Transplantation Mechanically Assisted Circulatory Support Registry Data*; L. Castro¹, N. Ruebsamen², A. Gebauer¹, H. Reichenspurner¹, A. M. Bernhardt¹. ¹*Department of Cardiovascular Surgery, Univ Heart and Vascular Ctr Hamburg, Hamburg, Germany*, ²*Department of Cardiology, Univ Heart and Vascular Ctr Hamburg, Hamburg, Germany*

4:00 PM - 5:30 PM

ORAL SESSION 27: Mind's Eye: Novel Approaches to Imaging and Managing Heart Transplant Patients (CARD, AN-CC)

Chairs:

4:00 PM (89) *Atrial Natriuretic Peptide in the Prevention of Postoperative Acute Renal Dysfunction in Patients Undergoing Heart Transplantation - An Investigator-Driven, Single-Center, Blinded, Randomized and Placebo-Controlled Trial*; M. Tholen¹, O. Kolsrud², G. Dellgren², K. Karason³, S. Ricksten⁴. ¹*Anesthesiology and Intensive Care Medicine, Sahlgrenska University Hospital, Univ of Gothenburg, Goteborg, Sweden*, ²*Cardiothoracic Surgery, Sahlgrenska University Hospital, Univ of Gothenburg, Goteborg, Sweden*, ³*Cardiology and Transplant Institute, Sahlgrenska University Hospital, Univ of Gothenburg, Goteborg, Sweden*, ⁴*Anesthesiology and Intensive Care Medicine, Sahlgrenska Univ Hospital, Univ of Gothenburg, Goteborg, Sweden*

4:10 PM (90) *Surveillance for Transthyretin Amyloidosis Progression after Heart Transplantation in the Era of Novel Disease Modifying Therapies*; J. M. Griffin¹, E. Baughan¹, H. Rosenblum¹, K. Clerkin¹, R. Jackson¹, N. Uriel¹, T. Brannagan¹, C. Marboe¹, K. Takeda¹, J. L. Grodin², M. S. Maurer¹, M. Farr¹. ¹*Columbia University Medical Center, New York, NY*, ²*UT Southwestern, Dallas, TX*

4:20 PM (91) *Predictive Value of Triglyceride Glucose Index for the Development of New-Onset Diabetes Mellitus Following Heart Transplantation*; Y. Peled, E. Ram, R. Klempfner, J. Lavee, E. Raanani. *Sheba Medical Center and Tel Aviv University, Ramat Gan, Israel*

4:30 PM (92) *Myocardial Scar Burden Correlates with NT-proBNP Levels and Changes in Left Ventricular Filling Pressures in Heart Transplant Recipients*; G. Poglajen¹, R. Zbačnik², S. Frljak¹, G. Zemljic¹, A. Cerar¹, R. Okrajšek¹, M. Šebeštjen¹, B. Vrtovec¹. ¹*Advanced Heart Failure and Transplantation Center, Dept. of Cardiology, University Medical Center, Ljubljana, Slovenia*, ²*Institute of Radiology, University Medical Center, Ljubljana, Slovenia*

4:40 PM (93) *Papillary Muscle Viability Correlates with Changes of Functional Mitral Regurgitation in Patients with Nonischemic Dilated Cardiomyopathy*; S. Frljak¹, G. Poglajen¹, G. Zemljic¹, A. Cerar¹, F. Haddad², U. P. Jorde³, B. Vrtovec¹. ¹*UMC Ljubljana, Ljubljana, Slovenia*, ²*Stanford Univ Sch of Medicine, Stanford, CA*, ³*Montefiore Medical Center, New York, NY*

4:50 PM **(94) Heart Transplant Recipients with pAMR1(H+) and pAMR2 Rejection Have the Same Amount of Myocardial Injury by Allosure;** M. W. Weston, D. Rinde-Hoffman, P. Berman, L. Arroyo, S. Kumar, B. Mackie, J. Feliberti. *Transplant, Tampa General Hospital, Tampa, FL*

4:00 PM - 5:30 PM

SYMPOSIUM 22: Calculus, King Lear and COVID-19: Innovations During Plagues
(ALL, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Marta Farrero, MD PhD, Saima Aslam, MD, MS, and Bronwyn J. Levvey, RN, Grad Dip Clin Ep

Session Summary: Since the first description of a novel coronavirus causing acute respiratory illness in Wuhan City, Hubei Province, China in December 2019, the world has since been severely impacted by the SARS-CoV-2 virus with high documented transmissibility and case fatality rate especially in susceptible patient cohorts. This symposium will highlight relevant scientific, societal and epidemiological challenges with COVID-19 infection, especially in the context of providing care to those with advanced heart or lung disease.

4:00 PM ***The Pandemic Response - Interplay between Science, Politics and the Media***
Ilaria Capua, DVM, PhD, One Health Center of Excellence, University of Florida, Gainesville, FL, United States

4:12 PM ***Long Term Outcomes of Transplant Patients with COVID-19***
Jonathan Messika, MD, PhD, Bichat - Claude Bernard Hospital, APHP.Université de Paris, Paris, France, Paris, France

4:24 PM ***Solidarity Trial: Challenges in Setting Up Global Clinical Trials in a Pandemic***
John-Arne Røttingen, MD, PhD, MSc, MPA, Ambassador for Global Health, Ministry of Foreign Affairs, Oslo, Norway

4:36 PM ***Lung Transplantation for COVID-19 Respiratory Failure***
Ankit Bharat, MD, Northwestern University Feinberg School of Medicine, Chicago, IL, United States

4:48 PM ***Challenges and Controversies in Developing a COVID-19 Vaccine***
Michael G Ison, MD MS, Northwestern University Feinberg School of Medicine, Chicago, IL, United States

5:00 PM ***Novel Insights into the COVID Pandemic - Perspectives of a Global Epidemiologist***
Michael Osterholm, MD, University of Minnesota, Minneapolis, MN, United States

4:00 PM - 5:30 PM

SYMPOSIUM 23: Where Are We Now and Where Are We Heading in MCS?
(CT-SURG, AN-CC, CARD)

Chairs: Emma Birks, MD, PhD, Diyar Saeed, MD, PhD, and Emily K Granger, MBBS

Session Summary: This symposium will discuss the overall future of Mechanical circulatory support. It will start with the direction of the mechanical circulatory support field focusing on the effect the new US transplant allocation system has had so far on LVAD use and outcomes, then discuss what are the limitations to implantation in the current era and what is unacceptable risk in high risk patients. The interplay between inflammation and the coagulation pathway in minimizing both thromboembolic and haemorrhagic events will then be discussed. Then an overview of the evolution of mechanical circulatory support including technological advances and clinical

improvements in survival and future perspectives and emerging technologies will be discussed and put into perspective.

- 4:00 PM** *Mechanical Circulatory Support: Past, Present and Future*
Daniel J Goldstein, MD, Montefiore Medical Center, Bronx, NY, United States
- 4:15 PM** *The Unholy Alliance of Inflammation and Coagulation in Mechanical Circulatory Support / ECLS*
John F Fraser, MD PhD, University of Queensland, Brisbane, Australia
- 4:30 PM** *The Effect of the New Transplant Allocation System on LVAD Use*
Salpy V Pamboukian, MD, University of Alabama at Birmingham, Birmingham, AL, United States
- 4:45 PM** *Patients That Won't Take No for an Answer, Rejected at Multiple Centers, What is Unacceptable Risk?*
Francis D Pagani, MD, PhD, University of Michigan, Ann Arbor, MI, United States
- 5:00 PM** *DEBATE: The Destination Therapy Patient Doing Well Should Not Be Transplanted (PRO)*
Stephan Schueler, MD, PhD, FRCS, Freeman Hospital, Newcastle Upon Tyne, United Kingdom
- 5:10 PM** *DEBATE: The Destination Therapy Patient Doing Well Should Not Be Transplanted (CON)*
Jon A Kobashigawa, MD, Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA, United States

4:00 PM - 5:30 PM

**SYMPOSIUM 24: Old Problem, Current Challenge: Identification of New Means of Graft Evaluation To Guarantee a Long-Lasting Transplantation
(CARD, AN-CC, CT-SURG, ID, NURS-AH, PEDS, PHARM, PULM, RES-IMM)**

Chairs: Darren H. Freed, MD, PhD, FRCSC, Minoru Ono, MD, PhD, and Evan P Kransdorf, MD, PhD

Session Summary: Selecting donor hearts is a key aspect for a successful transplantation. Despite the shortage of cardiac grafts, the acceptance rate of donor hearts for transplantation continues to be low. This is consequence of restrictive allocation policies that result in the needlessly rejection of about half of the organs offered. Based on common means of graft assessment, many non-conventional hearts that could be transplanted without compromising outcomes are considered not viable and not transplanted. Likewise, most of the biomarkers routinely used to assess suitability of cardiac grafts in conventional donation fail to predict post-transplant recovery of hearts obtained from donation after circulatory death and extended criteria donors. This session is therefore conceived to promote awareness in the clinical community about the necessity of identifying and validating new means of graft assessment and non-invasive biomarkers that may ultimately increase the numbers of hearts offered for transplantation.

- 4:00 PM** *Donor Cardiac Troponin as a Predictor of Post-Transplant Cardiac Dysfunction: To Be or Not to Be?*
Anne Vorlat, MD, University Hospital of Antwerp, Edegem, Belgium
- 4:12 PM** *Echocardiography Assessment of Donor Hearts: Go beyond the Boundaries?*
Goran Dellgren, MD, PhD, Sahlgrenska Univ Hospital, Goteborg, Sweden

- 4:24 PM** ***Organ Preservation in the 2020s: Extended Hypothermic Machine Perfusion***
David C McGiffin, MB, BS, FRACS, The Alfred Hospital, Melbourne, Australia
- 4:36 PM** ***Normothermic Ex-Situ Machine Perfusion: How to Obtain the Bigger Benefit of It?***
Mitesh V Badiwala, MD, PhD, FRCSC, Toronto General Hospital, Toronto, ON, Canada
- 4:48 PM** ***A New Era in the Search of Non-Invasive Biomarkers: Borrow Potential Candidates from the Preclinical Science***
Sarah Longnus, PhD, HGEK, Berne, Switzerland
- 5:00 PM** ***Let's Get Some Help: Artificial Intelligence as the New Tool to Predict Cardiac Post-Transplant Outcomes***
Johan Nilsson, MD, PhD, Skanes University Hospital, Lund, Sweden

Tuesday, April 27, 2021

8:00 AM - 9:30 AM

ORAL SESSION 28: Still Crazy After All These Years: Cardiac Allograft Rejection (CARD)

Chairs:

- 8:00 AM** (83) *Heart Transplant Recipients with pAMR1 (H+) and pAMR2 Rejection Have the Same Amount of Myocardial Injury by Molecular Microscope*; M. Weston, D. Rinde-Hoffman, P. Berman, L. Arroyo, S. Kumar, B. Mackie. *Tampa General Hospital, Tampa, FL*
- 8:10 AM** (84) *Development and Validation of an Individual Predictive Model for Risk of Biopsy-Proven Antibody-Mediated Rejection after Heart Transplantation*; G. Coutance¹, E. Kransdorf², A. Loupy³, J. Kobashigawa², J. Patel². ¹Heart Transplantation, Groupe Hospitalier Pitié-Salpêtrière, Paris, France, ²Heart Transplantation, Cedars Sinai Medical Center, Los Angeles, CA, ³Paris Transplant Group, Paris, France
- 8:20 AM** (85) *Machine Learning Based Prediction of 1-year Survival after Isolated Heart Transplant*; S. Moustakidis¹, P. Kampaktsis², A. Tzani³, I. Doulamis³, A. Tzoumas², A. Drosou⁴, G. Filippatos⁵, A. Briasoulis⁶. ¹University of Iowa, Iowa City, IA, ²Dept of Internal Medicine - Cardiology, New York University Hospital, New York City, NY, ³Cardiac Surgery, Boston's Children Hospital, Boston, MA, ⁴National Technical University of Thessaloniki, Thessaloniki, Greece, ⁵Dept of Internal Medicine - Cardiology, National Kapodistrian University of Athens, Athens, Greece, ⁶Dept of Internal Medicine - Cardiology, University of Iowa Hospital and National Kapodistrian University of Athens, Iowa City, IA
- 8:30 AM** (86) *Retrospective Analysis of UNOS Database to Assess the Impact of Induction Therapy on Rejection in Heart Transplantation*; C. Hsueh, L. Bellumkonda. *Internal Medicine, Yale School of Medicine, New Haven, CT*
- 8:40 AM** (87) *New Molecular Classification of Rejection in Heart Transplant Biopsies Reveals Relatively Little Three Year Graft Loss in Antibody-Mediated Rejection*; P. F. Halloran¹, K. Madill-Thomsen¹, M. Mackova¹, A. Aliabadi-Zuckermann², M. Cadeiras³, M. Crespo-Leiro⁴, E. Depasquale⁵, M. Deng³, J. Goekler⁶, D. H. Kim⁷, J. Kobashigawa⁸, M. Parkes¹, P. Macdonald⁹, L. Potena¹⁰, K. Shah¹¹, J. Stehlik¹², A. Zuckermann⁶. ¹Alberta Transplant Applied Genomics Centre, Edmonton, AB, Canada, ²Medical University of Vienna, Vienna, Austria, ³Ronald Reagan UCLA Medical Center, Los Angeles, CA, ⁴Complejo Hospitalario Universitario A Coruña, A Coruña, Spain, ⁵University of California Los Angeles, Los Angeles, CA, ⁶Medical University of Vienna, Vienna, Austria, ⁷University of Alberta, Edmonton, AB, Canada, ⁸Cedars-Sinai Medical Center, Los Angeles, CA, ⁹The Victor Chang Cardiac Research Institute, Sydney, Australia, ¹⁰University of Bologna, Bologna, Italy, ¹¹Virginia Commonwealth University, Richmond, VA, ¹²University of Utah, Salt Lake City, UT
- 8:50 AM** (88) *Modulation of Donor Cardiac Macrophages is Sufficient to Suppress Rejection and Extend Allograft Survival*; B. Kopecky¹, C. Lin², C. Frye³, H. Dun³, P. Bayguinov¹, J. Fitzpatrick¹, D. Kreisel³, K. Lavine¹. ¹Medicine, Washington University in St Louis, St. Louis, MO, ²Pathology, Washington University in St Louis, St. Louis, MO, ³Surgery, Washington University in St Louis, St. Louis, MO

8:00 AM - 9:30 AM

ORAL SESSION 29: Philip K. Caves Award Candidate Presentations

(ALL, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs:

- 8:00 AM** (5) *Best Possible Use of a Donor Organ: Is There a Need for Age Matching in Heart Transplant Allocation?*; K. Thangappan¹, D. L. Morales¹, L. B. Louis², A. Panza², A. Dani¹, D. Winlaw¹, F. Zafar¹. ¹Cardiothoracic Surgery, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ²Cardiac Surgery, University of Cincinnati Medical Center, Cincinnati, OH
- 8:10 AM** (6) *Reduced Flow during Ex-Situ Heart Perfusion Provides Superior Function Preservation and Less Edema Formation*; X. Qi, S. Hatami, S. Bozso, M. Khan, S. Himmat, K. Forgie, X. Wang, J. Nagendran, D. Freed. *Surgery, University of Alberta, Edmonton, AB, Canada*
- 8:20 AM** (7) *Fibroblast Expression of Thy-1 Protects Grafts from Chronic Lung Allograft Dysfunction*; A. Hata¹, M. Hata¹, Y. Guo¹, Z. Mei¹, A. Manafi¹, B. Mahgoub¹, D. Li¹, A. Banerjee¹, I. Yoshino², T. H. Barker³, A. S. Krupnick¹. ¹Department of Surgery, University of Maryland, Baltimore, MD, ²Department of General Thoracic Surgery, Chiba University Graduate School of Medicine, Chiba, Japan, ³Department of Biomedical Engineering, University of Virginia, Charlottesville, VA
- 8:30 AM** (8) *Donor Neutrophils and B Cells in EVLP Perfusate are Associated with Severe Primary Graft Dysfunction*; A. Duong, P. Riddell, J. Yeung, M. Cypel, S. Keshavjee, T. Martinu, S. Juvet. *Toronto Lung Transplant Program, University Health Network, Toronto, ON, Canada*
- 8:40 AM** (9) *Developing Universal ABO Blood Type Donor Lungs with Ex Vivo Enzymatic Treatment: A Proof of Concept Feasibility Study*; A. Wang¹, R. Ribeiro¹, A. Ali¹, E. Brambate¹, H. Gokhale¹, V. Michaelsen¹, Y. Zhang¹, A. Gazzalle¹, P. Rahfeld², C. Cserti³, K. Tinckam⁴, L. West⁵, T. Waddell¹, M. Liu¹, S. Keshavjee¹, S. Withers², M. Cypel¹. ¹Latner Thoracic Surgery Research Laboratories, University Health Network, Toronto, ON, Canada, ²University of British Columbia, Vancouver, BC, Canada, ³Transfusion Medicine & Hematology, University Health Network, Toronto, ON, Canada, ⁴Regional Histocompatibility Laboratory, University Health Network, Toronto, ON, Canada, ⁵University of Alberta and Canadian Donation and Transplantation Research Program, Edmonton, AB, Canada
- 8:50 AM** (10) *Using an Absorbable Antibacterial Mesh to Treat Biofilm-Related Driveline Infections: An In Vitro Study*; Y. Qu¹, D. McGiffin², S. Marasco², D. Kaye³, A. Peleg¹. ¹Infectious Diseases, The Alfred Hospital and Monash University, Melbourne, Australia, ²Department of Cardiothoracic Surgery, The Alfred Hospital, Melbourne, Australia, ³Department of Cardiology, The Alfred Hospital and Monash University, Melbourne, Australia

8:00 AM - 9:30 AM

ORAL SESSION 30: It's a Partnership - Remember the RV in MCS

(CARD)

Chairs:

- 8:00 AM** (209) *Right Ventricular Response to Exercise in LVAD-Supported Patients vs. Heart Failure and Normal Subjects*; V. Ton, J. Rouvina, C. White, A. Kowal, G. Cotter, T. Logan, K. Milley, A. Anthony, J. Camuso, M. A. Villavicencio-Theoduloz, S. S. Thomas, E.

Coglianesse, D. D. D'Alessandro, G. D. Lewis. *Division of Cardiology, Massachusetts General Hospital, Boston, MA*

- 8:10 AM** (210) *Pulmonary Vascular Reverse Remodeling in Combined Post and Pre Capillary Pulmonary Hypertension Occurs Over Time after Left Ventricular Assist Device Implantation*; E. Anegawa, O. Seguchi, Y. Iwasaki, S. Komeyama, K. Yoshitake, Y. Sujino, N. Yagi, H. Mochizuki, K. Kuroda, S. Nakajima, T. Watanabe, M. Yanase, S. Fukushima, T. Fujita, N. Fukushima. *Heart Transplantation, National Cerebral and Cardiovascular Center, Suita, Japan*
- 8:20 AM** (211) *Predicting Right Ventricular Failure Following Left Ventricular Assist Device Support: A Derivation-Validation Multicenter Risk Score*; C. P. Kyriakopoulos¹, I. Taleb¹, A. G. Koliopoulou¹, N. Ijaz², Z. Demertzis³, A. Peruri³, E. Dranow¹, O. Wever-Pinzon¹, M. Y. Yin¹, K. S. Shah¹, L. Kemeyou¹, T. J. Richins¹, D. G. Tang², H. W. Neme³, J. Stehlik¹, C. H. Selzman¹, R. Alharethi¹, W. T. Caine¹, A. G. Kfoury¹, J. C. Fang¹, J. A. Cowger³, P. Shah², S. G. Drakos¹. ¹U.T.A.H. Cardiac Transplant Program (University of Utah Health & School of Medicine, Intermountain Medical Center, George E. Wahlen VA Medical Center), Salt Lake City, UT, ²Inova Heart & Vascular Institute, Falls Church, VA, ³Henry Ford Medical Center, Detroit, MI
- 8:30 AM** (212) *A Multi-Institutional Retrospective Analysis on Impact of Timing of RVAD on 1-Year Mortality*; S. Kumar¹, M. H. Derbala², S. M. Rashid³, J. Ferrall⁴, M. Cefalu⁴, M. Rivas-Lasarte³, D. T. Joseph⁵, D. J. Goldstein⁶, U. P. Jorde³, A. Bhimaraj¹, E. E. Suarez⁷, D. B. Sims³, S. A. Smith², A. Guha¹. ¹Cardiology, Houston Methodist DeBakey Heart and Vascular Center, Houston, TX, ²Cardiology, The Ohio State University Wexner Medical Center, Columbus, OH, ³Cardiology, Montefiore Medical Center, Bronx, NY, ⁴Cardiology, Ohio State University Wexner Medical Center, Columbus, OH, ⁵Internal Medicine, Houston Methodist Hospital, Houston, TX, ⁶Cardiothoracic and Vascular Surgery, Montefiore Medical Center, Bronx, NY, ⁷Cardiothoracic and Vascular Surgery, Houston Methodist DeBakey Heart and Vascular Center, Houston, TX
- 8:40 AM** (213) *Postoperative Pulmonary Hypertension and Right Ventricular Dysfunction are Independently Associated with Poor Outcomes after LVAD Implantation*; G. Gulati¹, E. Grandin², D. DeNofrio¹, J. Upshaw¹, A. R. Vest¹, M. S. Kiernan¹. ¹Cardiology, Tufts Medical Center, Boston, MA, ²Cardiology, Beth Israel Deaconess Medical Center, Boston, MA
- 8:50 AM** (214) *Non-Invasive Estimation of Pulse Pressure in HeartMate 3 Patients*; A. Gaudig¹, A. Pinsino², L. Braghieri¹, Y. Wang², G. M. Mondellini¹, J. M. Hastie¹, O. Panzer¹, K. Takeda¹, Y. Naka¹, G. T. Sayer¹, N. Uriel¹, M. Yuzefpolskaya¹, P. C. Colombo¹. ¹Columbia University Irving Medical Center, New York, NY, ²Albert Einstein College of Medicine, NYC Health+Hospitals/Jacobi, Bronx, NY

8:00 AM - 9:30 AM

ORAL SESSION 31: In The Beginning: Pre-Implant Characteristics and Management in Pediatric Heart Transplantation (PEDS, CARD, CT-SURG, RES-IMM)

Chairs:

- 8:00 AM** (65) *HLA Eplet Mismatch Analysis of a Large Multi-Center Pediatric Heart Transplant Cohort: Not All Transplants are Immunologically Equal*; M. Mangiola¹, M. Marrari², C. Bentelejewski², J. Sadowski³, D. Zern³, B. Feingold⁴, S. A. Webber⁵, A. Zeevi². ¹Transplant Institute, NYU Langone Medical Center, New York, NY, ²Department of Pathology, University of Pittsburgh, Pittsburgh, PA, ³University of Pittsburgh Medical Center (UPMC), Pittsburgh, PA, ⁴Pediatric Heart Failure and Heart Transplant Program, Children's Hospital of

Pittsburgh, Pittsburgh, PA, ⁵Department of Pediatrics, Vanderbilt University School of Medicine, Nashville, TN

- 8:10 AM** (66) **Waitlist Mortality for Children Listed for Heart Transplant in the United States: How are We Doing?**; A. Power¹, K. R. Sweat², J. C. Dykes¹, M. Ma³, S. Chen¹, J. Schmidt⁴, B. D. Kaufman¹, S. A. Hollander¹, E. Profita¹, D. N. Rosenthal¹, C. Chen¹, C. S. Almond¹.
¹Department of Pediatrics, Stanford University School of Medicine, Palo Alto, CA, ²Department of Economics, Stanford University, Palo Alto, CA, ³Department of Cardiothoracic Surgery, Stanford University School of Medicine, Palo Alto, CA, ⁴Lucile Salter Packard Children's Hospital, Palo Alto, CA
- 8:20 AM** (67) **Waitlist and Post-Transplant Outcomes for Children with Myocarditis Listed for Heart Transplantation over Three Decades: A Multi-Institutional Analysis**; S. Amdani¹, A. Korang², Y. Law³, R. Cantor⁴, D. Koehl⁵, J. K. Kirklin⁶, M. Ybarra⁷, P. Rusconi⁸, E. Azeka⁹, A. Prada Ruiz¹⁰, K. Schowengerdt¹¹, H. Bostdorff¹, A. Joong¹². ¹Pediatric Cardiology, Cleveland Clinic Children's Hospital, Ohio, OH, ²Pediatric Cardiology, John Hopkins All Children's Hospital, St.Petersburg, FL, ³Pediatric Cardiology, Seattle Children's Hospital, Seattle, WA, ⁴University of Alabama at Birmingham, Birmingham, AL, ⁵University of Alabama at Birmingham, Ohio, OH, ⁶Surgery, Kirklin Institute for Research in Surgical Outcomes, Birmingham, AL, ⁷Pediatric Cardiology, St.Louis Children's Hospital, St.Louis, MO, ⁸Pediatric Cardiology, University of Miami, Jackson Memorial Hospital, Miami, FL, ⁹Pediatric Cardiology, Heart Institute (InCor) University of Sao Paulo Medical School, Sao Paulo, Brazil, ¹⁰Pediatric Cardiology, Nemours Cardiac Center, Wilmington, DE, ¹¹Pediatric Cardiology, Cardinal Glennon Children's Medical Center, St.Louis, MO, ¹²Pediatric Cardiology, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL
- 8:30 AM** (68) **UNOS Match Runs for Pediatric Heart Transplant Organ Allocation—How Well Do They Sequence Patients Based on Medical Urgency?**; K. R. Sweat¹, A. Power², J. C. Dykes², M. Ma², R. Davies³, S. A. Hollander², E. Profita², D. N. Rosenthal², C. Chen², C. S. Almond².
¹Department of Economics, Stanford University School of Humanities and Sciences, Palo Alto, CA, ²Pediatric Cardiology, Stanford University School of Medicine, Palo Alto, CA, ³Department of Cardiovascular and Thoracic Surgery, UT Southwestern, Dallas, TX
- 8:40 AM** (69) **The Impact of Ex Situ Heart Perfusion in Pediatric Transplantation: An Analysis of the UNOS Registry**; J. Conway¹, Y. Hong², T. Pidborochynski³, M. Khan², D. H. Freed².
¹Pediatric Cardiology, Stollery Children's Hospital, Edmonton, AB, Canada, ²Surgery, University of Alberta, Edmonton, AB, Canada, ³Pediatric Cardiology, University of Alberta, Edmonton, AB, Canada
- 8:50 AM** (70) **A Closed-Circuit Ex Vivo Perfusion System for Pediatric Solid Organ Transplantation**; C. Haller¹, D. Walford², C. Maxwell², K. Tomaino², M. Yu², T. Looi³, V. Forte⁴, O. Honjo¹.
¹Cardiovascular Surgery, The Hospital for Sick Children, Toronto, ON, Canada, ²Department of Systems Design Engineering, University of Waterloo, Waterloo, ON, Canada, ³Centre for Image Guided Innovation and Therapeutic Intervention, The Hospital for Sick Children, Toronto, ON, Canada, ⁴Institute of Biomedical Engineering, University of Toronto, Toronto, ON, Canada

8:00 AM - 9:30 AM

SYMPOSIUM 25: HCV State of the Art: How Do We Do This? An ISHLT HCV Consensus Conference (ID, AN-CC, CARD, CT-SURG, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Kelly Schlendorf, MD, MHS, Haifa Lyster, MSc, and Marcelo Cypel, MD

Session Summary: This symposium will offer practical insights from the recent ISHLT HCV consensus conference and will discuss recommendations regarding use of HCV+ organs for cardiothoracic (CT) transplant. This includes

details regarding direct acting antiviral therapy for HCV, with a focus on drug interactions, financial and waitlist time implications, summarize early results from use of HCV+ donors in CT transplant and management strategies regarding recipient and donor selection, and treatment of HCV.

- 8:00 AM** *HCV Treatment Paradigms: Early Results from Cardiothoracic Transplantation and Consensus Recommendations*
Saima Aslam, MD, MS, UCSD Medical Center, San Diego, CA, United States
- 8:15 AM** *Donor Profiles and Recipient Selection Criteria when Considering HCV-Infected Donors*
Cameron Wolfe, MBBS, MPH, Duke University, Durham, NC, United States
- 8:30 AM** *Approaches to Donor-Derived HCV Infection: The Practical Applications of Pre-Emptive and Delayed Therapy*
Ann E Woolley, MD, MPH, Brigham and Women's Hospital, Boston, MA, United States
- 8:45 AM** *Financial and Waitlist Time Implications from the Use of HCV+ Organs*
Mandeep R Mehra, MD, FRCP, FACC, FESC, Brigham and Women's Hospital, Boston, MA, United States
- 9:00 AM** *Direct Acting Antivirals for HCV: A Whole New World!*
Steven P Ivulich, BPharm, Alfred Hospital, Melbourne, Australia

8:00 AM - 9:30 AM

SYMPOSIUM 26: Update on Lung Transplantation in Cystic Fibrosis (PULM, AN-CC, CT-SURG, ID, PATH, PEDS)

Chairs: Christian Benden, MD FCCP, Alice L. Gray, MD, and Lilibeth M Carlos, BPharm (Hons)

Session Summary: This session will provide an update on issues surrounding lung transplantation in candidates with cystic fibrosis. Topics to be covered include timing of referral/listing in the era of CFTR modulators, the use of CFTR modulators post-transplant, and other non-pulmonary considerations unique to this population.

- 8:00 AM** *Referral and Transplantation in the Era of CFTR Modulators*
Ernestina Melicoff-Portillo, MD, Baylor College of Medicine, Houston, TX, United States
- 8:12 AM** *Perioperative Antimicrobial Strategies for Patient with CF Undergoing Lung Transplantation*
Erika D Lease, MD, University of Washington, Seattle, WA, United States
- 8:24 AM** *Pre/Post-Transplant GI Surgical Considerations in the CF Transplant Recipient*
Matthew G Hartwig, MD, Duke University Medical Center, Durham, NC, United States
- 8:36 AM** *Long-Term Considerations in the CF Post-Transplant Recipient*
Bart L. Rottier, MD, Univ Med Ctr Groningen, Groningen, Netherlands
- 8:48 AM** *DEBATE: Transition of the CF Late Adolescent Transplant Patient Should Be Delayed (PRO)*
Stuart Sweet, MD, St. Louis Children's Hospital, St. Louis, MO, United States
- 8:58 AM** *DEBATE: Transition of the CF Late Adolescent Transplant Patient Should Be Delayed (CON)*
Miranda Paraskeva, MBBS, Alfred Hospital, Melbourne, Australia

8:00 AM - 9:30 AM

**SYMPOSIUM 27: Success Starts at the Beginning: Improving Outcomes From Referral to Implant and Beyond
(CARD, AN-CC, CT-SURG, NURS-AH, PEDS, PHARM, PULM)**

Chairs: Colleen J LaBuhn, RN, MSN, Erin S Davis, BSN, RN, and Finn Gustafsson, MD, PhD

Session Summary: The purpose of this session is to discuss the process that surrounds mechanical circulatory support including when to refer, initial evaluation for candidacy, optimization before implant and management of patients following MCS therapy. In this session we will discuss various challenges and perspectives of the multidisciplinary team and how to best prepare the patients for positive outcomes. A panel discussion with all speakers will conclude this session.

- 8:00 AM** *Early Identification of Advancing Heart Failure: Knowing When to Refer*
Bow (Ben) Chung, MD, University of Chicago, Chicago, IL, United States
- 8:12 AM** *Evaluation for Candidacy: Can We Optimize for Better Results?*
Tonya I Elliott, MSN, RN, CCTC, CHFN, MedStar Washington Hospital Center, Reston, VA, United States
- 8:24 AM** *Looking at MCS through a Different Lens: The Psychosocial Perspective*
Kristin Sandau, PhD, RN, Bethel University, St. Paul, MN, United States
- 8:36 AM** *Can Early Education Be the Start of Success?*
Desiree Robson, RN BSc (Hons), St Vincent 's Hospital, Sydney, Australia
- 8:48 AM** *What Role Does Medical Optimization Play in Surgical Implantation?*
Evgenij V. Potapov, MD, PhD., Deutsches Herzzentrum, Berlin, Germany
- 9:00 AM** *Adverse Events and How to Achieve Successful Management and Long Term Outcomes*
Sarah Schettle, PA-C, Mayo Clinic, Rochester, MN, United States

9:45 AM - 11:15 AM

**ORAL SESSION 32: News From the HEART of the Pandemic
(CARD, ID, PEDS, RES-IMM)**

Chairs:

- 9:45 AM** *(17) Early Report on COVID-19 Infections in Pediatric Heart Transplant Recipients and Candidates; J. Conway¹, S. Auerbach², M. Richmond³, N. Timkovich⁴, E. Pahl⁵, B. Feingold⁶, E. Azeka⁷, W. J. Dreyer⁸, R. Cantor⁴, J. K. Kirklin⁴. ¹Stollery Children's Hospital, Edmonton, AB, Canada, ²Children's Hospital Colorado, Aurora, CO, ³Columbia University Irving Medical Center, New York, NY, ⁴KIRSO at University of Alabama, Birmingham, AL, ⁵Northwestern University, Feinberg School of Medicine, Chicago, IL, ⁶Children Hospital of Pittsburg, Pittsburg, PA, ⁷University of Sao Paulo, Sao Paulo, Brazil, ⁸Texas Children's Hospital, Houston, TX*
- 9:55 AM** *(18) Death Rate in Heart Transplant Recipients during the COVID-19 Outbreak in France; C. Legeai¹, C. Jasseron¹, C. Cantrelle¹, S. Varnous², M. Para³, E. Epailly⁴, S. Guendouz⁵, L. Sebbag⁶, R. Guillemain⁷, E. Vermes⁸, F. Kerbaul¹, R. Dorent¹. ¹Agence de la Biomédecine, Saint-Denis La Plaine, France, ²Cardiovascular Surgery, Pitié-Salpêtrière Hospital, Paris, France, ³Cardiovascular Surgery, Bichat Hospital, Paris, France, ⁴Cardiovascular Surgery, Civil Hospital, Strasbourg, France, ⁵Cardiovascular Surgery, Henri Mondor Hospital, Créteil, France, ⁶Transplant Department, Louis Pradel, Bron, France, ⁷Anesthesiology*

Department, Georges Pompidou Hospital, Paris, France, ⁸Cardiovascular Surgery, Trousseau Hospital, Tours, France

- 10:15 AM** (20) *Mortality Predictors in COVID-19 Patients with Cardiogenic Shock*; L. C. Brooks, E. E. Coglianesse. *Cardiology, Massachusetts General Hospital, Boston, MA*
- 10:25 AM** (21) *COVID-19 Impact on Heart Organ Transplantation - New Insights from a Single-Center Experience*; C. G. Gidea¹, N. Moazami², H. Neumann³, A. Fargnoli², J. Pavone¹, T. Lewis¹, T. Saraon¹, R. Goldberg¹, B. Kadosh¹, S. Katz¹, S. Rao¹, S. Metha³, D. Smith², A. Reyentovich¹. ¹*Advanced Heart Failure and Heart Transplantation, NYU Langone Health, New York, NY*, ²*Department of Cardiothoracic Surgery, NYU Langone Health, New York, NY*, ³*Infectious Disease Transplant Institute, NYU Langone Health, New York, NY*
- 10:35 AM** (22) *Use of Remdesivir to Treat COVID-19 after Orthotopic Heart Transplant*; J. M. Duran¹, A. Y. Lin¹, M. Barat¹, S. Aslam², E. D. Adler¹. ¹*Medicine, Division of Cardiology, UC San Diego Medical Center, La Jolla, CA*, ²*Medicine, Division of Infectious Disease, UC San Diego Medical Center, La Jolla, CA*

9:45 AM - 11:15 AM

ORAL SESSION 33: Elucidating Early Immune Processes After Lung Transplantation (RES-IMM, CT-SURG, PULM)

Chairs:

- 9:45 AM** (107) *Trafficking and Repopulation of Donor B Cells in a Minor-Mismatched Mouse Lung Transplant Model*; M. Kawashima, G. Teskey, B. Joe, H. Buhari, J. Oliver, T. Watanabe, M. Cypel, S. Keshavjee, T. Martinu, S. Juvet. *Latner Thoracic Research Laboratories, Toronto General Hospital Research Institute, Toronto, ON, Canada*
- 9:55 AM** (108) *Donor T and NK Cells with a Special Tissue-Resident Memory Phenotype Migrate into the Periphery of Lung Transplant Recipients - A Potential Feature for Tolerance Development*; R. Bellmàs Sanz¹, L. Ruhl¹, A. Hitz¹, B. Wiegmann², K. Bläsing¹, W. Sommer³, F. Ius², J. Kühne¹, A. Knöfel², L. Horn¹, I. Tudorache², A. Haverich², D. Jonigk⁴, G. Warnecke³, C. Falk¹. ¹*Institute of Transplant Immunology, Hannover Medical School, Hannover, Germany*, ²*Department of Cardiothoracic, Transplantation and Vascular Surgery, Hannover Medical School, Hannover, Germany*, ³*Department of Heart Surgery, Heidelberg University Hospital, Heidelberg, Germany*, ⁴*Institute of Pathology, Hannover Medical School, Hannover, Germany*
- 10:05 AM** (109) *Characterization of Plasma-Derived Exosomes from Patient with Primary Graft Dysfunction after Lung Transplantation*; L. I. Chacon Alberty¹, E. Curty¹, D. Doud², C. Hochman-Mendez¹, G. Loor². ¹*Texas Heart Institute, Houston, TX*, ²*Baylor College of Medicine, Houston, TX*
- 10:15 AM** (110) *A Novel Natural Autoantibody Targeted Complement Inhibitor Protects against Lung Transplant Ischemia Reperfusion Injury*; A. McQuiston, C. Li, K. Patel, Z. Tu, Q. Cheng, S. Tomlinson, C. Atkinson. *Medical University of South Carolina, Charleston, SC*
- 10:25 AM** (111) *A Protective Role of Donor B Cells against Ischemia-Reperfusion Injury in a Minor-Mismatched Mouse Lung Transplant Model*; M. Kawashima, G. Teskey, B. Joe, Z. Guan, J. Oliver, N. Sachewsky, T. Watanabe, H. Buhari, C. Lam, M. Cypel, S. Keshavjee, T. Martinu, S. Juvet. *Latner Thoracic Research Laboratories, Toronto General Hospital Research Institute, Toronto, ON, Canada*

10:35 AM (112) *Resolution of Post-Lung Transplant Ischemia-Reperfusion Injury is Mediated via Resolvin D1-Alx/FPR2 and Maresin 1-LGR6 Receptor Signaling*; V. Leroy¹, J. Cai¹, A. Filiberto¹, Z. Tu², A. Emtiazoo², C. Atkinson², T. Machuca¹, G. R. Upchurch¹, A. K. Sharma¹. ¹Department of Surgery, University of Florida, Gainesville, FL, ²Department of Medicine, University of Florida, Gainesville, FL

9:45 AM - 11:15 AM

**ORAL SESSION 34: Small But Mighty: MCS in Pediatrics
(PEDS, CARD, CT-SURG)**

Chairs:

9:45 AM (191) *Outcomes of ECMO versus VAD in Children with Congenital Heart Disease as a Bridge to Transplant in Recent Era: Analysis from United Network for Organ Sharing Database*; J. Trivedi¹, B. Alsoufi², M. Slaughter³, S. Deshpande⁴, B. B. Das⁵. ¹Research and Bostatistics, University of Louisville, Louisville, KY, ²Cardiovascular Surgery, University of Louisville, Louisville, KY, ³Cardiothoracic Surgery, University of Louisville, Louisville, KY, ⁴Pediatric Cardiology, Children's National Hospital, Washington, D.C., WA, ⁵Pediatric Cardiology, Baylor College of Medicine, Houston, TX

9:55 AM (192) *Outcomes of Ventricular Assist Device Use in Children for Bridge to Heart Replantation*; J. C. Dykes¹, M. Ma², J. Murray¹, S. A. Hollander¹, E. L. Profita¹, D. N. Rosenthal¹, C. Chen¹, C. S. Almond¹. ¹Pediatrics, Stanford University, Palo Alto, CA, ²Cardiothoracic Surgery, Stanford University, Palo Alto, CA

10:05 AM (193) *Outcomes of Infants and Children with Stage 1 Single Ventricle Implanted with Ventricular Assist Devices: An Analysis of the Advanced Cardiac Therapies Improving Outcomes Network (ACTION) Registry*; A. Joong¹, S. Chen², M. Absi³, D. W. Bearl⁴, J. Friedland-Little⁵, C. R. Villa⁶, D. M. Peng⁷. ¹Pediatric Cardiology, Lurie Children's Hospital, Chicago, IL, ²Pediatric Cardiology, Lucile Packard Children's Hospital, Palo Alto, CA, ³Pediatric Cardiology, Le Bonheur Children's Hospital, Memphis, TN, ⁴Pediatric Cardiology, Monroe Carell Jr. Children's Hospital, Nashville, TN, ⁵Pediatric Cardiology, Seattle Children's Hospital, Seattle, WA, ⁶Pediatric Cardiology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ⁷Pediatric Cardiology, C.S. Mott Children's Hospital, Ann Arbor, MI

10:15 AM (194) *VAD Support of the Fontan Circulation: An Analysis of the STS Pedimacs and Interimacs Databases*; E. K. Bedzra¹, I. Adachi², K. Maeda³, D. Peng⁴, Y. Naka⁵, A. Lorts⁶, S. Amdani⁷, s. law⁸, J. P. Jacobs⁹, D. Koehl¹⁰, R. Cantor¹⁰, A. Cedars¹¹, D. L. Morales¹². ¹Cardiothoracic Surgery, Cook Children's Medical Center, Fort Worth, TX, ²Cardiothoracic Surgery, Texas Children's Hospital, Houston, TX, ³Cardiac Surgery, Children's Hospital of Pennsylvania, Philadelphia, PA, ⁴Pediatric Cardiology, C.S. Mott Children's Hospital, Ann Arbor, MI, ⁵Cardiothoracic Surgery, Columbia University Medical Center, New York, NY, ⁶Pediatric Cardiology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ⁷Pediatric Cardiology, Cleveland Clinic, Cleveland, OH, ⁸Pediatric Cardiology, Morgan Stanley Children's Hospital, Columbia University Medical Center, New York, NY, ⁹Cardiothoracic Surgery, University of Florida, Gainesville, FL, ¹⁰James and John Kirklin Institute for Research in Surgical Outcomes, University of Alabama, Birmingham, AL, ¹¹Pediatric Cardiology, Children's Medical Center, Dallas, TX, ¹²Cardiothoracic Surgery, Cincinnati Children's Hospital, Cincinnati, OH

10:25 AM (195) *Clinical Outcomes of Ventricular Assist Device for Failing Bidirectional Glenn Physiology*; J. Moon¹, H. Tunuguntla², S. Tume², J. Spinner², B. Elias¹, J. McMullen¹, W. J. Dreyer², S. Denfield², J. Price², S. Choudhry², K. Puri², Z. Spigel¹, J. Cho¹, I. Adachi¹.

¹Congenital Heart Surgery, Texas Children's Hospital, Houston, TX, ²Pediatric Cardiology, Texas Children's Hospital, Houston, TX

10:35 AM

(196) Characterization of Strokes in Children on Ventricular Assist Devices: An Action Collaborative Analysis; D. M. Peng¹, M. F. Shezad², A. Lorts², R. J. Gajarski³, C. VanderPluym⁴, J. M. Murray⁵, B. Hawkins⁴, C. R. Villa², F. Zafar², D. N. Rosenthal⁶.
¹Pediatrics (Cardiology), University of Michigan, CS Mott Children's Hospital, Ann Arbor, MI, ²The Heart Institute, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ³Nationwide Children's Hospital, Columbus, OH, ⁴Boston Children's Hospital, Boston, MA, ⁵Stanford University, Lucile Packard Children's Hospital, Palo Alto, CA, ⁶Pediatrics (Cardiology), Stanford University, Lucile Packard Children's Hospital, Palo Alto, CA

9:45 AM - 11:15 AM

ORAL SESSION 35: As Good As New: Myocardial Recovery after MCS - What Does It Take? (CARD)

Chairs:

9:45 AM

(173) Greater Left Ventricular Remodeling in Patients with Heartmate 3 Support is Associated with Fewer Heart Failure Readmissions, Gastrointestinal Bleeding and Renal Failure; V. K. Randhawa, A. Kochar, A. Mentias, E. G. Soltesz, M. Z. Tong, R. C. Starling, J. D. Estep. Cleveland Clinic Foundation, Cleveland, OH

9:55 AM

(174) Long Term Post Explant Outcomes from RESTAGE-HF: A Prospective Multi-Center Study of Myocardial Recovery Using LVADs; E. Birks¹, J. E. Rame², M. Yin³, S. R. Patel⁴, B. Lowes⁵, C. Selzman³, J. Trivedi⁶, M. Laughter⁶, P. Atluri⁷, D. Goldstein⁴, S. Maybaum⁸, J. Um⁵, K. Margulies⁷, J. Stehlik³, C. Cunningham⁶, R. Starling⁹, D. Farrar¹⁰, S. Drakos³.
¹University of Kentucky, Lexington, KY, ²Jefferson University Hospital, Philadelphia, PA, ³University of Utah School of Medicine, Salt Lake City, UT, ⁴Montefiore Medical Center, Bronx, NY, ⁵University of Nebraska, Omaha, NE, ⁶University of Louisville, Louisville, KY, ⁷University of Pennsylvania, Philadelphia, PA, ⁸Northwell Health, Manhasset, NY, ⁹Cleveland Clinic, Cleveland, OH, ¹⁰Abbott Laboratories, Chicago, IL

10:05 AM

(175) Predictors of Myocardial Recovery Following LVAD-Mediated Reverse Remodeling and Device Removal: Insights from RESTAGE-HF; E. Birks¹, M. Yin², J. Rame³, S. Patel⁴, B. Lowes⁵, C. Selzman⁶, R. Starling⁷, J. Trivedi⁸, M. Slaughter⁹, P. Atluri¹⁰, D. Goldstein⁴, S. Maybaum¹¹, J. Um⁵, K. Margulies¹⁰, J. Stehlik⁶, C. Cunningham⁹, D. Farrar¹², S. Drakos².
¹University of Kentucky, Lexington, KY, ²Cardiology, University of Utah School of Medicine, Salt Lake City, UT, ³Jefferson University Hospital, Philadelphia, PA, ⁴Montefiore Medical Center, Bronx, NY, ⁵University of Nebraska, Omaha, NE, ⁶University of Utah School of Medicine, Salt Lake City, UT, ⁷Cleveland Clinic, Cleveland, OH, ⁸University of Louisville, Louisville, KY, ⁹University of Louisville, Louisville, KY, ¹⁰University of Pennsylvania, Philadelphia, PA, ¹¹Northwell Health, Manhasset, NY, ¹²Abbott Laboratories, Chicago, IL

10:15 AM

(176) Comparison of Cardiac Reverse Remodeling between Older and Newer Generation Continuous-Flow LVAD; M. Yin¹, A. Michaels², L. Genovese³, M. Indaram⁴, K. Shah¹, R. Singh³, W. Caine⁵, H. Neme¹, R. Alharethi⁵, D. Tang³, C. Selzman⁶, M. Kanwar⁷, J. Cowger², P. Shah³, S. G. Drakos⁶.
¹Cardiology, University of Utah School of Medicine, Salt Lake City, UT, ²Henry Ford Hospital, Detroit, MI, ³Inova Health System, Falls Church, VA, ⁴Cardiology, Allegheny Health Network, Pittsburg, PA, ⁵Intermountain Heart Intesitute, Salt Lake City, UT, ⁶University of Utah School of Medicine, Salt Lake City, UT, ⁷Allegheny Health Network, Pittsburg, PA

10:25 AM *(177) The Impact of Diabetes Mellitus and Glycemia on Myocardial Recovery*; I. Taleb, C. P. Kyriakopoulos, O. Wever-Pinzon, C. Chaudhary, M. Y. Yin, T. J. Richins, S. Navankasattusas, E. Dranow, R. Alharethi, A. G. Koliopoulou, A. G. Kfoury, J. Stehlik, B. B. Reid, L. Kemeyou, K. S. Shah, M. L. Goodwin, J. C. Fang, C. H. Selzman, S. G. Drakos. *U.T.A.H. Cardiac Transplant Program (University of Utah Health & School of Medicine, Intermountain Medical Center, George E. Wahlen VA Medical Center), Salt Lake City, UT*

10:35 AM *(178) Low Peak VO₂ and Pulse Pressure Augmentation on Exercise in LVAD Patients with Recovery and Pump Explant*; V. Ton, J. Rouvina, C. White, A. Kowal, G. Cotter, J. Camuso, T. Logan, K. Milley, A. Anthony, M. A. Villavicencio-Theoduloz, S. S. Thomas, E. Coglianesi, G. D. Lewis. *Division of Cardiology, Massachusetts General Hospital, Boston, MA*

9:45 AM - 11:15 AM

SYMPOSIUM 28: Hot Topics for Transplant and MCS Clinicians: Burnout, #SoMe and Psychosocial Issues (NURS-AH, AN-CC, CARD, CT-SURG, ID, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Michael G. Petty, PhD, RN, CNS, and Sarah E Schroeder, ACNP-BC, MSN RN

Session Summary: This session focuses on hot topics relevant to transplant and MCS clinicians of all disciplines, including provider burnout and resilience, social media use among transplant professionals, and pressing psychosocial issues. This session will feature a physician's own personal story of heart transplantation and transformation, after months of attributing heart failure symptoms to the busy lives we lead as healthcare providers. A panel discussion with all speakers will conclude this session.

9:45 AM *From My Heart: A Physician's Personal Story of Transplant and Transformation*
Alin Gragossian, DO, The Mt Sinai Hospital, Icahn School of Medicine, Philadelphia, PA, United States

9:57 AM *A Hard Day at Work: Provider Burnout and Resilience in Transplant Medicine*
Melissa Cousino, PhD, C.S. Mott Children's Hospital, Ann Arbor, MI, United States

10:09 AM *#SoMe, So What? Should the Transplant Community Embrace Social Media?*
Brian Keller, MD, PhD, The Ohio State University, Columbus, OH, United States

10:21 AM *Self-Management Interventions: What Really Works?*
Christiane Kugler, PhD, Albert-Ludwigs-University Freiburg, Dortmund, Germany

10:33 AM *DEBATE: Ready to Launch! Our Young Adults Must Transition (PRO)*
Lynsey M Barkoff, NP, Lucile Packard Children's Hospital, Palo Alto, CA, United States

10:45 AM *DEBATE: Ready to Launch! Our Young Adults Must Transition (CON)*
Kathleen L Grady, PhD, APN, FAAN, Northwestern Memorial Hospital, Chicago, IL, United States

9:45 AM - 11:15 AM

SYMPOSIUM 29: What Has COVID Taught Us About MCS? Lessons from 2020 for 2021 (CT-SURG, CARD, NURS-AH)

Chairs: Daniel Zimpfer, MD, Christopher T Salerno, MD, and Fabienne Dobbels, MSc, PhD

Session Summary: This symposium will first describe the use of ECMO in patients with COVID 19 and the experience of COVID infection in patients with mechanical support. Then it will discuss what we can learn from the pandemic to improve and streamline our management of VAD patients going forward -now that the current day pumps have greater reliability and durability can we see these patients less often and in more of a shared care model? Telehealth was successful during the pandemic can it be used more going forward in these patients and how can better virtual monitoring and Cardiomechs help in their care.

- 9:45 AM** *ECMO Support for COVID-19*
Luciano Potena, MD, PhD, Bologna Academic Hospital, Bologna, Italy
- 10:00 AM** *COVID Outcomes in VAD Patients*
Edo Y Birati, MD, Hospital of the University of Pennsylvania, Philadelphia, PA, United States
- 10:15 AM** *VAD Follow Up in 2021 - Hindsight from 2020*
Leway Chen, MD, MPH, University of Rochester, Rochester, NY, United States
- 10:30 AM** *Cardiomechs and LVAD*
Stavros G Drakos, MD, PhD, FACC, University of Utah Health & School of Medicine, Salt Lake City, UT, United States
- 10:45 AM** *Virtual Care Delivery during COVID-19 and Beyond - Lessons from the Plague for Telehealth and Virtual Monitoring*
Jesus Casida, PhD, RN, Johns Hopkins University, Baltimore, MD, United States

9:45 AM - 11:15 AM

SYMPOSIUM 30: Global Perspectives on Decreasing Waitlist Mortality: Expanded Donors and Prioritized Candidates
(CARD, AN-CC, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Kiran K Khush, MD, MAS, D. Eric Steidley, MD, and Javier Carbone, PhD

Session Summary: Advances in donor selection, innovative procurement strategies, and heart allocation policies are evolving. This session will review international practices aimed at decreasing wait list mortality. Talks will be given on the use of non-conventional donors, innovative procurement strategies, prioritization of underserved populations and controversial trends in urgent transplantation. A panel discussion will advance the discussion to considerations of post-transplant survival. A panel discussion with all speakers will conclude this session.

- 9:45 AM** *The New Normal: Decreasing Waitlist Mortality and Increasing Transplant Rates from Donors with High Risk Features*
Ricardo La Hoz, MD, University of Texas Southwestern, Dallas, TX, United States
- 9:57 AM** *Leveling the Playing Field: Decreasing Waitlist Mortality by Prioritizing Sensitized Patients in Canada*
Kim Anderson, MD, Dalhousie University, Toronto, ON, Canada
- 10:09 AM** *Just Because We Can, Doesn't Mean We Should: Use of Status Modifying Therapies in Waitlist Urgency*
Maria G Crespo-Leiro, MD, PhD, Hospital Universitario A Coruna, La Coruna, Spain
- 10:21 AM** *More Opportunities: Evolving Practices Including Use of DCD and Advanced Age Donors*
Kumud K Dhital, BMBCh, FRCS-CTh, FRACS, PhD, Yashoda Hospitals, Hyderabad, Telengana, India

10:33 AM *Getting Warmer: Expanding the Donor Pool with Use of Ex-Vivo Perfusion*
Abbas Ardehali, MD, UCLA School of Medicine, Los Angeles, CA, United States

10:45 AM *How We Got Here: Reflections on the Evolving OPTN Allocation System*
Maryl R Johnson, MD, University of Wisconsin, Madison, WI, United States

3:00 PM - 4:00 PM

MINI ORAL 06: Risk and Reward in Pulmonary Arterial Hypertension
(CT-SURG, AN-CC, CARD, PEDS, PULM, RES-IMM)

Chairs:

3:00 PM (431) *The Choice of Priming Solution for Cardiopulmonary Bypass during Pulmonary Endarterectomy for CTEPH Patients Has Important Impact*; K. Furrer¹, D. Bettex², T. Horisberger², I. Inci¹, O. Schmid³, N. G. Nagaraj³, H. Morselli¹, B. Battilana¹, R. Schuepbach⁴, S. Ulrich⁵, M. Hebeisen¹, A. Matter¹, I. Opitz¹. ¹Department of Thoracic Surgery, University Hospital Zurich, Zurich, Switzerland, ²Institute of Anesthesiology, University Hospital Zurich, Zurich, Switzerland, ³Perfusion Department, University Hospital Zurich, Zurich, Switzerland, ⁴Division of Surgical Intensive Care Unit, University Hospital Zurich, Zurich, Switzerland, ⁵Department of Pulmonology, University Hospital Zurich, Zurich, Switzerland

3:10 PM (433) *Prolonged Circulatory Arrest is Not Associated with Stroke or Mortality after Pulmonary Thromboendarterectomy*; J. L. Armstrong¹, A. M. Vekstein², A. Seas¹, C. M. Wojnarski², A. M. Ganapathi³, J. C. Haney². ¹School of Medicine, Duke University Medical Center, Durham, NC, ²Department of Surgery, Duke University Medical Center, Durham, NC, ³Department of Surgery, Ohio State Medical Center, Columbus, OH

3:15 PM (434) *Hemodynamic Parameters in Predicting Survival in Pulmonary Arterial Hypertension*; M. K. Kanwar¹, J. Krainsangka², J. Scott³, T. Barrett⁴, A. Everett⁵, A. Perer⁶, J. Antaki⁷, R. Benza⁴. ¹Allegheny General Hospital, Pittsburgh, PA, ²Information and Communication Technology, Mahidol, Thailand, ³Carnegie Mellon University, Pittsburgh, PA, ⁴Ohio State University, Columbus, OH, ⁵Johns Hopkins University, Baltimore, MD, ⁶Carnegie Mellon University, Pittsburgh, PA, ⁷Meinig School of Biomedical Engineering Cornell University, Ithaca, NY

3:20 PM (435) *MicroRNA Expression Analysis in Chronic Thromboembolic Pulmonary Hypertension Using Pulmonary Endarterectomy Derived Samples*; I. S. Martínez López¹, T. Papatziropoulos¹, F. Schlaepfer¹, S. Ulrich², I. Opitz¹, M. B. Kirschner¹. ¹Department of Thoracic Surgery, University Hospital Zurich, Zurich, Switzerland, ²Department of Pulmonology, University Hospital Zurich, Zurich, Switzerland

3:25 PM (436) *Measures of Right Ventricular Afterload Predict Exercise Pulmonary Hypertension beyond Mean Pulmonary Artery Pressure*; S. Osman¹, R. F. Bentley¹, S. Mak². ¹Medicine, University of Toronto, Toronto, ON, Canada, ²Medicine, Mount Sinai/University Health Network, Toronto, ON, Canada

3:30 PM (437) *Hemodynamic Parameters in Predicting Time to Clinical Worsening in Pulmonary Arterial Hypertension*; M. Kanwar¹, J. Krainsangka², J. Scott³, A. Peter³, J. Antaki⁴, R. Benza⁵. ¹Allegheny General Hospital, Pittsburgh, PA, ²Mahidol University, Mahidol, Thailand, ³Carnegie Mellon University, Pittsburgh, PA, ⁴Cornell University, Ithaca, NY, ⁵Ohio State University, Columbus, OH

3:35 PM **(438) *Synthesis of CT Imaging and Right Heart Catheterization Enables Single-Beat RV-PA Coupling Estimations in Heart Failure Patients*; A. Scott¹, D. Hernandez-Hernandez¹, E. Adler², P. Kim², S. Kligerman³, F. Contijoch¹. ¹Bioengineering, University of CA, San Diego, San Diego, CA, ²University of CA, San Diego, San Diego, CA, ³Radiology, University of CA, San Diego, San Diego, CA**

3:40 PM **(439) *Lung and Heart-Lung Transplantation for Children with PAH: Dramatic Benefits from the Implementation of High-Priority Allocation Program in France*; J. Le Pavec¹, S. Feuillet¹, O. Mercier¹, P. Pradère¹, G. Dauriat¹, A. Crutu¹, V. Florea¹, L. Savale², M. Levy³, F. Laverdure¹, F. Stephan¹, D. Fabre¹, D. Mitilian¹, D. Boulate¹, S. Mussot¹, S. Hascoët¹, D. Bonnet³, M. Humbert², E. Fadel¹. ¹Hôpital Marie Lannelongue, Le Plessis Robinson, France, ²Hôpital Kremlin Bicêtre, Kremlin Bicêtre, France, ³Hôpital Necker, Paris, France**

3:00 PM - 4:00 PM

**WORKSHOP 13: Advances in the Microbiome: The Secret World Inside Us
(CARD, AN-CC, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)**

Chairs: Nancy Law, DO, MPH, and Allan R Glanville, MBBS, MD, FRACP

Session Summary: It is now understood that the human body is home to a multitude of niche environments, each with their own unique microbiome, which appears to have an important symbiotic role with the host and modulates functioning of the associated organ system. The most researched of these is the gut microbiome. Although, our understanding of this symbiotic relationship has stemmed from gut-based research, it developed to include the reciprocal relationships between the gut and other organs including the heart and lung.

3:00 PM ***The Gut Microbiome as a Modulator in Transplant*
Steven Greenway, MD, Alberta Children's Hospital, Calgary, AB, Canada**

3:15 PM ***The Microbiome Changes of Heart Failure, Heart Transplant and MCS*
Melana Yuzefpolskaya, MD, Columbia University, New York, NY, United States**

3:30 PM ***The Microbiome after Lung Transplantation and Effects on CLAD*
Alicia B Mitchell, B.Med.Sci (Hons), PhD, Sydney Medical School/University of Sydney, Sydney, Australia**

3:00 PM - 4:00 PM

**WORKSHOP 14: DSAs and AMR: When and How to Treat
(PULM, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, RES-IMM)**

Chairs: Emilie Jean St. Michel, MD MSc, and Deborah Levine, MD

Session Summary: This session will provide guidance on when and how to treat the highly sensitized peri-operative candidate for transplant. Speakers will discuss treatment of donor specific antibodies identified in the post-transplant phase, and the treatment plan for recipients who develop antibody mediated rejection. A panel discussion with all speakers will conclude this session.

3:00 PM ***Peri-Operative Treatment of the Sensitized Candidate*
Patricia P Chang, MD, Univ of North Carolina, Chapel Hill, NC, United States**

3:15 PM ***Post-Transplant DSAs: When and How to Treat*
Angela W Velleca, RN, MHDS, CCTC, Cedars Sinai Heart Institute, Los Angeles, CA, United States**

3:30 PM *AMR in Pediatric and Adult Post-Transplant Recipients*
Steven P Ivulich, BPharm, The Alfred Hospital, Melbourne, Australia

3:00 PM - 4:00 PM

WORKSHOP 15: Coagulation Wars: Rogue Anticoagulation Strategies in Durable MCS (PHARM, AN-CC, CARD, CT-SURG, NURS-AH, PEDS, PULM)

Chairs: Douglas L Jennings, PharmD, Georgina Waldman, PharmD, and Lucas Eastaugh, MBBS, FRACP, FCSANZ

Session Summary: This session will focus on anticoagulation strategies and monitoring in adult and pediatric patients on durable mechanical circulatory support (MCS). Anticoagulation bridging approaches, reversal methods, and anticoagulation monitoring strategies will be discussed.

3:00 PM *Phantom Menace: Anticoagulation Bridging for Durable MCS*
Tara Veasey, PharmD, BCPS, Allegheny General Hospital, Pittsburgh, PA, United States

3:15 PM *A New Hope: Reversal of Bleeding for Durable MCS*
Joanne Lee, PharmD, Lucile Packard Children's Hospital, Palo Alto, CA, United States

3:30 PM *Return of the Pharmacists: Pharmacist-Driven Anticoagulation for Durable MCS*
Cassandra Vale, BPharm, GradCert ClinPharm, The Prince Charles Hospital, Queensland, Australia

4:00 PM - 5:30 PM

MINI ORAL 07: Cardiac Immunosuppression

(CARD, AN-CC, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs:

4:00 PM *(299) Is a Switch to Cyclosporine from Tacrolimus a Risk in Heart Transplant Recipients?; D. Chang, M. Kittleson, J. Patel, E. Kransdorf, M. Hamilton, A. Hage, A. Nikolova, N. Patel, T. Singer-Englar, L. Czer, A. Trento, J. A. Kobashigawa. Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*

4:05 PM *(300) Prolonged Release Tacrolimus Has Comparable Safety and Efficacy Profile as Standard Release Tacrolimus in Heart Transplant Recipients; G. Pogljajen, G. Zemljic, S. Frljak, R. Okrajsek, M. Šebeštjen, A. Cerar, V. Andročec, B. Vrtovec. Advanced Heart Failure and Transplantation Center, Dept. of Cardiology, University Medical Center, Ljubljana, Slovenia*

4:10 PM *(301) Retrospective Evaluation of Rabbit Anti-Thymocyte Globulin (rATG) Induction in Heart Transplant Patients; G. Lee¹, R. Cheng², C. Wu³, A. Vasbinder³, B. Wong⁴, S. Farris², D. Fishbein², J. Wong¹. ¹Pharmacy, University of Washington Medical Center, Seattle, WA, ²Cardiology, University of Washington Medical Center, Seattle, WA, ³Statistics, University of Washington Medical Center, Seattle, WA, ⁴Pharmacy, Kaiser Permanente, Seattle, WA*

4:15 PM *(302) Conversion from Liquid Prograf to Prograf Granules—Lessons Learned from Our Early Experience; N. McDonald¹, J. Lee², S. Gonzales³, S. A. Hollander³, D. N. Rosenthal³, K. Wujcik¹, M. Rosenberg¹, E. Profita³, C. S. Almond³. ¹Pediatric Cardiology, Lucile Packard Children's Hospital Stanford, Palo Alto, CA, ²Heart Transplant, Lucile Packard Children's Hospital Stanford, Palo Alto, CA, ³Pediatric Cardiology, Stanford University School of Medicine, Palo Alto, CA*

- 4:20 PM** (303) *Long-Term Effects of Monotherapy with Low Dose Tacrolimus*; J. Patel, M. Kittleson, M. Froch, N. Patel, T. Singer-Englar, G. Jamero, E. Kransdorf, A. Hage, D. Megna, L. Czer, J. A. Kobashigawa. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*
- 4:25 PM** (304) *Use of Prednisone Increases Post Heart Transplantation Mortality: Is it a Necessary Evil?*; T. A. Buchan¹, B. Heegaard², L. M. Nelson², F. Foroutan¹, H. J. Ross¹, M. McDonald¹, F. Gustafsson², A. C. Alba¹. ¹Cardiology, Toronto General Hospital, University Health Network, Toronto, ON, Canada, ²Cardiology, Copenhagen University Hospital, Rigshospitalet, Copenhagen, Denmark
- 4:30 PM** (305) *The Optimal Cumulative Dose of Rabbit Antithymocyte Globulin Induction in Adult Heart Transplantation*; C. Wu¹, Y. Chen². ¹Department of Pharmacy, National Taiwan University Hospital, Taipei, Taiwan, ²Department of Cardiovascular Surgery, National Taiwan University Hospital, Taipei, Taiwan
- 4:35 PM** (306) *Outcomes of Induction Immunosuppressive Therapy in Combined Heart-Liver Transplantation*; H. Abdulameer. *Smidt Heart Institute, Cedars-Sinai Medical Center, Los Angeles, CA*
- 4:40 PM** (307) *Association of Infection Rate in Heart Transplant Recipients with Combined Tacrolimus and Sirolimus at High versus Low Concentration*; S. Goyal, J. Negrelli, J. Lyons, M. Liebo. *Loyola University Medical Center, Maywood, IL*
- 4:45 PM** (308) *Cardiac Allograft Tolerance Induction with Ox40L Costimulatory Blockade*; D. C. Becerra¹, P. Patel², J. O², K. Ahrens², C. Miller², J. Morrisette², A. Dehnadi², I. Hanekamp², T. Costa², V. Tkachev³, L. Kean³, J. Madsen². ¹Surgery, Duke University, Durham, NC, ²Surgery, Massachusetts General Hospital, Boston, MA, ³Stem Cell Transplant Center, Boston Children's Hospital, Boston, MA
- 4:50 PM** (309) *ZFYVE21 is a Mediator of Non-Canonical Hedgehog Signaling Activating NLRP3 Inflammasomes in a Pathologic Subset of CD4+PD-1hi T Cells*; B. Jiang¹, C. Fang¹, C. Soh², X. Li¹, A. Geirsson³, G. Tellides³, J. S. Pober⁴, D. Jane-Wit¹. ¹Dept of Cardiovascular Medicine, Yale School of Medicine, New Haven, CT, ²Cambridge University, Cambridge, United Kingdom, ³Dept of Surgery, Yale School of Medicine, New Haven, CT, ⁴Dept of Pathology, Yale School of Medicine, New Haven, CT
- 4:55 PM** (310) *Sex-Based Outcomes of Heart Re-Transplantation: Analysis from UNOS Database*; A. Kainuma¹, Y. Ning², P. A. Kurlansky¹, A. N. Melehy³, V. Topkara⁴, F. Latif⁴, M. A. Farr⁴, G. T. Sayer⁴, N. Uriel⁴, Y. Naka¹, K. Takeda¹. ¹Department of Surgery CT, New York Presbyterian Hospital/Columbia University Medical Center, NY, NY, ²Department of Surgery RCIOR, New York Presbyterian Hospital/Columbia University Medical Center, NY, NY, ³Columbia University, NY, NY, ⁴Dept of Medicine Cardiology, New York Presbyterian Hospital/Columbia University Medical Center, NY, NY

4:00 PM - 5:30 PM

MINI ORAL 08: COVID-19: Impact on Lung Transplant Recipients and their Post-Transplant Care (ID, AN-CC, CARD, CT-SURG, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs:

- 4:00 PM** (323) *A Multicenter Prospective Registry Study of Lung Transplant Recipients Hospitalized with COVID-19*; M. R. Heldman¹, O. S. Kates¹, A. Multani², J. M. Steinbrink³, A. V. Lewis⁴, B. D. Alexander⁵, O. E. Beard⁴, S. Sehgal⁶, A. D. Mishkin⁷, R. M. La Hoz⁸, E. A. Blumberg⁹, J. Nelson¹⁰, K. Safa¹¹, C. N. Kotton¹², M. Hemmersbach-Miller¹³, Z. S. Chaudhry¹⁴, K. Saharia¹⁵, J. A. Morillas¹⁶, R. M. Rakita¹, A. S. Sait¹⁷, F. Meloni¹⁸, H. Wilkens¹⁹, P.

Camargo²⁰, S. D. Tanna²¹, R. Tomic²², M. G. Ison²³, E. D. Lease²⁴, C. E. Fisher¹, A. P. Limaye¹. ¹Department of Medicine, Division of Allergy and Infectious Diseases, University of Washington, Seattle, WA, ²Department of Medicine, Division of Infectious Diseases, University of California at Los Angeles, Los Angeles, CA, ³Department of Medicine, Division of Infectious Diseases, Duke University, Durham, NC, ⁴Department of Medicine, Division of Allergy and Infectious Diseases, University of California at Los Angeles, Los Angeles, CA, ⁵Department of Medicine, Division of Allergy and Infectious Diseases, Duke University, Durham, NC, ⁶Department of Thoracic Medicine and Surgery, Temple University, Philadelphia, PA, ⁷Department of Medicine, Temple University, Philadelphia, PA, ⁸Division of Infectious Diseases and Geographic Medicine, University of Texas Southwestern Medical Center, Dallas, TX, ⁹Department of Medicine, University of Pennsylvania Perelman School of Medicine, University of Washington, Seattle, WA, ¹⁰Department of Medicine, Division of Infectious Diseases, Stanford University, Palo Alto, CA, ¹¹Transplant Center and Division of Nephrology, Massachusetts General Hospital, Boston, MA, ¹²Transplant Infectious Diseases, Massachusetts General Hospital, Boston, MA, ¹³Section of Infectious Diseases, Baylor College of Medicine, Houston, TX, ¹⁴Transplantation Infectious Diseases and Immunotherapy, Henry Ford Health System, Detroit, MI, ¹⁵Department of Medicine, University of Maryland, Baltimore, MD, ¹⁶Department of Infectious Diseases, Cleveland Clinic, Cleveland, OH, ¹⁷Department of Medicine, Division of Infectious Diseases, Johns Hopkins School of Medicine, Baltimore, MD, ¹⁸IRCCS San Matteo Foundation and University, Pavia, Italy, ¹⁹Department of Internal Medicine V-Pneumology and Critical Care Medicine, University Hospital of Saarland, Homburg, Germany, ²⁰Priscila, Hospital Israelita Albert Einstein, Sao Paulo, Brazil, ²¹Department of Medicine, Division of Allergy and Infectious Diseases, Northwestern University Feinberg School of Medicine, Chicago, IL, ²²Department of Medicine, Division of Pulmonology and Critical Care, Northwestern University Feinberg School of Medicine, Chicago, IL, ²³Comprehensive Transplant Center, Northwestern University Feinberg School of Medicine, Chicago, IL, ²⁴Department of Medicine, Division of Pulmonology, Critical Care, and Sleep Medicine, University of Washington, Seattle, WA

- 4:05 PM** (324) **Cell-Free DNA Tissue Damage Mapping in Transplant Patients Infected with COVID-19**; T. E. Andargie¹, M. Jang¹, F. Seifuddin², H. Kong¹, I. Tunc², K. Singh², R. Woodward³, M. Pirooznia², H. Valantine¹, S. Agbor-Enoh¹. ¹Genomic Research Alliance for Transplantation (GRAfT) and Laboratory of Applied Precision Omics, National Heart, Lung, and Blood Institute (NHLBI), NIH, Bethesda, MD, ²Bioinformatics and Computation Core, National Heart, Lung, and Blood Institute (NHLBI), NIH, Bethesda, MD, ³CareDx, Brisbane, CA
- 4:10 PM** (325) **Impact of COVID-19 on Lung Transplantation in Australia**; M. S. Johal, E. K. Granger, P. Jansz, M. Connellan, A. Watson, A. Iyer, M. A. Malouf, A. P. Havryk, M. Plit. *St Vincent's Cardiothoracic department, University of New South Wales, Sydney, Australia*
- 4:15 PM** (326) **COVID-19 Related Stress among Lung Transplant Recipients**; A. J. Devito Dabbs¹, J. Keeling², M. L. Vendetti¹, D. Ren¹, P. Sanchez³, M. R. Morrell⁴. ¹University of Pittsburgh School of Nursing, Pittsburgh, PA, ²Cardiothoracic Transplant Center, UPMC Presbyterian Hospital, Pittsburgh, PA, ³Cardiothoracic Surgery, University of Pittsburgh School of Medicine, Pittsburgh, PA, ⁴Div of PACCM, University of Pittsburgh School of Medicine, Pittsburgh, PA
- 4:20 PM** (327) **Death Rate in Lung Transplant Recipients during the COVID-19 Outbreak in France**; C. Legeai¹, C. Cantrelle¹, C. Jasseron¹, F. Parquin², H. Mal³, A. Olland⁴, J. Le Pavec⁵, G. Brioude⁶, J. Mornex⁷, T. Lepoivre⁸, F. Kerbaul¹, R. Dorent¹. ¹Agence de la Biomédecine, Saint-Denis la Plaine, France, ²Anesthesiology Department, Foch Hospital, Suresnes, France, ³Pneumology, Bichat Hospital, Paris, France, ⁴Thoracic Surgery, Civil Hospital, Strasbourg, France, ⁵Thoracic Surgery, Marie-Lannelongue Hospital, Le Plessis

Robinson, France, ⁶Thoracic Surgery, North Hospital, Marseille, France, ⁷Pneumology, Louis Pradel Hospital, Bron, France, ⁸Anesthesiology, Laennec Hospital, Nantes, France

- 4:25 PM** **(328) Lung Transplantation for Acute Respiratory Distress Syndrome Related to COVID-19: The Lesson Learned from the First Two Cases;** A. Palleschi¹, L. Rosso¹, D. Tosi², I. Righi², P. Mendogni², V. Musso³, L. Morlacchi², V. Vaira¹, A. Muscatello², A. Bandera¹, E. Privitera², A. Scandroglio⁴, T. De Feo², M. Cardillo⁵, G. Grasselli¹, A. Pesenti¹, S. Ferrero³, A. Gori¹, F. Blasi¹, A. Zangrillo⁴, M. Nosotti¹. ¹Department of Pathophysiology and Transplantation, University of Milan, Milan, Italy, ²Fondazione IRCCS Ca' Granda - Ospedale Maggiore Policlinico, Milan, Italy, ³University of Milan, Milan, Italy, ⁴Vita-Salute San Raffaele University, Milan, Italy, ⁵National Transplant Center, Rome, Italy
- 4:30 PM** **(329) Poor Outcomes of COVID-19 in Lung Transplant Recipients. Cohort Study in a Single Center;** S. M. Amor¹, B. D. Fox², A. Grubstein³, D. Rosengarden¹, Y. Shostak¹, D. Shitenberg¹, M. R. Kramer¹. ¹Pulmonary Division, Rabin Medical Center, Petah Tikva, Israel, ²Pulmonary Division, Shamir Medical Center, Tzrifin, Israel, ³Radiology Institute, Rabin Medical Center, Petah Tikva, Israel
- 4:35 PM** **(330) Lung Allograft Dysfunction in a COVID-19 Transplanted Patient is Associated with a Peculiar Immunopathological Phenotype;** V. Vaira¹, G. Croci², A. Palleschi³, L. Rosso⁴, D. Trabattoni⁵, M. Biasin⁵, L. C. Morlacchi⁶, V. Rossetti⁷, F. Blasi⁷, M. Nosotti⁸, M. Clerici⁹, S. Ferrero¹. ¹Division of Pathology, Fondazione IRCCS Ca' Granda - Ospedale Maggiore Policlinico, Milan, Italy, ²Division of Pathology, Division of Pathology, Fondazione IRCCS Ca' Granda, Ospedale Maggiore Policlinico, Milan, Italy, Milan, Italy, ³Division of Thoracic Surgery and Lung Transplantation, Fondazione IRCCS Ca' Granda - Ospedale Maggiore Policlinico, Milan, Italy, ⁴Thoracic Surgery and Lung Transplantation, Fondazione IRCCS Ca' Granda - Ospedale Maggiore Policlinico, Milan, Italy, ⁵Department of Biomedical and Clinical Sciences L. Sacco, University of Milan, Milan, Italy, ⁶Internal Medicine Department, Respiratory Unit and Adult Cystic Fibrosis Center, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy, ⁷Internal Medicine Department, Respiratory Unit and Adult Cystic Fibrosis Center, Fondazione IRCCS Ca' Granda - Ospedale Maggiore Policlinico, Milan, Italy, ⁸Unit of Thoracic Surgery and Lung Transplantation, Fondazione IRCCS Ca' Granda - Ospedale Maggiore Policlinico, Milan, Italy, ⁹Department of Pathophysiology and Transplantation, University of Milan, Milan, Italy
- 4:40 PM** **(331) Immunosuppressive Treatment Does Not Prevent Humoral and Cellular Virus-Specific Immunity in Heart or Lung Recipients with SARS-CoV-2 Pneumonia;** E. Seminari¹, T. Abbate², E. Arbustini³, B. Cattadori¹, A. Di Matteo¹, E. Gabanti⁴, F. Meloni⁵, C. Pellegrini⁶, A. Turco⁷, F. Zavaglio⁴, D. Lilleri⁴. ¹Infectious Disease, IRCCS S.Matteo Foundation, Pavia, Italy, ²Respiratory Diseases, IRCCS S.Matteo Foundation, Pavia, Italy, ³Genetics of cardiomyopathies, IRCCS S.Matteo Foundation, Pavia, Italy, ⁴Virology, IRCCS S.Matteo Foundation, Pavia, Italy, ⁵Respiratory Diseases, IRCCS S.Matteo Foundation, University, Pavia, Italy, ⁶Cardiothoracic Surgery, IRCCS S.Matteo Foundation, University, Pavia, Italy, ⁷Infectious Disease, Internal medicine, IRCCS S.Matteo Foundation, Pavia, Italy
- 4:45 PM** **(332) Rapid ECMO Training for Nurses in Response to the COVID-19 Pandemic;** B. Toy¹, A. Emmarco¹, L. Lester², M. Lohan-Mullens³, E. Ottoson³, T. Garofalo³, M. Saputo³, N. Moazami⁴, Z. Kon⁴, D. Smith⁴. ¹Transplant Institute, NYU Langone Health, New York, NY, ²NYU Grossman School of Medicine, NYU Langone Health, New York, NY, ³Nursing, NYU Langone Health, New York, NY, ⁴Cardiothoracic Surgery, NYU Langone Health, New York, NY
- 4:50 PM** **(333) Implementation of a Chatbot Mobile Health Intervention with Home Spirometry to Monitor Lung Transplant Recipients Remotely;** A. Odisho¹, J. P. Singer², A. Perez², L. E. Leard², R. Shah², J. A. Golden², M. Kleinhenz², N. Kolaitis², J. Maheshwari², A. Liu¹, B. Trinh³, J. Kukreja³, J. Greenland², D. Calabrese², S. R. Hays². ¹Center for Digital Health

Innovation, University of California, San Francisco, San Francisco, CA, ²Medicine, University of California, San Francisco, San Francisco, CA, ³Surgery, University of California, San Francisco, San Francisco, CA

4:55 PM (334) *Interdisciplinary Approach to Comprehensive Virtual Patient Care in Lung Transplant*; N. Marks, L. Singer, L. Wickerson, C. Chaparro, G. Zilinskas, C. Masino, L. Won, P. Dalton, S. Keshavjee, A. Sidhu. *Toronto Lung Transplant Program, University Health Network Toronto General Hospital, Toronto, ON, Canada*

4:00 PM - 5:30 PM

MINI ORAL 09: What Could Go Wrong? Management and Complications Following LVAD (CT-SURG, AN-CC, CARD, ID, NURS-AH, PHARM, RES-IMM)

Chairs:

4:00 PM (407) *Correlation between Body Mass Index and Renal Function before and after LVAD: Evidence for Overestimation of Renal Function Using Creatinine in the Advanced Heart Failure Population*; R. Cogswell¹, M. Masotti², J. Schultz¹, C. M. Martin¹, M. Pritzker¹, F. Kamdar¹, R. Knoper³, A. Shaffer³, R. John³. ¹Department of Medicine, Division of Cardiology, University of Minnesota, Minneapolis, MN, ²Department of Biostatistics, University of Minnesota, Minneapolis, MN, ³Department of Surgery, Division of Cardiovascular Surgery, University of Minnesota, Minneapolis, MN

4:05 PM (408) *Aortic Valve Status Detection for Heart Failure Patient with LVAD Using Deep Neural Networks*; M. Fetanat¹, M. Stevens¹, C. Hayward², N. Lovell¹. ¹Graduate School of Biomedical Engineering, UNSW, Sydney, Australia, ²Cardiology Department, St Vincent's Hospital, Sydney, Australia

4:10 PM (409) *Raising the (LVAD) Bar: Temporary RVAD Support and its Effects on Renal Function*; R. Moayedifar, S. Sandner, E. Kagerl, J. Riebandt, D. Wiedemann, T. Schloeglhofer, G. Laufer, D. Zimpfer. *Medical University Vienna, Vienna, Austria*

4:15 PM (410) *Quality of Anticoagulation with Phenprocoumon and Warfarin in Left Ventricular Assist Device Patients: A Multicenter Study*; T. Schlöglhofer¹, K. Meehan², A. Marschütz¹, C. Stonebraker², S. Lupo², V. Jeevanandam², H. Schima¹, D. Zimpfer¹, P. Combs². ¹Division of Cardiac Surgery, Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna, Austria, ²Section of Cardiac Surgery, University of Chicago Medical Center, Chicago, IL

4:20 PM (411) *To Bleed or Not to Bleed: MCS-Related Shear Stress Promotes Redistribution of GPIIb and α IIb β 3 from Platelets to Microparticles Thus Impairing Platelet Hemostatic Function*; Y. Roka-Moia¹, S. Miller-Gutierrez¹, J. Sheriff², D. Bluestein², M. Slepian¹. ¹Department of Medicine, University of Arizona, Tucson, AZ, ²Department of Biomedical Engineering, Stony Brook University, Stony Brook, NY

4:25 PM (412) *Gastrointestinal Bleeding, International Normalized Ratio, and Subsequent Risk of Recurrent Thromboembolic Events among Left Ventricular Assist Device Patients*; S. Sherazi¹, I. Goldenberg¹, S. McNitt¹, B. Polonsky¹, I. Gosev², H. Vidula¹, J. Alexis¹. ¹Cardiology, University of Rochester, Rochester, NY, ²Cardiac Surgery, University of Rochester, Rochester, NY

4:30 PM (413) *Follow-Up after Cold Atmospheric Argon Plasma for Wound Management of Driveline Infections - A Promising Strategy*; J. Kremer¹, F. Mueller², M. Farag¹, A. Ruhparwar³, M. Karck¹, B. Schmack³. ¹Cardiac Surgery, University Hospital Heidelberg,

Heidelberg, Germany, ²Cardiology, University Hospital Homburg, Homburg, Germany, ³Cardiothoracic Surgery, University Hospital Essen, Essen, Germany

- 4:35 PM** (414) **Device-Induced Platelet Dysfunction in Patients after Left Ventricular Assist Device Implantation**; K. Klaeske¹, M. Dieterlen¹, S. Eifert¹, F. Sieg¹, U. Scholz², J. Garbade¹, K. Jawad¹, M. A. Borger¹, A. L. Meyer³. ¹Clinic for Cardiac Surgery, Heart Center Leipzig, Leipzig, Germany, ²Center of Hemostasis, MVZ Labor Dr. Reising-Ackermann und Kollegen, Leipzig, Germany, ³Department of Cardiac Surgery, University Hospital Heidelberg, Heidelberg, Germany
- 4:40 PM** (415) **Comprehensive Analysis of Long-Term Outcomes after HeartMate 3 LVAD Implantation Depending on Surgical Access**; R. Antończyk, A. Bielka, M. Kalinowski, J. Waszak, J. Małyszczek-Tumidajewicz, I. Copik, M. Borowicz, M. O. Zembala. Department of Cardiac, Vascular and Endovascular Surgery and Transplantology, SMDZ in Zabrze, Medical University of Silesia in Katowice, Silesian Centre for Heart Diseases, Zabrze, Poland, Zabrze, Poland
- 4:45 PM** (416) **Intravenous Iron Replacement in Patients with Left Ventricular Assist Devices**; A. Mardis¹, L. B. Straw¹, A. Robinson¹, C. Crowder², P. J. McCann¹, R. S. Napier¹, C. R. Mardis³. ¹Prisma Health, Columbia, SC, ²Intermountain Healthcare, Salt Lake City, UT, ³University of South Carolina College of Pharmacy, Columbia, SC
- 4:50 PM** (417) **Patient-Reported Health Status in Relation to Change in Skeletal Muscle Mass and Function during Left Ventricular Assist Device Support**; A. Singla¹, P. Karanja¹, J. Chery¹, A. Coston¹, A. R. Vest². ¹Tufts University Medical Center, Boston, MA, ²Tufts Medical Center, Boston, MA
- 4:55 PM** (418) **Outcomes of Patients Referred for Cardiac Rehabilitation after Left Ventricular Assist Device Implantation**; A. Shaaban¹, J. Schultz², J. Leonard¹, R. John³, C. M. Martin², T. Alexy², M. Pritzker², T. Thenappan², F. Kamdar², A. Shaffer³, R. Cogswell². ¹Department of Medicine, University of Minnesota, Minneapolis, MN, ²Department of Medicine, Division of Cardiology, University of Minnesota, Minneapolis, MN, ³Department of Surgery, Division of Cardiovascular Surgery, University of Minnesota, Minneapolis, MN

4:00 PM - 5:30 PM

**MINI ORAL 10: Cardiogenic Shock and Other Surprises
(CT-SURG, AN-CC, CARD)**

Chairs:

- 4:00 PM** (287) **Use of Extracorporeal Membrane Oxygenation for Heart Graft Dysfunction in Adults: Incidence, Risk Factors, and Outcomes in a Multicentric Study**; M. Hébert¹, P. Noly¹, Y. Lamarche¹, P. Voisine², J. Robles-Cortes², J. Verhoye³, E. Flécher³, M. Carrier¹. ¹Cardiac Surgery, Montreal Heart Institute, Montreal, QC, Canada, ²Cardiac Surgery, Quebec Heart and Lung Institute, Québec, QC, Canada, ³Thoracic and Cardiovascular Surgery, Rennes Hospital, Rennes, France
- 4:05 PM** (288) **Compatibility of Novel Cardiogenic Shock Phenotypes from the Cardiogenic Shock Working Group (CSWG) with the SCAI Staging System**; E. Zweck¹, K. L. Thayer², O. K. Helgestad³, M. Kanwar⁴, M. Ayouty⁵, A. Garan⁶, J. Hernandez-Montfort⁷, C. Mahr⁸, D. Wencker⁹, S. Sinha¹⁰, E. Vorovich¹¹, J. Abraham¹², W. O'Neill¹³, S. Li⁸, G. W. Hickey¹⁴, J. Jossiasen¹⁵, C. Hassager¹⁶, L. O. Jensen³, L. Holmvang¹⁶, H. Schmidt³, H. B. Ravn¹⁶, J. E. Moeller³, D. Burkhoff¹⁷, N. K. Kapur². ¹Heinrich Heine University, Dusseldorf, Germany, ²Tufts Medical Center, Boston, MA, ³Odense University Hospital, Odense, Denmark, ⁴Allegheny Health Network, Pittsburgh, PA, ⁵Tufts University School of Medicine, Boston,

MA, ⁶Beth Israel Deaconess Medical Center, Boston, MA, ⁷Cleveland Clinic Florida, Weston, FL, ⁸University of Washington Medical Center, Seattle, WA, ⁹Baylor Scott & White Advanced Heart Failure Clinic, Dallas, TX, ¹⁰Inova Heart and Vascular Institute, Falls Church, VA, ¹¹Northwestern Medicine, Chicago, IL, ¹²Providence Heart Institute, Portland, OR, ¹³Henry Ford Hospital, Detroit, MI, ¹⁴University of Pittsburgh Medical Center, Pittsburgh, PA, ¹⁵Rigshospitalet, Copenhagen, Denmark, ¹⁶University of Copenhagen, Copenhagen, Denmark, ¹⁷Cardiac Research Foundation, New York, NY

- 4:10 PM** (289) **Coronary Flow Reserve Predicts Major Adverse Cardiac Events and All-Cause Mortality in Heart Transplant Recipients**; K. P. Bjerre, T. Clemmensen, S. Poulsen, A. Hvas, B. Løgstrup, E. Grove, F. Flyvholm, S. Kristensen, H. Eiskjær. *Department of Cardiology, Aarhus University Hospital, Aarhus N, Denmark*
- 4:15 PM** (290) **Evaluating the Role for Simultaneous Heart Kidney Transplantation in Patients with Continuous Flow Ventricular Assist Devices**; P. J. Altschuler, M. R. Helmers, J. J. Han, D. Herbst, R. Hu, A. Schiazza, A. Iyengar, P. Alturi. *Surgery, Department of Cardiovascular Surgery, University of Pennsylvania, Philadelphia, PA*
- 4:25 PM** (292) **Outcomes for Cardiogenic Shock: Comparison of Patients Transferred from Outside Hospitals with Those Directly Admitted to an Advanced Heart Failure Centre**; V. N. Wang¹, D. H. Brahmhatt¹, C. Overgaard², A. Luk¹. ¹*Division of Cardiology, University Health Network, Toronto, ON, Canada*, ²*Division of Cardiology, Southlake Regional Health Centre, Newmarket, ON, Canada*
- 4:30 PM** (293) **Clinical Outcomes Associated with Acute Mechanical Circulatory Support Utilization in Heart Failure Related Cardiogenic Shock**; J. Hernandez-Montfort¹, S. Sinha², K. L. Thayer³, E. H. Whitehead⁴, M. Pahuja⁵, A. R. Garan⁶, C. Mahr⁷, J. L. Haywood³, N. M. Harwani³, A. Schaeffer⁸, M. Kanwar⁹, D. Burkhoff¹⁰, N. K. Kapur³. ¹*Cleveland Clinic Florida, Coral Springs, FL*, ²*Inova Heart and Vascular Institute, Fall Church, VA*, ³*Tufts Medical Center, Boston, MA*, ⁴*Massachusetts General Hospital, Boston, MA*, ⁵*Wayne State University, Detroit, MI*, ⁶*Beth Israel Deaconess Medical Center, Boston, MA*, ⁷*University of Washington Medical Center, Seattle, WA*, ⁸*University of Texas Medical Branch, Galveston, TX*, ⁹*Allegheny Health Network, Pittsburgh, PA*, ¹⁰*Cardiovascular Research Foundation, New York, NY*
- 4:35 PM** (294) **Impact of Age on Outcomes in Patients with Cardiogenic Shock**; M. Kanwar¹, K. L. Thayer², A. Garan³, J. Hernandez-Montfort⁴, E. H. Whitehead⁵, C. Mahr⁶, S. Sinha⁷, E. Vorovich⁸, N. M. Harwani², E. Zweck⁹, J. Abraham¹⁰, D. Burkhoff¹¹. ¹*Cardiovascular Institute, Allegheny Health Network, Pittsburgh, PA*, ²*Tufts Medical Center, Boston, MA*, ³*Beth Israel Deaconess Medical Center, Boston, MA*, ⁴*Cleveland Clinic Florida, Weston, FL*, ⁵*Massachusetts General Hospital, Boston, MA*, ⁶*University of Washington, Seattle, WA*, ⁷*Inova Heart and Vascular Institute, Fall Church, VA*, ⁸*Northwestern Medicine, Chicago, IL*, ⁹*Heinrich Heine University, Dusseldorf, Germany*, ¹⁰*Providence Heart Institute, Portland, OR*, ¹¹*Cardiovascular Research Foundation, New York, NY*
- 4:40 PM** (295) **Geographic Distribution in Use of Extended Criteria Donors**; A. Critsinelis¹, T. Nordan², C. Hironaka², Y. Zhan², F. Y. Chen², G. S. Couper², M. Kawabori². ¹*Department of Surgery, Mount Sinai Medical Center, Miami Beach, FL*, ²*Tufts medical center, Boston, MA*
- 4:45 PM** (296) **Geographic Variation in High-Priority Listing Status Under the New U.S. Heart Allocation Policy**; G. Ran¹, K. Chung¹, A. S. Anderson², R. Gibbons³, W. F. Parker³. ¹*University of Chicago Pritzker School of Medicine, Chicago, IL*, ²*Department of Medicine, The University of Texas at San Antonio, San Antonio, TX*, ³*Department of Medicine and Public Health, University of Chicago, Chicago, IL*

4:50 PM *(297) Ex Situ Heart Perfusion and Standard of Care Cold Storage Differentially Affect the Ischemic Secretome of Donor Hearts in Perfusates but Not the Reperfusion Response in Recipient Plasma*; B. Wiegmann¹, N. Ledwoch², E. Chichelnitskiy², F. Lus¹, F. Wandrer², J. Kühne², K. Beushausen², J. Keil², S. Rojas-Hernandez³, W. Sommer³, C. Kühn³, I. Tudorache³, M. Avsar³, A. Haverich³, G. Warnecke³, C. Falk². ¹Department of Cardiothoracic, Transplantation and Vascular Surgery, Hannover Medical School, Hannover, Germany, ²Institut for Transplantation Immunology, Hannover Medical School, Hannover, Germany, ³Department of Cardiothoracic, Transplantation and Vascular Surgery, Hannover Medical School, Hannover, Germany

4:55 PM *(298) Direct Advanced Therapy Off Veno-Arterial Extracorporeal Membrane Oxygenation Support: Impact of New Heart Allocation Policy on Early Outcomes*; S. Ohira¹, D. Spielvogel¹, A. L. Gass², A. Levine², C. Aggarwal-Gupta², S. Pan², G. M. Lanier², B. Abraham³, C. Austin-Mattison³, E. Jennings³, K. McCrink³, P. J. Spencer¹, M. Kai¹. ¹Cardiothoracic Surgery, Westchester Medical Center, Valhalla, NY, ²Cardiology, Westchester Medical Center, Valhalla, NY, ³Westchester Medical Center, Valhalla, NY

4:00 PM - 5:30 PM

SYMPOSIUM 31: JHLT at ISHLT: The Year in a Capsule

(ALL, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Marco Masetti, MD, PhD, and Peter Hopkins, MD

Session Summary: This session will review the most impactful papers published in Journal of Heart and Lung Transplantation (JHLT) over the past year, among a broad field of interest: advanced lung disease and lung transplantation, advanced heart disease and cardiac transplantation, mechanical circulatory support and pulmonary vascular disease. After a presentation of the main papers by junior faculty, expert senior members will comment how they significantly contributed to change the current knowledge and practice.

4:00 PM *JHLT Best Papers of the Year*
Daniel R Goldstein, MD, University of Michigan, Ann Arbor, MI, United States

4:05 PM *Highlights of Advanced Heart Disease and Cardiac Transplantation*
Lynn Punnoose, MD, Vanderbilt University School of Medicine, Nashville, TN, United States

4:17 PM *Invited Discussant in Advanced Heart Disease and Cardiac Transplantation*
Andreas Zuckermann, MD, Medical Univ of Vienna, Vienna, Austria

4:22 PM *Highlights of Advanced Lung Disease and Lung Transplantation*
Caroline M Patterson, BMBS BMedSci MD, Royal Papworth Hospital, Cambridge, United Kingdom

4:34 PM *Invited Discussant in Advanced Lung Disease and Lung Transplantation*
Sandra Lindstedt, MD, PhD, Lund University Hospital, Lund, Sweden

4:39 PM *Highlights of Mechanical Circulatory Support*
Yaron D. Barac, MD, PhD, Rabin Medical Center, Petach-Tikva, Israel

4:51 PM *Invited Discussant in Mechanical Circulatory Support*
Ivan Netuka, MD, PhD, Institute for Clinical and Experimental Medicine, Prague, Czech Republic

4:56 PM *Highlights of Pulmonary Vascular Disease*
Sarah Medrek, MD, University of New Mexico, Albuquerque, NM, United States

5:08 PM *Invited Discussant in Pulmonary Vascular Disease*
Marion Delcroix, MD, University Hospital Leuven, Leuven, Belgium

4:00 PM - 5:30 PM

SYMPOSIUM 32: Early Markers for CLAD Development: Ready to Use or Discard?
(PULM, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, RES-IMM)

Chairs: Geert M Verleden, MD, PhD, FERS, Federica Meloni, MD, and Kieran Halloran, MD, MSc

Session Summary: This session will give an update on the current status of blood and BAL biomarkers and early changes in pulmonary function, imaging, and pathology which might predict the development of CLAD and its specific phenotypes. A panel discussion with all speakers will conclude this session.

4:00 PM *Pulmonary Function Changes as an Early Marker and Prognostic Sign for CLAD Phenotypes*
Greg Snell, MD, The Alfred Hospital, Melbourne, Australia

4:12 PM *Imaging Changes as an Early Marker and Prognostic Sign for CLAD Phenotypes*
Katharine Tweed, MBBS, BMedSci, Royal Papworth Hospital, Cambridge, United Kingdom

4:24 PM *Early Pathologic Changes: How Predictable are They as an Early Marker and Prognostic Sign for CLAD Phenotypes*
Elizabeth N Pavlisko, MD, Duke Univ Med Ctr, Durham, NC, United States

4:36 PM *Blood Biomarkers: Does Anything Stand at Present?*
Sam S Weigt, MD, UCLA Medical Center, Los Angeles, CA, United States

4:48 PM *BAL Biomarkers: What's in the Name?*
Angela Koutsokera, MD, PhD, Lausanne University Hospital, Lausanne, Switzerland

5:00 PM *Wrap Up: The Final Answers?*
Scott M Palmer, MD, MHS, Duke University, Durham, NC, United States

4:00 PM - 5:30 PM

SYMPOSIUM 33: The Good, the Bad, the Ugly: Individualized VAD Therapy
(CARD, AN-CC, CT-SURG, ID, NURS-AH, PEDS, PHARM)

Chairs: Cally K Ho, MD, Jaime A Hernandez Montfort, MD MPH, and Stephan M. Ensminger, MD, DPhil

Session Summary: Tailoring treatments to individual patients has revolutionized other fields of medicine, but personalized therapies still need to gain attention in the left ventricle assist devices (LVADs) field. Even if LVADs are just few types, they are implanted in patients with different clinical and cultural characteristics. This symposium focuses on current disparities among LVAD patients and it investigates the importance of individualized therapies, titrated on sex, body mass, ethnicity and culture. A panel discussion with all speakers will conclude this session.

4:00 PM *Gender Matters before, during and after LVAD Implantation*
Silvia Mariani, MD, Hannover Medical School, Hannover, Germany

4:12 PM *Asterix or Obelix? Don't Forget Body Mass Index!*
Hannah Copeland, MD, University of Mississippi Medical Center, Jackson, MS, United States

- 4:24 PM** *Social Environment: Essential but Underestimated*
Alessandro Barbone, MD PhD, Humanitas Research Hospital IRCCS, Milan, Italy
- 4:36 PM** *Europe, North America and Australia: Brothers but Not Triplets in the VAD Family*
Daniel Zimpfer, MD, Medical University Vienna, Vienna, Austria
- 4:48 PM** *VADs in Asia, Africa and South America: The Need for Local Standards*
Erik Fung, MD, PhD, Prince of Wales Hospital, Hong Kong, China
- 5:00 PM** *The Complexity of a VAD Patient: How to Reach an Individualized Therapeutic Approach*
Pascal N Leprince, MD, PhD, La Pitie Salpetriere, Paris, France

Wednesday, April 28, 2021

8:00 AM - 9:30 AM

**MINI ORAL 11: More to Worry About Besides COVID: Other Viruses Can Still Cause Mischief in Heart Transplant Recipients
(CARD, AN-CC, CT-SURG, ID, PHARM)**

Chairs:

- 8:00 AM** (251) *Hepatitis B Virus Infection and Heart Transplantation Outcomes: An Analysis of the ISHLT Registry Data*; Y. Peled¹, R. Klempfner¹, J. Lavee¹, S. Ugolini², E. Raanani¹, W. S. Cherikh³, J. Stehlik². ¹Sheba Medical Center and Tel Aviv University, Ramat Gan, Israel, ²University of Utah School of Medicine, Salt Lake City, UT, ³United Network for Organ Sharing, Richmond, VA
- 8:10 AM** (253) *A Multi-Center Study of CMV Prophylaxis Strategies in Intermediate Risk (R+) Heart Transplant Recipients*; R. T. Cole¹, A. Devore², A. Morris³, T. Alexy⁴, J. M. Ortega-Legaspi⁵, M. Flattery⁶, E. Maziarz⁷, M. Molina⁵, E. Udeshi³, K. Shah⁶, C. Martin⁴, V. Maharaj⁴, P. Shah¹. ¹Cardiology, Inova Heart and Vascular Institute, Falls Church, VA, ²Cardiology, Duke University, Durham, NC, ³Cardiology, Emory University, Atlanta, GA, ⁴Cardiology, University of Minnesota, Minneapolis, MN, ⁵Cardiology, University of Pennsylvania, Philadelphia, PA, ⁶Cardiology, Virginia Commonwealth University, Richmond, VA, ⁷Duke University, Durham, NC
- 8:15 AM** (254) *Does CMV Status Affect Morbidity and Survival Following Heart Transplantation? A Large Multicentre Retrospective Study*; P. Callan¹, N. Yonan¹, K. Santhanakrishnan¹, E. Karimi¹, S. Pettit², O. Dar³, S. Lim⁴, J. Dalzell⁵, G. Parry⁶, R. Venkateswaran¹. ¹Wythenshawe Hospital Cardiothoracic Transplant Unit, Manchester Foundation Trust, Manchester, United Kingdom, ²Royal Papworth Hospital NHS Foundation Trust, Royal Papworth Hospital, Cambridge, United Kingdom, ³Royal Brompton and Harefield NHS Foundation Trust, Harefield Hospital, Manchester, United Kingdom, ⁴University Hospitals Birmingham NHS Trust, Queen Elizabeth Hospital, Birmingham, Birmingham, United Kingdom, ⁵Scottish National Advanced Heart Failure Unit, Golden Jubilee National Hospital, Glasgow, United Kingdom, ⁶Newcastle Hospitals NHS Foundation Trust, Freeman Hospital, Newcastle, United Kingdom
- 8:20 AM** (255) *Comparison of Outcomes in Heart Transplant Recipients Receiving CMV Prophylaxis with CMV IVIG with Valganciclovir versus Valganciclovir Alone*; I. Moss, A. Rumore, A. Brueckner. Tampa General Hospital, Tampa, FL
- 8:25 AM** (256) *Effect of Mycophenolate Mofetil Dosing on 6-month Risk of Acute Cellular Rejection, Leukopenia and CMV Viremia in Heart Transplant*; L. Braghieri¹, A. Pinsino², G. M. Mondellini¹, K. Finnigan¹, K. Takeda¹, Y. Naka¹, K. J. Clerkin¹, M. V. Habal¹, F. Latif¹, M. A. Farr¹, G. T. Sayer¹, N. Uriel¹, P. C. Colombo¹, M. Yuzefpolskaya¹, D. L. Jennings¹. ¹Columbia University Irving Medical Center, New York, NY, ²Albert Einstein College of Medicine Health + Hospitals/Jacobi, Bronx, NY
- 8:30 AM** (257) *Efficacy of 3 Months vs. 6 Months of Valganciclovir Prophylaxis for Heart Transplant Recipients at Intermediate Risk (R+) for CMV Complications*; J. Ortega-Legaspi¹, A. Morris², M. Flattery³, T. Alexy⁴, A. Devore⁵, V. Maharaj⁴, C. Martin⁴, E. Maziarz⁶, L. Cooper⁷, K. Shah³, M. Molina¹, E. Udeshi², P. Shah⁷, R. T. Cole⁷. ¹Cardiology, University of Pennsylvania, Philadelphia, PA, ²Cardiology, Emory University, Atlanta, GA, ³Cardiology, Virginia Commonwealth University, Richmond, VA, ⁴Cardiology, University of Minnesota, Minneapolis, MN, ⁵Cardiology, Duke University, Durham, NC, ⁶Duke University, Durham, NC, ⁷Cardiology, Inova Heart and Vascular Institute, Falls Church, VA

- 8:35 AM** (258) *The Risk of Leukopenia with Universal vs. Preemptive Prophylaxis Strategies in Heart Transplant Recipients at Intermediate Risk for CMV Complications*; A. Morris¹, M. Flattery², J. Ortega-Legaspi³, A. Devore⁴, T. Alexy⁵, P. Shah⁶, K. Nair⁷, R. T. Cole⁶.
¹Cardiology, Emory University, Atlanta, GA, ²Cardiology, Virginia Commonwealth University, Richmond, VA, ³Cardiology, University of Pennsylvania, Philadelphia, PA, ⁴Cardiology, Duke University, Durham, NC, ⁵Cardiology, University of Minnesota, Minneapolis, MN, ⁶Cardiology, Inova Heart and Vascular Institute, Falls Church, VA, ⁷Indiana University, Indianapolis, IN
- 8:40 AM** (259) *Universal CMV Prophylaxis Mitigates the Risks of Basiliximab Induction in Heart Transplant Recipients at Intermediate Risk (R+) for Post-Transplant CMV Complications*; T. Alexy¹, A. Morris², M. Flattery³, J. Ortega-Legaspi⁴, A. Devore⁵, P. Shah⁶, S. Sinha⁶, R. T. Cole⁶.
¹Cardiology, University of Minnesota, Minneapolis, MN, ²Cardiology, Emory University, Atlanta, GA, ³Cardiology, Virginia Commonwealth University, Richmond, VA, ⁴Cardiology, University of Pennsylvania, Philadelphia, PA, ⁵Cardiology, Duke University, Durham, NC, ⁶Cardiology, Inova Heart and Vascular Institute, Falls Church, VA
- 8:45 AM** (260) *Six-Month Outcomes of Heart Transplant Recipients Infected by COVID-19*; N. Diakos, F. Latif, K. Takeda, K. Clerkin, M. Habal, Y. Naka, S. Restaino, K. Oh, G. Sayer, M. Farr, N. Uriel. Columbia University, New York City, NY
- 8:50 AM** (261) *Non-Association of Infectious Exposure and Seasonality with Cardiac Graft Rejection*; W. Cohen, U. A. Siddiqi, P. S. Combs, W. Li, K. Pinkos, S. Mishra, A. Lee, T. Riley, C. Murks, J. Powers, L. Lourenco, V. Jeevanandam, J. Grinstein. University of Chicago, Chicago, IL
- 8:55 AM** (262) *Factors Associated with Neutropenia Post-Heart Transplantation*; J. K. Chow¹, R. Ruthazer², H. W. Boucher¹, A. R. Vest³, D. DeNofrio³, D. R. Snyderman¹.
¹Infectious Disease, Tufts Medical Center, Boston, MA, ²Tufts Clinical and Translational Science Institute, Biostatistics, Epidemiology, and Research Desig, Tufts Medical Center, Boston, MA, ³Cardiology, Tufts Medical Center, Boston, MA

8:00 AM - 9:30 AM

MINI ORAL 12: Immunology of Early Post-Lung Transplantation Events and Beyond (RES-IMM, AN-CC, CT-SURG, PULM)

Chairs:

- 8:00 AM** (335) *Ex Vivo Perfusion and In Vivo Xenotransplantation of Pig Lungs with Humanized Von Willebrand Factor Demonstrate Reduced Platelet Sequestration*; M. R. Connolly¹, L. Burdorf¹, Z. Habibabady¹, K. Petitpas¹, S. Sendil², C. Phelps³, K. Kuravi³, D. Ayares³, A. Azimzadeh⁴, R. Pierson¹.
¹Surgery, Massachusetts General Hospital, Boston, MA, ²Surgery, University of Maryland, Baltimore, Baltimore, MD, ³Revivacor, Blacksburg, VA, ⁴Massachusetts General Hospital, Boston, MA
- 8:05 AM** (336) *Natural Killer Cells Recognize Pulmonary Epithelial Stress Molecules during Primary Graft Dysfunction*; E. Aminian, B. Mallavia, F. Liu, S. Cleary, P. Wang, J. P. Singer, S. R. Hays, J. A. Golden, J. Kukreja, D. Dugger, M. Nakamura, L. L. Lanier, M. R. Looney, J. R. Greenland, D. R. Calabrese. University of California San Francisco, San Francisco, CA
- 8:10 AM** (337) *Deconvolution of Donor and Recipient Transcripts from Frozen Lung Transplant Biopsies*; G. W. Wilson, J. Allen, T. Martinu, S. Juvet, M. Liu, S. Keshavjee, J. C. Yeung. University of Toronto, Toronto, ON, Canada

- 8:15 AM** (338) *Performance of Donor Derived Cell-Free DNA in Routine Clinical Care of Lung Transplant Recipients, a Multi-Center Study*; M. B. Keller¹, C. Mutebi², P. Shah³, D. Levine⁴, S. Aryal⁵, I. Timofte⁶, J. Mathew³, A. Varghese⁷, C. Giner⁴, D. Ross⁸, B. Dale⁹, R. Woodward⁸, S. Agbor-Enoh². ¹Department of Critical Care Medicine, National Institute of Health, Bethesda, MD, ²Laboratory of Applied Precision Omics (APO) & Laboratory of Transplantation Genomics, National Institute of Health, Bethesda, MD, ³Pulmonary and Critical Care Medicine, Johns Hopkins Hospital, Baltimore, MD, ⁴Pulmonary and Critical Care Medicine, University of Texas Health San Antonio, San Antonio, TX, ⁵Pulmonary and Critical Care Medicine, Inova Fairfax Hospital, Falls Church, VA, ⁶Division of Pulmonary and Critical Care Medicine, University of Maryland Medical Center, Baltimore, MD, ⁷Pulmonary and Critical Care Medicine, University of Maryland Medical Center, Baltimore, MD, ⁸CareDx, Brisbane, CA, ⁹CareDx, Brisbane, MD
- 8:20 AM** (339) *Anti-HMGB1 Monoclonal Antibody Ameliorates Lung Ischemia Reperfusion Injury in Mice*; K. Nakata, M. Okazaki, S. Sugimoto, M. Yamane, S. Toyooka. Okayama University, Okayama, Japan
- 8:25 AM** (340) *The Smell of Lung Transplantation*; V. Verplancke¹, A. Sabbe², X. Dumoulin², E. Janssens², J. M. Hendriks¹, S. K. Yogeswaran¹, P. Lauwers¹, K. Lamote¹, J. M. Kwakkel- van Erp¹. ¹University Hospital Antwerp, Antwerp, Belgium, ²University of Antwerp, Antwerp, Belgium
- 8:30 AM** (341) *Deconvolution of Donor and Recipient Cells from Lung Transplant Single Cell RNA-seq Data*; G. W. Wilson, S. Moshkelgosha, A. Duong, S. Keshavjee, T. Martinu, S. Juvet, J. C. Yeung. University Health Network, Toronto, ON, Canada
- 8:35 AM** (342) *Plasma Levels of Histidine-Rich Glycoprotein are Associated with the Development of Primary Graft Dysfunction after Lung Transplantation*; T. Shiotani, S. Sugimoto, H. Yamamoto, K. Matsubara, D. Shimizu, K. Nakata, Y. Tomioka, K. Miyoshi, S. Otani, M. Okazaki, M. Yamane, S. Toyooka. General Thoracic Surgery, Organ Transplant Center, Okayama University, Okayama, Japan
- 8:40 AM** (343) *The Ratio between Naïve and Memory B Cells is Associated with Development of Early Donor-Specific Antibodies within the First Month after Lung Transplantation*; S. Christoph¹, A. Hitz¹, R. Bellmas-Sanz¹, J. Kühne¹, L. Ruhl¹, B. Wiegmann², W. Sommer³, J. Salman², T. Siemeni², C. Kühn², A. Haverich², G. Warnecke³, C. S. Falk¹. ¹Institute of Transplant Immunology, Hanover Medical School, Hannover, Germany, ²Department of Cardiothoracic, Transplantation and Vascular Surgery, Hanover Medical School, Hannover, Germany, ³Department of Heart Surgery, Heidelberg University Hospital, Heidelberg, Germany
- 8:45 AM** (344) *Alterations in Perfusate Leukocyte Populations are Associated with Donor Mode of Death and the Outcome of Ex Vivo Lung Perfusion*; A. Duong¹, G. Madu¹, D. Putman², M. Cypel¹, S. Keshavjee¹, J. Yeung¹, T. Martinu¹, S. Juvet¹. ¹Toronto Lung Transplant Program, University Health Network, Toronto, ON, Canada, ²Department of Internal Medicine, McMaster University, Hamilton, ON, Canada
- 8:50 AM** (345) *Application of Radiomics Based on ¹⁸F-fluorodeoxyglucose Positron Emission Tomography for Predicting of Allograft Rejection in a Rat Lung Transplantation Model*; D. Tian¹, H. Shiiya¹, M. Takahashi², Y. Terasaki³, H. Urushiyama⁴, A. Shinozaki-Ushiku⁵, M. Sato¹, J. Nakajima¹. ¹Department of Thoracic Surgery, The University of Tokyo Graduate School of Medicine, Tokyo, Japan, ²Division of Nuclear Medicine, Department of Radiology, The University of Tokyo Graduate School of Medicine, Tokyo, Japan, ³Department of Analytic Human Pathology, Nippon Medical School Graduate School of Medicine, Tokyo, Japan, ⁴Department of Respiratory Medicine, The University of Tokyo Graduate School of Medicine,

Tokyo, Japan, ⁵Department of Pathology, The University of Tokyo Graduate School of Medicine, Tokyo, Japan

8:55 AM (346) *Early Phase Circulating Donor-Derived Cell-Free DNA in Patients after Lung Transplantation*; K. Noda¹, B. J. Philips¹, N. R. Ryssel¹, Q. Xu², T. Harano¹, M. R. Morrell³, J. F. McDyer³, A. Zeevi², P. G. Sanchez¹. ¹Department of Cardiothoracic Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA, ²Department of Pathology, University of Pittsburgh Medical Center, Pittsburgh, PA, ³Department of Medicine, University of Pittsburgh Medical Center, Pittsburgh, PA

8:00 AM - 9:30 AM

MINI ORAL 13: Nothing Lasts Forever: Temporary MCS and Other (CT-SURG, AN-CC, CARD)

Chairs:

8:00 AM (419) *Outcomes of Heart Transplantation (HT) in Patients with Total Artificial Heart (TAH) as Bridge to Transplantation (BTT)*; F. A. Arabia¹, R. S. Gopalan², L. Deng³, R. S. Cantor³, S. Seethala², M. J. Colon¹, A. V. Kalya², O. L. Amabile¹, M. R. Tasset¹, E. B. Juneman⁴, R. G. Smith⁵, J. K. Kirklin³. ¹Surgery, Banner-University of Arizona-Phoenix, Phoenix, AZ, ²Medicine, Banner-University of Arizona-Phoenix, Phoenix, AZ, ³Surgery, University of Alabama at Birmingham, Birmingham, AL, ⁴Medicine, Banner-University of Arizona-Tucson, Tucson, AZ, ⁵Artificial Heart, Banner-University of Arizona-Tucson, Tucson, AZ

8:05 AM (420) *Effects of Surgical Left Ventricular Vent in Patients with Cardiogenic Shock Requiring Extracorporeal Membrane Oxygenation*; S. K. Singh¹, D. Blitzer¹, Y. Kaku¹, A. Melehy¹, J. Fried², A. Masoumi², G. Syer², N. Uriel², Y. Naka¹, K. Takeda¹. ¹Surgery, New York Presbyterian Columbia University Medical Center, New York, NY, ²Medicine, New York Presbyterian Columbia University Medical Center, New York, NY

8:10 AM (421) *The Effects of the New Donor Heart Allocation Policy on Temporary Device Utilization and Outcomes: A Single Center Experience*; D. Ramzy¹, A. Akhmerov¹, F. Esmailian¹, D. Emerson¹, D. Megna¹, R. Levine¹, R. Cole², C. Runyan¹, J. Kobashigawa², J. Moriguchi². ¹Cardiac Surgery, Cedars-Sinai Medical Center, Los Angeles, CA, ²Cedars-Sinai Medical Center, Los Angeles, CA

8:15 AM (422) *Implementing an Algorithm for Mechanical Support in Cardiogenic Shock Improves Survival*; T. Smith, K. Gorder, S. Rudick, T. O'Brien, K. Liebing, R. Riley, J. Kong, J. Griffin, S. Shreenivas, T. Raymond, G. Answini, G. Egnaczyk, E. Chung. *Heart and Vascular Institute, The Christ Hospital, Cincinnati, OH*

8:20 AM (423) *The BEAT Device for Intrathoracic, Extracardiac Biventricular Mechanical Circulatory Support for Advanced Heart Failure*; U. A. Stock¹, C. Bowles¹, R. Hinkel², J. Fischer³, H. Smail¹, S. Wildhirt⁴, S. Schueler⁵. ¹Cardiothoracic, Transplant and Mechanical Assist Surgery Vascular Surgery, Harefield Hospital, Harefield, United Kingdom, ²Department of Laboratory Animal Science, German Primate Center, Goettingen, Germany, ³Center of Preclinical Research, Technical University of Munich, Munich, Germany, ⁴AdjuCor GmbH, Munich, Germany, ⁵Department for Cardiothoracic Surgery, Freeman Hospital, Newcastle, United Kingdom

8:25 AM (424) *SCAI Shock Classification to Predict Outcomes of Venoarterial Extracorporeal Membrane Oxygenation*; S. Mehta¹, S. Nemeth², P. Kurlansky¹, J. Fried³, A. Melehy¹, A. Masoumi³, G. Sayer², N. Uriel³, Y. Naka¹, S. Char¹, G. O'Connell¹, K. Takeda¹. ¹Department of Surgery, Division of Cardiothoracic and Vascular Surgery, Columbia University Medical

Center, New York, NY, ²Center of Innovation and Outcomes Research, Department of Surgery, Columbia University, New York, NY, ³Division of Cardiology, Department of Medicine, Columbia University Medical Center, New York, NY

- 8:30 AM** (425) *Impact of Duration of Venous-Arterial Extra-Corporeal Membrane Oxygenation Cannulation on Post Transplant Survival Following the UNOS Allocation Policy Change*; J. Nattiv¹, G. S. Liu¹, S. Hashmi², C. P. Bradley¹, C. Lum³, A. Salimbangon¹, A. Vaidya¹, A. M. Wolfson¹, E. C. DePasquale¹. ¹Cardiovascular Medicine, University of Southern California, Los Angeles, CA, ²Cardiovascular Medicine, University of Southern California, Los Angeles, CA, ³Cardiovascular Medicine, Queens Medical Center, Honolulu, HI
- 8:35 AM** (426) *Outcomes after Heart Transplantation and Total Artificial Heart Implantation: A Multicenter Study*; M. Carrier¹, J. Moriguchi², K. Shah³, A. Anyanwu⁴, C. Mahr⁵, E. Skipper⁶, M. Cossette¹, P. Noly¹. ¹Montreal Heart Institute, Montreal, QC, Canada, ²Cedar-Sinai Heart Institute, Los Angeles, CA, ³Paul Heart Center, Virginia Commonwealth University, QC, ⁴Icahn School of Medicine at Mount Sinai, New York, QC, ⁵University of Washington, Seattle, QC, ⁶Carolina Medical Center, Charlotte, QC
- 8:40 AM** (427) *Left Ventricular Assist Device in Patients with History of Alcohol Abuse or Substance Abuse: An INTERMACS Analysis*; V. T. Truong, S. Shreenivas, G. F. Egnaczyk, T. M. O'Brien, T. E. Raymond, A. A. Geoffrey, E. S. Eugene. Cardiology, The Christ Hospital Health Network, Cincinnati, OH, OH
- 8:45 AM** (428) *Continuous-Flow Left Ventricular Assist Device Support for Patients with Hypertrophic Cardiomyopathy: A Single Centre Experience*; D. H. Brahmabhatt¹, J. K. Vishram-Nielsen¹, D. Lee¹, M. Alhussein², Y. Moayed¹, J. G. Duero Posada¹, H. J. Ross¹, H. Rakowski¹, V. Rao³, F. Billia¹. ¹Division of Cardiology, Peter Munk Cardiac Centre, University Health Network, Toronto, ON, Canada, ²King Saud bin Abdulaziz University for Health Sciences and King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia, ³Division of Cardiac Surgery, Peter Munk Cardiac Centre, University Health Network, Toronto, ON, Canada
- 8:50 AM** (429) *Non-Pulsatile Flow is Associated with Lower Levels of Circulating CD34⁺ Cells in LVAD-Supported Patients*; G. Poglajen¹, S. Frljak¹, V. Andročec¹, F. Haddad², B. Vrtovec¹. ¹Advanced Heart Failure and Transplantation Center, Dept. of Cardiology, University Medical Center, Ljubljana, Slovenia, ²Division of Cardiovascular Medicine, Department of Medicine, Stanford Cardiovascular Institute, Stanford University, Palo Alto, CA
- 8:55 AM** (430) *Using the Sinoatrial Node to Induce Pulsatility in Mechanical Circulatory Support Devices*; S. Emmanuel¹, M. Stevens², G. M. Vazquez², M. Fetanat², A. Al Abed², N. Lovell², C. S. Hayward¹. ¹St Vincent's Hospital (Sydney), Darlinghurst, Australia, ²University of New South Wales, Kensington, Australia

8:00 AM - 9:30 AM

ORAL SESSION 36: COVID19, Outcomes and Health Equity in Heart Failure and Transplantation (NURS-AH, AN-CC, CARD, ID, PEDS, RES-IMM)

Chairs:

- 8:00 AM** (35) *Impact of Telemedicine on Pediatric Heart Transplant Patients during the COVID-19 Pandemic*; K. Beddows, N. Bansal, L. Abraham, D. T. Hsu, J. M. Lamour. Children's Hospital at Montefiore, Bronx, NY
- 8:10 AM** (36) *Remote Monitoring of Heart Transplant Recipients during the COVID-19 Pandemic*; S. Slomovich, Z. Roth, K. Clerkin, A. Kleet, O. Walraven, A. Kim, P. Colombo, J.

Raikhelkar, J. Griffin, M. Farr, M. Yuzefpolskaya, J. Fried, F. Latif, S. Restaino, V. Topkara, N. Uriel, G. Sayer. *Columbia University Irving Medical Center, New York, NY*

- 8:20 AM** (37) *Quality of Life Outcomes for Patients on Palliative Cardiac Continuous Intravenous Inotropic Support*; M. Maini¹, A. Rao², A. Wood³, H. Groninger². ¹Georgetown University School of Medicine, Washington, DC, ²Section of Palliative Care, Department of Medicine, MedStar Washington Hospital Center, Washington, DC, ³Section of Palliative Care, Department of Medicine, Georgetown University Hospital, Washington, DC
- 8:30 AM** (38) *Decreased Utilization of Durable Left Ventricular Assist Device Therapy in Blacks Relative to Whites with Advanced Heart Failure*; M. Jones¹, M. Fuller¹, L. McElroy², K. Ghadimi¹, M. Mirreh¹, R. Schroeder¹, E. Black-Maier³, J. Piccini³, K. Thomas³. ¹Anesthesiology, Duke University Hospital, Durham, NC, ²Surgery, Duke University Hospital, Durham, NC, ³Medicine, Duke University Hospital, Durham, NC
- 8:40 AM** (39) *Impact of Sex on Access to Donor Organs and Clinical Outcomes in the New 2018 US Adult Heart Allocation System - OPTN/UNOS Analysis*; A. K. Okoh¹, M. R. Mehra², R. Tayal¹, S. G. Drakos³, S. Machado⁴, M. G. Yin³, L. Y. Lee¹, K. Shah⁵, M. J. Russo¹, M. Vaduganathan⁶, J. Stehlik⁵. ¹RWJ Barnabas Health Rutgers Robert Wood Johnson University, New Brunswick, NJ, ²RWJ Barnabas Health Rutgers Robert Wood Johnson University, Boston, NJ, ³RWJ Barnabas Health Rutgers Robert Wood Johnson University, Salt Lake City, UT, ⁴London School of Economics, London, UK, London, United Kingdom, ⁵University of Utah School of Medicine, Salt Lake City, UT, ⁶Brigham and Womens Hospital, Harvard School of Medicine., Boston, NJ
- 8:50 AM** (40) *Demographic Bias in Referral and Evaluation for Advanced Cardiac Therapies*; J. S. van Zyl¹, A. K. Jamil¹, J. Felius¹, R. L. Gottlieb². ¹Baylor Scott & White Research Institute, Dallas, TX, ²Center for Advanced Heart and Lung Disease, Baylor University Medical Center, Dallas, TX

8:00 AM - 9:30 AM

SYMPOSIUM 34: Joint ISHLT/TTS Meeting Ethical Challenges in Transplantation Through Global Partnership

(ALL, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Are M Holm, MD, PhD, Jeremy Chapman, MD, and Sharon A. Hunt, MD

Session Summary: In collaboration with The Transplantation Society (TTS), this joint symposium will address the challenges of organ transplantation across borders. Country disparities in the access to transplantation lead to ethical dilemmas when organs, donors or recipients cross the borders. Good collaborative experiences as well as the challenges of transplant tourism or organ traffic will be discussed. Experiences on the rise of transplant programs in developing countries will be shared. Society policies regarding transplantation in China be will be discussed. A panel discussion with all speakers will conclude this session.

- 8:00 AM** *Cultural and Religious Implications in the Donation and Transplant Process*
Marta Farrero, MD, PhD, Hospital Clinic de Barcelona, Barcelona, Spain
- 8:12 AM** *Transplantation across International Borders: The Ethical Challenges*
Peter G Stock, MD, PhD, UCSF Medical Center, San Francisco, CA, United States
- 8:24 AM** *Established International Collaborations in Organ Sharing: Benefits and Challenges*
Are M Holm, MD, PhD, Oslo Univ Hospital, Oslo, Norway

8:36 AM *Transplant Tourism: Recipients Crossing Borders*
Komarakshi Balakrishnan, MD, Fortis Malar Hospital, Chennai, India

8:48 AM *Partnerships for Establishing Deceased Donor Transplant Programs in Emerging Countries*
Richard Allen, MBBS, University of Sydney, Sydney, Australia

9:00 AM *Organ Transplantation in China*
Jeremy Chapman, MD, University of Sydney, Sydney, Australia

8:00 AM - 9:30 AM

SYMPOSIUM 35: Crossing the HLA Rubicon: Lung Transplantation in the Presence of Donor Specific Antibodies
(PULM, AN-CC, CARD, CT-SURG, NURS-AH, PATH, PEDS, PHARM, RES-IMM)

Chairs: Andrew Courtwright, MD, Christine S. Falk, PhD, and Annette M Jackson, PhD

Session Summary: Highly sensitized lung transplant candidates have prolonged waitlist times and increased waitlist mortality. This symposium will include representatives from programs that differ in their approaches to achieving successful transplant outcomes in this population. A panel discussion with all speakers will conclude this session.

8:00 AM *Not All Created Equal: Which Pre-Transplant DSAs Really Matter?*
Elaine F Reed, PhD, UCLA Immunogenetics Center, Los Angeles, CA, United States

8:12 AM *DEBATE: Desensitization is an Effective Bridge to Lung Transplant (PRO)*
Ramsey Hachem, MD, Washington University SoM, Saint Louis, MO, United States

8:24 AM *DEBATE: Desensitization is an Effective Bridge to Lung Transplant (CON)*
Antoine Roux, MD, Foch Hospital, Paris, France

8:36 AM *It's Time to Include Testing for Non-HLA Antibody in Thoracic Transplantation*
Nancy Reinsmoen, PhD, Cedars Sinai Health System, Los Angeles, CA, United States

8:48 AM *Pheresis Your Fears Away (In the OR)*
Lianne G Singer, MD, FRCPC, Toronto General Hospital, Toronto, ON, Canada

9:00 AM *You Must Augment: Induction and Maintenance Immunosuppression When Crossing DSA*
Glen Westall, MD, The Alfred Hospital, Melbourne, Australia

8:00 AM - 9:30 AM

SYMPOSIUM 36: Tales from the Plague Year: Remote Monitoring of Heart Transplant Recipients
(CARD, AN-CC, CT-SURG, ID, NURS-AH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Howard Eisen, MD, Young-Nam Youn, MD, PhD, and Sonia Mirabet, MD, PhD

Session Summary: This session will review strategies from around the world to closely monitor and manage heart transplant recipients while minimizing their trips to the hospital and hence exposure to COVID-19.

8:00 AM *Use of Donor-Derived Cell-Free DNA to Remotely Monitor Allograft Status in Cardiac Transplant Recipients*
Shelley Hall, MD, Baylor University Medical Center, Dallas, TX, United States

- 8:12 AM** *The Role of At-Home Gene Expression Profiling Test to Remotely Manage Heart Transplant Recipients and Prevent Undue Viral Exposures*
Shelley Hankins, MD, Drexel College of Medicine, Philadelphia, PA, United States
- 8:24 AM** *How Italy Remotely Managed Heart Transplant Recipients in the Epicenter*
Attilio Iacovoni, MD, ASST Ospedale Papa Giovanni XXIII, Bergamo, Italy
- 8:36 AM** *Making it Up Along the Way: How We Cared for Heart Transplant Patients without Exposing Them to Risk before Anything Was Known about the Novel Coronavirus - The Experience from South Korea*
In-Cheol Kim, MD, PhD, Keimyung University Dongsan Hospital, Daegu, Korea, Republic of
- 8:48 AM** *Being in the Southern Hemisphere Did Not Always Predict Success: How Brazil Remotely Managed Our Heart Transplant Patients*
Estela Azeka, MD, University of Sao Paulo, Sao Paulo, Brazil
- 9:00 AM** *The Surgical Perspective: Challenges to Organ Procurement Traveling across Borders in the Eurotransplant Zone: How to Optimize Acquisition of Donor Information with Limited Access*
Andreas Zuckermann, MD, Medical Univ of Vienna, Vienna, Austria

9:45 AM - 11:15 AM

**MINI ORAL 14: Pediatric Cardiac Potpourri
(PEDS, AN-CC, CARD, CT-SURG, ID, NURS-AH)**

Chairs:

- 9:45 AM** *(263) Location, Location, Location - Does Epitope Matching Matter in Pediatric Heart Transplantation?*; J. A. Spinner¹, A. V. Ram², J. Magana², S. Nicholas³, W. J. Dreyer³, K. D. Hope³, S. Choudhry³, K. Puri³, H. Tunuguntla³, J. Price³, S. W. Denfield³, P. T. Jindra².
¹Baylor College of Medicine, Houston, TX, ²Surgery, Baylor College of Medicine, Houston, TX, ³Pediatrics, Baylor College of Medicine, Houston, TX
- 9:50 AM** *(264) Aspirin Use and the Development of Cardiac Allograft Vasculopathy in Pediatric Heart Transplant Recipients*; L. D'Addese¹, R. Cantor², D. Koehl², L. Reardon³, R. Ameduri⁴, M. Bock⁵, A. Morrison⁶, S. White⁷, B. Wisotzkey⁸, J. K. Kirklin², J. Godown⁹.
¹Pediatric Cardiology, Joe DiMaggio Children's Hospital, Hollywood, FL, ²Surgery, Kirklin Institute for Research in Surgical Outcomes, University of Alabama at Birmingham, Birmingham, AL, ³Pediatric Cardiology, Mattel Children's Hospital, Los Angeles, CA, ⁴Pediatric Cardiology, University of Minnesota Masonic Children's Hospital, Minneapolis, MN, ⁵Pediatric Cardiology, Loma Linda University Children's Hospital, Loma Linda, CA, ⁶Pediatric Cardiology, Levine Children's Hospital-Atrium Health, Charlotte, NC, ⁷Pediatric Cardiology, University of Virginia Medical Center, Charlottesville, VA, ⁸Pediatric Cardiology, Phoenix Children's Hospital, Phoenix, AZ, ⁹Pediatric Cardiology, Monroe Carell Jr. Children's Hospital at Vanderbilt, Nashville, TN
- 9:55 AM** *(265) Pediatric Risk to OHT (PRO) Score: Insights from UNOS Waitlist Mortality Findings*; S. Raymundo¹, A. Chaudhary², J. Alejos¹, N. Srivastava³. ¹Pediatric Cardiology, UCLA Mattel Children's Hospital, Los Angeles, CA, ²Pediatrics, UCLA Mattel Children's Hospital, Los Angeles, CA, ³Pediatric Critical Care, UCLA Mattel Children's Hospital, Los Angeles, CA

- 10:00 AM** (266) *Outcomes of Ventricular Assist Device Use for Bridge to Heart Transplant in Children with Single-Ventricle Heart Disease*; J. Murray¹, J. C. Dykes², M. Ma², S. Chen², C. Chen², E. Profita², D. N. Rosenthal², C. S. Almond². ¹Lucile Packard Children's Hospital Stanford, Palo Alto, CA, ²Pediatric Cardiology, Stanford University School of Medicine, Palo Alto, CA
- 10:05 AM** (267) *Induction and Increased Risk of Infections in Pediatric Fontan Patients after Heart Transplantation*; H. Ahmed¹, J. Lee², D. Bernstein², K. Weinberg², D. N. Rosenthal², D. Lee², L. Barkoff², S. Hollander², S. Chen². ¹Seattle Children's Hospital, Seattle, WA, ²Lucille Packard Children's Hospital/Stanford, Palo Alto, CA
- 10:10 AM** (268) *Impact of Race on Listing and Waitlist Mortality in Pediatric Cardiac Transplantation*; N. Bansal¹, A. K. Lal², R. S. Cantor³, D. Koehl³, J. K. Kirklin⁴, W. J. Ravekes⁵, S. Auerbach⁶, C. Baker-Smith⁷, A. Cabrera⁸, S. Amdani⁹, S. Urschel¹⁰. ¹Children's Hospital at Montefiore, Bronx, NY, ²Primary Children's Hospital, University of Utah, Salt Lake City, UT, ³Kirklin Institute for Research in Surgical Outcomes, Birmingham, AL, ⁴Department of Surgery, University of Alabama, Birmingham, AL, ⁵Johns Hopkins University School of Medicine, Baltimore, MD, ⁶Children's Hospital Colorado Heart Institute, Aurora, CO, ⁷Nemours Cardiac Center, Nemours/Alfred I. duPont Hospital for Children, Wilmington, DE, ⁸Children's Hospital, University of Utah, Salt Lake City, UT, ⁹Cleveland Clinic Children's Hospital, Cleveland, OH, ¹⁰University of Alberta, Edmonton, AB, Canada
- 10:15 AM** (269) *Pediatric Heart Transplantation Following Donation after Circulatory Death, Distant Procurement and Ex-Situ Perfusion*; E. Nachum¹, C. Laurence², M. Osman¹, J. Hogan¹, J. Baxter¹, R. Quigley¹, S. Messer¹, S. Large¹, P. Kaul¹, J. Forsythe³, S. Henwood², M. Fenton², B. Davies⁴, M. Berman¹, J. Simmonds². ¹Department of Transplantation, Royal Papworth Hospital NHS Foundation Trust, Cambridge, United Kingdom, ²Division of Cardiology, Great Ormond Street Hospital for Children, London, United Kingdom, ³Organ Donation & Transplantation, NHS Blood and Transplant, Stoke Gifford, Bristol, United Kingdom, ⁴Department of Cardiac Surgery, Great Ormond Street Hospital for Children, London, United Kingdom
- 10:20 AM** (270) *Impact of Institutional Routine Endomyocardial Surveillance Biopsy Practices on Rejection and Graft Survival in Pediatric Heart Transplantation*; S. Q. Duong¹, Y. Zhang¹, M. Hall², S. Hollander¹, C. W. Thurm², D. Bernstein¹, B. Feingold³, J. Godown⁴, C. Almond¹. ¹Pediatrics (Cardiology), Stanford University School of Medicine, Palo Alto, CA, ²Children's Hospital Association, Lenexa, KS, ³Pediatrics and Clinical and Translational Science, University of Pittsburgh School of Medicine, Pittsburgh, PA, ⁴Pediatric Cardiology, Monroe Carell Jr. Children's Hospital at Vanderbilt, Nashville, TN
- 10:25 AM** (271) *Heart Rate Reduction Strategy Improves Survival in Children with Severe Dilated Cardiomyopathy*; R. Adorisio, E. Mencarelli, N. Cantarutti, L. Amato, M. Ciabattini, G. Pontrelli, F. Drago, A. Amodeo. *Cardiology, Cardiac Surgery and Heart Lung Transplant, Bambino Gesù Hospital, Rome, Italy*
- 10:30 AM** (272) *Palliative and End of Life Care Preferences in Adolescents and Young Adults with Heart Failure*; M. Cousino¹, E. Blume², C. Smith¹, H. Lim¹, S. Yu¹, R. Lowery¹, S. Viers¹, K. Uzark¹, E. Fredericks¹, V. Miller³, K. Schumacher¹. ¹C.S. Mott Children's Hospital, Ann Arbor, MI, ²Boston Children's Hospital, Boston, MA, ³Children's Hospital of Philadelphia, Philadelphia, PA
- 10:35 AM** (273) *Length of Stay and Readmission Rates in Pediatric Acute Heart Failure*; D. S. Burstein¹, C. Connelly², C. S. Almond³, R. A. Niebler⁴, J. A. Godown⁵, F. Zafar⁶, R. J. Butts⁷. ¹Cardiology, Children's Hospital of Philadelphia, Philadelphia, PA, ²AC Data & Analytics, Cincinnati Children's Medical Center, Cincinnati, OH, ³Cardiology, Stanford Children's Hospital, Palo Alto, CA, ⁴Cardiology, Children's Hospital of Wisconsin, Milwaukee, WI,

⁵Cardiology, Vanderbilt Children's Hospital, Nashville, TN, ⁶Cardiothoracic Surgery, Cincinnati Children's Medical Center, Cincinnati, OH, ⁷Cardiology, UT Southwestern Medical Center, Dallas, TX

10:40 AM (274) *Immune Dysregulation after Pediatric Heart Transplant*; J. A. Laks¹, A. Kiss², E. Jean-St-Michel¹, A. I. Dipchand¹. ¹Pediatric Cardiology, The Hospital for Sick Children, Toronto, ON, Canada, ²University of Ottawa, Ottawa, ON, Canada

9:45 AM - 11:15 AM

MINI ORAL 15: Cellular and Molecular Pathways to CLAD

(PULM, AN-CC, CT-SURG, NURS-AH, PATH, PEDS, RES-IMM)

Chairs:

9:45 AM (347) *Induction of Epithelial-Mesenchymal Transition (EMT) by Neutrophil Extracellular Traps (NETs) as Possible Molecular Mechanism in CLAD*; S. Bozzini¹, L. Pandolfi², V. Vertui², V. Frangipane², M. Violatto³, A. De Luigi⁴, M. D'Amato⁵, M. Morosini², P. Bigini³, M. Salmona⁴, F. Meloni². ¹Molecular Medicine, IRCCS S.Matteo, Pavia, Italy, ²Respiratory Diseases, IRCCS S.Matteo, Pavia, Italy, ³Biochemistry and Molecular Pharmacology, IRCCS Mario Negri, Milano, Italy, ⁴Biochemistry and Molecular Pharmacology, IRCCS S.Matteo, Milano, Italy, ⁵Molecular Medicine, University of Pavia, Pavia, Italy

9:50 AM (348) *Connective Tissue Growth Factor in Chronic Lung Allograft Dysfunction: An Explorative Study*; A. Vanstapel¹, R. Goldschmeding², R. Broekhuizen², T. Nguyen², A. Sacreas¹, J. Kaes¹, T. Heigl¹, S. Verleden¹, G. Verleden¹, B. Weynand¹, E. Verbeken¹, L. Ceulemans¹, D. Van Raemdonck¹, A. Neyrinck¹, H. Schoemans¹, B. Vanaudenaerde¹, R. Vos¹. ¹Leuven Lung Transplant Unit, KU Leuven - UH Leuven, Leuven, Belgium, ²Department of Pathology, UMC Utrecht, Utrecht, Netherlands

9:55 AM (349) *Epithelial and Immune Phenotyping of Distal Airway Cells in Lung Allograft Dysfunction*; T. Daigneault¹, B. Renaud-Picard², A. Duong¹, G. Berra², Z. Guan², A. Tian², S. Juvet², T. Martinu². ¹Immunology, University of Toronto, Toronto, ON, Canada, ²Toronto Lung Transplant Program, Toronto, ON, Canada

10:00 AM (350) *Use of Single Cell RNA seq to Discern Molecular Pathways of Fibrosis and Predicting Emergence of CLAD*; C. K. Conrad. Pediatrics, Lucile Packard Children's Hospital, Palo Alto, CA

10:05 AM (351) *A Comparison of Serological Markers and Exosome Content between Lung Transplant Recipients with BOS and RAS*; S. Bansal, S. Tokman, A. Arjuna, K. Q. Sanborn, R. Bremner, M. Smith, T. Mohanakumar. Norton Thoracic Institute, St. Joseph's Hospital and Medical Center, Phoenix, AZ

10:10 AM (352) *Non HLA Antibodies in Serum Prior to the Onset of Chronic Lung Allograft Dysfunction*; A. Ulahannan¹, D. Vosoughi², G. Madu³, G. Teskey³, D. Birriel¹, M. Aversa¹, T. Martinu¹, A. Chruscinski², S. C. Juvet². ¹Toronto Lung Transplant Program, University Health Network, Toronto, ON, Canada, ²University Health Network, Toronto, ON, Canada, ³Latner Thoracic Research Laboratories, University Health Network, Toronto, ON, Canada

10:15 AM (353) *Imaging Mass Cytometry to Assess the Pathobiology of Chronic Lung Allograft Dysfunction*; B. Renaud-Picard¹, M. Cheung², S. Moshkelgosha¹, D. Hwang³, D. Hedley⁴, S. Juvet¹, T. Martinu¹. ¹Toronto Lung Transplant Program, Toronto General Hospital Research Institute, Toronto, ON, Canada, ²Ontario Cancer Institute, Princess Margaret Cancer Centre, Toronto, ON, Canada, ³Department of Pathology, Sunnybrook Health Sciences Center,

Toronto, ON, Canada, ⁴Ontario Cancer Institute, Princess Margaret Cancer Centre, Toronto, Toronto, ON, Canada

- 10:20 AM** (354) **Pulmonary Macrophage Subsets Associated with Lung Allograft Dysfunction Revealed by Single-Cell RNA Sequencing**; S. Moshkelgosh¹, A. Duong¹, G. W. Wilson¹, T. Andrews², B. Renaud-Picard¹, G. Berra¹, T. Daigneault¹, M. Liu¹, S. Keshavjee¹, J. Yeung¹, S. Macparland¹, T. Martinu¹, S. C. Juvet¹. ¹Latner Thoracic Surgery Research Laboratories, University Health Network, Toronto, ON, Canada, ²University Health Network, Toronto, ON, Canada
- 10:25 AM** (355) **Immune Checkpoint Expression Associates with Rejection in Lung Transplant Recipients**; I. Righi¹, V. Vaira², L. Rosso², L. Morlacchi³, M. Cattaneo¹, S. Ferrero⁴, F. Blasi³, M. Nosotti², M. Clerici². ¹Thoracic Surgery and Lung Transplant Unit, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico of Milan, Milan, Italy, ²Departments of Pathophysiology and Transplantation and of Health Sciences, University of Milan, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico of Milan, Milan, Italy, ³Respiratory Unit and Adult Cystic Fibrosis Center, Internal Medicine Department, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico of Milan, Milan, Italy, ⁴Division of Pathology, Foundation IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico of Milan, milano, Italy
- 10:30 AM** (356) **Gene Expression Profiling and Pathway Enrichment Analysis in Long-Term Survivors after Lung Transplantation with Normal Allograft Function**; B. Saez-Gimenez¹, A. Mendoza-Valderrey¹, M. Hernandez-Fuentes², R. Escobar¹, C. Berastegui Garcia¹, A. Sole³, S. Fernández-Rozas⁴, M. de la Torre⁵, R. Laporta⁶, J. Redel⁷, S. Gomez-Olles¹, A. Roman¹. ¹Lung Transplant Unit, Hospital Vall Hebron, Barcelona, Spain, ²Medical Research Council Centre for Transplantation, King's College, London, United Kingdom, ³Cystic fibrosis and Lung Transplant Unit, Hospital La Fe, Valencia, Spain, ⁴Lung Transplant Unit, Hospital Universitario Marques Valdecilla, Santander, Spain, ⁵Thoracic Surgery Unit, Hospital Universitario A Coruña, Coruña, Spain, ⁶Lung Transplant Unit, Hospital Universitario Puerta del Hierro, Madrid, Spain, ⁷Lung Transplant Unit, Hospital Universitario Reina Sofía, Córdoba, Spain
- 10:35 AM** (357) **Prediction of Survival after Chronic Lung Allograft Dysfunction in Lung Transplant Recipients by Blood Profiling Using a Predefined 52 Gene Signature**; B. Luijk¹, M. Krebber², Q. Li³, T. Kardol-Hoefnagel⁴, K. Budding⁴, D. A. van Kessel⁵, J. C. Grutters⁵, H. G. Otten⁴, N. Kaminski³, J. D. Herazo Maya⁶. ¹Respiratory Medicine, UMC Utrecht, Utrecht, Netherlands, ²Nephrology and Hypertension, UMC Utrecht, Utrecht, Netherlands, ³Pulmonary, Critical Care and Sleep Medicine, Yale School of Medicine, New Haven, CT, ⁴Center of Translational Immunology, UMC Utrecht, Utrecht, Netherlands, ⁵Respiratory Medicine, St Antonius Hospital Nieuwegein, Nieuwegein, Netherlands, ⁶Division of Pulmonary, Critical Care Medicine and Sleep Medicine, Napels Community Hospital, Napels, FL
- 10:40 AM** (358) **Bronchoalveolar Lavage Markers of Inflammation Early Post Lung-Transplant are Associated with CLAD and Death**; L. Levy¹, S. Moshkelgosh², E. Huszti², S. Hunter², M. Ahmed², K. Zhang², R. Ghany², S. Keshavjee², L. Singer², J. Tikkanen², S. Juvet², T. Martinu². ¹Sheba Medical Center, Ramat Gan, Israel, ²Toronto General Hospital / University Health Network, Toronto, ON, Canada

9:45 AM - 11:15 AM

**MINI ORAL 16: Hindsight is 2020: Forecasting the Future After MCS
(CARD, AN-CC, CT-SURG, NURS-AH, RES-IMM)**

Chairs:

- 9:45 AM** (383) *Red Blood Cell Distribution Width Predicts Mortality in Patients with Cardiogenic Shock Receiving Temporary Mechanical Circulatory Support*; T. Khawaja¹, N. Tashtish², H. Mously², D. A. Zidar², C. Elamm², S. Al-Kindi². ¹Internal Medicine, University Hospitals, Case Western Reserve University School of Medicine, Cleveland, OH, ²Cardiology, University Hospitals, Case Western Reserve University School of Medicine, Cleveland, OH
- 9:50 AM** (384) *Heart Failure and Health-Related Quality of Life: Five Measures for Assessing Post-Implant Left Ventricular Assist Device Patients*; M. Kallen, K. L. Grady, D. Cella, P. Cummings, E. H. Hahn. Northwestern University, Chicago, IL
- 9:55 AM** (385) *Prediction of Right Heart Failure after Left Ventricular Assist Implantation: External Validation of the EUROMACS Right-Sided Heart Failure Risk Score*; M. Rivas-Lasarte¹, S. Kumar², M. H. Derbala³, J. Ferrall³, M. Cefalu³, S. M. Rashid¹, D. T. Joseph⁴, D. Goldstein⁵, U. P. Jorde¹, A. Guha², A. Bhimaraj², E. E. Suarez², S. A. Smith³, D. B. Sims¹. ¹Cardiology, Montefiore Medical Center, Bronx, NY, NY, ²Cardiology, Houston Methodist Hospital, Houston, TX, ³Cardiology, Ohio State University Wexner Medical Center, Columbus, OH, ⁴Internal Medicine, Houston Methodist Hospital, Houston, TX, ⁵Cardiothoracic and Vascular Surgery, Montefiore Medical Center, Bronx, NY, NY
- 10:00 AM** (386) *Hyperhomocysteinemia and Oxidative Stress May Predict the Risk of Stroke in Patients Supported by Continuous Flow Left Ventricular Assist Devices*; N. K. Mondal¹, H. K. Lamba¹, S. I. Hudson¹, C. Hochman-Mendez², A. E. Shafii¹, G. Loor¹, A. Mattar¹, R. K. Ghanta¹, O. Frazier¹, K. K. Liao¹. ¹Department of Surgery, Baylor College of Medicine, Houston, TX, ²Regenerative Medicine Research, Texas Heart Institute, Houston, TX
- 10:05 AM** (387) *The Stanford Integrated Psychosocial Assessment for Transplantation Score Predicts Frequency of Hospital Readmissions in Left Ventricular Assist Device Patients*; A. M. Schwartz¹, Y. Hu², A. Nayak², M. Tannu¹, S. R. Laskar³, D. Gupta³, J. D. Vega³, A. A. Morris². ¹Internal Medicine, Emory University, Atlanta, GA, ²Emory University, Atlanta, GA, ³Cardiology, Emory University, Atlanta, GA
- 10:10 AM** (388) *A Patient-Reported Metric of Social and Physical Function after Left Ventricular Assist Devices: A PROMIS of a Better Assessment*; E. A. Hahn¹, K. E. Wortman¹, P. D. Cummings¹, D. Cella¹, L. A. Allen², J. Stehlik³, J. Teuteberg⁴, Q. Denfeld⁵, M. S. Kiernan⁶, J. Lindenfeld⁷, E. Adler⁸, D. G. Beiser⁹, L. Klein¹⁰, C. K. McIlvennan², D. T. Pham¹¹, J. D. Rich¹², B. Ruo⁸, M. N. Walsh¹³, S. Buono¹, K. L. Grady¹¹. ¹Medical Social Sciences, Northwestern University Feinberg School of Medicine, Chicago, IL, ²Medicine, University of Colorado, Aurora, CO, ³Medicine, University of Utah Health Sciences Center, Salt Lake City, UT, ⁴Falk Cardiovascular Research Center, Stanford University School of Medicine, Stanford, CA, ⁵Oregon Health & Science University School of Nursing, Portland, OR, ⁶Tufts Medical Center, Boston, MA, ⁷Medicine, Vanderbilt University Medical Center, Nashville, TN, ⁸Medicine, University of California San Diego, San Diego, CA, ⁹Medicine, University of Chicago, Chicago, IL, ¹⁰Medicine, University of California San Francisco, San Francisco, CA, ¹¹Surgery, Northwestern University Feinberg School of Medicine, Chicago, IL, ¹²Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL, ¹³St. Vincent Heart Center, Indianapolis, IN

- 10:15 AM** (389) *Improving Prediction of Acute Right Ventricular Failure in Patients Undergoing Left Ventricular Assist Devices Using Novel Comprehensive Eighteen-Segment Echocardiographic Strain Analysis*; M. Yin¹, S. Ishihara¹, T. Anderson¹, J. Stehlik¹, S. McKellar², E. Dranow¹, E. Gilbert¹, C. Selzman², J. Fang¹, S. Drakos², O. Wever-Pinzon¹. ¹Cardiology, University of Utah School of Medicine, Salt Lake City, UT, ²University of Utah School of Medicine, Salt Lake City, UT
- 10:20 AM** (390) *The Impact of Peripheral Arterial Disease on Left Ventricular Assist Device Implantation a Propensity Matched Analysis of the Nationwide Inpatient Sample Database*; W. Ullah¹, S. Zahid², N. Thalambedu¹, M. Khan³, H. Massey⁴, D. Haas⁴, V. Tchanchaleishvili⁴, E. Rame⁴. ¹Abington Jefferson Health, Abington, PA, ²Rochester General Hospital, Rochester, NY, ³Kaiser Permanente, Oakland, CA, ⁴Thomas Jefferson University, Philadelphia, PA
- 10:25 AM** (391) *Prognostic Impact of Functional Mitral Regurgitation at the Time of Left Ventricular Assist Device Implantation*; J. Pausch, O. Bhadra, E. Girdauskas, M. Barten, H. Reichenspurner, A. Bernhardt. *Department of Cardiovascular Surgery, University Heart & Vascular Center Hamburg, 20251, Germany*
- 10:30 AM** (392) *Peripheral Arterial Disease in Non-Diabetic Patients is Associated with Worse Outcomes after LVAD Implantation*; V. T. Truong¹, S. Shreenivas¹, I. Rajapreyar², M. Shah², R. J. Alvarez², E. S. Chung¹, J. Rame², Y. Brailovsky². ¹Cardiology, The Christ Hospital Health Network, Cincinnati, OH, ²Cardiology, Jefferson Heart Institute, Thomas Jefferson University, Philadelphia, PA
- 10:35 AM** (393) *A New Hemodynamic Profile Signaling Early Death on Left Ventricular Assist Device*; R. Cogswell¹, M. Masotti², J. Schultz¹, V. Maharaj¹, A. El Rafei³, M. Fraser¹, M. Mutschler¹, C. M. Martin¹, T. Thenappan¹, M. Pritzker¹, R. Knoper⁴, R. John⁴, A. Shaffer⁴. ¹Department of Medicine, Division of Cardiology, University of Minnesota, Minneapolis, MN, ²Department of Biostatistics, University of Minnesota, Minneapolis, MN, ³Department of Medicine, University of Minnesota, Minneapolis, MN, ⁴Department of Surgery, Division of Cardiovascular Surgery, University of Minnesota, Minneapolis, MN
- 10:40 AM** (394) *Adaptive Sensorless Control of LVAD Using Deep Convolutional Neural Network*; M. Fetanat¹, M. Stevens¹, C. Hayward², N. Lovell¹. ¹Graduate School of Biomedical Engineering, UNSW, Sydney, Australia, ²Cardiology Department, St Vincent's Hospital, Sydney, Australia

9:45 AM - 11:15 AM

ORAL SESSION 37: From Bench to Bedside: Latest Advances in Translational Science in Heart Transplantation (RES-IMM, CARD, PATH)

Chairs:

- 9:45 AM** (41) *Extracellular Vesicles Surface Protein Profile as Biomarkers to Characterize Allograft Rejection in Heart Transplanted Patients*; C. Castellani¹, J. Burrello², M. Fedrigo¹, A. Burrello³, S. Bolis², D. Di Silvestre⁴, F. Tona¹, T. Bottio¹, V. Biemmi², G. Toscano⁵, G. Gerosa¹, G. Thiene¹, C. Basso¹, S. L. Longnus⁶, G. Vassalli⁷, A. Angelini¹, L. Barile². ¹University of Padua, Padova, Italy, ²Cardiocentro Ticino Foundation Lugano, Lugano, Switzerland, ³University of Bologna, Bologna, Italy, ⁴ITB-CNR, Milano, Italy, ⁵Azienda Ospedaliera of Padua, Padova, Italy, ⁶University Hospital of Bern, Bern, Switzerland, ⁷Università Svizzera Italiana and Cardiocentro Ticino Foundation, Lugano, Switzerland

- 9:55 AM** **(42) CRISPR/Cas9 Technology: Hypoimmunogenic Pluripotent Stem Cells Evade Immune Rejection in Fully Immunocompetent Allogeneic Recipients;** X. Hu¹, T. Deuse¹, A. Gravina¹, D. Wang¹, G. Tediashvili¹, H. Reichenspurner², M. M. Davis³, L. L. Lanier⁴, S. Schrepfer¹. ¹Department of Surgery, Division of Cardiothoracic Surgery, Transplant and Stem Cell Immunobiology-Lab, UCSF, San Francisco, CA, ²Department of Cardiovascular Surgery, University Heart Center Hamburg, Hamburg, Germany, ³Department of Microbiology and Immunology, Stanford University School of Medicine, Stanford, CA, ⁴Dept of Microbiology and Immunology and the Parker Institute for Cancer Immunotherapy, UCSF, San Francisco, CA
- 10:05 AM** **(43) Reconditioning of Donation after Cardiac Death Hearts by Ex-Vivo Machine Perfusion with a Novel HTK-N Preservation Solution;** L. Saemann¹, S. Korkmaz¹, F. Hoorn¹, P. Zhou¹, Q. Ding¹, Y. Guo¹, G. Veres², S. Loganathan¹, M. Brune³, F. Wenzel⁴, M. Karck¹, G. Szabó². ¹Department of Cardiac Surgery, University of Heidelberg, Heidelberg, Germany, ²Department of Cardiac Surgery, University of Halle, Halle (Saale), Germany, ³Department of Medicine I and Clinical Chemistry, University of Heidelberg, Heidelberg, Germany, ⁴Faculty Medical and Life Sciences, Furtwangen University, Villingen-Schwenningen, Germany
- 10:15 AM** **(44) The Effect of Reperfusion on Cerebral Activity in Donors after Circulatory Death Following Normothermic Regional Perfusion;** F. F. Dalsgaard¹, N. Moeslund¹, M. Pedersen², E. Q. Montvilas³, H. Eiskjær⁴. ¹Department of Cardiology, Research Unit, Aarhus University Hospital, Clinical Institute, Aarhus, Denmark, ²Comparative Medicine Lab, Aarhus University Hospital, Clinical Institute, Aarhus, Denmark, ³Department of Neurophysiology, Aarhus University Hospital, Aarhus, Denmark, ⁴Department of Cardiology, Aarhus University Hospital, Aarhus, Denmark
- 10:25 AM** **(45) CA125 Predicts Right Heart Hemodynamic and Function and Identifies Distinct Congestion Phenotypes: Guidance for Therapy;** Y. Peled¹, R. Beigel¹, E. Ram¹, M. Arad¹, R. Klempfner¹, J. Patel², E. Raanani¹. ¹Sheba Medical Center and Tel Aviv University, Ramat Gan, Israel, ²Cedars-Sinai Heart Institute and David Geffen School of Medicine, Los Angeles, CA
- 10:35 AM** **(46) Donor-Derived Cell-Free DNA Predicts De Novo DSA after Heart Transplantation;** J. Teuteberg¹, J. Kobashigawa², P. Shah³, S. Ghosh⁴, D. Ross⁵, E. DePasquale⁶, K. Khush¹. ¹Stanford University Medical Center, Stanford, CA, ²Cedars-Sinai Smidt Heart Institute, Los Angeles, CA, ³Inova Heart and Vascular Institute, Falls Church, VA, ⁴CareDx, Brisbane, CA, ⁵Medical Affairs, CareDx, Brisbane, CA, ⁶University of Southern California, Los Angeles, CA

9:45 AM - 11:15 AM

SYMPOSIUM 37: It's All About Trust: Time for Networking on Long Distance Retrievals? (CARD, AN-CC, CT-SURG, NURS-AH, PEDS, PULM)

Chairs: Thomas K Lund, MD, PhD, Cumara C Sivathanan, MBBS, FRCS, and Edith Boyes, APN

Session Summary: This session will focus on the challenge of traveling through areas with different rates of COVID infection during the pandemic crisis for heart and lung retrievals. This situation brought the necessity and possibility of regional surgical teams networking, avoiding the movement of human and technical resources for long distance retrievals, nationally or internationally.

9:45 AM **Networking on Long Distance Retrievals: Heart Vision**
Hannah Copeland, MD, Lutheran Medical Group, Fort Wayne, IN, United States

- 10:00 AM** *Networking on Long Distance Retrievals: Lung Vision*
 Marcos N. Samano, MD, PhD, Albert Einstein Hospital, São Paulo, Brazil
- 10:15 AM** *Networking on Long Distance Retrievals: Can Telehealth Technologies Enable a Better Approach/Assessment of the Donor?*
 Antonio Loforte, MD, PhD, S. Orsola Hospital, University of Bologna, Bologna, Italy
- 10:30 AM** *Donors for Everyone: Regional Organ Procurement*
 Michael K. Pasque, MD, Washington University School of Medicine, St. Louis, MO, United States
- 10:45 AM** *Networking for Organ Allocation in Europe When the Borders are Closed*
 Axel Rahmel, MD, German Procurement Organisation DSO, Frankfurt, Germany

9:45 AM - 11:15 AM

SYMPOSIUM 38: Immunology of Aging in Thoracic Transplantation and MCS (RES-IMM, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM)

Chairs: Hanneke M Kwakkel-van Erp, MD, PhD, and John McDyer, MD

Session Summary: Older thoracic transplant and mechanical circulatory support patients have increased rates of infection and death compared with younger patients, demonstrating the important of age-associated immune dysfunction in the growing numbers of older candidates. At the same time, older patients have lower rates of rejection compared with younger patients. This symposium seeks to explore differences across a variety of immunologic lineages, leading to a concept of biologic rather than chronologic age.

- 9:45 AM** *Biology of T Cell Aging: Senescence and Exhaustion*
 Joanna M Schaanman, MD, PhD, UCLA School of Medicine, Los Angeles, CA, United States
- 10:00 AM** *B Cells, Aging and Impact on Transplantation*
 Marilia Cascalho, MD, PhD, University of Michigan Hospital, Ann Arbor, MI, United States
- 10:15 AM** *NK Cells, Aging, and Tolerance in Transplantation*
 Daniel Calabrese, MD, UCSF Medical Center, San Francisco, CA, United States
- 10:30 AM** *Chronic Inflammation in Immune Aging - Role of Telomeres*
 John McDyer, MD, University of Pittsburgh School of Medicine, Pittsburgh, PA, United States
- 10:45 AM** *Continuous Flow Ventricular Assist Devices and Cellular Aging*
 Maja-Theresa Dieterlen, PhD, Herzzentrum Leipzig, Leipzig, Germany

9:45 AM - 11:15 AM

SYMPOSIUM 39: Short-Term MCS in Bridging the Gap Between Recovery and Transplant (CT-SURG, AN-CC, CARD, ID, NURS-AH, PEDS, PHARM, RES-IMM)

Chairs: Carmelo A Milano, MD, Jens Garbade, MD, PhD, and Kewal Krishan, MD

Session Summary: The symposium will review all short-term circulatory support devices and their pros and cons. We will discuss which patients are best suited for short-term support, which would do better with durable support, and who should not be supported at all. We will discuss how to manage the acute heart failure patient; specifically, which patients will recover and which should be transitioned to durable support or transplant. Finally, we will

review the new heart allocation system in the US and its impact on decision making around support strategies. A panel discussion with all speakers will conclude this session.

- 9:45 AM** *Percutaneous Management of the Acute Heart Failure Patient*
David Schibilsky, MD, University of Freiburg, Freiburg, Germany
- 9:57 AM** *Surgical Management of the Acute Heart Failure Patient, Temporary vs Durable Support*
Julia Riebandt, MD, University of Vienna, Vienna, Austria
- 10:09 AM** *Will This Heart Beat Again? Who Will Recover and Who to Transplant*
Shelley Hall, MD, Baylor University Medical Center, Dallas, TX, United States
- 10:21 AM** *Novel Strategies for Extended Support for Pediatric and Adult Patients with 'Short-Term' Mechanical Circulatory Support*
Iki Adachi, MD, Texas Children's Hospital/Baylor College of Medicine, Houston, TX, United States
- 10:33 AM** *DEBATE: Short-Term MCS is the Best Strategy for Bridge to Heart Transplant (PRO)*
Lauren B Cooper, MD, MHS, Inova Heart and Vascular Institute, Fairfax, VA, United States
- 10:45 AM** *DEBATE: Short-Term MCS is the Best Strategy for Bridge to Heart Transplant (CON)*
Jeffrey J Teuteberg, MD, Stanford University, Stanford, CA, United States

11:30 AM - 1:00 PM

MINI ORAL 17: Thinking Outside the Box: Perioperative Strategies to Improve Outcomes After Lung Transplantation
(ALL, AN-CC, CT-SURG, PULM, RES-IMM)

Chairs:

- 11:30 AM** (371) *Donor Substance Abuse is Not Associated with Late High-Grade Primary Graft Dysfunction (PGD) in Lung Transplant*; C. Liu¹, E. Hauptmann¹, M. Ali¹, C. Heid², J. Pruszyński², A. Banga³, M. Wait², L. C. Huffman², M. Peltz², A. E. Hackmann², M. E. Jessen², W. S. Ring², J. Murala². ¹Medical School, The University of Texas Southwestern Medical Center, Dallas, TX, ²Department of Cardiovascular and Thoracic Surgery, The University of Texas Southwestern Medical Center, Dallas, TX, ³Division of Pulmonary and Critical Care Medicine, The University of Texas Southwestern Medical Center, Dallas, TX
- 11:35 AM** (372) *Delayed Chest Closure Following Bilateral Lung Transplantation: Risk Factors and Outcomes*; S. Tsou¹, J. Chen², C. Feng³, B. Trinh², T. Deuse², S. Hays⁴, J. A. Golden⁴, A. Venado Estrada⁴, J. P. Singer⁴, M. Brzezinski³, J. Kukreja². ¹School of Medicine, University of California, San Francisco, San Francisco, CA, ²Division of Cardiothoracic Surgery, University of California, San Francisco, San Francisco, CA, ³Department of Anesthesia, University of California, San Francisco, San Francisco, CA, ⁴Division of Pulmonary Medicine, University of California, San Francisco, San Francisco, CA
- 11:40 AM** (373) *Early Implementation of Renal Replacement Therapy after Lung Transplantation Does Not Impair Long-Term Kidney Function in iPAH Patients*; A. Benazzo, S. Schwarz, A. Necha, L. Bajorek, A. Morscher, L. Schrutka, T. Schweiger, B. Moser, J. Matilla, G. Lang, S. Taghavi, W. Klepetko, P. Jaksch, K. Hoetzenecker. *Thoracic Surgery, Medical University of Vienna, Vienna, Austria*

- 11:50 AM** **(375) Lung Transplantation Using Allografts with Extreme Ischemic Time: A Single-Institution Experience;** S. E. Halpern¹, S. Au¹, S. J. Kesseli², M. K. Krischak¹, D. G. Olaso¹, B. A. Bottiger³, J. C. Haney², J. A. Klapper², M. G. Hartwig². ¹Duke University School of Medicine, Durham, NC, ²Surgery, Duke University Medical Center, Durham, NC, ³Anesthesiology, Duke University Medical Center, Durham, NC
- 11:55 AM** **(376) Effect of Surgical Exposure on Outcomes in Lung Transplantation: Insight from the International Multicenter Extracorporeal Life Support (ECLS) in Lung Transplantation Registry;** F. Ius¹, D. Van Raemdonck², M. Hartwig³, B. Bottiger³, G. Loor⁴, D. Daoud⁴, Q. Wei⁴, M. Villavicencio-Theoduloz⁵, A. Osho⁵, S. Chandrashekar⁶, T. N. Machuca⁶, A. Neyrinck², Y. Toyoda⁷, M. A. Kashem⁷, S. Huddleston⁸, M. Myers⁸, P. G. Sanchez⁹, N. R. Ryssel⁹, G. Warnecke¹⁰. ¹Hannover Medical School, Hannover, Germany, ²University Hospitals Leuven, Leuven, Belgium, ³Duke University Medical Center, Durham, NC, ⁴Baylor College of Medicine, Houston, TX, ⁵Massachusetts General Hospital, Boston, MA, ⁶University of Florida, Gainesville, FL, ⁷Temple University Hospital, Philadelphia, PA, ⁸University of Minnesota Medical School, Minneapolis, MN, ⁹University of Pittsburgh Medical Center, Pittsburgh, PA, ¹⁰Heidelberg University Hospital, Heidelberg, Germany
- 12:00 PM** **(377) Lung Transplantation Outcomes after Crossing Low Level Donor Specific Antibodies without Augmented Immunosuppression;** A. Courtwright¹, M. Kamoun², J. Kearns², J. M. Diamond¹, V. N. Ahya¹, M. Cevalco³, J. D. Christie¹, E. Clausen¹, D. Hadjiliadis¹, J. Lee¹, N. Patel¹, J. C. Salgado¹, E. E. Cantu³, M. M. Crespo¹, C. A. Bermudez³. ¹Pulmonary and Critical Care Medicine, University of Pennsylvania, Philadelphia, PA, ²Pathology and Laboratory Medicine, University of Pennsylvania, Philadelphia, PA, ³Cardiovascular Surgery, University of Pennsylvania, Philadelphia, PA
- 12:05 PM** **(378) Lung Transplant Outcomes Based on Immunosuppressive Regimen at Discharge: Data from the US Scientific Registry of Transplant Recipients (SRTR);** J. Erdman¹, J. Wolfram², D. Nimke¹, R. Croy³, X. Wang¹, W. E. Fitzsimmons⁴, T. Weaver⁵, D. Schladt⁵. ¹Astellas Pharma, Inc, Northbrook, IL, ²Astellas Pharma Europe BV, Leiden, Netherlands, ³Astellas Pharma, Inc, Tokyo, Japan, ⁴University of Illinois, Chicago, IL, ⁵Chronic Disease Research Group, Minneapolis, MN
- 12:10 PM** **(379) A Virtualcrossmatch-Based Strategy for Perioperative Desensitization in Lung Transplant Recipients with Pre-Formed Donor-Specific Antibodies: 3-year Outcome;** O. Brugiere¹, B. Zuber², A. Vallée³, J. Taupin⁴, C. Cuquemelle⁵, L. Beaumont⁶, C. Picard⁶, A. Hamid⁶, S. Colin de Verdière⁶, D. Grenet⁶, S. De miranda⁶, M. Le Guen⁷, M. Glorion⁶, S. Sage⁸, C. Cerf⁹, A. Roux⁶, F. Parquin¹⁰. ¹Transplantation pulmonaire, Hopital Foch, Suresnes, France, Paris, France, ²Réanimation Médicale, Hopital Foch, Suresnes, France, Paris, France, ³Biostatistics, Hopital Hôtel Dieu, APHP, Paris, France, ⁴Laboratoire d'histocompatibilité, Hôpital Saint-Louis, Paris, France, ⁵Réanimation médicale, Hôpital Foch, Suresnes, France, ⁶Transplantation pulmonaire, Hopital Foch, Suresnes, France, Suresnes, France, ⁷Anesthésie-Réanimation, Hopital Foch, Suresnes, France, Suresnes, France, ⁸Chirurgie Thoracique, Hôpital Foch, Suresnes, France, ⁹Réanimation médicale, Hôpital Foch, Paris, France, ¹⁰Réanimation médicale, Hopital Foch, Suresnes, France, Suresnes, France
- 12:15 PM** **(380) High Immunologic Risk Lung Transplantation Using Risk Stratified Induction;** M. Wang¹, P. Campbell², E. Esme Dijke², D. Lien¹, R. Varughese¹, J. Weinkauff¹, A. Kapasi¹, J. Nagendran³, A. Hirji¹, D. Li¹, K. Halloran¹. ¹Department of Medicine, University of Alberta, Edmonton, AB, Canada, ²Department of Laboratory Medicine and Pathology, University of Alberta, Edmonton, AB, Canada, ³Department of Surgery, University of Alberta, Edmonton, AB, Canada

12:20 PM (381) *Lung Transplantation for Bronchopulmonary Dysplasia: An Analysis of the UNOS Registry*; A. Dani¹, D. Hayes², J. C. Woods², D. L. Morales¹, R. Hirsch³, F. Zafar¹, E. B. Hysinger². ¹Cardiothoracic Surgery, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ²Pulmonary Medicine, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ³Cardiology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

12:25 PM (382) *Perioperative Acute Kidney Injury after Sequential Bilateral Lung Transplant: Comparing Intraoperative Elective VA ECMO to an "Off Pump" Strategy*; B. Bottiger¹, J. Klapper², M. Cooter¹, H. Salfity², A. Pollak¹, K. Ghadimi¹, J. Reynolds³, J. Haney², M. Hartwig², M. Stafford-Smith¹. ¹Anesthesiology, Duke University, Durham, NC, ²Department of Surgery, Cardiothoracic Division, Duke University, Durham, NC, ³Department of Medicine, Transplant Pulmonology, Duke University, Durham, NC

11:30 AM - 1:00 PM

ORAL SESSION 38: Examine Well Your Blood: Cardiac Allograft Vasculopathy (CARD)

Chairs:

11:30 AM (71) *Triglyceride Glucose Index is an Independent Predictor for Cardiac Allograft Vasculopathy and Cardiovascular Mortality Following Heart Transplantation*; Y. Peled, E. Ram, J. Lavee, R. Klempfner, E. Raanani. Sheba Medical Center and Tel Aviv University, Ramat Gan, Israel

11:40 AM (72) *Predicting Cardiac Allograft Vasculopathy Profiles Using Machine Learning Clustering*; Y. Moayed¹, E. Somerset², S. Fan², B. Doumouras¹, E. Henricksen³, F. Billia¹, J. G. Duero Posada¹, S. Chih⁴, H. Ross¹, J. J. Teuteberg⁵. ¹Cardiology, University Health Network, Toronto, ON, Canada, ²Ted Rogers Computational Program, University Health Network, Toronto, ON, Canada, ³Pharmacy, Stanford Healthcare, Stanford, CA, ⁴Cardiology, Ottawa Heart Institute, Ottawa, ON, Canada, ⁵Cardiology, Stanford University, Stanford, CA

11:50 AM (73) *Is Donor-Derived Cell Free DNA a Useful Biomarker of Cardiac Allograft Vasculopathy? (FreeDNA-CAV Study)*; M. Jimenez-Blanco Bravo, L. Pérez Gómez, F. Hernández Pérez, M. Torres Sanabria, C. Arellano Serrano, M. Gómez Bueno, J. Segovia Cubero. Cardiology, Hospital Puerta de Hierro Majadahonda, Madrid, Spain

12:00 PM (74) *Regadenoson Myocardial Contrast Echocardiography Perfusion Imaging for Detection of Allograft Coronary Vasculopathy*; J. Steiner, J. Hodovan, N. Colaco, L. Masha, D. Meyers, J. Lindner. OHSU, Portland, OR

12:10 PM (75) *The Effects of Donor-Specific Antibody Characteristics on Cardiac Allograft Vasculopathy*; M. Wang¹, N. Patel², E. Kransdorf², B. Azarbal², X. Zhang¹, J. A. Kobashigawa², J. Patel². ¹Cedars-Sinai Medical Center, Los Angeles, CA, ²Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA

12:20 PM (76) *Validation of Coronary Angiography-Derived Vessel Fractional Flow in Heart Transplant Patients with Suspected Graft Vasculopathy*; S. Nagumo, E. Gallinoro, A. Candreva, S. Dierckx, R. Dierckx, W. Heggermont, J. Bartunek, M. Goethals, D. Buytaert, N. Mileva, B. De Bruyne, J. Sonck, C. Collet, M. Vanderheyden. Cardiovascular Center Aalst, OLV Clinic, Aalst, Belgium

11:30 AM - 1:00 PM

ORAL SESSION 39: Don't Break My Heart: Temporary MCS Impact on Heart Transplant Outcomes (CT-SURG, AN-CC, CARD, RES-IMM)

Chairs:

- 11:30 AM** (179) *One-year before and after UNOS Status Change Effect on ECMO as a Bridge to Heart Transplant*; J. P. Li¹, P. Kingsford¹, S. Hashmi¹, J. Onwuzurike¹, P. Genyk¹, G. Liu², M. Saffarian¹, K. Yang¹, P. Abarca¹, P. Singhal¹, A. Sharma¹, S. Miller¹, S. Patel¹, D. Miklin¹, C. Lum³, A. Salimbangon², R. Lee Jr.¹, A. Lee¹, J. Nattiv², J. Pizula², M. Fong², L. Gralette², J. Rahman², K. Pandya², A. Wolfson⁴, E. C. DePasquale², A. S. Vaidya². ¹Internal Medicine, Keck Medicine of USC, Los Angeles, CA, ²Cardiology, Keck Medicine of USC, Los Angeles, CA, ³Internal Medicine, The Queen's Medical Center, Honolulu, HI, ⁴Cardiology, University of Arizona Sarver Heart Center, Los Angeles, CA
- 11:40 AM** (180) *Changes in Waitlist Survival for Patients Bridged by VA-ECMO in the United States*; T. C. Hanff¹, M. O. Harhay², P. Atluri³, M. A. Acker³, J. W. Wald¹, L. R. Goldberg¹, E. Y. Birati¹. ¹Division of Cardiovascular Medicine, Hospital of University of Pennsylvania, Philadelphia, PA, ²Department of Biostatistics, Epidemiology, and Informatics, University of Pennsylvania, Philadelphia, PA, ³Division of Cardiovascular Surgery, Hospital of University of Pennsylvania, Philadelphia, PA
- 11:50 AM** (181) *Effect of the New Donor Heart Allocation System on Waitlist Mortality among All Candidates Listed with Mechanical Circulatory Support*; J. Ortoleva, T. Nordan, F. Y. Chen, A. Vest, M. Kiernan, D. DeNofrio, G. S. Couper, M. Kawabori. Tufts Medical Center, Boston, MA
- 12:00 PM** (182) *Impact of Pre-Transplant ECMO Duration on Heart Transplant Survival*; M. T. McGoldrick¹, I. Barbur¹, E. W. Etchill², K. Giuliano², S. Hsu², K. Sharma², A. Kilic², C. Choi². ¹Johns Hopkins University School of Medicine, Baltimore, MD, ²Johns Hopkins Hospital, Baltimore, MD
- 12:10 PM** (183) *Outcomes of Heart Transplant Recipients Bridged with Percutaneous versus Durable LVADs*; Y. Xia¹, J. Kim², A. Nsair³, A. Ardehali¹, R. Shemin¹, M. Kwon¹. ¹Surgery, Division of Cardiac Surgery, UCLA, Los Angeles, CA, ²David Geffen School of Medicine at UCLA, Los Angeles, CA, ³Medicine, Cardiology, UCLA, Los Angeles, CA
- 12:20 PM** (184) *Extracorporeal Membrane Oxygenation for Early Graft Dysfunction Following Heart Transplantation: A Systematic Review and Meta-Analysis*; N. Aleksova¹, T. A. Buchan¹, F. Foroutan¹, A. Zhu², P. Noly³, M. Carrier³, S. F. Marasco⁴, M. Pozzi⁵, S. Lehmann⁶, K. Jawad⁶, A. Defontaine⁷, O. Baron⁷, A. Loforte⁸, E. Dal Checco⁸, D. O. Absi⁹, M. Kawabori¹⁰, M. A. Mastroianni¹⁰, M. Simonenko¹¹, A. Marichev¹¹, S. Sponga¹², U. Livi¹², A. Orchanian-Cheff¹³, H. J. Ross¹, G. Guyatt¹⁴, F. Billia¹, A. C. Alba¹. ¹Peter Munk Cardiac Centre, Toronto General Hospital, University Health Network, Toronto, ON, Canada, ²University of Toronto, Toronto, ON, Canada, ³Department of Cardiac Surgery, Montreal Heart Institute, Montreal, QC, Canada, ⁴Department of Cardiothoracic Surgery, The Alfred Hospital, Melbourne, Australia, ⁵Service de Chirurgie Cardiaque, Hospices Civils de Lyon, Hopital Louis Pradel, Lyon, France, ⁶Heart Center, University of Leipzig, Leipzig, Germany, ⁷Centre Hospitalier Universitaire de Nantes, Nantes, France, ⁸Cardio-Thoracic-Vascular Department, S. Orsola University Hospital, Bologna, Italy, ⁹University Hospital Fundación Favaloro, Buenos Aires, Argentina, ¹⁰Department of Cardiovascular Surgery, Tufts Medical Center, Boston, MA, ¹¹Almazov National Medical Research Centre, St. Petersburg, Russian Federation, ¹²Cardiothoracic Department, University Hospital of Udine, Udine, Italy, ¹³Library and Information Services, University Health Network, Toronto, ON, Canada, ¹⁴Department of Health Research Methods, Evidence and Impact, McMaster University, Hamilton, ON, Canada

11:30 AM - 1:00 PM

**ORAL SESSION 40: It's a Bug's Life: The Microbiome in Heart Transplantation
(ID, CARD, RES-IMM)**

Chairs:

- 11:30 AM** (29) *Malnutrition is Associated with Gut Dysbiosis and Perioperative Infections in LVAD Patients*; L. Braghieri¹, B. Bohn², J. Porter¹, C. P. Reighard¹, J. Cho¹, M. T. Pineda¹, A. Pinsino³, G. M. Mondellini¹, H. Lumish¹, K. Takeda¹, Y. Naka¹, G. T. Sayer¹, N. Uriel¹, D. S. Seres¹, P. C. Colombo¹, R. T. Demmer², M. Yuzefpolskaya¹. ¹Columbia University Irving Medical Center, New York, NY, ²University of Minnesota - School of Public Health, Minneapolis, MN, ³Albert Einstein College of Medicine Health + Hospitals/Jacobi, Bronx, NY
- 11:40 AM** (30) *Tacrolimus Time in Therapeutic Range is Associated with Cellular Rejection and Gut Dysbiosis Early after Heart Transplant*; B. Bohn¹, D. L. Jennings², L. Braghieri², G. M. Mondellini², A. Pinsino³, K. Finnigan², K. Takeda², Y. Naka⁴, M. V. Habal², F. Latif², M. A. Farr², G. T. Sayer², N. Uriel², P. C. Colombo², R. T. Demmer⁵, M. Yuzefpolskaya². ¹University of Minnesota - School of Public Health, Minneapolis, MN, ²Columbia University Irving Medical Center, New York, NY, ³Albert Einstein College of Medicine Health + Hospitals/Jacobi, Bronx, NY, ⁴Columbia University Irving Medical Center, Minneapolis, NY, ⁵University of Minnesota - School of Public Health, Minneapolis, NY
- 11:50 AM** (31) *The Association of Sarcopenia with Gut Dysbiosis and Inflammation in Heart Failure, LVAD and Heart Transplant Patients*; L. Braghieri¹, A. Pinsino², B. Bohn³, K. Takeda¹, Y. Naka¹, G. T. Sayer¹, N. Uriel¹, R. T. Demmer³, P. C. Colombo¹, M. Yuzefpolskaya¹. ¹Columbia University Irving Medical Center, New York, NY, ²Albert Einstein College of Medicine Health + Hospitals/Jacobi, Bronx, NY, ³University of Minnesota - School of Public Health, Minneapolis, MN
- 12:00 PM** (32) *The Association of Renal Dysfunction with Gut Dysbiosis in Heart Failure, LVAD and Heart Transplant Patients - A Mediation Analysis*; L. Braghieri¹, A. Pinsino², B. Bohn³, G. M. Mondellini¹, K. Takeda¹, Y. Naka¹, G. T. Sayer¹, N. Uriel¹, R. T. Demmer³, P. C. Colombo¹, M. Yuzefpolskaya¹. ¹Columbia University Irving Medical Center, New York, NY, ²Albert Einstein College of Medicine Health + Hospitals/Jacobi, Bronx, NY, ³University of Minnesota - School of Public Health, Minneapolis, MN
- 12:10 PM** (33) *The Gut Microbiome in Heart Transplantation: A Prospective Pilot Study*; M. Dela Cruz¹, E. Littmann², R. Nayak², C. Lehmann³, R. Keskey⁴, T. Baker⁵, H. Lin², A. Bennett¹, G. Kim¹, S. Pinney¹, E. Pamer⁶, A. B. Nguyen¹. ¹Cardiology, University of Chicago, Chicago, IL, ²Duchossois Family Institute, University of Chicago, Chicago, IL, ³Infectious Disease, University of Chicago, Chicago, IL, ⁴General Surgery, University of Chicago, Chicago, IL, ⁵Surgery, University of Chicago, Chicago, IL, ⁶Duchossois Family Institute; Microbiology; Infectious Diseases, University of Chicago, Chicago, IL
- 12:20 PM** (34) *Apparent Immune Effect of Clostridium Difficile in Post-Heart Transplant Recipients*; J. Patel, M. Kittleson, S. Rashidi, T. Singer-Englar, N. Patel, E. Kransdorf, A. Hage, L. Czer, D. Megna, J. A. Kobashigawa. Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA

11:30 AM - 1:00 PM

**SYMPOSIUM 40: Selection of Donors for Pediatric Heart and Lung Transplantation: Maximizing Use of a Limited Resource
(PEDS, AN-CC, CARD, CT-SURG, NURS-AH, PHARM, PULM)**

Chairs: Justin Godown, MD, Ernestina Melicoff, MD, and Christian Benden, MD FCCP

Session Summary: This session aims to report the current state of donor selection and management, discuss the factors that impact donor acceptance, highlight provider behaviors that may negatively impact donor utilization, discuss the positive and negative impacts of publicly reported outcome data, and discuss future strategies to optimize the utilization of potentially viable donor hearts and lungs. A panel discussion with all speakers will conclude this session.

- 11:30 AM** *Donor Allocation Systems across the Globe: How Can We Improve Use of Limited Resources?*
Jens Boehmer, MD, The Queen Silvia Children's Hosp, Gothenburg, Sweden
- 11:42 AM** *Donor Selection among Pediatric Heart Transplant Providers: Waste Not, Want Not*
Anna Joong, MD, Lurie Children's Hospital, Chicago, IL, United States
- 11:54 AM** *Donor Selection among Pediatric Lung Transplant Providers: Waste Not, Want Not*
Nicolaus Schwerk, MD, Hannover Medical School, Hannover, Germany
- 12:06 PM** *Donor Assessment Scoring in Pediatric Heart Transplantation to Ensure the Optimal Use of Organs*
Farhan Zafar, MD, Children's Hospital Med Ctr, Cincinnati, OH, United States
- 12:18 PM** *Behavioral Economics: How Our Biases Impact Provider Decision-Making in Donor Selection*
Gretchen Chapman, PhD, Carnegie Mellon University, Pittsburgh, PA, United States
- 12:30 PM** *Public Reporting of Transplant Outcomes: Does This Change Our Willingness to Take Organs?*
Ryan Davies, MD, Children's Hospital, Dallas, TX, United States

11:30 AM - 1:00 PM

**SYMPOSIUM 41: A Balancing Act: Innate Mechanisms of Injury and Immunomodulation in Transplantation
(RES-IMM, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM)**

Chairs: Christian Heim, MD, Ciara M Shaver, MD PhD, and Stephen C Juvet, MD, PhD, FRCPC

Session Summary: Transplant immunology is a rapidly advancing field. This session aims to challenge existing paradigms regarding how the innate immune system and its effector cells are helpful or harmful to thoracic allografts. Identifying similarities and differences between heart and lung transplant immunology may help advance understanding of the immunobiology of both organs. The primary goal of this session is to enrich understanding of allograft immune responses with a focus on targets for interventions.

- 11:30 AM** *Setting the Stage*
Christian Heim, MD, University of Erlangen, Erlangen, Germany
- 11:35 AM** *Cellular Death: The Kickoff*
Mingyao Liu, MD, MSc, Toronto General Hospital, Toronto, ON, Canada

- 11:47 AM** *Mitochondria: A Game Changer*
Andrew E Gelman, PhD, Washington University School of Medicine, St. Louis, MO, United States
- 11:59 AM** *Endothelium and Epithelium: Ground Zero*
Christine Falk, PhD, Hannover Medical School, Hannover, Germany
- 12:11 PM** *Complement: Defending Cell Integrity*
Hrishikesh S Kulkarni, MD, Washington University in St Louis, Saint Louis, MO, United States
- 12:23 PM** *Therapeutic Targets for Innate Immune Manipulation: The Comeback*
Carl Atkinson, PhD, Medical University of South Carolina, Charleston, SC, United States

11:30 AM - 1:00 PM

SYMPOSIUM 42: Big Brother is Watching You! Home-Monitoring and Technical Advances in VAD Therapy (CARD, AN-CC, CT-SURG, NURS-AH, PATH, PEDS, PULM, RES-IMM)

Chairs: Kathleen Grady, PhD, APN, FAAN, Laurens Tops, MD, and Andrew J Lenneman, MD

Session Summary: Long-term mechanical circulatory support improves outcome and quality of life of patients with advanced heart failure. There is growing evidence that home-monitoring of patients with a ventricular assist device (VAD) may impact outcome. In addition, recent innovations in powering devices and both internal and external device management have advanced VAD therapy. In this session, the role of home-monitoring of VAD patients and recent innovations in VAD technology will be discussed.

- 11:30 AM** *When the Beat Goes On: Monitoring of Arrhythmias in VAD Patients*
Gabriel Sayer, MD, New York Presbyterian Hospital/Columbia University Medical Center, New York, NY, United States
- 11:42 AM** *Forgotten No More? Use of Hemodynamics in Monitoring and Optimization of VAD Patients*
Eugene C DePasquale, MD, Keck School of Medicine of USC, Los Angeles, CA, United States
- 11:54 AM** *Of Cuff and Doppler: (Home-)Monitoring of Blood Pressure in VAD Patients*
Van-Khue Ton, MD, PhD, Massachusetts General Hospital, Boston, MA, United States
- 12:06 PM** *It's All about Coordination: The VAD Coordinator's Perspective on Home-Monitoring*
Thomas Schloeglhofer, MSc, Medical University of Vienna, Vienna, Austria
- 12:18 PM** *Of Apps and Icons: Utilizing Smart Phones and Tablets to Enhance Patient Monitoring*
Jesus Casida, PhD, RN, APN-C, FAAN, Johns Hopkins University, Baltimore, MD, United States
- 12:30 PM** *Innovations in Mechanical Circulatory Support*
Pramod Bonde, MD, Yale School of Medicine, New Haven, CT, United States

3:00 PM - 4:00 PM

WORKSHOP 16: Cardiac Allograft Injury: It's More Than Just Rejection!
(CARD, AN-CC, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Martin Goddard, MD, Brandon T Larsen, MD, PhD, and Connie White-Williams, RN, PhD

Session Summary: Cardiac allograft dysfunction (CAD) reflects myocardial injury (MI). Previously attributed to acute cellular rejection and infection, the current etiology is multifactorial. New diagnostic modalities are directed at detection and enumeration of MI. This symposium will discuss CAD as a consequence of MI. Clinicians and pathologists will be aware of causes of injury and how diagnostic modalities address them. The symposium will unite clinicians and pathologists to discuss emerging modalities.

3:00 PM *Histopathology of Allograft Injury: A Temporal Paradigm*
Gerald J Berry, MD, Stanford University, Stanford, CA, United States

3:15 PM *Allograft Dysfunction: A Clinician's Approach to a Common Dilemma*
Christopher S Hayward, MD, St. Vincent's Hospital, Sydney, Australia

3:30 PM *Integration of Information Overload: The Role of the Pathologist*
Ornella Leone, MD, Sant'Orsola Academic Hospital, Bologna, Italy

3:00 PM - 4:00 PM

WORKSHOP 17: A Worthwhile Pursuit: Balancing Parallel Goals of Prolonged Life and Relief from Symptom Burden in Advanced Heart and Lung Disease
(PULM, AN-CC, CARD, CT-SURG, NURS-AH, PEDS, PHARM)

Chairs: Sasha Storaasli, LCSW, Sandeep Sahay, MD, and Rachel M Crackett, MSc

Session Summary: Advanced cardiopulmonary disease (both the disease and treatment) has a devastating effect of quality of life (QoL). Palliative care support as a treatment option is very much underutilized in patients with end stage heart and lung disease both before and after transplantation. This session will focus on how to integrate palliative care and improve QoL both before and after transplantation. A panel discussion with all speakers will conclude this session.

3:00 PM *Case Presentation on End-Stage Cardiopulmonary Disease*
Sandeep Sahay, MD, Houston Methodist Hospital, Houston, TX, United States

3:05 PM *A Breath of Fresh Air: Management of Dyspnea in End Stage Heart/Lung Disease*
Rebecca Colman, MD, University of Toronto, Toronto, ON, Canada

3:20 PM *This Could Go a Couple of Ways: Understanding How Preoperative Expectations of Quality of Life after Transplant Measure Up with Actual Experience*
Meghan Aversa, MD, University Health Network, Toronto, ON, Canada

3:35 PM *A Shared Reality: Seeing through the Lens by All Providers, Starting Early*
Eric P Nolley, MD, MS, Johns Hopkins, Baltimore, MD, United States

3:00 PM - 4:00 PM

**WORKSHOP 18: VAD Infection: What Are We Doing Wrong?
(CT-SURG, AN-CC, CARD, ID, NURS-AH, PATH, PEDS, PHARM)**

Chairs: Keyur Shah, MD, Margaret M Hannan, MD, and Stephanie M Pouch, MD, MS

Session Summary: This session will provide an overview of evidence-based approaches to diagnosis and management of LVAD infections. Individual speakers will add their own personal experience. Lectures will cover all aspects of non-VAD specific to VAD specific infection from the peri-operative period to months/years after implantation.

3:00 PM

Drive-Line Infection: Perils and Comprehensive Mitigation Strategies

Michiel Morshuis, MD, Heart Center NRW, Bad Oeynhausen, Germany

3:15 PM

LVAD Exchange or Heart Transplantation in Intractable Pump Infection?

Marian Urban, MD, PhD, University of Nebraska Medical Center, Omaha, NE, United States

3:30 PM

Internal Pump Components Infection

Palak Shah, MD, MS, Inova Fairfax Hospital, Falls Church, VA, United States

3:00 PM - 4:00 PM

**WORKSHOP 19: Challenging CTEPH Surgical Cases in the BPA Era
(PULM, AN-CC, CARD, CT-SURG, NURS-AH, PATH)**

Chairs: Andrea D'Armini, MD, Manreet Kanwar, MD, and Micheal McInnis, MD

Session Summary: BPA is becoming a new standard of treatment for inoperable CTEPH patients as it achieved satisfactory early and mid-term outcomes. Hence, it appears a grey zone for operable patients with distal disease whose surgery remains challenging and BPA seems possible. The aim of the session is to present surgical results of distal pulmonary endarterectomy (splenectomy, chronic emboli from catheter, blood disorders) and debate to know what is the best treatment of this challenging subset of patients. A panel discussion with all speakers will conclude this session.

3:00 PM

Case Presentation: Pulmonary Endarterectomy in Catheter-Induced CTEPH Patients

Andrea M D'Armini, MD, University of Pavia School of Medicine, Pavia, Italy

3:05 PM

Case Presentation: Pulmonary Endarterectomy in Blood Disorders Patients

David P Jenkins, FRCS, Royal Papworth Hospital, Cambridge, United Kingdom

3:10 PM

Case Presentation: Pulmonary Endarterectomy in Splenectomised Patients

Marc De Perrot, MD, Toronto General Hospital, Toronto, ON, Canada

3:15 PM

DEBATE: CTEPH in High-Risk Patients is Better Managed Using BPA Rather Than Undergoing Pulmonary Endarterectomy (PRO)

Hiroshi Matsubara, MD, PhD, Okayama Medical Center, Okayama, Japan

3:25 PM

DEBATE: CTEPH in High-Risk Patients is Better Managed Using BPA Rather Than Undergoing Pulmonary Endarterectomy (CON)

Elie Fadel, MD, Hosp Marie Lannelongue, Le Plessis Robinson, France

4:00 PM - 6:00 PM

PLENARY 3: Closing Plenary Session

(ALL, AN-CC, CARD, CT-SURG, ID, NURS-AH, PATH, PEDS, PHARM, PULM, RES-IMM)

Chairs: Lara Danziger-Isakov, MD, MPH, and Laurie D Snyder, MD

4:00 PM *Awards Presentations*

4:10 PM *Organ Preservation in the 2020s: Suspended Animation - Subzero Supercooling*
Shannon N Tessier, PhD, Massachusetts General Hospital, Boston, MA, United States

4:35 PM *(4) A Comparative Analysis of Long-Term Outcomes in the MOMENTUM 3 Pivotal Trial and Continued Access Protocol Post-Approval Study Phase: A Study of over 1500 HeartMate 3 Implants; M. R. Mehra, Brigham and Women's Hospital, Boston, MA*

4:45 PM *Featured Abstract Q&A with Invited Discussant*
Evgenij V. Potapow, MD, PhD., Deutsches Herzzentrum, Berlin, Germany

4:50 PM *Going Full Circle - From Tobacco Leaves to 3D Lung*
Oded Shoseyov, PhD, Hebrew University of Jerusalem, Jerusalem, Israel

5:15 PM *PRESIDENT'S DEBATE: Psychosocial Issues are a Contraindication to Transplantation (Introduction)*
Melissa Cousino, PhD, C.S. Mott Children's Hospital, Ann Arbor, MI, United States

5:20 PM *PRESIDENT'S DEBATE: Psychosocial Issues are a Contraindication to Transplantation (PRO)*
Erik Verschuuren, MD, PhD, University Medical Centre Groningen, Groningen, Netherlands

5:35 PM *PRESIDENT'S DEBATE: Psychosocial Issues Alone are a Contraindication to Transplantation (CON)*
Lianne G. Singer, MD, FRCPC, Toronto General Hospital, Toronto, ON, Canada

5:50 PM *Moderated Debate Rebuttals*

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(440) *The Impact of Health Insurance Status on Pediatric Heart Transplant Recipients*; M. S. Iqbal, Y. Zhang, J. Dykes, S. Gonzales, C. Almond. *Pediatric Cardiology, Stanford University, Palo Alto, CA*

(441) *Heart Transplant Waitlist Outcomes and Wait Time by Center Volume: Where Should You List?*; A. Critsinelis¹, T. Nordan², C. Hironaka², Y. Zhan², F. Y. Chen², G. S. Couper², M. Kawabori². ¹*Department of Surgery, Mount Sinai Medical Center, Miami Beach, FL*, ²*Tufts medical center, Boston, MA*

(442) *Sex-Related Temporal Trends in Donor and Recipient Profile and Outcome after Heart Transplantation: Analysis of the ISHLT Registry*; Y. Peled¹, R. Klempfner¹, J. Lavee¹, L. Kemeyou², E. Raanani¹, W. S. Cherikh³, J. Stehlik². ¹*Sheba Medical Center and Tel Aviv University, Ramat Gan, Israel*, ²*University of Utah School of Medicine, Salt Lake City, UT*, ³*United Network for Organ Sharing, Richmond, VA*

(443) *Racial and Regional Disparities in Utilization and Outcomes of Heart Transplant: An Analysis of Nis Database*; N. Ganta, H. Gonzalez, R. Ogunti, I. Opoku-Asare. *Cardiology, Howard University Hospital, Washington, DC*

(444) *Physiologic Phenotype of Cardiogenic Shock Due to End-Stage Heart Failure and Acute Myocardial Infarction: Effect of ECLS*; S. Lim. *University Hospital Birmingham, Birmingham, United Kingdom*

(445) *Predictors of Survival to Hospital Discharge with IABP Use in Acute Myocardial Infarction with Cardiogenic Shock*; M. Dimza¹, M. Al-Ani², D. Naik², S. Kennedy¹, A. H. Elsayed³, A. Parker², M. Ahmed², J. M. Aranda², J. R. Vilaro². ¹*Department of Internal Medicine, University of Florida, Gainesville, FL*, ²*Division of Cardiology, University of Florida, Gainesville, FL*, ³*Department of Pharmacotherapy and Translational Research, University of Florida, Gainesville, FL*

(446) *Estimation of Stressed Blood Volume in Patients with Cardiogenic Shock from Acute Myocardial Infarction and Decompensated Heart Failure*; E. H. Whitehead¹, K. L. Thayer², K. Sunagawa³, J. Hernandez-Montfort⁴, A. Garan⁵, M. Kanwar⁶, S. Sinha⁷, C. Mahr⁸, N. K. Kapur², D. Burkhoff⁹. ¹*Massachusetts General Hospital, Boston, MA*, ²*Tufts Medical Center, Boston, MA*, ³*Circulatory System Research Foundation, Tokyo, Japan*, ⁴*Cleveland Clinic Florida, Weston, FL*, ⁵*Beth Israel Deaconess Medical Center, Boston, MA*, ⁶*Allegheny Health Network, Pittsburgh, PA*, ⁷*Inova Heart and Vascular Institute, Falls Church, VA*, ⁸*University of Washington, Seattle, WA*, ⁹*Cardiovascular Research Foundation, New York, NY*

(447) *Improvement in Right Ventricular Stroke Work Index in Cardiogenic Shock Associated with Excellent Durable Left Ventricular Assist Implantation Results*; M. P. Rogers¹, B. D. Mackie², R. L. Hooker³. ¹*Department of Surgery, University of South Florida, Tampa, FL*, ²*Tampa General Hospital Transplant Institute, Tampa General Hospital, Tampa, FL*, ³*Nazih Zuhdi Transplant Institute, Integris Baptist Medical Center, Oklahoma City, OK*

(448) *Early Outcomes of Direct Heart Transplant Off Veno-Arterial Extracorporeal Membrane Oxygenation Support after New Heart Allocation Policy: Analysis Based on Etiology of Cardiomyopathy*; S. Ohira¹, D. Spielvogel¹, A. L. Gass², G. M. Lanier², C. Aggarwal-Gupta², A. Levine², S. Pan², B. Abraham³, C. Austin-Matison³, K. McCrink³, E. Jennings³, P. J. Spencer¹, M. Kai¹. ¹*Cardiothoracic Surgery, Westchester Medical Center, Valhalla, NY*, ²*Cardiology, Westchester Medical Center, Valhalla, NY*, ³*Westchester Medical Center, Valhalla, NY*

(449) *Therapeutic Strategies for Lupus Myocarditis Complicated by Cardiogenic Shock*; C. Smith¹, R. Rao², M. Guglin². ¹*Indiana University, Indianapolis, IN*, ²*Department of Cardiology, Indiana University, Indianapolis, IN*

(450) *Association of Patient Health Outcomes with Caregiver Burden after LVAD in Destination Therapy and as a Bridge to Transplant*; M. C. Benton¹, M. Thomas¹, J. A. Spertus¹, A. Andrei², A. Warzecha², T. Wu², K. Grady². ¹*Department of Cardiovascular Medicine, Mid America Heart Institute/University of Missouri Kansas City, Kansas City, MO*, ²*Feinberg School of Medicine, Northwestern University, Chicago, IL*

(451) *Prevalence of Cognitive Impairment in Heart Transplant Waiting List Patients in a Developing Country*; E. M. de Oliveira, E. T. Ikeda, M. S. Avila, I. W. Campos, L. F. Seguro, M. V. Santos, M. Feltrim, F. Barone, V. S. Issa, S. Lage, E. A. Bocchi, F. A. Gaiotto, C. Nomura, F. Bacal, F. G. Marcondes-Braga, S. Mangini. *Transplante cardíaco, INCOR - Instituto do Coração do Hospital das Clínicas da FMUSP, São Paulo, Brazil*

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(452) Socioeconomic Implications of Heart Transplant- An Indian Perspective; J. J. THOMAS, B. Renganathan, J. C. Periappuram. CVTS, Lisie Heart Institutie, Kochi, India

(453) Introduction of Machine Perfusion in Donor Hearts; N. Pizanis¹, A. Dimitriou¹, A. Koch¹, G. Ayoub¹, P. Luedike², M. Papathanasiou², A. Ruhparwar¹, B. Schmack¹, A. Weymann¹, M. Kamler¹. ¹Thoracic- and Cardiovascular Surgery, West German Heart Center Essen, University Hospital Essen, Essen, Germany, ²Cardiology, West German Heart Center Essen, University Hospital Essen, Essen, Germany

(454) Pre-Mortem Percutaneous Femoral Venous Cannulation Significantly Reduces Blood Collection Time and Warm Ischemic Time in Donation after Circulatory Death Heart Procurement; S. A. DeVries¹, E. Lushaj¹, R. Machotka², A. G. Fiedler¹, J. L. Hermsen¹, R. Dhingra³, J. W. Smith¹. ¹Cardiothoracic Surgery, University of Wisconsin, Madison, WI, ²Nursing, University of Wisconsin, Madison, WI, ³Cardiovascular Medicine, University of Wisconsin, Madison, WI

(455) Real World Experience with Transmedics Organ Care System in Cardiac Transplantation with Donor Organs Associated with Marginal Risk Factors; Y. Wong¹, J. Maddicks-Law¹, P. Raymond¹, M. Davidson¹, B. Thomson², V. Sharma², G. Javorsky¹, A. Prabhu². ¹Department of Cardiovascular Medicine, The Prince Charles Hospital, Chermside, Australia, ²Department of Cardiothoracic Surgery, The Prince Charles Hospital, Chermside, Australia

(456) Report of the 2020 Organ Care System Workforce Survey: Personnel Profiles and Staffing Models; B. Johnson¹, W. Riley², K. Iwai², M. Arcaro³, T. Song⁴. ¹Perfusion Services, UChicago Medicine, Chicago, IL, ²Perfusion Services, Massachusetts General Hospital, Boston, MA, ³Perfusion Services, CHI St. Luke's Health-Baylor St. Luke's Medical Center, Houston, TX, ⁴Department of Surgery, University of Chicago, Chicago, IL

(457) Use of SherpaPak™ CTS for Organ Transportation during Heart Transplantation: First Clinical Use in United Kingdom and Outcomes; V. Mehta¹, A. Joshi¹, J. Hasan¹, K. Oommen¹, P. Callan², S. Shaw², R. V. Venkateswaran³. ¹Cardiothoracic Surgery and Transplantation, Manchester University NHS Foundation Trust, Manchester, United Kingdom, ²Cardiology and Transplantation, Manchester University NHS Foundation Trust, Manchester, United Kingdom, ³Cardiothoracic Surgery and Transplantation, Manchester University NHS Foundation Trust and University of Manchester, Manchester, United Kingdom

(458) Early Experience with a New Storage Device for Cold Preservation; J. Gökler, P. Angleitner, R. Moayedifar, H. Johann, A. Aliabadi-Zuckermann, G. Laufer, A. Zuckermann. Department of Cardiac Surgery, Medical Univ of Vienna, Vienna, Austria

(459) Rupture of the Ascending Aorta in a Donor Heart during Ex-Vivo Transport: A Case Report; W. Y. Shi, M. Funamoto, T. D. Hull, T. M. Sundt, D. A. D'Alessandro. Division of Cardiac Surgery, Massachusetts General Hospital, Boston, MA

(460) Organ Care System for High Risk Transplantation: A New Paradigm; A. Vincentelli¹, J. Soquet¹, D. Deblauwe², N. Rousse¹, V. Loobuyck¹, C. Goeminne¹, A. Mugnier¹, G. Gantois³, A. Bical¹, M. Moussa³, E. Robin³, F. Juthier¹. ¹Cardiac Surgery, Centre Hospitalier Universitaire Regional de Lille, Lille, France, ²Anesthesiology Cardiac Surgery, Centre Hospitalier Universitaire Regional de Lille, Lille, France, ³Anesthesiology-Cardiac Surgery, Centre Hospitalier Universitaire Regional de Lille, Lille, France

(461) Gender Differences in Adherence to Nonpharmacological Health-Related Behaviors after Heart Transplant: A Secondary Analysis from the International BRIGHT Study; J. Trammell¹, F. R. Epstein¹, C. Liu¹, K. Denhaerynck², F. Dobbels³, C. Russell⁴, S. De Geest⁵. ¹Santa Clara Kaiser, San Jose, CA, ²Nursing Science Department Public Health, Faculty of Medicine, University of Basel, Basel, Switzerland, ³Academic Centre for Nursing and Midwifery, Department of Public Health and Primary Care, KU Leuven, Leuven, Belgium, ⁴School of Nursing, University of Missouri-Kansas City, Kansas City, MO, ⁵Nursing Science Department Public Health, Faculty of Medicine, University of Basel, Basel, Switzerland

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(462) Improvement of Adherence to Drug Therapy Using a Weekly Multidose Pillbox in Heart Transplant Patients. A Prospective Single-Center Study; M. Crespo-Leiro¹, S. Veiga-Seijo², P. Blanco-Canosa³, C. Naya-Leira³, C. Riveiro-Rodríguez³, Z. Grille-Cancela⁴, E. Barge-Caballero⁴, M. Sagastagoitia-Fornie⁴, M. Paniagua-Martín⁴, G. Barge-Caballero⁴, D. Couto-Mallón⁴, P. Pardo-Martínez⁴, N. Domenech-García⁵, G. Fernández-Arrojo⁶, J. Vázquez-Rodríguez⁴, J. Muñiz⁷. ¹Cardiology, Complejo Hospitalario Universitario A Coruña (CHUAC), CIBERCV, Universidade da Coruña, A Coruña, Spain, ²Cardiology, Complejo Hospitalario Universitario A Coruña (CHUAC), Universidade da Coruña, A Coruña, Spain, ³Cardiology, Complejo Hospitalario Universitario A Coruña (CHUAC), A Coruña, Spain, ⁴Cardiology, Complejo Hospitalario Universitario A Coruña (CHUAC), CIBERCV, A Coruña, Spain, ⁵Instituto de Investigación Biomédica de A Coruña (INIBIC), CIBERCV, A Coruña, Spain, ⁶Instituto de Investigación Biomédica de A Coruña, A Coruña, Spain, ⁷Health Sciences, Grupo de Investigación Cardiovascular, Universidade da Coruña, A Coruña, Spain

(463) Neurologic Events Following Pediatric Heart Transplantation; A. Power¹, J. M. Murray², J. C. Dykes³, D. N. Rosenthal³, S. A. Hollander³. ¹Department of Pediatrics, UT Southwestern Medical Center, Dallas, TX, ²Lucile Salter Packard Children's Hospital, Palo Alto, CA, ³Department of Pediatrics, Stanford University School of Medicine, Palo Alto, CA

(464) B Cell Abnormalities and Cancer Development in Heart Recipients; K. Limay¹, N. Jimenez¹, A. Gallego¹, E. Zatarain², I. Sousa², A. Alarcon¹, L. Calahorra¹, E. Sarmiento¹, J. Carbone¹. ¹Clinical Immunology, Hospital General Universitario Gregorio Marañón, Madrid, Spain, ²Cardiology, Hospital General Universitario Gregorio Marañón, Madrid, Spain

(465) Left Ventricular Assist Device (LVAD) Explant versus Decommissioning for LV Recovery; K. L. Morris¹, E. Mathis², S. Gupta³, A. Patel¹, R. Garcia-Cortes¹, M. Walsh¹, G. Zanotti⁴, S. Chaudhry¹, C. Salerno⁴, A. Ravichandran¹. ¹Advanced Heart Failure and Transplant, St. Vincent Hospital, Indianapolis, IN, ²Internal Medicine, St. Vincent Hospital, Indianapolis, IN, ³Cardiology, St. Vincent Hospital, Indianapolis, IN, ⁴Cardiovascular Surgery, St. Vincent Hospital, Indianapolis, IN

(466) Bloody Transplants! Impact of Prior Sternotomy on Transfusion Rate in Heart Transplantation; B. Schneegg, S. Emmanuel, P. Jansz, C. Hayward. *Heart and Lung clinic, St.-Vincent Hospital, Darlinghurst, Australia*

(467) Renal Decline Following Heart Transplant; C. Heid¹, M. Khoury², O. Harirah¹, A. Kalsbeek¹, K. Maaraoui¹, W. S. Ring¹, M. Jessen¹, M. Peltz¹. ¹Cardiovascular and Thoracic Surgery, University of Texas Southwestern, Dallas, TX, ²Surgery, University of Texas Southwestern, Dallas, TX

(468) Systematic Screening for Diabetes and Pre-Diabetes Post-Heart Transplantation; S. Roest¹, M. M. Goedendorp-Sluijmer¹, J. J. Köbber², J. J. Brugs¹, A. A. Constantinescu¹, K. Caliskan¹, A. A. Zandbergen², O. C. Manintveld¹. ¹Cardiology, Thorax Center, Erasmus MC, University Medical Center Rotterdam, Rotterdam, Netherlands, ²Internal Medicine, Erasmus MC, University Medical Center Rotterdam, Rotterdam, Netherlands

(469) Does Timing of Renal Dysfunction after Heart Transplant Result in Worse Outcomes?; M. Kittleson, J. Patel, N. Patel, T. Singer-Englar, M. Ackerman, G. Jameró, E. Kransdorf, D. Chang, L. Czer, D. Ramzy, J. A. Kobashigawa. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*

(470) Prevalence, Prognosis and Predictors of Neurological Complications after Heart Transplantation; C. Caraviello, D. Harsanyi, L. L B Trevizan, F. Bacal, S. Mangini. *Transplant Cardiology, Hospital Israelita Albert Einstein, São Paulo, Brazil*

(471) Acute Compartment Syndrome Following Heart Transplant; M. Khorramshahi Bayat¹, W. Chan¹, G. Javorsky¹, D. Platts¹, A. Dashwood¹, Y. Wong¹, A. Mulligan¹, P. Tesar², A. Prahbu³, B. Thomson⁴, J. Lavana⁵, S. McKenzie¹. ¹Advanced Heart Failure and Cardiac Transplant, The Prince Charles Hospital, Brisbane, Australia, ²Cardiac Surgical, The Prince Charles Hospital, Brisbane, Australia, ³Cardiothoracic surgery, The Prince Charles Hospital, Brisbane, Australia, ⁴Cardiac Surgery, The Prince Charles Hospital, Brisbane, Australia, ⁵Intensive Care, The Prince Charles Hospital, Brisbane, Australia

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(472) Skeletal Muscle Index Z-score –A Novel Method to Evaluate Malnutrition Level in Pediatric Heart Failure Patients?; L. M. Schultz¹, J. A. Sullivan², B. A. Derstine², B. E. Ross², J. Dykes¹, D. Lee¹, S. C. Wang³, C. S. Almond¹. ¹Department of Pediatrics and Surgery, Stanford University School of Medicine, Palo Alto, CA, ²Department of Morphomic Analysis Group, University of Michigan, Ann Arbor, MI, ³Department of Surgery Morphomic Analysis Group, University of Michigan, Ann Arbor, MI

(473) Use of Isosorbide Dinitrate/Hydralazine in the Pediatric Cardiac Population; E. L. Frandsen¹, C. J. Kirk², Y. M. Law¹, N. Musa³, M. D. Files¹. ¹Heart Center, Seattle Children's Hospital, Seattle, WA, ²Division of Pharmacy, Seattle Children's Hospital, Seattle, WA, ³Division of Critical Care, Seattle Children's Hospital, Seattle, WA

(474) Association between Pre-Albumin and Malnutrition in Children with Advanced Heart Failure; S. Gonzales¹, L. Schultz², J. C. Dykes³, S. Chen⁴, K. Wujcik², B. Kaufman⁴, C. Chen⁴, K. Maeda³, D. B. McElhinney³, C. Almond¹. ¹Department of Pediatrics, Stanford University School of Medicine, Palo Alto, CA, ²Lucile Packard Children's Hospital Stanford, Palo Alto, CA, ³Department of Pediatrics and Cardiac Surgery, Stanford University School of Medicine, Palo Alto, CA, ⁴Stanford University School of Medicine, Palo Alto, CA

(475) Trends in Hospitalizations and Racial Disparities in Rates of Procedures in Adults Hospitalized with Congenital Heart Disease; M. J. Hendrickson, S. Arora, M. Sharma, M. Yeung, M. Byku. University of North Carolina, Chapel Hill, Chapel Hill, NC

(476) The Teammate Trial: Study Design and Rationale of the First Pediatric Heart Transplant Randomized Clinical Trial; C. S. Almond¹, L. A. Sleeper², J. W. Rossano³, E. Pahl⁴, A. K. Lal⁵, C. D. Castleberry⁶, J. Lee⁷, S. A. Hollander⁸, G. Klein², L. M. Barkoff⁷, M. Bock⁹, M. Fenton¹⁰, K. P. Daly¹¹. ¹Pediatric Cardiology, Stanford University School of Medicine, Palo Alto, CA, ²Boston Children's Hospital, Boston, MA, ³Children's Hospital of Philadelphia, Philadelphia, PA, ⁴Ann & Robert H. Lurie Children's Hospital, Chicago, IL, ⁵U of Utah Primary Children's Hospital, Salt Lake City, UT, ⁶Washington University in St. Louis, St. Louis, MO, ⁷Lucile Packard Children's Hospital Stanford, Palo Alto, CA, ⁸Stanford University School of Medicine, Palo Alto, CA, ⁹Loma Linda University Children's Hospital, Loma Linda, CA, ¹⁰Great Ormond Street Hospital, London, United Kingdom, ¹¹Children's Hospital Boston, Boston, MA

(477) Taking a Closer Look at Distance: Does Increasing the Maximal Donor Distance Range Shorten Waitlist Times in Pediatric Heart Transplant Candidates?; L. M. Barkoff¹, J. C. Dykes², K. Maeda², S. A. Hollander², D. Rosenthal², B. D. Kaufman², E. Profita², K. Wujcik¹, C. S. Almond². ¹Lucile Packard Children's Hospital, Palo Alto, CA, ²Pediatric Cardiology, Stanford University School of Medicine, Palo Alto, CA

(478) Qualitative Exploration of the Pediatric Heart Failure Experience for Development of a Patient-Reported Outcome Measure; C. Chen¹, J. L. Ridgeway², F. D. Bocell³, M. L. Tanenbaum⁴, K. K. Hood⁴, E. Behnken⁵, J. Schmidt⁶, S. J. Hanes⁴, A. Saha³, B. Caldwell³, M. Tarver³, V. Peiris³, C. S. Almond¹, J. N. Johnson⁷. ¹Pediatric Cardiology, Stanford University, Palo Alto, CA, ²Health Services Research, Mayo Clinic, Rochester, MN, ³Center for Devices and Radiological Health, United States Food and Drug Administration, Silver Spring, MD, ⁴Pediatrics - Endocrinology, Stanford University, Palo Alto, CA, ⁵Knowledge and Evaluation Research Unit, Mayo Clinic, Rochester, MN, ⁶Pediatric Cardiology, Lucile Packard Children's Hospital Stanford, Palo Alto, CA, ⁷Pediatric Cardiology, Mayo Clinic, Rochester, MN

(479) Waitlist Outcomes for Heart Transplant Candidates with Congenital Heart Disease (CHD) before and after the 2018 UNOS Allocation Policy Change; S. Hashmi¹, J. P. Li¹, S. Patel¹, K. Yang¹, S. Miller¹, C. P. Bradley¹, A. Wolfson², A. S. Vaidya¹, E. DePasquale¹. ¹University of Southern California, Los Angeles, CA, ²University of Arizona, Tucson, AZ

(480) Outcomes of Heart Transplantation in Adults with Congenital Heart Disease Following the UNOS Allocation Policy Change; S. V. Patel¹, S. R. Miller¹, S. Hashmi¹, K. Yang¹, J. P. Li¹, A. S. Vaidya¹, A. M. Wolfson², E. C. DePasquale¹. ¹Cardiology, Keck Medicine of USC, Los Angeles, CA, ²Cardiology, University of Arizona Sarver Heart Center, Tucson, AZ

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

- (481) Cardiac Allograft Vasculopathy in Adult Congenital Heart Disease Patients Requiring Cardiac Transplantation;** C. DeZorzi, A. Magalski, H. Brandt, J. Saxon, A. Kao, D. Safley, B. Sperry. *Cardiology, University of Kansas City-Missouri, Kansas City, MO*
- (482) Implementing Coronary CT for Routine Annual Surveillance of Cardiac Allograft Vasculopathy in Heart Transplant Patients;** S. Roest¹, F. M. Nous², M. Attrach³, K. Caliskan¹, J. J. Brugts¹, K. Nieman⁴, A. Hirsch², A. A. Constantinescu¹, O. C. Manintveld¹, R. P. Budde². ¹Cardiology, Thorax Center, Erasmus MC, University Medical Center Rotterdam, Rotterdam, Netherlands, ²Cardiology, Radiology and Nuclear Medicine, Erasmus MC, University Medical Center Rotterdam, Rotterdam, Netherlands, ³Radiology and Nuclear Medicine, Erasmus MC, University Medical Center Rotterdam, Rotterdam, Netherlands, ⁴Radiology and Cardiology, Stanford University School of Medicine, Palo Alto, CA
- (483) Low-Density Lipoprotein Cholesterol Trends and the Development of Cardiac Allograft Vasculopathy after Heart Transplantation;** N. Aleksova¹, F. Umar², J. Bernick², L. M. Mielniczuk², H. J. Ross¹, S. Chih². ¹Peter Munk Cardiac Centre, Toronto General Hospital, University Health Network, Toronto, ON, Canada, ²University of Ottawa Heart Institute, Ottawa, ON, Canada
- (484) Surgical Palpation to Exclude Donor Transmitted Coronary Disease: A Single Centre Experience;** I. Vokshi, J. Ali, A. Ansaripour, E. Woolcock, C. Cheshire, J. Parameshwar, A. Kydd, C. Lewis, D. Jenkins, S. Tsui, P. Kaul, S. Large, M. Berman, S. Pettit, S. Bhagra. *Transplant Department, Royal Papworth Hospital, Cambridge, United Kingdom*
- (485) Coronary Allograft Vasculopathy is Associated with Decreased CD34⁺ Cell Count in Heart Transplant Recipients;** G. Poglajen¹, L. Poljančič², S. Frljak¹, G. Zemljič¹, A. Cerar¹, R. Okrajšek¹, M. Šebeštjen¹, B. Vrtovec¹. ¹Advanced Heart Failure and Transplantation Center, Dept. of Cardiology, University Medical Center, Ljubljana, Slovenia, ²Institute of Radiology, University Medical Center, Ljubljana, Slovenia
- (486) Moderate Association of Coronary Artery Calcium and Cardiac Allograft Vasculopathy in Heart Transplant Recipients on Non-Gated CT;** C. Bjorkman, S. Carter, A. A. Amin, P. H. Joshi. *Department of Internal Medicine, Division of Cardiology, UTSW, Dallas, TX*
- (487) The Association between Epicardial Fat and Cardiac Allograft Vasculopathy;** S. Roest¹, D. Bos², R. P. Budde³, T. van Walsum⁴, J. J. Brugts¹, K. Caliskan¹, A. A. Constantinescu¹, O. C. Manintveld¹. ¹Cardiology, Thorax Center, Erasmus MC, University Medical Center Rotterdam, Rotterdam, Netherlands, ²Radiology and Nuclear Medicine and Epidemiology, Erasmus MC, University Medical Center Rotterdam, Rotterdam, Netherlands, ³Cardiology, Radiology and Nuclear Medicine, Erasmus MC, University Medical Center Rotterdam, Rotterdam, Netherlands, ⁴Radiology and Nuclear Medicine, Erasmus MC, University Medical Center Rotterdam, Rotterdam, Netherlands
- (488) Donor Heart Coronary Calcification: Do We Take This Donor Heart?;** N. Patel, M. Kittleson, J. Patel, P. Hage, T. Singer-Englar, B. Azarbal, A. Nikolova, L. Czer, D. Megna, J. A. Kobashigawa. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*
- (489) Outcome of the Development of Early Restrictive Physiology after Heart Transplantation;** J. Patel, M. Kittleson, A. Deshpande, N. Patel, T. Singer-Englar, M. Hamilton, A. Hage, J. Moriguchi, L. Czer, F. Esmailian, J. A. Kobashigawa. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*
- (490) Association of Donor Age and Plasma Donor-Derived Cell-Free DNA Levels with CAV Development after Heart Transplant: SHORE Preliminary Data;** N. Raval¹, A. Ravichandran², S. Ghosh³, T. Wolf-Doty³, D. Ross³, S. Hall⁴, N. Uriel⁵. ¹Advent Health, Orlando, FL, ²Ascension St. Vincent, Indianapolis, IN, ³Medical Affairs, CareDx, Brisbane, CA, ⁴Baylor University Medical Center, Dallas, TX, ⁵Columbia University Irving Medical Center, Weill Cornell Medicine, New York, NY
- (491) Heart Transplantation Single Center Experience of 63 Heart Transplantation Procedures Performed during the COVID 19 Pandemic;** J. Malyszek-Tumidajewicz, A. Dyla, K. Ratman, M. Grochla, M. Jasinska, K.

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

Antonczyk, J. Waszak, I. Copik, E. Rotuska, J. Nozynski, M. O. Zembala. *Department of Cardiac, Vascular and Endovascular Surgery and Transplantation, Silesian Center for Heart Diseases in Zabrze, Zabrze, Poland*

(492) Natriuretic Peptide Levels and Clinical Outcomes among Patients Hospitalized with COVID-19 Infection; M. I. Aslam¹, A. Minhas¹, A. Ghorbani¹, J. Shade², V. Jani¹, S. Hsu¹, K. Sharma¹, D. Cihakova³, A. Hays¹, N. A. Gilotra¹. ¹Medicine, Division of Cardiology, Johns Hopkins Hospital, Baltimore, MD, ²Department of Biomedical Engineering, Johns Hopkins University School of Medicine, Baltimore, MD, ³Department of Pathology, Johns Hopkins University School of Medicine, Baltimore, MD

(493) The Utility of Televisits in Patients with Cardiac Amyloidosis during the COVID-19 Pandemic; S. Slomovich, J. A. Fried, K. J. Clerkin, J. Raikhelkar, M. S. Maurer, A. J. Kim, G. Sayer, N. Uriel, J. M. Griffin. *Medicine, Columbia University Irving Medical Center, New York, NY*

(494) Incidence and Outcomes of COVID-19 Infection in Heart Transplant Recipients: The USC Experience; D. Miklin¹, A. Lee¹, B. Rosen², A. Salimbanon², A. Cochran², P. Singhal¹, S. Miller¹, M. Saffarian¹, J. Onwuzurike¹, P. Kingsford¹, J. Li¹, K. Yang¹, A. Wolfson³, A. Vaidya¹, E. Depasquale⁴. ¹Internal Medicine, University of Southern California, Los Angeles, CA, ²Cardiology and Heart Transplant, University of Southern California, Los Angeles, CA, ³Advanced Heart Failure and Transplant Cardiology, University of Arizona, Tucson, AZ, ⁴Heart Failure, Heart Transplant, and Mechanical Circulatory Support, University of Southern California, Los Angeles, CA

(495) Heart Failure Care Delivery in the COVID19 Era: The Patient's Perspective; M. Fraser, M. Mutschler, C. Newman, K. Sackman, B. Mehdi, C. M. Martin, T. Alexy. *Department of Medicine, Division of Cardiology, University of Minnesota, Minneapolis, MN*

(496) Predictors of Mortality in Patients with Cardiac Arrest Treated with ECPR; M. Bertic¹, M. Worme¹, F. Foroutan¹, H. J. Ross¹, V. Rao², A. Alba¹, F. Billia¹. ¹Cardiology, University Health Network, University of Toronto, Toronto, ON, Canada, ²Cardiovascular Surgery, University Health Network, University of Toronto, Toronto, ON, Canada

(497) Incidence of Deep Venous Thrombosis and its Impact on Outcomes after Heart Transplantation; A. Kainuma¹, Y. Ning², P. A. Kurlansky¹, A. N. Melehy³, F. Latif⁴, M. A. Farr⁴, G. T. Sayer⁴, N. Uriel⁴, H. Takayama¹, Y. Naka¹, K. Takeda¹. ¹Department of Surgery CT, New York Presbyterian Hospital/Columbia University Medical Center, NY, NY, ²Department of Surgery RCIOR, New York Presbyterian Hospital/Columbia University Medical Center, NY, NY, ³New York Presbyterian Hospital/Columbia University Medical Center, NY, NY, ⁴Dept of Medicine Cardiology, New York Presbyterian Hospital/Columbia University Medical Center, NY, NY

(498) Comparison of Efficacy of Oral and Intravenous Iron Replacement Therapy in Children with Systolic Heart Failure and Iron Deficiency; K. Puri¹, J. A. Spinner², J. M. Powers³, H. P. Tunuguntla², S. Choudhry², S. W. Denfield², W. J. Dreyer², J. F. Price². ¹Pediatric Critical Care Medicine, Baylor College of Medicine, Houston, TX, ²Pediatric Cardiology, Baylor College of Medicine, Houston, TX, ³Pediatric Hematology/Oncology, Baylor College of Medicine, Houston, TX

(499) Clinical Application of Donor-Derived Cell Free DNA in Place of Surveillance Endomyocardial Biopsy after Pediatric Heart Transplantation; B. Feingold¹, K. Rose-Felker¹, M. D. Zinn¹, S. C. West¹, P. Berman², A. Moninger², A. Huston², B. Stinner², S. A. Miller¹. ¹Pediatrics, UPMC Children's Hospital of Pittsburgh, Pittsburgh, PA, ²UPMC Children's Hospital of Pittsburgh, Pittsburgh, PA

(500) Cost Effectiveness of Donor-Derived Cell Free DNA Integrated into Acute Rejection Surveillance after Pediatric Heart Transplantation; B. Feingold, S. C. West, K. Rose-Felker, M. D. Zinn, S. A. Miller. *Pediatrics, UPMC Children's Hospital of Pittsburgh, Pittsburgh, PA*

(501) Treating Pediatric Myocarditis with High Dose Steroids and Immunoglobulin; J. Schauer, D. Newland, J. Friedland-Little, E. Albers, B. Hong, M. Kemna, T. Wagner, Y. Law. *Pediatric Cardiology, Seattle Children's Hospital, Seattle, WA*

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(502) Objective Nutritional Index is Associated with Worse Cardiopulmonary Exercise Test Performance in Advanced Heart Failure Patients; S. Sundararajan, R. Chepuri, D. Lambert, N. Lohr, D. Ishizawar, N. Gaglianello. *Medical College of Wisconsin, Milwaukee, WI*

(503) Evaluating Use of 99mTc-PYP Scan in Diagnosis of ATTR- A Tertiary Care Center Experience; W. Sovic¹, A. Lemieux¹, A. Patel², A. Whitaker¹, J. S. van Zyl³, N. Patel², V. Bhattad², J. Felius³, P. Kale², A. Bindra². ¹Internal Medicine, Baylor University Medical Center, Dallas, TX, ²Cardiology, Baylor University Medical Center, Dallas, TX, ³Baylor Scott & White Research Institute, Dallas, TX

(504) Clinical Predictors, Regional Variation and Temporal Trends of Weight Gain after Heart Transplant: An Analysis of the ISHLT Transplant Registry; Y. Peled¹, E. Ram¹, R. Klempfner¹, K. S. Shah², J. Lavee¹, W. S. Cherikh³, J. Stehlik². ¹Sheba Medical Center and Tel Aviv University, Ramat Gan, Israel, ²University of Utah School of Medicine, Salt Lake City, UT, ³United Network for Organ Sharing, Richmond, VA

(505) Indirect Fick and Thermodilution Cardiac Output Measurements Have Significant Variance Compared to Direct Fick in LVAD Patients; N. I. Azih¹, J. M. Read¹, G. Jackson², C. Inampudi², N. H. Pope³, L. J. Witer³, R. J. Tedford², B. A. Houston². ¹Internal Medicine, Medical University of South Carolina, Charleston, SC, ²Cardiology, Medical University of South Carolina, Charleston, SC, ³Cardiothoracic Surgery, Medical University of South Carolina, Charleston, SC

(506) CS as a Novel Biomarker for Diagnosis of Cardiac Allograft Rejection; S. Oskouie, A. Nikolova, J. Patel, J. A. Kobashigawa. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*

(507) Serum Protein Levels as Biomarkers of Muscle Strength in Patients with End-Stage Systolic Heart Failure; P. W. Karanja¹, A. Singla¹, J. Chery¹, A. Coston¹, A. R. Vest². ¹Tufts University School of Medicine, Boston, MA, ²Tufts Medical Center, Boston, MA

(508) Interpretation of AlloMap® in Clinically Stable Combined Heart-Kidney Transplant Recipients; M. Flattery¹, Z. Soltani², S. Krim³, T. Gregory³, I. Tchoukina¹. ¹Pauley Heart Center, Va Commonwealth Univ, Richmond, VA, ²Internal Medicine, Division of Nephrology, Oschsner Medical Center, New Orleans, LA, ³Internal Medicine, Division of Cardiology, Oschsner Medical Center, New Orleans, LA

(509) The Predictive Scoring Systems for Outcomes of Heart Transplantation in Patients with Pre-Existing Liver Cirrhosis; H. Kim, J. Kim, H. Joo, S. Lee, S. Lee, K. Yoo, Y. Youn. *Severance Cardiovascular Hospital, Yonsei University College of Medicine, Seoul, Korea, Republic of*

(510) Is VE/VCO2 Slope More Reflective of Isolated Cardiac Performance Compared to Peak VO2: A Comparison of Cardiopulmonary Stress Test Variables before and after Transplantation; K. Hu, U. Siddiqi, J. Cruz, R. Hoang, A. Lee, M. Acosta, M. Dela Cruz, B. Smith, B. Chung, A. Nguyen, N. Sarswat, G. Kim, V. Jeevanandam, S. Pinney, J. Grinstein, S. Kalantari. *University of Chicago Medicine, Chicago, IL*

(511) Management of Cardiac Sarcoidosis after Orthotopic Heart Transplant: A Multi-Institutional Experience; H. Nazeer, J. Grinstein, S. Besser, S. Pinney, B. Chung. *Advanced Heart Failure and Transplant, University of Chicago, Chicago, IL*

(512) Performing Colonoscopies in Patients in Cardiogenic Shock Awaiting Heart Transplantation: Is it Safe?; M. Kittleson, J. Patel, I. Sindha, N. Patel, T. Singer-Englar, D. Chang, D. Geft, E. Kransdorf, A. Nikolova, L. Czer, F. Esmailian, J. A. Kobashigawa. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*

(513) The Use of Cardiopulmonary Stress Testing to Predict Poor Outcomes Post-Heart Transplantation; M. Dela Cruz¹, J. Grinstein¹, Y. Kumai¹, K. Hu¹, U. Siddiqi², B. Smith¹, G. Kim¹, N. Sarswat¹, A. B. Nguyen¹, B. Chung¹, S. Pinney¹, S. Kalantari¹. ¹Cardiology, University of Chicago, Chicago, IL, ²Surgery, University of Chicago, Chicago, IL

(514) Donor Derived Cell Free DNA as a Risk Factor for Initiating De-Novo Donor Specific Antibodies in Heart Transplantation; E. C. DePasquale¹, J. Kobashigawa², S. Hall³, T. Wolf-Doty⁴, J. Teuteberg⁵, K. K. Khush⁵.

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

¹University of Southern California, Los Angeles, CA, ²Cedars-Sinai Smidt Heart Institute, Los Angeles, CA, ³Baylor University Medical Center, Dallas, TX, ⁴Medical Affairs, CareDx, Brisbane, CA, ⁵Stanford University Medical Center, Stanford, CA

(515) One-Year Experience of Cytomegalovirus T Cell Immunity Monitoring in Heart Transplant Recipients; T. M. Veasey¹, P. A. Uber¹, K. L. Mohney², M. K. Kanwar². ¹Pharmacy, Allegheny General Hospital, Pittsburgh, PA, ²Cardiovascular Medicine, Allegheny General Hospital, Pittsburgh, PA

(516) Racial Disparities in Gene Expression Profiling but Not Donor-Derived Cell-Free DNA after Heart Transplant; K. K. Khush¹, K. B. Shah², A. Kao³, S. Ghosh⁴, L. Lourenco Jenkins⁵, D. Baran⁶, S. Pinney⁷, S. Hall⁸. ¹Stanford University Medical Center, Stanford, CA, ²Virginia Commonwealth University Health, Richmond, VA, ³St. Luke's Hospital, Kansas City, MO, ⁴Medical Affairs, CareDx, Brisbane, CA, ⁵CareDx, Brisbane, CA, ⁶Sentara Heart Hospital, Norfolk, VA, ⁷University of Chicago Medicine, Chicago, IL, ⁸Baylor University Medical Center, Dallas, TX

(517) The Safety of a Non-Invasive Monitoring Protocol in Heart Transplant Recipients; S. Slomovich, Z. B. Roth, K. J. Clerkin, M. Habal, J. M. Griffin, M. Yuzefpolskaya, P. C. Colombo, J. A. Fried, J. Raikhelkar, F. Latif, V. Topkara, S. Restaino, A. J. Kim, O. Walraven, A. Kleet, M. A. Farr, G. Sayer, N. Uriel. Columbia University Irving Medical Center, New York, NY

(518) Vitamin D Serum Levels are Not Associated with Risk of Skin Cancer in Heart Transplant Recipients; N. Žorž¹, G. Poglajen¹, S. Frljak¹, G. Zemljič¹, V. Andročec¹, I. Knežević², B. Vrtovec¹. ¹Advanced Heart Failure and Transplantation Center, Dept. of Cardiology, University Medical Center, Ljubljana, Slovenia, ²Dept. of Cardiovascular Surgery, University Medical Center, Ljubljana, Slovenia

(519) Cell-Free DNA after Heart Transplantation: New Aspects of the Story; J. Boehmer¹, C. Wasslavik², K. Karason³, D. Andersson⁴, A. Stahlberg⁴, H. Wahlander¹, J. Sunnegardh¹, J. Asp², A. Ricksten², G. Dellgren³. ¹Pediatric Heart Center, The Queen Silvia Children's Hospital, Gothenburg, Sweden, ²Department of Clinical Chemistry, Sahlgrenska University Hospital, Gothenburg, Sweden, ³Transplantation Center, Sahlgrenska University Hospital, Gothenburg, Sweden, ⁴Sahlgrenska Cancer Center, University of Gothenburg, Gothenburg, Sweden

(520) Improved Survival of Pediatric Heart Transplant Recipients with Donor Thyroxine Management: Is it Age-Dependent?; J. S. Heidel¹, A. Dani¹, B. Huang², T. Qui², C. Chen², D. L. Morales¹, D. Rosenthal³, F. Zafar¹. ¹Cardiothoracic Surgery, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ²Biostatistics and Epidemiology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ³Cardiology, Lucile Salter Packard Children's Hospital, Stanford, CA

(521) Weight Matching in Infant Heart Transplantation: Analysis of the United Network for Organ Sharing Database; J. Lee, S. Kidambi, D. Rosenthal, T. Nasirov, J. Dykes, M. Ma. Stanford University, Stanford, CA

(522) Wait Times in Pediatric Heart Transplant Candidates: Impact of Size and Blood Type Following the 2016 Allocation Policy Revision; R. Williams, M. Lu, L. Sleeper, S. Urbach, K. Daly. Department of Cardiology, Boston Children's Hospital, Boston, MA

(523) Evaluating Matching by Predicted Heart Mass in Adolescent Heart Transplantation: Analysis of the United Network for Organ Sharing Database; J. Lee, S. Kidambi, D. Rosenthal, T. Nasirov, J. Dykes, M. Ma. Stanford University, Stanford, CA

(524) Identifying Recipients Who are at High Risk of Receiving a Donor Heart with Undersized Right Ventricle; A. Critsinelis¹, T. Nordan², C. Hironaka², Y. Zhan², F. Y. Chen², G. Couper², M. Kawabori². ¹Department of Surgery, Mount Sinai Medical Center, Miami Beach, FL, ²Tufts Medical Center, Brookline, MA

(525) Outcomes in Heart Transplant (HT) in Patients Receiving Inotropes Following UNOS Heart Allocation Policy Changes; P. Abarca¹, J. P. Li¹, M. M. Saffarian¹, S. V. Patel¹, S. Hashmi¹, J. Nattiv¹, M. Fong¹, J. Pizula¹, P. Banankhah¹, A. S. Vaidya¹, A. M. Wolfson², E. C. DePasquale¹. ¹Keck Medicine of USC, Los Angeles, CA, ²University of Arizona Sarver Heart Center, Tucson, AZ

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(526) Impact of the New UNOS Heart Transplant Allocation System on Waitlist and Early Post-Transplant Mortality among Adults with Congenital Heart Disease; K. Bravo-Jaimes¹, K. M. Axsom², J. Menachem³, A. Cedars⁴. ¹Adult Congenital Heart Disease Center, University of California, Los Angeles, Los Angeles, CA, ²Columbia University Medical Center, New York, NY, ³Vanderbilt University Medical Center, Nashville, TN, ⁴Johns Hopkins University, Baltimore, MD

(527) Comparison of Waitlist and Post-Transplant All-Cause Mortality in Patients with Hypertrophic Cardiomyopathy before and after the UNOS Allocation System Change; R. J. Chen¹, A. Vallakati², A. M. Ganapathi¹, M. C. Henn¹, B. A. Whitson¹, N. A. Mokadam¹, B. Lampert², R. Benza², A. Hasan², R. Kahwash², V. Franco², G. Haas², S. Emani². ¹Cardiac Surgery, Ohio State University Wexner Medical Center, Columbus, OH, ²Cardiology, Ohio State University Wexner Medical Center, Columbus, OH

(528) Post-Heart Transplant Outcomes in Patients with Hypertrophic Cardiomyopathy (HCM) before and after the 2018 UNOS Heart Allocation Policy Change; P. Abarca¹, S. V. Patel¹, J. P. Li¹, M. M. Saffarian¹, P. Singhal¹, G. Liu¹, L. Grazette¹, J. Pizula¹, P. Banankhah¹, A. S. Vaidya¹, A. M. Wolfson², E. C. DePasquale¹. ¹Keck Medicine of USC, Los Angeles, CA, ²University of Arizona Sarver Heart Center, Tucson, AZ

(529) Heart Transplant Allocation Change Results in Increased Cost and Initial Decrease in Transplant Volume: The Florida Experience; M. P. Rogers¹, H. Janjua¹, B. D. Mackie², R. L. Hooker³, E. M. Toloza⁴, P. C. Kuo¹, L. Lozonschi⁵. ¹Department of Surgery, University of South Florida, Tampa, FL, ²Tampa General Hospital Transplant Institute, Tampa General Hospital, Tampa, FL, ³Nazih Zuhdi Transplant Institute, Integris Baptist Medical Center, Oklahoma City, OK, ⁴Department of Thoracic Oncology, Moffitt Cancer Center, Tampa, FL, ⁵Division of Cardiothoracic Surgery and Transplantation, University of South Florida, Tampa, FL

(530) Survival after OHT in Patients with BMI >35 with and without Diabetes; A. G. Fiedler¹, L. N. Stalter², N. Marka³, R. Dhingra⁴, J. L. Hermsen¹, C. Masri⁴, J. W. Smith¹. ¹Cardiothoracic Surgery, University of Wisconsin, Madison, WI, ²Department of Surgery, University of Wisconsin, Madison, WI, ³Surgery, University of Wisconsin, Madison, WI, ⁴Cardiology, University of Wisconsin, Madison, WI

(531) Improved Access to Heart Re-Transplantation with the New Heart Transplant Allocation System; M. Jani¹, R. L. Grayburn¹, M. G. Dickinson¹, E. Watson¹, T. Boeve², M. Leacche², N. Manandhar-Sherstha³, S. Jovinge³, R. Y. Loyaga-Rendon¹. ¹Advanced Heart Failure and Transplantation, Spectrum Health, Grand Rapids, MI, ²Cardiothoracic Surgery, Spectrum Health, Grand Rapids, MI, ³DeVos Cardiovascular Research Program, Spectrum Health, Grand Rapids, MI

(532) Insights into the Impact of Modifications Made to Adult Heart Allocation Policy in the US at 18-months; K. Bradbrook¹, K. Lindblad¹, R. R. Goff¹, R. Daly², S. Hall³. ¹United Network for Organ Sharing (UNOS), Richmond, VA, ²Mayo Clinic, Rochester, MN, ³Baylor University Medical Center, Dallas, TX

(533) Impact of Donor Sequence Number on Survival Following Heart Transplantation; Z. Tran¹, S. T. Kim¹, Y. Sanaïha¹, J. Hadaya¹, M. Gandjian¹, D. G. Rabkin², P. Benharash¹. ¹Division of Cardiac Surgery, University of California, Los Angeles, Los Angeles, CA, ²Department of Cardiothoracic Surgery, Loma Linda University Health, Loma Linda, CA

(534) One-Year before and after UNOS Status Change Effect on Dilated Cardiomyopathy Patients Undergoing Heart Transplant; J. P. Li¹, S. Hashmi¹, G. Liu², P. Kingsford¹, A. M. Wolfson³, A. Vaidya², E. DePasquale². ¹Internal Medicine, Keck Medicine of USC, Los Angeles, CA, ²Cardiology, Keck Medicine of USC, Los Angeles, CA, ³Cardiology, University of Arizona Sarver Heart Center, Tucson, AZ

(535) Donor Transient Myocardial Dysfunction - Structural versus Hypoxic Brain Injury; M. Muellner¹, A. Siddique¹, A. Castleberry¹, J. Um¹, B. Lowes², D. Stoller², M. Moulton¹, M. Urban¹. ¹Department of Cardiothoracic Surgery, University of Nebraska Medical Center, Omaha, NE, ²Department of Cardiology, University of Nebraska Medical Center, Omaha, NE

(536) Impact of Histidine-Tryptophan-Ketoglutarate Preservation Solution in Heart Transplantation with Extended Distance; F. A. Rodrigues Gonçalves, E. M. Trindade, S. Mangini, F. A. Gaiotto, F. Bacal. *Heart*

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

Transplant Clinical Unit, Heart Institute of the Clinical Hospital of the School of Medicine of the University of Sao Paulo, Sao Paulo, Brazil

(537) Capitalizing on Missed Opportunities: An Internal Retrospective Review of Heart Transplant Donor Selection; C. M. Romero¹, M. Al-Otaibi¹, J. Hoosain², E. Hamad². ¹Internal Medicine, Temple University Hospital, Philadelphia, PA, ²Cardiology, Temple University Hospital, Philadelphia, PA

(538) Providers and Patients Differ in Their Opinions on Travel for Organ Transplantation; A. B. Nguyen¹, B. B. Chung¹, S. A. Besser¹, A. Bennett¹, D. Rodgers¹, G. Kim¹, S. Pinney¹, N. Uriel², A. Aronsohn¹. ¹University of Chicago Medicine, Chicago, IL, ²Columbia University, New York, NY

(539) High Pre-Donation Vasoactive Inotropic Score (VIS) May Be Associated with Increased Risk of Primary Graft Dysfunction in Cardiac Transplantation; A. Challa¹, J. Maddicks-Law², A. Mulligan², A. Prabhu³, Y. Wong². ¹Cardiology, Prince Charles Hospital, Brisbane, Australia, ²Advanced heart failure and transplant unit, Prince Charles Hospital, Brisbane, Australia, ³Cardiothoracic surgery, Prince Charles Hospital, Brisbane, Australia

(540) The Vroom-Yetton Model in Transplantation - Deciding How to Decide; I. McPherson, N. Chilvers, Y. Diyab, R. Birla, S. Clark. Cardiothoracic Surgery, Freeman Hospital, Newcastle-upon-Tyne, United Kingdom

(541) Heart Transplantation from Donors with Heparin-Induced Thrombocytopenia; N. Fukushima¹, M. Yanase¹, O. Seguchi¹, T. Watanabe¹, K. Kuroda¹, S. Nakajima¹, H. Mochizuki¹, S. Fukushima², T. Saito², N. Tadokoro², T. Fujita², A. Iguchi³. ¹Department of Transplant Medicine, National Cerebral and Cardiovascular Center, Suita, Japan, ²Department of Cardiovascular Surgery, National Cerebral and Cardiovascular Center, Suita, Japan, ³Department of Cardiovascular Surgery, Saitama Medical University International Medical Center, Hidaka, Japan

(542) TET2 Driven Clonal Hematopoiesis Promotes Allograft Tolerance in a Mouse Heart Transplant Model; L. R. Gokanapudy Hahn¹, S. Yang², A. Bredemeyer³, H. Dun⁴, I. Lokshina⁵, F. Kadyrov⁶, L. Adamo⁷, D. Kreisel⁸, K. J. Lavine⁹. ¹Pediatrics, Division of Pediatric Cardiology, Washington University in St. Louis, St. Louis, MO, ²Washington University in St. Louis, School of Medicine, St. Louis, MO, ³Medicine, Washington University in St. Louis, St. Louis, MO, ⁴Surgery, Washington University in St. Louis, St. Louis, MO, ⁵Cardiology, Washington University in St. Louis, St. Louis, MO, ⁶Developmental Biology, Washington University in St. Louis, St. Louis, MO, ⁷Medicine, Division of Cardiology, Johns Hopkins University, School of Medicine, Baltimore, MD, ⁸Medicine and Surgery, Washington University in St. Louis, St. Louis, MO, ⁹Medicine, Pathology and Immunology, Division of Cardiology, Washington University in St. Louis, St. Louis, MO

(543) Heart-Associated Cytokine and Endothelial Patterns Dominate the Ischemia/Reperfusion Response in Recipients of Combined Heart/Lung Transplantation in Comparison to Lung Transplantation; J. F. Kuehne¹, F. Wandrer¹, B. Wiegmann², N. Ledwoch¹, R. Bellmas Sanz¹, K. Beushausen¹, J. Keil¹, F. Ius², W. Sommer², S. Rojas², C. Kuehn², I. Tudorache², M. Avsar², A. Haverich², G. Warnecke², C. S. Falk¹. ¹Institute of Transplant Immunology, Hannover Medical School, Hannover, Germany, ²Department for Cardiothoracic, Transplantation and Vascular Surgery, Hannover Medical School, Hannover, Germany

(544) Efficacy and Safety of Desensitization Therapy in Pediatric Heart Transplant Candidates; A. Haregu, M. McCulloch, S. White, T. L'Ecuyer. Pediatric Cardiology, University of Virginia, Charlottesville, VA, VA

(545) ABO-Incompatible Heart Transplantation in Older Children Using Immune Modulation; A. Krauss¹, L. J. West¹, J. Conway¹, M. Khoury¹, A. Halpin², S. Nahirniak³, M. Al Aklabi¹, S. Urschel¹. ¹Department of Pediatrics, University of Alberta, Stollery Children's Hospital, Edmonton, AB, Canada, ²Department of Pediatrics and Laboratory Medicine and Pathology, Alberta Precision Laboratories and University of Alberta, Edmonton, AB, Canada, ³Department of Pediatrics, Laboratory Medicine and Pathology, University of Alberta, Edmonton, AB, Canada

(546) The Impact of Sirolimus as a Primary Immunosuppressant on Myocardial Fibrosis and Diastolic Function Following Heart Transplantation; H. Alnsasra, R. Asleh, J. K. Oh, J. J. Maleszewski, A. Lerman, T. Toya, K. Chandrasekaran, M. C. Bois, S. S. Kushwaha. Mayo Clinic, Rochester, MN, Rochester, MN

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

- (547) Independent Validation of a Genomic Heart Failure Survival Prediction Algorithm;** B. Galyna¹, I. Silacheva¹, T. Bao¹, S. Deshmukh², N. S. Kulkarni³, T. Nakade¹, T. Grogan¹, D. Elashoff¹, M. C. Deng¹. ¹Medicine/Cardiology, UCLA, Los Angeles, CA, ²Department of Molecular Biology and Biotechnology, University of Sheffield, Sheffield, United Kingdom, ³Academic Unit of Reproductive and Developmental Medicine, University of Sheffield, Sheffield, United Kingdom
- (548) Incidence, Predictors and Outcomes of Stroke Following Cardiac Transplantation;** H. Alnsasra, R. Asleh, N. Kumar, T. Toya, C. Lopez, W. K. Kremers, B. Edwards, R. C. Daly, S. S. Kushwaha. Mayo Clinic, Rochester, MN, Rochester, MN
- (549) Single Center Experience in Using Donor-Derived Cell-Free DNA and Gene Expression Profiling in Heart Transplantation;** S. M. Attig, B. W. Hardaway, L. M. LeMond, J. L. Rosenthal, R. L. Scott, D. Steidley. Mayo Clinic Arizona, Phoenix, AZ
- (550) Early (1-Year) Class II Donor Specific Antibodies without Complement-Binding Appears Benign after Heart Transplantation;** M. Kittleson, J. Patel, E. Kransdorf, T. Singer-Englar, N. Patel, J. Moriguchi, A. Hage, D. Emerson, X. Zhang, J. A. Kobashigawa. Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA
- (551) Plasma Donor-Derived Cell-Free DNA Levels are Not Affected by Prednisone Dose nor Time after Heart Transplant: Pilot Data from DOAR and SHORE;** K. Ghafourian¹, L. Bellumkonda², L. Lourenco Jenkins³, J. Teuteberg⁴. ¹Northwestern Medicine, Chicago, IL, ²Yale New Haven Hospital, New Haven, CT, ³Medical Affairs, CareDx, Brisbane, CA, ⁴Stanford University Medical Center, Stanford, CA
- (552) Comparison of De Novo Donor Specific and Non-Specific Antibodies on the Outcome after Heart Transplantation;** J. Konertz, L. Wachendorfer, C. Buchholz, A. Bernhardt, M. Rybczynski, H. Reichenspurner, M. Barten. Department of Cardiothoracic Surgery, UHZ, Hamburg, Germany
- (553) Outcome of Urgent Desensitization in Sensitized Heart Transplant Recipients;** H. Fu, C. Tsao, N. Chou, H. Yu, Y. Chen, H. Chou, C. Wang. Cardiovascular Surgery, National Taiwan University Hospital, Taipei, Taiwan
- (554) Immune Function Testing and Long-Term Immune-Related Outcomes among Heart Transplant Recipients;** M. Dela Cruz, K. Terry, S. A. Besser, A. B. Nguyen, B. Chung, B. Smith, S. Kalantari, J. Grinstein, N. Sarswat, C. Murks, J. Powers, T. Riley, S. Pinney, G. Kim. Cardiology, University of Chicago, Chicago, IL
- (555) Pre-Transplant Immune Cell Function Assay as a Predictor of Early Cardiac Allograft Rejection;** S. D. Maidman¹, C. Gidea², A. Reyentovich², S. Rao², T. Saraon², B. Kadosh², N. Narula³, J. Carillo⁴, Z. Kon⁴, D. Smith⁴, N. Moazami⁴, S. Katz², R. I. Goldberg². ¹Medicine, NYU Langone, New York, NY, ²Cardiology, NYU Langone, New York, NY, ³Pathology, NYU Langone, New York, NY, ⁴Cardiac Surgery, NYU Langone, New York, NY
- (556) 5-year Review of Invasive Fungal Diseases in a National Heart Transplant Centre;** G. Y. Chan¹, N. Starr², P. Ging³, E. Joyce², J. O'Neill², S. H. Javadpour³, J. Egan³, B. Lynch¹, M. Hannan¹. ¹Clinical Microbiology, Mater Misericordiae University Hospital, Dublin, Ireland, ²Cardiology, Mater Misericordiae University Hospital, Dublin, Ireland, ³Heart and Lung Transplant, Mater Misericordiae University Hospital, Dublin, Ireland
- (557) Prophylaxis for Chagas Disease Reactivation: Is it Necessary?;** J. Patel¹, M. Kittleson¹, M. Oda¹, T. Singer-Englar¹, N. Patel¹, G. Jamer¹, D. Chang¹, E. Kransdorf¹, C. Gaultier², R. Zabner², P. Zakowski², F. Esmailian¹, J. A. Kobashigawa¹. ¹Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA, ²Cedars-Sinai Medical Center, Los Angeles, CA
- (558) Experience with Posaconazole Use for Fungal Prophylaxis Immediately Post Heart Transplant;** A. Gerlach, G. Waldman, J. Clark, C. Kotton, G. Lewis. Cardiac Transplant, Massachusetts General Hospital, Boston, MA
- (559) Assessment of Cerebral Perfusion and Activity during Normothermic Regional Perfusion in a Porcine Model of Donation after Circulatory Death;** R. Ribeiro¹, J. Alvarez¹, F. Yu¹, B. Gomes², A. Hondjeu³, R. Ribeiro⁴, M. Adamson⁵, V. Bissoondath⁶, M. Meineri⁷, V. Rao¹, M. Cypel⁴, M. Badiwala¹. ¹Cardiovascular Surgery,

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

University of Toronto, Toronto, ON, Canada, ²Thoracic Surgery, University Health Network, Toronto, ON, Canada, ³Anesthesiology, University Health Network, Toronto, ON, Canada, ⁴Thoracic Surgery, University of Toronto, Toronto, ON, Canada, ⁵Cardiology, University of Toronto, Toronto, ON, Canada, ⁶Cardiovascular Surgery, University Health Network, Toronto, ON, Canada, ⁷Anesthesiology, University of Leipzig, Leipzig, Germany

(560) Improvement of Left but Not Right Ventricular Contractility after Circulatory Death and Normothermic Regional Perfusion in a Porcine Model; N. Moeslund¹, Z. L. Zhang², F. F. Dalsgaard¹, S. Bay³, P. Ryhammer⁴, L. Ilkjaer⁵, M. Pedersen³, M. E. Erasmus², H. Eiskjaer⁶. ¹Cardiology Research, Institute for Clinical Medicine, Aarhus University, Aarhus, Denmark, ²Cardiothoracic surgery, University Medical Center Groningen, Groningen, Netherlands, ³Comparative Medicine Lab, Institute for Clinical Medicine, Aarhus University, Aarhus, Denmark, ⁴Anesthesiology, Regionshospitalet Silkeborg, Silkeborg, Denmark, ⁵Cardio, thoracic and vascular surgery, Aarhus University Hospital, Aarhus, Denmark, ⁶Cardiology, Aarhus University Hospital, Aarhus, Denmark

(561) Effects of Graft Preservation Conditions on Coronary Endothelium and Functional Recovery in a Rat Model of Donation after Circulatory Death; N. Méndez-Carmona, R. K. Wyss, M. Arnold, A. Segiser, A. Joachimbauer, T. P. Carrel, S. L. Longnus. Department of Cardiovascular Surgery, Bern University Hospital and University of Bern, Bern, Switzerland

(562) High Oxygen is Likely to be Beneficial on Cardiac Contractility after Normothermic Regional Perfusion after Circulatory Death in a Porcine Model; N. Moeslund¹, Z. L. Zhang², P. Ryhammer³, L. Ilkjaer⁴, M. Pedersen⁵, M. E. Erasmus², S. Tsui⁶, H. Eiskjaer⁷. ¹Cardiology Research, Institute for Clinical Medicine, Aarhus University, Aarhus, Denmark, ²Cardiothoracic surgery, University Medical Center Groningen, Groningen, Netherlands, ³Anesthesiology, Regionshospitalet Silkeborg, Silkeborg, Denmark, ⁴Cardio, thoracic and vascular surgery, Aarhus University Hospital, Aarhus, Denmark, ⁵Comparative Medicine Lab, Institute for Clinical Medicine, Aarhus University, Aarhus, Denmark, ⁶Cardiothoracic surgery, Royal Papworth Hospital NHS Foundation Trust, Cambridge, United Kingdom, ⁷Cardiology, Aarhus University Hospital, Aarhus, Denmark

(563) Effects of Hope (Hypothermic Oxygenated Perfusion) on Preservation of Vascular and Contractile Function in Cardiac Grafts in a Rat Model of Donation after Circulatory Death (DCD); M. U. Egle, N. Mendez-Carmona, M. Arnold, A. Segiser, T. P. Carrel, S. Longnus. Department of Cardiovascular Surgery, Bern University Hospital and University of Bern, Bern, Switzerland

(564) Pre-Ischemic Lactate Levels Affect Post-Ischemic Functional Recovery in an Isolated Rat Heart Model of Donation after Circulatory Death (DCD); S. Graf¹, M. Arnold¹, A. Segiser¹, N. Méndez-Carmona¹, N. Kalbermatter¹, T. Carrel², S. Longnus¹. ¹Department of Cardiovascular Surgery, Basic Research, Inselspital Bern, Bern, Switzerland, ²Department of Cardiovascular Surgery, Inselspital Bern, Bern, Switzerland

(565) A Standardized Protocol for Donor-Derived Cell-Free DNA Quantification in the Diagnosis of Allograft Injury; J. Boehmer¹, C. Wasslavik², K. Karason³, A. Stahlberg⁴, J. Asp², J. Sunnegardh¹, H. Wahlander¹, G. Dellgren³, A. Ricksten², D. Andersson⁴. ¹Pediatric Heart Center, The Queen Silvia Children's Hospital, Gothenburg, Sweden, ²Department of Clinical Chemistry, Sahlgrenska University Hospital, Gothenburg, Sweden, ³Transplantation Center, Sahlgrenska University Hospital, Gothenburg, Sweden, ⁴Sahlgrenska Cancer Center, University of Gothenburg, Gothenburg, Sweden

(566) Gene Network Analysis of Cardiac Allograft Vasculopathy in Heart Transplantation through Messenger RNA Expression Profile; A. Giarraputo¹, M. Fedrigo¹, F. Tona², E. Rossi³, I. Barison¹, C. Castellani¹, T. Bottio², G. Toscano², G. Gerosa², S. Mandruzzato⁴, T. Michoel⁵, A. Joshi⁵, A. Angelini¹. ¹Cardiovascular Pathology, Department of Cardiac, Thoracic, Vascular Sciences and Public Health, University of Padova, Padova, Italy, ²Division of Cardiac Surgery, Department of Cardiac, Thoracic, Vascular Sciences and Public Health, University of Padova, Padova, Italy, ³Oncology and Immunology Section, Department of Surgery, Oncology and Gastroenterology, University of Padova, Padova, Italy, ⁴Oncology and Immunology Section, Department of Surgery, Oncology and Gastroenterology, University of Padova; Istituto Oncologico Veneto (IOV), IRCCS, Padova, Italy, ⁵Computational Biology Unit, Department of Informatics, University of Bergen, Bergen, Norway

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(567) Functional Validation of a Pathogenic Missense Variant in Human Filamin C Cardiomyopathy through Disruption of a Zebrafish Homologue Recapitulates Cardiac Disease; E. Fung¹, D. Guo², W. Zhu³, B. N. Ahmadabadi¹, C. Lee³, P. Teekakirikul⁴, H. Zhao⁵. ¹Dept. of Medicine & Therapeutics, Laboratory for Heart Failure + Circulation Research and HKHOPE, Prince of Wales Hospital, Hong Kong Children's Hospital and The Chinese University of Hong Kong, Shatin, Hong Kong, ²Division of Medical Sciences, Department of Medicine & Therapeutics, Prince of Wales Hospital and The Chinese University of Hong Kong, Shatin, Hong Kong, ³Centre for Cardiovascular Genomics and Medicine, Prince of Wales Hospital and The Chinese University of Hong Kong, Shatin, Hong Kong, ⁴Centre for Cardiovascular Genomics and Medicine and Department of Medicine & Therapeutics, Prince of Wales Hospital and The Chinese University of Hong Kong, Shatin, Hong Kong, ⁵School of Biomedical Science, Faculty of Medicine, The Chinese University of Hong Kong, Shatin, Hong Kong

(568) Impact of Ambient Particulate Matter and Ozone Exposure of Heart Transplant Recipients on All-Cause Mortality after Heart Transplant; T. M. Egan¹, S. Arunachalam², P. Strassle¹. ¹Surgery, U. North Carolina Sch Med, Chapel Hill, NC, ²UNC Inst for the Environment, U. North Carolina at Chapel Hill, Chapel Hill, NC

(569) Exploring a Functional Role for BMP10 in Heart Failure; M. L. Esposito, S. Bhavé, L. Swain, G. Martin, N. K. Kapur. Cardiology, Tufts Medical Center, Boston, MA

(570) Characterization of iPSCs-Derived Cardiomyocytes; H. Basma, K. Dhar, D. Zolty, B. Lowes. Internal Medicine, UNMC, OMAHA, NE

(571) Targeted Sequencing Approach to Identifying Rare Genetic Variants Associated with Atrial Fibrillation; A. R. Akilzhanova¹, Z. M. Abilova¹, S. E. Rakhimova¹, U. A. Kozhamkulov¹, U. E. Kairov², G. A. Akilzhanova³, O. Nuralinov⁴, S. K. Akilzhanova⁵, A. S. Abdrakhmanov⁴, M. S. Bekbosynova⁴. ¹Laboratory of Genomic and Personalised Medicine, National Laboratory Astana, Center for Life Sciences, Nazarbayev University, Nur-Sultan, Kazakhstan, ²Laboratory of Bioinformatics and System Biology, National Laboratory Astana, Center for Life Sciences, Nazarbayev University, Nur-Sultan, Kazakhstan, ³Semey Medical University, Pavlodar Branch, Pavlodar, Kazakhstan, ⁴National Research Cardiac Surgery Center, Nur-Sultan, Kazakhstan, ⁵Pavlodar Regional Cardiology Center, Pavlodar, Kazakhstan

(572) Medical Decision Making among Adolescents and Young Adults with Heart Failure; M. Cousino¹, V. Miller², C. Smith¹, H. Lim¹, S. Yu¹, R. Lowery¹, S. Viers¹, K. Uzark¹, E. Fredericks¹, E. Blume³, K. Schumacher¹. ¹C.S. Mott Children's Hospital, Ann Arbor, MI, ²Children's Hospital of Philadelphia, Philadelphia, PA, ³Boston Children's Hospital, Boston, MA

(573) The Effects of Nighttime Surgery on Outcomes Following Orthotopic Heart Transplantation: An Analysis of the UNOS Database; M. Bjelic¹, J. Martens², C. Louis¹, L. Chen², B. Barrus¹, I. Gosev¹. ¹Department of Surgery, University of Rochester Medical Center, Rochester, NY, ²Department of Medicine, University of Rochester Medical Center, Rochester, NY

(574) Myocardial Ischemia Correlates with Right Ventricular Dysfunction in Patients with Noncompaction Cardiomyopathy; A. Cerar, S. Frljak, G. Poglajen, G. Zemljič, B. Vrtovec. Dpt of Cardiology, UMC Ljubljana, Ljubljana, Slovenia

(575) High Rate of Systolic Heart Failure in Patients with Hereditary Transthyretin Cardiac Amyloid; S. Yalamanchili¹, M. T. Brown², E. A. Blank², M. A. Lyle³, K. N. Bhatt². ¹East Carolina University Brody School of Medicine, Greenville, NC, ²Emory University School of Medicine, Atlanta, GA, ³Mayo Clinic, Jacksonville, FL

(576) Cystatin C- vs. Creatinine- Based Assessment of Renal Function in Patients Admitted with Heart Failure: Insights from DOSE, ROSE and CARRESS-HF; A. Pinsino¹, L. Braghieri², Y. Wang¹, M. Fabbri¹, G. M. Mondellini², K. Takeda², Y. Naka², G. T. Sayer², N. Uriel², P. C. Colombo², R. T. Faillace¹, M. Yuzefpolskaya². ¹Albert Einstein College of Medicine, NYC Health + Hospitals/Jacobi, Bronx, NY, ²Columbia University Irving Medical Center, New York, NY

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(577) Risk Prediction Model for Skin Cancers in Cardiac Transplant Patients: A UNOS Database Analysis; N. Nair¹, D. Du², Z. Hu², E. Gongora³. ¹Division of Cardiology, Dept of Internal Medicine, Texas Tech health Sciences Center, Lubbock, TX, ²Department of Industrial, Manufacturing and Structural Engineering, Texas Tech University, Lubbock, TX, ³Department of Cardiovascular Surgery, UABMC, Birmingham, AL

(578) Assessment of Right Ventricular Contractile Patterns Using Cardiac Magnetic Resonance Imaging Would Reflect the Underlying Mechanism of Right Ventricular Dysfunction; M. Sato¹, T. Kato², M. Ito³, Y. Takakuwa³, J. Ito³, C. Takamura³, M. Terashima³. ¹Cardiovascular Imaging Clinic (CVIC corporation), Tokyo, Japan, ²Department of Cardiology, International University of Health and Welfare, Chiba, Japan, ³Cardiovascular Imaging Clinic, Tokyo, Japan

(579) Increased Bleeding Risk with Phosphodiesterase-5 Inhibitors after Left Ventricular Assist-Device Implantation; A. Jakstaite, P. Luedike, B. Schmack, N. Pizanis, M. Riebisch, A. Weymann, M. Kamler, A. Ruhparwar, T. Rassaf, M. Papathanasiou. University Hospital Essen, West German Heart and Vascular Center, Essen, Germany

(580) New-Onset Immune Mediated Disease after Heart Transplantation: Characterization and Outcomes; Y. Peled, E. Ram, J. Lavee, Y. Shoenfeld. Sheba Medical Center and Tel Aviv University, Ramat Gan, Israel

(581) Malignancies before and after Heart Transplantation - A Single-Centre Long-Term Outcome Study; C. F. Stenman, A. Wallinder, E. Holmberg, K. Karason, J. Magnusson, G. Dellgren. Department of Cardiothoracic Surgery, Institution of Medicine, Gothenburg, Sweden

(582) The Utility of Televisits in Heart Transplant Recipients; S. Slomovich, K. J. Clerkin, Z. B. Roth, J. Raikhelkar, J. A. Fried, A. J. Kim, A. Kleet, P. C. Colombo, F. Latif, S. W. Restaino, M. Yuzefpolskaya, V. Topkara, M. A. Farr, G. T. Sayer, N. Uriel. Medicine, Columbia University Irving Medical Center, New York, NY

(583) Clinical Course and Cardiac Complications of Hospitalized COVID-19 Patients; T. Rahman, A. Woo, G. Doufle, D. Thavendiranathan. Cardiovascular Medicine, University of Toronto- Toronto General Hospital, Toronto, ON, Canada

(584) Cardiopulmonary Transplant Surgery - A Bedtime Story; N. J. Chilvers, R. Birla, A. Clark, S. Clark. Cardiothoracic Surgery, Freeman Hospital, Newcastle Upon Tyne, United Kingdom

(585) Change in the Clinical-Demographic Profile of Chagasic Patients Who are Candidates for Heart Transplantation in Recent Years; C. A. Aragao, I. W. Campos, M. T. Lira, R. T. Dantas, C. M. Murad, D. S. Belfort, S. Mangini, T. V. Strabelli, F. M. Braga, L. F. Seguro, M. S. Avila, F. A. Gaiotto, F. Bacal. Transplant Nucleus, Heart Institute, São Paulo, Brazil

(586) Functional Status as a Predictor of Pediatric Heart Transplant Outcomes; R. S. Khan¹, P. Khoury², F. Zafar², D. L. Morales², C. Chin², S. G. Wittekind². ¹University of Iowa Stead Family Children's Hospital, Iowa City, IA, ²Cincinnati Children's Hospital, Cincinnati, OH

(587) Heart Transplantation in Children with Trisomy 21; J. Godown¹, D. Fountain², N. Bansal³, R. Ameduri⁴, S. Anderson⁵, G. Beasley⁶, D. Burstein⁷, K. Knecht⁸, K. Molina⁹, S. Pye⁸, M. Richmond¹⁰, J. A. Spinner¹¹, K. Watanabe¹², S. West¹³, J. Bohmer¹⁴, L. Glass¹⁵, S. Kirmani¹⁶, Z. Reinhardt¹⁷, J. Scheel¹⁸, S. Urschel¹⁹, C. Villa²⁰, S. A. Hollander²¹. ¹Pediatric Cardiology, Vanderbilt University Medical Center, Nashville, TN, ²Vanderbilt University Medical Center, Nashville, TN, ³Pediatric Cardiology, Montefiore Medical Center, New York, NY, ⁴Pediatric Cardiology, University of Minnesota, Minneapolis, MN, ⁵University of Minnesota, Minneapolis, MN, ⁶Pediatric Cardiology, LeBonheur Children's Hospital, Memphis, TN, ⁷Pediatric Cardiology, Children's Hospital of Philadelphia, Philadelphia, PA, ⁸Pediatric Cardiology, Arkansas Children's Hospital, Little Rock, AR, ⁹Pediatric Cardiology, Primary Children's Hospital, Salt Lake City, UT, ¹⁰Pediatric Cardiology, Columbia University Medical Center, New York, NY, ¹¹Pediatric Cardiology, Texas Children's Hospital, Houston, TX, ¹²Pediatric Cardiology, Lurie Children's Hospital, Chicago, IL, ¹³Pediatric Cardiology, Children's Hospital of Pittsburgh, Pittsburgh, PA, ¹⁴Pediatric Cardiology, University of Gothenburg, Gothenburg, Sweden, ¹⁵Pediatric Cardiology, Mount Sinai Hospital, New York, NY, ¹⁶Pediatric Cardiology, Duke University Medical Center, Durham, NC, ¹⁷Pediatric

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

Cardiology, Newcastle Upon Tyne Hospitals, Newcastle upon Tyne, United Kingdom, ¹⁸Pediatric Cardiology, Washington University, St. Louis, MO, ¹⁹Pediatric Cardiology, University of Alberta, Edmonton, AB, Canada, ²⁰Pediatric Cardiology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ²¹Pediatric Cardiology, Lucile Packard Children's Hospital at Stanford, Palo Alto, CA

(588) Prevalence and Risk Factors of Proteinuria in Pediatric Heart Transplantation; E. L. Frandsen¹, S. Hingorani², N. Jorgensen³, E. L. Albers¹, J. M. Friedland-Little¹, M. S. Kemna¹, B. J. Hong¹, Y. M. Law¹. ¹Heart Center, Seattle Children's Hospital, Seattle, WA, ²Division of Nephrology, Seattle Children's Hospital, Seattle, WA, ³Department of Biostatistics, University of Washington, Seattle, WA

(589) Impact of Insurance and Race on Pediatric Heart Transplant Outcomes- An Analysis of the Pediatric Heart Transplant Society (PHTS) Registry; A. K. Lal¹, N. Bansal², R. S. Cantor³, D. Koehl³, S. Urschel⁴, A. Asante-Korang⁵, W. F. Carlo⁶, J. Conway⁷, N. Deal⁸, J. K. Kirklin⁹, J. A. Kleinmahon¹⁰, M. D. Everitt¹¹. ¹Primary Children's Hospital, University of Utah, Salt Lake City, UT, ²Children's Hospital at Montefiore, Bronx, NY, ³Kirklin Institute for Research in Surgical Outcomes, Birmingham, AL, ⁴University of Alberta, Edmonton, AB, Canada, ⁵Johns Hopkins All Children's Hospital, Johns Hopkins University, Baltimore, MD, ⁶University of Alabama Birmingham, Birmingham, AL, ⁷Stollery Children's Hospital, University of Alberta, Edmonton, AB, Canada, ⁸Arkansas Children's Hospital, Little Rock, AR, ⁹Department of Surgery, University of Alabama at Birmingham, Birmingham, AL, ¹⁰Ochsner Hospital for Children, University of Queensland/Ochsner Clinical School, New Orleans, LA, ¹¹Children's Hospital Colorado, University of Colorado, Aurora, CO

(590) Update on Achievement of 10 Years of Heart Transplant in Vietnam; U. H. Nguyen, Q. T. Pham, D. K. Nguyen, S. H. Phung Duy. Cardiovascular and Thoracic Center, Viet Duc University Hospital, HA NOI, Viet Nam

(591) Impact of Hemodynamic Parameters on Outcomes in European Heart Transplant Patients/Results from the Eurotransplant Database; H. Grahn. Cardiology, University Heart Center Hamburg, Hamburg, Germany

(592) Isolated Coronary Artery Bypass Grafting or Valve Surgery is Associated with Increased Mortality Following Heart Transplantation under the New Donor Heart Allocation System; T. Nordan¹, A. C. Critsinelis², C. Hironaka¹, Y. Zhan¹, F. Y. Chen¹, G. S. Couper¹, M. Kawabori¹. ¹Tufts Medical Center, Boston, MA, ²Mount Sinai Medical Center, Miami, FL

(593) Textbook Outcome: A Novel Metric for Heart Transplantation; A. Ganapathi¹, A. Logan¹, B. A. Whitson¹, N. A. Mokadam¹, B. C. Lampert², G. Brock¹, W. Washburn¹, A. D. Schenk¹. ¹Department of Surgery, Ohio State University Wexner Medical Center, Columbus, OH, ²Department of Medicine, Ohio State University Wexner Medical Center, Columbus, OH

(594) Combined Utility of Aortic Pulsatility Index and Pulmonary Artery Pulsatility Index for Risk Stratification in Advanced Heart Failure Patients; U. A. Siddiqi, M. Belkin, S. Kalantari, A. Kanelidis, T. Miller, N. Sarawat, A. Nguyen, B. Chung, G. Kim, B. Smith, V. Jeevanandam, S. Pinney, J. Grinstein. University of Chicago, Chicago, IL

(595) Waitlist Outcomes in Patients with Dilated Cardiomyopathy before and after UNOS Heart Allocation Policy Change; K. Yang, A. Sharma, M. Saffarian, S. R. Miller, A. S. Vaidya, A. M. Wolfson, E. C. Depasquale. Internal Medicine, Keck Medicine of USC, Los Angeles, CA

(596) Successful Combined Heart-Kidney Transplants Using Donors with Acute Kidney Injury: 15 Year Single-Institution Experience; D. A. Rodriguez¹, P. A. DeValeria², D. E. Steidley³, G. K. Mour⁴, A. A. Moss⁵, F. X. Downey². ¹Mayo Clinic Alix School of Medicine, Scottsdale, AZ, ²Department of Cardiovascular and Thoracic Surgery, Mayo Clinic Hospital, Phoenix, AZ, ³Department of Cardiovascular Diseases, Mayo Clinic Hospital, Phoenix, AZ, ⁴Department of Nephrology, Mayo Clinic Hospital, Phoenix, AZ, ⁵Department of Transplant Surgery, Mayo Clinic Hospital, Phoenix, AZ

(597) Comparison of Six-Month Post-Transplant Survival before and after Implementation of the 2018 UNOS Allocation Policy Change; M. M. Saffarian¹, A. Sharma¹, S. Hashmi¹, J. P. Li¹, S. R. Miller¹, K. Yang¹, A. M. Wolfson², A. S. Vaidya³, E. C. DePasquale³. ¹Internal Medicine, Keck Medicine of USC, Los Angeles, CA, ²Cardiology, University of Arizona, Tucson, AZ, ³Cardiology, Keck Medicine of USC, Los Angeles, CA

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(598) Utility of Total Cardiac and Right Ventricular Mass Ratios in Recipients with Pulmonary Hypertension: A UNOS Database Analysis; M. P. Weber¹, J. Pelberg², Y. Brailovsky², M. K. Shah², I. Rajapreyar², R. J. Alvarez², E. Rame², R. J. Morris¹, J. W. Entwistle¹, T. Massey¹, V. Tchanchaleishvili¹. ¹Division of Cardiac Surgery, Thomas Jefferson University, Philadelphia, PA, ²Division of Cardiology, Thomas Jefferson University, Philadelphia, PA

(599) Characteristics of LVAD Turn-Down Study to Predict Myocardial Recovery and Successful LVAD Decommissioning; J. R. Goldenberg, D. Rogers, V. Kagan, K. Meehan, J. Okray, S. Creighton, C. LaBuhn, T. Song, T. Ota, V. Jeevanandam, A. B. Nguyen, B. B. Chung, B. Smith, S. Kalantari, J. Grinstein, N. Sarswat, S. P. Pinney, G. Kim. *Medicine, University of Chicago, Chicago, IL*

(600) Waitlist Weight Changes Impact Survival Following Heart Transplantation; N. R. Hess¹, G. W. Hickey², I. Sultan¹, A. Kilic¹. ¹Cardiac Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA, ²Cardiology, University of Pittsburgh Medical Center, Pittsburgh, PA

(601) Combined Heart-Lung Transplantation: UNOS Data Analysis for Long-Term Survival Outcome; M. Suryapalam, M. Kashem, N. Shigemura, Y. Toyoda. *Temple University, Philadelphia, PA*

(602) Outcomes in Hypertrophic Cardiomyopathy before and after the UNOS Allocation System Change; J. Zhang¹, C. Lum¹, P. Abarca², A. Salimbangon², P. Genyk², A. Wolfson², A. Vaidya², E. C. DePasquale². ¹Div of Cardiovascular Medicine, Queens Medical Center, Honolulu, HI, ²Div of Cardiovascular Medicine, Keck School of Medicine of USC, Los Angeles, CA

(604) Waitlist Outcomes in Status 1B/2 vs. Status 4-6 Heart Transplant Candidates before and after the UNOS Allocation Policy Change; A. Sharma¹, S. Miller¹, K. Yang¹, M. Saffarian¹, A. Wolfson², A. Vaidya¹, E. DePasquale¹. ¹Keck School of Medicine of the University of Southern California, Los Angeles, CA, ²Advanced Heart Failure and Transplant, University of Arizona Sarver Heart Center, Tucson, AZ

(605) Impact of the New French Heart Allocation System on Post-Transplant Mortality; C. Jasseron¹, C. Legeai¹, C. Cantrelle¹, B. Audry¹, G. Lebreton², M. Para³, A. Vincentelli⁴, E. Flecher⁵, S. Pattier⁶, F. Kerbaul¹, R. Dorent¹. ¹Agence de la biomedecine, Saint-Denis la plaine, France, ²Cardiovascular Surgery, Groupe Hospitalier Pitié-Salpêtrière, APHP, Paris, France, ³Cardiovascular Surgery, Bichat Hospital, APHP, Paris, France, ⁴Cardiovascular Surgery, Cardio-Thoracic Institute, CHU Lille, Lille, France, ⁵Cardiovascular Surgery, Pontchaillou Hopital, CHU Rennes, Rennes, France, ⁶Cardiovascular Surgery, Laennec Hospital, Nantes, France

(606) Prehabilitation Prior to Heart Transplantation: Feasibility and Cost-Effectiveness; M. A. Castel¹, M. J. Arguis², E. Gimeno-Santos³, F. Pérez-Villa¹, E. Sandoval⁴, R. Navarro-Ripoll², M. Farrero¹, A. García-Álvarez¹, G. Martinez-Palli². ¹Department of Cardiology, Hospital Clinic Barcelona, Barcelona, Spain, ²Department of Anaesthesiology, Hospital Clinic Barcelona, Barcelona, Spain, ³Pneumologie Department, Hospital Clinic Barcelona, Barcelona, Spain, ⁴Department of Cardiac Surgery, Hospital Clinic Barcelona, Barcelona, Spain

(607) Analysis of Survival Outcomes Based on Hemodialysis Requirement after Heart Transplantation; K. Yang, A. Sharma, M. M. Saffarian, A. S. Vaidya, A. M. Wolfson, R. R. Chand, E. C. DePasquale. *Internal Medicine, Keck Medicine of USC, Los Angeles, CA*

(608) Comparison of Six-Month Post-Heart Transplant Survival between Status 1B/2 and Status 4-6 Recipients before and after the UNOS Allocation System Change; S. Miller¹, A. Sharma¹, M. Saffarian¹, P. Singhal¹, K. Yang¹, D. Miklin¹, A. S. Vaidya¹, A. Wolfson², E. C. DePasquale¹. ¹University of Southern California, Los Angeles, CA, ²University of Arizona, Tucson, CA

(609) Comparison of Post-Heart Transplant Survival between Status 1A versus Status 1-3 Recipients before and after the UNOS Allocation Policy Change; P. Singhal¹, P. A. Genyk¹, S. R. Miller¹, A. M. Wolfson², A. S. Vaidya³, E. C. DePasquale³. ¹Internal Medicine, Keck Medical Center of USC, Los Angeles, CA, ²Cardiovascular Medicine, University of Arizona Sarver Heart Center, Tucson, AZ, ³Cardiovascular Medicine, Keck Medical Center of USC, Los Angeles, CA

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(610) Cardiac Allograft Injury in Patients of African Ancestry: Trends of Donor-Derived Cell-Free DNA Based on Genetic Ancestry; Y. Yang¹, S. Agbor-Enoh¹, T. Ilker¹, S. Hsu², S. Russell³, E. Feller⁴, K. Shah⁵, M. E. Rodrigo⁶, S. S. Najjar⁷, H. Kong¹, M. Pirooznia¹, M. Jang¹, C. C. Marboe⁸, G. Berry⁹, P. Shah¹⁰, H. Valantine¹¹. ¹National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, MD, ²School of Medicine, Johns Hopkins University, Baltimore, MD, ³Department of Medicine, Duke University, Durham, NC, ⁴University of Maryland Medical Center, Baltimore, MD, ⁵Department of Internal Medicine, Virginia Commonwealth University, Richmond, VA, ⁶MedStar Heart and Vascular Institute, Washington DC, DC, ⁷Washington Hospital Center, Washington DC, DC, ⁸Department of Pathology and Cell Biology, Columbia University, New York, NY, ⁹Department of Pathology, Stanford University Medical Center, Stanford, CA, ¹⁰Department of Heart Failure and Transplantation, Inova Heart and Vascular Institute Fairfax Hospital, Falls Church, VA, ¹¹Stanford University, Stanford, CA

(611) Waitlist Outcomes in Status 1A versus Status 1-3 Heart Transplant Candidates before and after the UNOS Allocation Policy Change; P. A. Genyk¹, P. Singhal¹, J. Onwuzurike¹, A. Vaidya², A. Wolfson³, E. DePasquale². ¹Internal Medicine, Keck Medical Center of USC, Los Angeles, CA, ²Cardiology, Keck Medical Center of USC, Los Angeles, CA, ³Cardiology, University of Arizona Sarver Heart Center, Tucson, AZ

(612) Phenotype-Guided Inflammation-Related Long Non-Coding RNA Discovery in Heart Failure Survival Prediction; I. Silacheva¹, G. Bondar², T. Nakade², T. Grogan³, D. Elashoff³, M. Deng². ¹Medicine/Cardiology/Microbiology, Immunology and Molecular Genetics, UCLA, Los Angeles, CA, ²Medicine/Cardiology, UCLA, Los Angeles, CA, ³Bioinformatics, UCLA, Los Angeles, CA

(613) Improving Trends in 6-month Mortality after Heart Transplant in White vs. Black Recipients; M. E. Sabatino¹, I. S. Okwuosa², E. Akhabue¹, J. Kim³, M. J. Russo¹, M. L. Williams⁴, S. Setoguchi¹. ¹Rutgers Robert Wood Johnson Medical School, New Brunswick, NJ, ²Feinberg School of Medicine, Northwestern University, Chicago, IL, ³Institute for Health, Health Care Policy and Aging Research, New Brunswick, NJ, ⁴Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA

(614) Waitlist Outcomes for Heart Transplant Candidates before and after the 2018 UNOS Allocation Policy Change; S. Hashmi¹, J. P. Li¹, A. Sharma¹, M. Saffarian¹, C. P. Bradley¹, A. Vaidya¹, A. Wolfson², E. DePasquale¹. ¹University of Southern California, Los Angeles, CA, ²University of Arizona, Tucson, AZ

(615) Six-Month Post-Transplant Outcomes in Patients Bridged to Heart Transplantation with IABP or Impella Following 2018 UNOS Allocation Policy Change; R. O. Lee Jr.¹, A. S. Vaidya², A. M. Wolfson³, E. C. DePasquale². ¹Internal Medicine, Keck School of Medicine of the University of Southern California, Los Angeles, CA, ²Cardiology, Keck School of Medicine of the University of Southern California, Los Angeles, CA, ³Cardiology, University of Arizona Sarver Heart Center, Tucson, AZ

(616) Comparison of Sixth-Month Post-Transplant Survival before and after Implementation of the 2018 UNOS Allocation Policy Change in Patients with Restrictive Cardiomyopathy; M. M. Saffarian¹, K. Yang¹, A. Sharma¹, P. A. Abarca¹, A. M. Wolfson², A. S. Vaidya³, E. C. DePasquale³. ¹Internal Medicine, Keck Medicine of USC, Los Angeles, CA, ²Cardiology, University of Arizona, Tucson, AZ, ³Cardiology, Keck Medicine of USC, Los Angeles, CA

(617) Analysis of Total Survival Benefit in Candidates Listed for Heart Transplantation with Intraaortic Balloon Pump - Direct Bridge to Transplant versus Transplant Following Transition to Durable Left Ventricular Assist Device; T. Nordan¹, A. C. Critsinelis², C. Hironaka¹, Y. Zhan¹, F. Y. Chen¹, G. S. Couper¹, M. Kawabori¹. ¹Tufts Medical Center, Boston, MA, ²Mount Sinai Medical Center, Miami, FL, United States, Miami, FL

(618) Distance between Recipients Residency and Heart Transplant Center: Effect on Long-Term Outcome; A. Lechiancole¹, V. Ferrara², S. Sponga¹, I. Vendramin¹, G. Guzzi¹, C. Nalli¹, C. Di Nora¹, P. Daniela¹, U. Livi¹. ¹Cardio-thoracic surgery, University Hospital of Udine, Udine, Italy, ²Medical Area Department (DAME), University of Udine, Udine, Italy

(619) Perioperative Pectoralis Muscle Mass and Attenuation Estimated by Computed Tomography are Not Predictors for Mortality after Heart Transplantation; D. Couto-Mallon¹, A. Used-Gavin¹, C. Fontenla-Martinez², P. Blanco-Canosa¹, E. Barge-Caballero¹, G. Barge-Caballero¹, M. Paniagua-Martin¹, D. Fraga-Manteiga², P. Pardo-Martinez¹, M. Sagastagoitia-Fornie¹, Z. Grille-Cancela¹, V. Mosquera-Rodriguez³, C. Velasco-García de Sierra³, J.

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

Vázquez-Rodríguez¹, J. Herrera-Noreña³, M. Crespo-Leiro¹. ¹Cardiology, A Coruña University Hospital, A Coruña, Spain, ²Radiology, A Coruña University Hospital, A Coruña, Spain, ³Cardiac Surgery, A Coruña University Hospital, A Coruña, Spain

(620) Risk Factors for Malignancy after Orthotopic Heart Transplant: An Analysis of the UNOS Registry; Z. Hughes, Q. R. Youmans, T. Wu, R. Harap, A. Pawale, D. T. Pham, J. D. Rich, K. Ghafourian, E. Vorovich, J. Wilcox, F. Ahmad, A. Tibrewala, Y. Raza, I. S. Okwuosa. Northwestern University, Chicago, IL

(621) Very Temporary Mechanical Support Prior to Heart Transplant: Post-Transplant Outcomes as Status 1-2 versus 3-6 in the Setting of Short Wait Times; J. Teuteberg, K. Waddell, E. Henricksen, K. Khush, H. Luikart, C. Resurreccion, P. Marks, H. Packard, J. Woo, S. Jimenez, W. Hiesinger. Stanford University, Palo Alto, CA

(622) Procedural Safety Profile of Cardiomechs Heart Failure Sensor Implantation in a Veterans Association Patient Population; G. P. Milligan¹, N. Patel¹, T. Gong¹, C. Mathew², I. Tejani³, S. Hall¹, S. Banerjee³, N. Minniefield³, R. Jermyn⁴, K. Michelis³, D. Cheeran³, A. Alam¹. ¹Baylor University Medical Center, Dallas, TX, ²Texas A&M University College of Medicine, Dallas, TX, ³VA North Texas Healthcare Center, Dallas, TX, ⁴Saint Francis Hospital, Roslyn, NY

(623) Patient Reported Outcomes Measures in Advanced Heart Failure Patients; B. A. Perez Villa¹, S. Wilson¹, C. Sheffield¹, N. Brozzi¹, V. Navas¹, M. Velez¹, R. Cubeddu¹, J. Iannotti¹, K. Splinder², E. Sosic², J. Navia¹, J. Hernandez-Montfort¹. ¹Heart and Vascular Institute, Cleveland Clinic Florida, Weston, FL, ²Heart and Vascular Institute, Cleveland Clinic, Cleveland, OH

(624) Hypotensive Response on Cardiopulmonary Stress Test is Associated with Increased Hospitalization Length of Stay Following Orthotopic Heart Transplantation; V. Maharaj¹, A. Agdamag¹, J. Edmiston², V. Charpentier³, J. Schultz¹, R. John⁴, A. Shaffer⁴, S. Duval¹, C. M. Martin¹, G. S. Francis¹, R. Cogswell¹, T. Alexy¹. ¹Department of Medicine, Division of Cardiology, University of Minnesota Medical Center, Minneapolis, MN, ²Department of Medicine, University of Minnesota Medical Center, Minneapolis, MN, ³Medical School, University of Minnesota Medical Center, Minneapolis, MN, ⁴Department of Surgery, Division of Cardiovascular Surgery, University of Minnesota Medical Center, Minneapolis, MN

(625) Impact of New Onset Diabetes after Transplantation (NODAT) on Heart Transplantation Recipients; W. Kang¹, K. Wattanakit², M. Kim¹, C. Bhardwaj². ¹Department of Internal Medicine, University of Illinois College of Medicine at Peoria, Peoria, IL, ²Department of Cardiology, University of Illinois College of Medicine at Peoria, Peoria, IL

(626) Six-Month Waitlist Outcomes in Restrictive Cardiomyopathy Heart Transplant Candidates before and after the 2018 UNOS Allocation Policy Change; M. M. Saffarian¹, K. Yang¹, A. Sharma¹, D. J. Miklin¹, A. M. Wolfson², A. S. Vaidya³, E. C. DePasquale³. ¹Internal Medicine, Keck Medicine of USC, Los Angeles, CA, ²Cardiology, University of Arizona, Tucson, AZ, ³Cardiology, Keck Medicine of USC, Los Angeles, CA

(627) Immediate Post-Discharge Comprehensive Rehabilitation Program Expedites Heart Transplant Recovery and Reduces Readmission; J. Chapa, C. DiPerna, P. Lueck, L. Tucker, C. Hage, M. Guglin, M. Jones, K. Ballut, R. Rao. Indiana University School of Medicine, Indianapolis, IN

(628) Utility of Recipient Cardiothoracic Ratio in Predicting Delayed Chest Closure after Heart Transplantation; A. Sukhvasi¹, M. P. Weber¹, E. J. Maynes², Y. Brailovsky³, M. K. Shah³, I. Rajapreyar³, R. J. Alvarez³, J. E. Rame³, J. W. Entwistle², H. T. Massey², V. Tchanchaleishvili². ¹Sidney Kimmel Medical College, Thomas Jefferson University, Philadelphia, PA, ²Division of Cardiac Surgery, Thomas Jefferson University, Philadelphia, PA, ³Department of Cardiology, Thomas Jefferson University, Philadelphia, PA

(629) Post-Heart Transplant Outcomes by Recipient Working Status; G. S. Liu¹, S. Hashmi¹, C. P. Bradley¹, A. Vaidya¹, A. Wolfson², D. Eugene¹. ¹University of Southern California, Los Angeles, CA, ²University of Arizona, Tucson, AZ

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

- (630) **Comparing Short/Long-Term Outcomes of Heart Transplants That Occur Inside and Outside of Normal Working Hours**; H. Nishida, T. Song, D. Onsager, P. Combs, A. Nguyen, J. Grinstein, B. Chung, B. Smith, S. Kalantari, N. Sarswat, G. Kim, S. Pinney, V. Jeevanandam, T. Ota. *University of Chicago, Chicago, IL*
- (631) **Percent Increase in Aortic Pulsatility Index and Pulmonary Artery Pulsatility Index after Milrinone Infusion Predicts Escalation of Therapy and Mortality**; U. A. Siddiqi, M. Belkin, S. Kalantari, A. Kanelidis, T. Miller, N. Sarswat, A. Nguyen, B. Chung, G. Kim, B. Smith, V. Jeevanandam, S. Pinney, J. Grinstein. *University of Chicago, Chicago, IL*
- (632) **Prognostic Role of Simultaneous Assessment of Biventricular Function Using Left Ventricular Stroke Work Index and Right Ventricular Stroke Work Index**; U. A. Siddiqi, M. Belkin, S. Kalantari, A. Kanelidis, T. Miller, N. Sarswat, A. Nguyen, B. Chung, G. Kim, B. Smith, V. Jeevanandam, S. Pinney, J. Grinstein. *University of Chicago, Chicago, IL*
- (633) **NGS and NanoString Platforms Play Complementary Role in Bedside Advanced Heart Failure Outcome Prediction Test Development**; G. Bondar¹, W. Xu², D. Elashoff¹, X. Li¹, I. Silacheva¹, E. Faure-Kumar¹, T. Bao¹, T. Grogan¹, J. Moose³, M. Deng¹. ¹Medicine/Cardiology, UCLA, Los Angeles, CA, ²Nanostring Technology, Seattle, WA, ³LeukoLifeDx, Point Pleasant, NJ
- (634) **Disparities in Depression Screening between Adults with versus without Congestive Heart Failure in the United States: A National Cross-Sectional Study**; J. Chu¹, A. Chieh², R. Xie³. ¹Biology, University of Alabama at Birmingham, Birmingham, AL, ²University of Alabama at Birmingham, Birmingham, AL, ³Cardiothoracic Surgery, University of Alabama at Birmingham, Birmingham, AL
- (635) **Warm Ischemic Time in Orthotopic Heart Transplantation: Is Faster Really Better?**; D. Megna, D. Emerson, T. Singer-Englar, A. Roach, A. Trento, D. Ramzy, P. Catarino, A. Alhossan, G. Rowe, G. Gill, J. Chikwe, J. Kobashigawa, F. Esmailian. *Cedars-Sinai Medical Center, Los Angeles, CA*
- (636) **Do Heart-Kidney Transplant Candidates on Mechanical Circulatory Support Have Acceptable Outcomes Post-Transplant?**; J. Patel, M. Kittleson, R. Skorka, D. Ramzy, D. Megna, D. Emerson, R. Cole, K. Knabe, N. Patel, T. Singer-Englar, L. Czer, J. A. Kobashigawa, J. Moriguchi. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*
- (637) **Impact of Cytomegalovirus Mismatch on Outcome after Heart Transplantation**; M. B. Immohr¹, P. Akhyari¹, C. Böttger¹, A. Mehdiani¹, H. Aubin¹, R. Westenfeld², S. Erbel-Khurtsidze¹, I. Tudorache¹, H. Dalyanoglu¹, A. Lichtenberg¹, U. Boeken¹. ¹Dept. of Cardiac Surgery, Heinrich-Heine-University Düsseldorf, Düsseldorf, Germany, ²Dept. of Cardiology, Heinrich-Heine-University Düsseldorf, Düsseldorf, Germany
- (638) **Percent Increase in Left Ventricular Stroke Work Index and Right Ventricular Stroke Work Index after Milrinone Infusion Predicts Escalation of Therapy and Mortality**; U. A. Siddiqi, M. Belkin, S. Kalantari, A. Kanelidis, T. Miller, N. Sarswat, A. Nguyen, B. Chung, G. Kim, B. Smith, V. Jeevanandam, S. Pinney, J. Grinstein. *University of Chicago, Chicago, IL*
- (639) **Initiation of Noninvasive Surveillance for Allograft Rejection in a Cohort of Heart Transplant Patients >1 Year after Transplant: An Exploratory Analysis**; J. Kewcharoen¹, D. Banerjee², C. J. Lum². ¹Internal Medicine, University of Hawaii, Honolulu, HI, ²Queens Heart Physician Practice, Queens Medical Center, Honolulu, HI
- (640) **Outcomes of Patients Bridged to Cardiac Transplant with Subclavian Access Intra-Aortic Balloon Pumps: A Single Center Experience and Matched UNOS Analysis**; M. Fraser¹, M. Mutschler¹, K. Sackman¹, J. Schultz¹, C. M. Martin¹, T. Alexy¹, A. Shaffer², R. John², R. Knoper², C. Newman¹, R. Cogswell¹. ¹Department of Medicine, Division of Cardiology, University of Minnesota, Minneapolis, MN, ²Department of Surgery, Division of Cardiothoracic Surgery, University of Minnesota, Minneapolis, MN
- (641) **Myocardial Complement Depositions- A Possible Biomarker for Outcome of Mechanical Circulatory Support Therapy**; K. Wassilew¹, E. Potapov². ¹Department of Pathology, Rigshospitalet, Copenhagen, Denmark, ²Department of Cardiothoracic and Vascular Surgery, Deutsches Herzzentrum Berlin, Berlin, Germany

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(642) Impact of Gender Matching in Heart Transplantation: Does Sex Matter?; U. Boeken¹, M. B. Immohr¹, C. Böttger¹, C. Böttger¹, H. Aubin¹, H. Dalyanoglu¹, S. Erbel-Khurtsidze¹, A. Mehdiani¹, R. Westenfeld², I. Tudorache¹, A. Lichtenberg¹, P. Akhyari¹. ¹Dept. of Cardiac Surgery, Heinrich-Heine-University Düsseldorf, Düsseldorf, Germany, ²Dept. of Cardiology, Heinrich-Heine-University Düsseldorf, Düsseldorf, Germany

(643) Echocardiography Surveillance of Rejection after Heart Transplant without Endomyocardial Biopsy; N. Kapadia¹, P. Mehra², R. swami³, A. K. Tiwari⁴, S. S. Jenasamant⁴, G. S. Rawat⁴. ¹Kokilaben Dhirubhai Ambani Hospital, Mumbai, India, ²Cardiac Anesthesiology, Kokilaben Dhirubhai Ambani Hospital, MUMBAI, India, ³Perfusion Technology, Kokilaben Dhirubhai Ambani Hospital & Research Institute Mumbai India, MUMBAI, India, ⁴Cardiothoracic Surgery, Kokilaben Dhirubhai Ambani Hospital & Research Institute Mumbai India, MUMBAI, India

(644) Validation and Comparison of Risk Stratification Models in Pediatric Heart Transplantation; A. Dani¹, J. S. Heidel¹, T. Qiu², Y. Zhang², M. Hossain², C. Chin³, D. L. Morales¹, B. Huang², F. Zafar¹. ¹Cardiothoracic Surgery, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ²Biostatistics and Epidemiology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ³Cardiology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

(645) Contemporary Indications for Heart-Lung Transplantation; C. G. Gidea¹, D. Smith², A. Reyentovich¹, E. Flattery³, L. Angel⁴, K. Sureau⁴, A. Fagnoli², J. Pavone¹, T. Lewis¹, M. Lesko⁴, T. Saraon¹, D. Rudym⁴, S. Rao¹, R. Goldberg¹, B. Kadosh¹, N. Moazami², Z. Kon². ¹Advanced Heart Failure and Heart Transplantation, NYU Langone Health, New York, NY, ²Department of Cardiothoracic Surgery, NYU Langone Health, New York, NY, ³Department of Internal Medicine, NYU Langone Health, New York, NY, ⁴Lung Transplantation, NYU Langone Health, New York, NY

(646) Association between Area Deprivation Index and Listing for Heart Transplantation at an Academic Medical Center; E. M. DeFilippis, R. C. Givens, V. K. Topkara, D. Cruz O'Connell, A. C. Kleet, W. Ramirez, F. Latif, S. W. Restaino, R. McArthur-Murphy, D. M. Blackstock, G. T. Sayer, N. Uriel, M. A. Farr. Columbia University Medical Center, New York, NY

(647) Ischemic Time Greater Than Four Hours is Associated with Increased Mortality among Candidates Listed and Transplanted under the New Donor Heart Allocation System; T. Nordan¹, A. C. Critsinelis², C. E. Hironaka¹, Y. Zhan¹, F. Y. Chen¹, G. S. Couper¹, M. Kawabori¹. ¹Tufts Medical Center, Boston, MA, ²Mount Sinai Medical Center, Miami, FL

(648) Impact of the UNOS Policy Allocation Change on Waitlist Outcomes in Patients Bridged to Heart Transplantation on Impella; P. Kingsford, J. Onwuzurike, J. P. Li, C. P. Bradley, A. S. Vaidya, A. M. Wolfson, E. C. DePasquale. Keck Medicine of USC, Los Angeles, CA

(649) Body Mass Index as a Continuous Predictor of Survival after Heart Transplantation; A. Jaiswal¹, N. Gadela², J. Radojevic¹, J. Gluck¹, S. Arora¹, A. Scatola¹, J. Hammond³, A. Ali³, W. Baker¹. ¹Advanced Heart failure and Transplant, Hartford hospital, Hartford, CT, ²Department of Internal Medicine, University of Connecticut, Farmington, CT, ³Cardiothoracic surgery, Hartford hospital, Hartford, CT

(650) Low Organ Perfusion Pressure Indexed to Body Surface Area is a Powerful Predictor of Poor Outcomes Even after Heart Transplantation in the Presence of High Right Atrial Pressure; R. Ravikumar, K. Balakrishnan, K. Suresh Rao, V. Srinath, R. Veena, A. Ajay. Heart and Lung Transplantation, MGM Hospital, Chennai, India

(651) Thermodilution Cardiac Index Has Poor Agreement with That Measured by the Direct Fick Method in Low-Output States; N. Narang¹, J. T. Thibodeau², J. L. Grodin³, S. Garg³, D. K. McGuire³, M. H. Drazner³. ¹Cardiology, Advocate Christ Medical Center/University of Illinois-Chicago, Chicago, IL, ²University of Texas Southwestern Medical Center, Parkland Health and Hospital System, Dallas, TX, ³Cardiology, University of Texas Southwestern Medical Center, Parkland Health and Hospital System, Dallas, TX

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(652) Size Matching and Combined Heart Kidney Transplantation - UNOS Registry Analysis; S. Zalawadiya, K. Schlendorf, M. Wigger, A. Shah, M. Brinkley, J. Menachem, L. Punnoose, S. Brown Sacks, H. Ooi, J. Hoffman, B. Keki, W. McMaster, R. Frobes, B. Concepcion, J. Lindenfeld. *Vanderbilt University Medical Center, Nashville, TN*

(653) Does Liver Surface Nodularity by Non-Invasive Testing Suggesting Cirrhosis Contraindicate Heart Transplant?; E. Kransdorf, M. Kittleson, J. Patel, I. Singh, T. Singer-Englar, N. Patel, D. Chang, A. Hage, L. Czer, A. Trento, J. A. Kobashigawa. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*

(654) Recipient Morbid Obesity Worsens Post Heart Transplantation Survival; A. Jaiswal¹, N. Gadela², J. Radojevic¹, J. Gluck¹, S. Arora¹, A. Scatola¹, J. Hammond³, A. Ali³, W. Baker¹. ¹*Advanced Heart failure and Transplant, Hartford hospital, Hartford, CT*, ²*Department of Internal Medicine, University of Connecticut, Farmington, CT*, ³*Cardiothoracic surgery, Hartford hospital, Hartford, CT*

(655) Outcomes of Septuagenarians Undergoing Heart Transplant after the UNOS Allocation Policy Change; D. Miklin¹, C. Bradley¹, A. Salimbangon², A. Wolfson³, A. Vaidya², E. Depasquale². ¹*Internal Medicine, University of Southern California, Los Angeles, CA*, ²*Cardiology and Heart Transplant, University of Southern California, Los Angeles, CA*, ³*Advanced Heart Failure and Transplant Cardiology, University of Arizona, Tucson, AZ*

(656) Is Older Age (>60 Years) A Contraindication to Combined Heart-Kidney Transplant?; E. Kransdorf, J. Patel, T. Singer-Englar, N. Patel, S. Kim, D. Chang, M. Kittleson, A. Nikolova, L. Czer, D. Ramzy, J. A. Kobashigawa. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*

(657) Severe Recipient Obesity Decreases Post Heart Transplant Survival; A. Jaiswal¹, N. Gadela², J. Radojevic¹, J. Gluck¹, S. Arora¹, A. Scatola¹, J. Hammond³, A. Ali³, W. Baker¹. ¹*Advanced Heart failure and Transplant, Hartford hospital, Hartford, CT*, ²*Department of Internal Medicine, University of Connecticut, Farmington, CT*, ³*Cardiothoracic surgery, Hartford hospital, Hartford, CT*

(658) Absence of Obesity Paradox in Morbidly Obese Patients Listed for Heart Transplantation in Contemporary Era; A. Jaiswal¹, N. Gadela², J. Radojevic¹, J. Gluck¹, S. Arora¹, A. Scatola¹, J. Hammond³, A. Ali¹, W. Baker¹. ¹*Advanced Heart failure and Transplant, Hartford hospital, Hartford, CT*, ²*Department of Internal Medicine, University of Connecticut, Farmington, CT*, ³*Cardiothoracic surgery, Hartford hospital, Hartford, CT*

(659) Hepatitis B in Heart Transplant Donors and Recipients: A Systematic Review; C. C. Yost¹, D. C. Jimenez¹, M. P. Weber¹, K. A. Belden², V. Tchanchaleishvili¹, H. T. Massey¹, D. A. Sass³, J. E. Rame⁴, J. J. Zurlo², N. Aburjania². ¹*Division of Cardiac Surgery, Thomas Jefferson University, Philadelphia, PA*, ²*Division of Infectious Diseases, Thomas Jefferson University, Philadelphia, PA*, ³*Division of Gastroenterology and Hepatology, Thomas Jefferson University, Philadelphia, PA*, ⁴*Division of Cardiology, Thomas Jefferson University, Philadelphia, PA*

(660) Racial Disparities in Advanced Heart Failure Therapies: Are Outcomes the Correct Metric?; C. Bowles, R. Shad, R. Fong, N. Quach, P. Kasinpila, B. Lingala, Y. Zhu, J. W. MacArthur, Y. Shudo, W. Hiesinger. *Cardiothoracic Surgery, Stanford University, Palo Alto, CA*

(661) Left Ventricular Dilatation Impacts Heart Transplant and Death in Left Ventricular Non-Compaction Cardiomyopathy; B. Cardoso¹, A. Jeewa¹, E. Minn¹, J. Ashkanase², A. Lynch¹, E. Jean-St-Michel¹. ¹*Division of Cardiology, The Labatt Family Heart Centre, The Hospital For Sick Children, Toronto, ON, Canada*, ²*Pediatric Cardiology, McMaster University Medical Centre, Hamilton, ON, Canada*

(662) Clinical Characteristics and Outcomes of Cancer Survivors Undergoing Heart Transplantation; S. Golob¹, J. Batra¹, S. Godfrey¹, S. Slomovich², J. Fried², K. Clerkin², J. Griffin², K. Takeda³, Y. Naka³, V. Topkara², M. Habal², F. Latif², S. Restaino², M. Farr², M. Yuzefpolskaya², P. Colombo², G. Sayer², N. Uriel², J. Raikhelkar². ¹*Internal Medicine, Columbia University, New York Presbyterian, New York, NY*, ²*Cardiology, Columbia University, New York Presbyterian, New York, NY*, ³*Cardiothoracic Surgery, Columbia University, New York Presbyterian, New York, NY*

(663) Heart Transplant Outcomes in Patients with Urgent Listing Priority in Canada; N. Aleksova¹, C. McGuinty², J. Amadio¹, K. McGrath³, K. Anderson⁴, R. Davey⁵, B. Clarke⁶, S. Chih², H. J. Ross¹, M. McDonald¹.

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

¹Peter Munk Cardiac Centre, Toronto General Hospital, University Health Network, Toronto, ON, Canada, ²University of Ottawa Heart Institute, Ottawa, ON, Canada, ³University of Calgary, Calgary, ON, Canada, ⁴Halifax Infirmary, Department of Medicine-Cardiology, Dalhousie University, Halifax, NS, Canada, ⁵University of Western Ontario, London, ON, Canada, ⁶University of Calgary, Calgary, AB, Canada

(664) Heart Transplantation in an Aging Society: Impact of Recipient Age on Postoperative Outcome; M. B. Immohr¹, H. Aubin¹, R. Westenfeld², R. Bruno², H. Dalyanoglu¹, S. Erbel-Khurtsidze¹, I. Tudorache¹, P. Akhyari¹, A. Lichtenberg¹, U. Boeken¹. ¹Dept. of Cardiac Surgery, Heinrich-Heine-University Düsseldorf, Düsseldorf, Germany, ²Dept. of Cardiology, Heinrich-Heine-University Düsseldorf, Düsseldorf, Germany

(665) Prior Sternotomy Does Not Adversely Impact Survival or Allograft Function after Heart Transplantation; A. Loforte, C. Mariani, G. Gliozzi, G. Cavalli, L. Botta, L. Potena, S. Martin Suarez, D. Pacini. Cardio-Thoracic-Vascular Department, S. Orsola Hospital, University of Bologna, Bologna, Italy

(666) Cardiac Transplantation in Danon Disease; K. N. Hong¹, C. Battikha¹, A. Lin¹, S. John¹, M. Brambatti², A. Garcia-Alvarez³, L. Garcia-Guereta⁴, C. Diez⁵, L. Perez-Gomez⁶, P. Garcia-Pavia⁶, M. Taylor⁷, E. Adler¹. ¹UCSD, San Diego, CA, ²Ionis Pharmaceuticals, San Diego, CA, ³Hospital Clinic, Barcelona, Spain, ⁴Hospital La Paz, Madrid, Spain, ⁵Hospital Bellvitge, Barcelona, Spain, ⁶Hospital Puerta de Hierro Majadahonda, Madrid, Spain, ⁷University of Colorado, Aurora, CO

(667) Impact of UNOS Policy Allocation Change on Waitlist Outcomes in Patients Bridged to Heart Transplant with an Intra-Aortic Balloon Pump; D. Miklin¹, P. Bradley¹, R. Lee¹, P. Singhal¹, S. Miller¹, P. Genyk¹, J. Li¹, M. Saffarian¹, S. Hashmi¹, P. Kingsford¹, S. Patel¹, C. Lum², A. Salimbangon³, A. Wolfson⁴, A. Vaidya³, E. Depasquale³. ¹Internal Medicine, University of Southern California, Los Angeles, CA, ²Cardiology and Heart Transplant, The Queen's Medical Center, Honolulu, HI, ³Cardiology and Heart Transplant, University of Southern California, Los Angeles, CA, ⁴Advanced Heart Failure and Transplant Cardiology, University of Arizona, Tucson, AZ

(668) Is There Bias in Heart Transplant Selection?; M. Kittleson, J. Patel, N. Patel, T. Singer-Englar, D. Chang, A. Velleca, E. Kransdorf, M. Hamilton, L. Czer, D. Ramzy, J. A. Kobashigawa. Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA

(669) Role of Cardiac Transplant in Systemic Lupus Erythematosus Complicated by Severe Heart Failure; C. Smith¹, R. Rao², M. Guglin². ¹Indiana University, Indianapolis, IN, ²Department of Cardiology, Indiana University, Indianapolis, IN

(670) Benefits of Both Physical Assessments and Electronic Health Record Information to Assess Frailty Prior to Heart Transplant; Y. Lee¹, M. Shukman², R. Biniwale³, A. Ardehali³, M. Kamath⁴, A. Nsair⁴, J. Schaeffer⁴, D. Goldwater⁴. ¹UCLA David Geffen School of Medicine, Los Angeles, CA, ²Transplant Services, UCLA David Geffen School of Medicine, Los Angeles, CA, ³Surgery, UCLA David Geffen School of Medicine, Los Angeles, CA, ⁴Medicine, UCLA David Geffen School of Medicine, Los Angeles, CA

(671) Trend and Outcome of Patients with Body Mass Index ≥ 40 Kg/m² Who Are listed for Heart Transplantation in the Contemporary Era; A. Jaiswal¹, N. Gadela², J. Radojevic¹, J. Gluck¹, S. Arora¹, A. Scatola¹, J. Hammond³, A. Ali³, W. Baker¹. ¹Advanced Heart failure and Transplant, Hartford hospital, Hartford, CT, ²Department of Internal Medicine, University of Connecticut, Farmington, CT, ³Cardiothoracic surgery, Hartford hospital, Hartford, CT

(672) Waitlist Outcomes in Patients Supported with Extracorporeal Membrane Oxygenation before and after the UNOS Policy Allocation Change; J. P. Li¹, P. Kingsford¹, G. Liu², S. Hashmi¹, P. Abarca¹, M. Saffarian¹, J. Onwuzurike¹, P. Genyk², K. Pandya², L. Grazette², M. Fong², J. Rahman², E. DePasquale², A. Vaidya², A. Wolfson³. ¹Internal Medicine, Keck Medicine of USC, Los Angeles, CA, ²Cardiology, Keck Medicine of USC, Los Angeles, CA, ³Cardiology, University of Arizona Sarver Heart Center, Tucson, AZ

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(673) Survival Outcome of Combined Heart and Lung Transplantation: Single Center vs. UNOS Data; A. Firoz, M. A. Kashem, S. Jafar, N. Shigemura, Y. Toyoda. *Lewis Katz School of Medicine at Temple University, Philadelphia, PA*

(674) Effects of the UNOS Allocation Policy Change on Impella Use as Bridge in Heart Transplant; J. Onwuzurike, P. Kingsford, J. P. Li, C. P. Bradley, A. S. Vaidya, A. M. Wolfson, E. C. DePasquale. *Keck Medicine of USC, Los Angeles, CA*

(675) Heart Transplantation in Dextrocardia-Heterotaxy Syndrome; C. Buyukgoz¹, K. Karki², T. Street², M. Absi², U. Boston³. ¹*Pediatric Critical Care Medicine, Le Bonheur Children's Hospital, Memphis, TN*, ²*Pediatric Cardiology, Le Bonheur Children's Hospital, Memphis, TN*, ³*Pediatric Cardiac Surgery, Le Bonheur Children's Hospital, Memphis, TN*

(676) Cardiac Transplantation after Heparin Induced Thrombocytopenia: A Patient-Level Meta-Analysis; D. C. Jimenez¹, E. D. Warner¹, J. L. Rosen¹, N. Al-Rawas², R. J. Morris¹, R. Alvarez³, J. Rame³, J. W. Entwistle¹, H. Massey¹, V. Tchanchaleishvili¹. ¹*Division of Cardiothoracic Surgery, Thomas Jefferson University, Philadelphia, PA*, ²*Department of Anesthesiology, Thomas Jefferson University, Philadelphia, PA*, ³*Division of Cardiology, Thomas Jefferson University, Philadelphia, PA*

(677) Functional Status of Heart Transplant Recipients Predicts Survival; H. Copeland¹, S. Lirette², A. Mohammed³, J. G. Copeland⁴, D. A. Baran⁵. ¹*Cardiothoracic Surgery, Lutheran Hospital/Indiana University School of Medicine Fort Wayne, Fort Wayne, IN*, ²*Data Science, University of Mississippi Medical Center, Jackson, MS*, ³*Cardiology, Advanced Heart Failure, Heart Transplant, Lutheran Hospital, Fort Wayne, IN*, ⁴*Cardiothoracic Surgery, University of Arizona, Tucson, AZ*, ⁵*Cardiology, Advanced Heart Failure, Heart Transplant, Sentara Hospital, Norfolk, VA*

(678) Cardioplegia Solution Related Ventricular Pacing Following Orthotopic Heart Transplantation; N. Donthi, P. Brown, P. Shah, M. A. Psocka, L. Cooper, R. Singh, D. Tang. *Inova Heart and Vascular Institute, INOVA Fairfax Medical Center, Falls Church, VA*

(679) Post-Heart Transplant Tricuspid Regurgitation: Prevalence and Risk Factor Analysis; H. Kim, H. Kim, S. Lee, T. Yun, J. Kim, J. Lee, S. Jung. *Department of Thoracic and Cardiovascular Surgery, Asan Medical Center, Seoul, Korea, Republic of*

(680) High Dosage of Carvedilol is Effective to Induce Remodeling and Improve Survival in Children with Dilated Cardiomyopathy; R. Adorisio, N. Cantarutti, M. Cicienia, A. Amodeo, F. Drago. *Cardiology, Cardiac Surgery and Heart Lung Transplant, Bambino Gesù Hospital, Rome, Italy*

(681) Effect of Lymphocyte Depletion in Post Heart Transplant Outcomes of Children with Protein Losing Enteropathy; J. Chen¹, H. Corbo¹, A. C. Rothkopf², D. Salerno¹, I. D. Lytrivi². ¹*Department of Pharmacy, NewYork-Presbyterian Hospital, New York, NY*, ²*Pediatric Cardiology, Columbia University Medical Center, New York, NY*

(682) Safety of Dapagliflozin in Children with Heart Failure; D. M. Newland¹, B. J. Hong², E. L. Albers², J. M. Friedland-Little², M. S. Kemna², Y. M. Law². ¹*Pharmacy, Seattle Children 's Hospital/University of Washington, Seattle, WA*, ²*Pediatric Cardiology, Seattle Children 's Hospital/University of Washington, Seattle, WA*

(683) Prior Amiodarone Use Does Not Affect Long-Term Survival after Heart Transplant; W. L. Baker¹, D. Jennings², N. Gadela³, J. Radojevic³, J. Gluck³, S. Arora³, A. Scatola³, J. Hammond³, A. Ali³, A. Jaiswal³. ¹*University of Connecticut, Storrs, CT*, ²*Long Island University, New York, NY*, ³*Hartford Healthcare, Hartford, CT*

(684) Efficacy and Safety of Direct Oral Anticoagulants in Solid Organ Transplant Recipients: A Meta-Analysis; J. Zakk, B. Lampert, R. Kahwash, A. K. Hasan, V. Franco, S. Emani, G. Haas, A. Ganapati, B. Whitson, N. Mokadam, R. Benza, A. Vallakati. *Cardiovascular Diseases, The Ohio State University, Columbus, OH*

(685) Health Related Quality of Life in Iron Deficient Heart Transplant Recipients Receiving Intravenous Iron Supplement: A Prespecified Secondary Endpoint in the IronIC Trial; K. Brautaset Englund, C. M. Oestby, K.

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

Rolid, E. Gude, A. K. Andreassen, L. Gullestad, K. Broch. *Department of Cardiology, Oslo University Hospital, Rikshospitalet, Oslo, Norway*

(686) Improving Patients' Experience and Medication Adherence after Heart Transplant Using a Multilevel eHealth Intervention: The Mheart Clinical Trial; M. Gomis-Pastor¹, A. de Dios López¹, S. Mirabet Pérez², E. Roig Minguell², V. Brossa Loidi², L. López López², S. Ros Abarca³, N. Mas Malagarriga¹, M. Manges Bafalluy¹.
¹Pharmacy, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain, ²Cardiology, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain, ³Psychology, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain

(687) Prevalence and Clinical Predictors of Aspirin Resistance in Heart Transplant Recipients; Y. Peled, R. Beigel, R. Klempfner, J. Lavee, s. Matetzky. *Sheba Medical Center and Tel Aviv University, Ramat Gan, Israel*

(688) The Effect of Race and Gender on Response to Milrinone and Time to LVAD or Transplant; B. Smith¹, S. Kalantari¹, M. Belkin¹, B. Chung¹, A. Nguyen¹, G. Kim¹, S. Besser¹, N. Sarswat¹, V. Jeevanandam², S. Pinney¹, J. Grinstein¹. ¹Department of Cardiology, University of Chicago, Chicago, IL, ²Department of Cardiothoracic Surgery, University of Chicago, Chicago, IL

(689) Use of Apixaban in Heart Transplant Patients Receiving Biopsies: A Case Series; M. McMahon¹, A. Lichvar², D. A. Baran¹, J. M. Herre¹, A. Yehya¹, E. J. Sawey¹, A. Badiye¹, C. Cameron¹, A. Yao¹, A. I. Ingemi¹.
¹Sentara Norfolk General Hospital, Norfolk, VA, ²University of Illinois at Chicago, Chicago, IL

(690) Assessing the Impact of Antibiotic Selection and Intraoperative Volume Management on Renal Dysfunction in Heart Transplant Recipients; J. E. Kelly¹, C. Perez¹, D. Taber¹, R. J. Tedford², B. McMahon², S. Alzaidi¹, H. B. Meadows¹. ¹Pharmacy, Medical University of South Carolina, Charleston, SC, ²Medicine, Medical University of South Carolina, Charleston, SC

(691) Intermittent Levosimendan Infusion in Ambulatory Patients with End-Stage Heart Failure: A Systematic Review and Meta-Analysis; K. Caliskan¹, H. Elsherbini¹, C. Zijderhand¹, M. Lenzen¹, S. E. Hoeks¹, R. Kaddoura², M. Izham³, A. Alkhulaifi², A. S. Omar², O. I. Soliman⁴. ¹Erasmus Medical Center, Rotterdam, Netherlands, ²Hamad Medical Corporation, Doha, Qatar, ³Qatar University, Doha, Qatar, ⁴National University of Ireland, Doha, Ireland

(692) Ace in the Hole Use of Angiotensin Converting Enzyme Inhibitors and Angiotensin II Receptor Blockers in the First Year after Heart Transplant; E. J. Henricksen¹, Y. Moayed², R. Lee¹, J. Han³, K. Waddell⁴, H. Luikart⁴, D. P. Morales⁴, J. Gordon⁴, A. Lyapin⁵, S. Duclos⁵, S. Jimenez⁴, K. K. Khush⁴, J. J. Teuteberg⁴. ¹Pharmacy, Stanford Health Care, Stanford, CA, ²Cardiology, University Health Network, Toronto, ON, ³Medicine, Stanford University, Stanford, CA, ⁴Cardiology, Stanford University, Stanford, CA, ⁵Cardiology, Stanford Health Care, Stanford, CA

(693) The Clinical Impact of ACEI/ARBs in Heart Transplantation: Perhaps Not All Good; D. Chang, M. Kittleson, N. Patel, T. Singer-Englar, M. Ackerman, J. Patel, D. Geft, M. Hamilton, L. Czer, A. Trento, J. A. Kobashigawa. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*

(694) Don't Go Breakin' My Heart: Lack of Association between Granulocyte Colony Stimulating Factor and Development of Acute Cellular Rejection; R. Lee¹, E. J. Henricksen¹, Y. Moayed², J. Han³, K. Y. Feng³, K. Waddell⁴, H. Luikart⁴, D. Morales⁴, J. Gordon⁴, A. Lyapin⁴, S. Duclos⁴, S. Jimenez⁴, J. J. Teuteberg⁴, K. K. Khush⁴.
¹Pharmacy, Stanford Health Care, Stanford, CA, ²University Health Network, Toronto, ON, Canada, ³Medicine, Stanford University, Stanford, CA, ⁴Cardiac Transplant, Stanford University, Stanford, CA

(695) Clinical Outcomes for Children with Left Ventricular Noncompaction and Cardiomyopathy; M. Hasegawa¹, M. Taira¹, T. Kanaya¹, K. Araki¹, T. Watanabe¹, Y. Tominaga¹, Y. Kugo¹, H. Ishida¹, A. Narita¹, T. Ueno², T. Ueno¹, Y. Sawa¹. ¹Cardiovascular Surgery, Graduate School of Medicine, Osaka University, Suita, Osaka, Japan, ²Cardiovascular surgery, Graduate School of Medicine, Osaka University, Suita, Osaka, Japan

(696) Combined Hemodynamic Measures of Left and Right Ventricular Function Predict Clinical Outcomes the ESCAPE Trial; M. N. Belkin, U. Siddiqi, F. Alenghat, A. B. Nguyen, B. B. Chung, B. A. Smith, S. Kalantari, N. Sarswat, G. Kim, S. P. Pinney, J. Grinstein. *University of Chicago, Chicago, IL*

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(697) Are Those with Primary Graft Dysfunction More Likely to Have Acute Cellular Rejection or Donor-Specific Antibodies after Heart Transplantation?; J. Han¹, Y. Moayed², E. J. Henricksen³, M. Zhang⁴, R. Lee³, K. Waddell⁵, H. I. Luikart⁵, D. P. Morales⁵, J. Gordon⁵, A. Lyapin⁶, S. Duclos⁷, K. Y. Feng¹, S. Jimenez⁵, J. J. Teuteberg⁵, K. K. Khush⁵. ¹Department of Medicine, Stanford University, Stanford, CA, ²Peter Munk Cardiac Centre, University Health Network, Toronto, ON, Canada, ³Department of Pharmacy, Stanford Health Care, Stanford, CA, ⁴Department of Pathology, Stanford University, Stanford, CA, ⁵Division of Cardiovascular Medicine, Department of Medicine, Stanford University, Stanford, CA, ⁶Stanford Health Care, Stanford, CA, Stanford, CA, ⁷Stanford Health Care, Stanford, CA

(698) Donor Drug Overdose Not Associated with Primary Graft Dysfunction after Heart Transplantation; J. Han¹, Y. Moayed², E. J. Henricksen³, R. Lee³, K. Waddell⁴, H. I. Luikart⁴, D. P. Morales⁴, J. Gordon⁴, A. Lyapin⁵, S. Duclos⁵, K. Y. Feng¹, S. Jimenez⁴, J. J. Teuteberg⁴, K. K. Khush⁴. ¹Department of Medicine, Stanford University, Stanford, CA, ²Peter Munk Cardiac Centre, University Health Network, Toronto, ON, Canada, ³Department of Pharmacy, Stanford Health Care, Stanford, CA, ⁴Division of Cardiovascular Medicine, Department of Medicine, Stanford University, Stanford, CA, ⁵Stanford Health Care, Stanford, CA

(699) Combined Procurement of Heart and Lungs is Associated with an Increased Risk of Primary Graft Dysfunction after Heart Transplantation Compared to Isolated Heart Procurement; Y. Peled¹, J. Lavee¹, E. Ram¹, Y. Kassif¹, Y. Peysakhovich², L. Sternik¹, J. Patel³, E. Raanani¹. ¹Sheba Medical Center and Tel Aviv University, Ramat Gan, Israel, ²Rabin Medical Center, Ramat Gan, Israel, ³Cedars-Sinai Heart institute and David Geffen School of Medicine, Los Angeles, CA

(700) Risk Factors Associated with Post Heart Transplantation Left Ventricular versus Right Ventricular Primary Graft Dysfunction; S. Greni¹, A. Siddique¹, A. Castleberry¹, B. Lowes¹, J. Um¹, M. Moulton¹, S. Lundgren¹, D. Stoller², M. Urban¹. ¹Department of Cardiothoracic Surgery, University of Nebraska Medical Center, Omaha, NE, ²Department of Cardiology, University of Nebraska Medical Center, Omaha, NE

(701) Transplant Flight Plan and Huddle: Simple Intervention to Improve Communication in Pediatric Heart Transplantation; R. Butts¹, L. Vinson², L. Toombs², O. Hoffman¹, M. Bano¹, J. McDermott², R. Davies¹, S. A. Hollander³. ¹University of Texas Southwestern, Dallas, TX, ²Children's Medical Center of Dallas, Dallas, TX, ³Stanford University, Palo Alto, CA

(702) Transition and Transfer of Pediatric Heart Transplant Patients to Adult Healthcare; C. M. Iler, K. Amatya, S. Deshpande. Cardiology, Children's National Hospital, Washington, DC

(703) Upgrading Pediatric Transition: Combining Best Practices for Success; D. W. Ramstack, D. Faull, K. M. Riley, A. Bowman, M. Nelson, K. M. Molina. Primary Children's Hospital, Salt Lake City, UT

(704) Caring for Adolescents and Young Adults in an Adult Hospital Setting with a History of Heart Transplant: Nurses' Experience; B. E. Parlon¹, L. Carroll². ¹Post Heart Transplant, Mater Misericordiae Hospital, Dublin, Ireland, ²UCD School of Nursing / Midwifery & Health Systems, University College Dublin, Dublin, Ireland

(705) The Utility of Preoperative Nutrition Screenings and Postoperative Nutrition Protocols in Patients with Ventricular Assist Devices and Heart Transplantation; R. Modir¹, J. Teuteberg², W. Hiesinger³, E. Hadhazy⁴, J. Wei⁵, Z. Tulu⁶, C. Hill⁷. ¹Stanford University Hospital, Stanford, CA, ²Cardiovascular Medicine, Stanford University Hospital, Stanford, CA, ³Cardiothoracic Surgery, Stanford University Hospital, Stanford, CA, ⁴Critical Care Quality, Stanford University Hospital, Stanford, CA, ⁵Quality, Patient safety and Effectiveness, Stanford University Hospital, Stanford, CA, ⁶Solid Organ Transplant Quality, Stanford University Hospital, Stanford, CA, ⁷Anesthesia - Cardiac, Stanford University Hospital, Stanford, CA

(706) Medication Education Pilot Program for Heart Transplant Patients; S. Fraschilla, A. Fan, M. Kamath, H. Byford. Ronald Reagan-UCLA Med, Los Angeles, CA

(707) Single Center Experience with Venoarterial Extracorporeal Membrane Oxygenation as a Bridge to Heart Transplant under the Contemporary UNOS Heart Allocation System; E. Jeng, F. Esseghir, M. Ahmed, A. Parker, M. Al-Ani, J. Vilaro, J. Aranda, G. Peek, M. Bleiweis. University of Florida, Gainesville, FL

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(708) Post-heart Transplant Care Pathway's Impact on Reducing Length of Stay; L. Guertin¹, M. Earle², T. Dardas¹, C. Brown³. ¹Cardiology, University of Washington, Seattle, WA, ²Rush University, Chicago, IL, ³Decision Patterns, Oakland, CA

(709) AlloMap versus Endomyocardial Biopsy: The Patient Experience; A. K. Jamil¹, K. Tecson², T. T. Ganz¹, S. Blankenship¹, J. Felius¹, S. Carey³, S. A. Hall³. ¹Baylor Scott & White Research Institute, Baylor University Medical Center, Dallas, TX, ²Baylor Scott & White Research Institute, Baylor Heart and Vascular Institute, Baylor University Medical Center, Dallas, TX, ³Baylor Scott & White Research Institute, Center for Advanced Heart and Lung Disease, Baylor University Medical Center, Dallas, TX

(710) Using Data to Drive Improvement: Impact of Reporting Process Compliance Rates on Heart Failure Re-Hospitalizations and 30 Day Mortality; B. Clemson¹, R. McRae¹, M. Huntman¹, B. Sreedharan Pillai², J. Henderson², C. Theisen². ¹OSF Healthcare Cardiovascular Institute, Peoria, IL, ²OSF Healthcare, Peoria, IL

(711) Associations of Perioperative, Donor, and Recipient Factors with Functional Exercise Capacity after Orthotopic Heart Transplantation; K. D. Brown¹, J. S. van Zyl², C. Cooper³, A. A. Arce-Esquivel³, J. Felius², J. Adams¹, R. L. Gottlieb⁴. ¹Cardiac Rehabilitation, Baylor Scott and White Heart and Vascular Hospital, Dallas, TX, ²Baylor Scott and White Research Institute, Baylor Scott and White Health, Dallas, TX, ³Department of Health and Kinesiology, The University of Texas at Tyler, Tyler, TX, ⁴Center for Advanced Heart and Lung Disease, Baylor University Medical Center, Dallas, TX

(712) One Year Outcomes Following Orthotopic Heart Transplantation at a Tertiary Care Center in India; S. Rabbani, S. P. Singh, S. Seth, A. Goyal, M. K. Sahu, M. P. Hote. Cardiothoracic Vascular Surgery, AIIMS, New Delhi, New Delhi, India

(713) The Design of Voxe: An Electronic Patient-Reported Outcome Measure Platform to Capture Pediatric Transplant Patients' Voices and Transform Care; S. J. Anthony¹, S. J. Pol¹, M. Brudno², D. Manase², R. Parekh¹, A. Silva², J. Stinson¹. ¹Hospital for Sick Children, Toronto, ON, Canada, ²University Health Network, Toronto, ON, Canada

(714) Rapid Weight Change Following Heart Transplantation is Associated with Adverse Outcomes: An Analysis of the ISHLT Transplant Registry; Y. Peled¹, E. Ram¹, R. Klempfner¹, O. Wever-Pinzon², J. Lavee¹, W. S. Cherikh³, J. Stehlik². ¹Sheba Medical Center and Tel Aviv University, Ramat Gan, Israel, ²University of Utah School of Medicine, Salt Lake City, UT, ³United Network for Organ Sharing, Richmond, VA

(715) Employment Following Heart Transplantation in Canada; A. Malik¹, A. Teixeira-Barreira¹, S. Kozusko², F. Foroutan², H. Ross², M. McDonald², A. C. Alba². ¹University of Toronto, Toronto, ON, Canada, ²Ted Rogers Center for Heart Research, Toronto General Hospital, Toronto, ON, Canada

(716) Impact of Ischemic Time on Cardiopulmonary Exercise Outcomes after Orthotopic Heart Transplantation; K. D. Brown¹, J. S. van Zyl², C. Cooper³, J. Felius², A. A. Arce-Esquivel³, J. Adams⁴, R. L. Gottlieb⁵. ¹Cardiac Rehabilitation, Baylor Scott and White Heart and Vascular Hospital, DALLAS, TX, ²Baylor Scott and White Research Institute, Baylor Scott and White Health, Dallas, TX, ³Department of Health and Kinesiology, The University of Texas at Tyler, Tyler, TX, ⁴Cardiac Rehabilitation, Baylor Scott and White Heart and Vascular Hospital, Dallas, TX, ⁵Center for Advanced Heart and Lung Disease, Baylor University Medical Center, Dallas, TX

(717) Impact of Major Surgical Procedures on Quality of Life of Patients with Advanced Heart Failure; S. Boschi¹, L. Campedelli¹, M. Valente¹, L. Giovannini¹, L. Golfieri¹, M. Masetti¹, M. Sabatino¹, A. Loforte¹, S. Martin Suarez¹, S. Grandi², D. Pacini¹, L. Potena¹. ¹Bologna Academic Hospital, Bologna, Italy, ²University of Bologna, Bologna, Italy

(718) A Comparison of AlloMap versus Echocardiographic Doppler Tissue Imaging in Assessing the Presence of Rejection in Orthotopic Heart Transplant Recipients; R. Wu¹, J. Shah², N. Mencer², R. Mhaskar², M. Weston³. ¹Cardiology, University of South Florida, Tampa, FL, ²Internal Medicine, University of South Florida, Tampa, FL, ³Advanced Heart Failure and Transplant Cardiology, Tampa General Medical Group, Tampa, FL

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(719) Vasculitis on Heart Transplant as an Emerging Prognostic Factor; M. Fedrigo¹, D. Bottigliengo¹, A. Romano¹, E. Gugole¹, T. Bocca¹, G. Lorenzoni¹, G. M. Vescovo¹, I. Barison¹, T. Bottio¹, G. Tarantini¹, G. Toscano¹, A. Nocco², E. Benazzi², C. Castellani¹, G. De Silvestro³, G. Gerosa¹, F. Tona¹, D. Gregori¹, A. Angelini¹. ¹Cardiac, Thoracic, Vascular Sciences and Public Health, University of Padua, Padua, Italy, ²Fondazione IRCCS Cà Granda Ospedale Maggiore, Milan, Italy, ³Transfusion Medicine, Regional laboratory of Transplant, University of Padua, Padua, Italy

(720) Treatment of Anti-HLA Donor-Specific Antibodies in Heart Transplantation: A Single-Center Experience; J. Salman¹, T. Kaufeld¹, K. Aburahma¹, C. Bara¹, A. Niehaus¹, R. Poyanmehr¹, M. Avsar¹, C. S. Falk², W. Sommer³, A. Haverich¹, G. Warnecke³, F. Lus¹. ¹Department of Cardiothoracic, Transplant and Vascular Surgery, Hannover Medical School, Hannover, Germany, ²Institute of Transplant Immunology, Hannover Medical School, Hannover, Germany, ³Department of Cardiac surgery, Heidelberg Medical School, Heidelberg, Germany

(721) Continuous Intermittent Intravenous Immunoglobulin in Heart Transplant Recipients with Elevated Donor-Specific Antibody Levels; M. C. Yopes¹, K. Clerkin², J. Fried², J. Griffin², J. Raikhelkar², V. Topkara², A. Kim², M. Habal², F. Latif², S. Restaino², M. Yuzefpolskaya², M. Farr², P. Colombo², G. Sayer², N. Uriel². ¹Department of Medicine, Columbia University Vagelos College of Physicians and Surgeons, New York, NY, ²Department of Medicine, Division of Cardiology, Columbia University Vagelos College of Physicians and Surgeons, New York, NY

(722) Treatment of Donor-Specific Antibody Mediated Rejection after Heart Transplantation by IGM-Enriched Human Intravenous Immunoglobulin; M. B. Immohr¹, H. Aubin¹, R. Westenfeld², A. Mehdiani¹, D. Scheiber², R. Bruno², I. Tudorache¹, P. Akhyari¹, A. Lichtenberg¹, U. Boeken¹. ¹Dept. of Cardiac Surgery, Heinrich-Heine-University Düsseldorf, Düsseldorf, Germany, ²Dept. of Cardiology, Heinrich-Heine-University Düsseldorf, Düsseldorf, Germany

(723) Does Crossing Historical DSA in Patients Undergoing Heart Transplantation Have Any Impact on Post-Transplant Outcomes?; J. A. Kobashigawa, M. Kittleson, L. Czer, N. Patel, T. Singer-Englar, N. Kissling, E. Kransdorf, D. Geft, D. Emerson, J. Patel. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*

(724) Management of Antibody Mediated Rejection (AMR) in Heart Transplant Patients: The Real World in a French Single Center Treating All Pathological AMR; E. vermes, X. Cansoulline, L. Rouault, C. Loardi. *Heart Surgery, CHU Trousseau, Tours, France*

(725) Release the Pressure! Does Jugular Venous Pressure Predict Rejection in Cardiac Biopsy?; R. C. Campos Deveza e Silva¹, B. Schnegg², N. Gorrie¹, F. Koppe¹, I. Lee¹, C. Hayward¹, P. MacDonald¹. ¹Cardiology, St Vincent's Hospital, Darlinghurst, Australia, ²Heart and Lung Clinic, St Vincent's Hospital, Darlinghurst, Australia

(726) Reducing the Risk of Glowing in the Dark; a Protocol to Reduce Patient and Personal Exposure to Ionizing Radiation during Biopsy; B. Schnegg¹, F. Koppe¹, H. Lee¹, N. Gorrie¹, C. Kessler Iglesias¹, A. Schnegg-Kaufmann², P. Macdonald¹, C. Hayward¹. ¹Heart and Lung Clinic, St.-Vincent Hospital, Darlinghurst, Australia, ²Lowy Cancer Research Centre and School of Medical Sciences, Faculty of Medicine, University of New South Wales, Sydney, Australia

(727) Endomyocardial Biopsy Monitoring in the Follow Up and Rejection Profile in Htx Patients; M. Fedrigo¹, M. Carrozzini¹, T. Bocca¹, D. Bottigliengo², E. Gugole¹, T. Bottio¹, G. Toscano¹, G. De Silvestro³, F. Tona¹, D. Gregori², G. Gerosa¹, A. Angelini¹. ¹Cardiac, Thoracic, Vascular Sciences and Public Health, University of Padua, Padua, Italy, ²Unit of Biostatistics, Epidemiology and Public Health, Department of Cardiac, Thoracic, Vascular Sci, University of Padua, Padua, Italy, ³Transfusion Medicine, Regional laboratory of Transplant, University of Padua, Padua, Italy

(728) In the Current Era, Do We Have Improved Outcomes in Hemodynamic Compromise Rejection after Heart Transplantation?; M. Kittleson, J. Patel, N. Patel, T. Singer-Englar, S. Kim, N. Kissling, D. Chang, R. Cole, A. Trento, L. Czer, J. A. Kobashigawa. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*

POSTER TOPICS -- ADVANCED HEART FAILURE AND TRANSPLANTATION

(729) Longitudinal Variation in Absolute and Relative AlloMap Score in Heart Transplant Recipients; U. A. Siddiqi, W. Cohen, J. Cruz, R. Hoang, P. Combs, S. Kalantari, B. Smith, B. Chung, A. Nguyen, N. Sarswat, G. Kim, V. Jeevanandam, S. Pinney, L. Lourenco Jenkins, J. Grinstein. *University of Chicago, Chicago, IL*

(730) In the Current Era, Heart-Liver Transplantation May Not Protect Against Acute and Chronic Rejection; J. Patel, M. Kittleson, T. Singer-Englar, N. Patel, S. Kim, A. Velleca, E. Kransdorf, D. Chang, D. Geft, L. Czer, F. Esmailian, J. A. Kobashigawa. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*

(731) Increased Cell Free DNA Levels in African American Patients Early after Heart Transplantation; A. Doshi¹, Z. Tushak¹, V. Garcia¹, K. Shah², M. Jang³, P. Shah⁴, S. Hsu⁵, E. Feller⁶, M. Rodrigo⁷, S. Najjar⁸, U. Fidelli³, A. Marishta³, K. Bhatti³, Y. Yang³, I. Tunc⁹, M. Solomon¹⁰, G. Berry¹¹, C. Marboe¹², S. Agbor-Enoh³, H. Valentine³. ¹Cardiology, Virginia Commonwealth University, Richmond, VA, ²Virginia Commonwealth University, Richmond, VA, ³Laboratory of Transplantation Genomics, Division of Intramural Research, National Heart, Lung and Blood Institute, Bethesda, MD, ⁴Cardiology, Inova Fairfax Hospitals, Falls Church, VA, ⁵Cardiology, Johns Hopkins Hospital, Baltimore, MD, ⁶Cardiology, University of Maryland Medical Center, Baltimore, MD, ⁷Cardiology, Medstar Washington Hospital, Washington, DC, ⁸Cardiology, Medstar Washington Hospital, Baltimore, MD, ⁹Laboratory of Applied Precision Omics, Bethesda, MD, ¹⁰National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, VA, ¹¹Pathology, Stanford University School of Medicine, Palo Alto, CA, ¹²Pathology, New York Presbyterian University Hospital of Cornell and Columbia, New York, NY

(732) Recellularization of Xenograft Heart Valves Reduces the Xenoreactive Immune Response in an In-Vivo Rat Model; S. J. Bozso, R. EL-Andari, L. Zhu, B. Adam, M. C. Moon, D. H. Freed, J. Nagendran, J. Nagendran. *University of Alberta, Edmonton, AB, Canada*

(733) Xenimmune Response Can Elicit Postoperative Bioprosthetic Valve Degeneration; T. Kato¹, A. Yoshizawa¹, S. Manabe², S. Takashi², A. Kawamura¹, S. Yoshizawa³, K. Kuwaki⁴. ¹Department of Cardiology, International University of Health and Welfare, Chiba, Japan, ²Department of Cardiothoracic Surgery, International University of Health and Welfare, Chiba, Japan, ³Department of Pathology, Tokyo Women's Medical University, Tokyo, Japan, ⁴Department of Cardiothoracic Surgery, Juntendo University, Tokyo, Japan

(734) Could Cellular Therapy Rescue the Chronically Failing Heart?; L. Ong¹, M. Colzani¹, K. Mitzelfelt², L. Gambardella¹, A. Bertero², A. Martinson², C. E. Murry², S. Sinha¹. ¹University of Cambridge, Cambridge, United Kingdom, ²University of Washington, Seattle, WA

(735) Biologisation of the Left Ventricular Assist Device; H. Güntner, K. Katsirntaki, M. Pflaum, A. Haverich, B. Wiegmann. *Hannover Medical School, Hannover, Germany*

(736) Acute Heart Failure Post Liver Transplantation: A Systematic Literature Review; K. Nazif, C. Kubal, M. Guglin. *Internal Medicine, Indiana University School of Medicine, Indianapolis, IN*

(737) Association between Pulmonary Hypertension and Outcomes in Heart-Kidney Transplantation; L. K. Truby, V. Blumer, A. D. Devore, K. S. Parikh, M. Fudim, C. B. Patel, S. D. Russell, B. Bryner, J. Morris, R. Agarwal. *Duke University Medical Center, Durham, NC*

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(738) Satellite Strategy: A Simple Approach Which Solved Access to Lung Transplant in Uruguay; N. Tommasino¹, A. Bertolotti², A. Musetti¹, C. Chao¹, I. Villanueva¹, P. Curbelo¹. ¹Lung Transplant Program, National Resources Funds, Montevideo, Uruguay, ²Director of Lung Transplant Division and Heart Transplant Division, Lung and Heart Transplant Division, Hospital Universitario Fundación Favaloro, Buenos Aires, Uruguay

(739) Surf's Up, Radical Approaches to Riding the COVID Waves; D. Burke, R. Martin, K. Wilson, F. Kirsch, V. Sivevski, A. Smale, H. Ward, L. Webster, B. Bourne, B. Levvey, H. Stedman, G. Snell, G. Westall. Lung Transplant Service, Alfred Health, Melbourne, Australia

(740) Are Psychopharmacological Treatments Risk Factors for Mortality in Lung Transplant Recipients? - Retrospective Study; M. G. Sanchez Sanda¹, M. E. Dabi², M. Grinberg³, S. Moscoloni⁴, R. Ahumada⁴, J. M. Osses⁴, A. M. Bertolotti⁴. ¹Hospital Universitario Fundación Favaloro, Ciudad Autonoma de Buenos Aires, Argentina, ²Departamento de Psiquiatria, instituto de Neurociencias, Hospital Universitario Fundación Favaloro, Ciudad Autonoma de Buenos Aires, Argentina, ³Laboratorio de Neurociencias Cognitivas Computacionales, Humai, Ciudad Autonoma de Buenos Aires, Argentina, ⁴Departamento de Trasplante Pulmonar, Hospital Universitario Fundación Favaloro, Ciudad Autonoma de Buenos Aires, Argentina

(741) Frailty is Associated with Subsequent Development of Chronic Lung Allograft Dysfunction Following Lung Transplantation; J. Maheshwari¹, J. Greenland¹, Y. Gao¹, S. Hays¹, P. Katz², P. Blanc¹, N. Kolaitis¹, J. Golden¹, J. Kukreja³, R. J. Shah¹, L. Leard¹, B. Trinh³, K. Covinsky⁴, D. Calabrese¹, A. Venado¹, C. Huang⁵, M. Kleinhenz¹, N. Sutter¹, G. Tietje-Ulrich¹, J. Singer¹. ¹Pulmonary & Critical Care Medicine, University of California, San Francisco, San Francisco, CA, ²Division of Rheumatology, University of California, San Francisco, San Francisco, CA, ³Division of Adult Cardiothoracic Surgery, University of California, San Francisco, San Francisco, CA, ⁴Division of Geriatrics, University of California, San Francisco, San Francisco, CA, ⁵Department of Epidemiology and Biostatistics, University of California, San Francisco, San Francisco, CA

(742) Molecular Assessment (RNA-sequencing) of CLAD in Lung Transplant Biopsies: A Pilot Study; F. Lunardi¹, S. E. Vuljan¹, F. Pezzuto¹, F. Fortarezza¹, D. I. Abbrescia², G. Comacchio¹, P. Ferrigno¹, M. Loy³, C. Giraud¹, A. S. Fraia¹, M. Schiavon¹, F. Braccioni³, E. Cozzi¹, F. Rea¹, F. P. Schena², F. Calabrese¹. ¹University of Padova, Padova, Italy, ²Fondazione Schena, Valenzano (Bari), Italy, ³Padova University Hospital, Padova, Italy

(743) Phenotyping CLAD after Single Lung Transplant: Limits and Prognostic Assessment of the 2019 ISHLT Classification System; G. Berra¹, E. Huszti², L. Levy¹, M. Kawashima³, E. Fuchs³, B. Renaud-Picard³, P. Riddell³, O. Dias³, S. Rajagopala³, A. Ulahannan³, R. Ghany¹, L. Singer³, J. Tikkanen¹, T. Martinu³. ¹Latner Thoracic Surgery Research Laboratories, UHN Research, Toronto Lung Transplant Program, Toronto, ON, Canada, ²Biostatistics Research Unit, UHN, Toronto, ON, Canada, ³UHN Research, Toronto Lung Transplant Program, Toronto, ON, Canada

(744) NETosis in Broncho-Alveolar Lavage-Fluid (BAL-f) from Bronchiolitis Obliterans Syndrome (BOS) Patients; L. Pandolfi¹, V. Frangipane¹, M. D'Amato², S. Bozzini¹, S. Viglio², P. Iadarola², M. De Amici³, S. Lettieri⁴, M. Morosini¹, F. Meloni¹. ¹Respiratory Diseases, IRCCS S.Matteo, Pavia, Italy, ²Molecular Medicine, University of Pavia, Pavia, Italy, ³Laboratory services, IRCCS S.Matteo, Pavia, Italy, ⁴Respiratory Diseases, University of Pavia, Pavia, Italy

(745) Forced Vital Capacity for Defining Restrictive Allograft Syndrome and Mixed Phenotype in Lung Transplant Recipients; L. Levy¹, E. Huszti², G. Berra², B. Renaud-Picard², M. Kawashima², A. Takahagi², S. Moshkelgosha², R. Ghany², C. Chow², S. Keshavjee², L. Singer², J. Tikkanen², T. Martinu². ¹Sheba Medical Center, Ramat Gan, Israel, ²Toronto General Hospital / University Health Network, Toronto, ON, Canada

(746) Outcome of Lung Re-Transplant in Chronic Lung Allograft Dysfunction; P. Charoenpong¹, D. Song², D. Ford¹, N. Daoud³, A. Adedeji³. ¹Pulmonary and Critical Care Medicine, Ochsner LSU Shreveport, Shreveport, LA, ²Internal Medicine, Ochsner LSU Shreveport, Shreveport, LA, ³Infectious Disease, Ochsner LSU Shreveport, Shreveport, LA

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(747) Clinical Characteristics of Patients with Chronic Lung Allograft Dysfunction Listed for Lung Re-Transplant; P. Charoenpong¹, A. Adedeji², N. Daoud², D. Song³, D. Ford¹. ¹Pulmonary and Critical Care Medicine, Ochsner LSU Shreveport, Shreveport, LA, ²Infectious Disease, Ochsner LSU Shreveport, Shreveport, LA, ³Internal Medicine, Ochsner LSU Shreveport, Shreveport, LA

(748) Association between Cytomegalovirus (CMV) and Chronic Lung Allograft Dysfunction (CLAD) in Lung Transplant Recipients; M. Kawashima¹, J. Ma², E. Huszti², L. Levy¹, G. Berra¹, B. Renaud-Picard¹, A. Takahagi¹, R. Ghany¹, M. Sato³, S. Keshavjee¹, L. G. Singer¹, S. Husain⁴, D. Kumar⁴, J. Tikkanen¹, T. Martinu¹. ¹Toronto Lung Transplant Program, University Health Network, Toronto, ON, Canada, ²Biostatistics Research Unit, University Health Network, Toronto, ON, Canada, ³Thoracic Surgery, The University of Tokyo, Tokyo, Japan, ⁴Transplant Infectious Diseases & Multi Organ Transplant Program, University Health Network, Toronto, ON, Canada

(749) Factors Associated with Long-Term CLAD-Free Survival in Lung Transplantation; S. Rajagopala, J. Ma, R. Ghany, J. Tikkanen, T. Martinu, S. C. Juvet. *Medicine, Division of Respiriology, Toronto General Hospital, Toronto, ON, Canada*

(750) Baseline Lung Allograft Dysfunction after Lung Transplantation is Not Associated with Donor Factors; S. Schwarz¹, P. Wady¹, A. Benazzo¹, M. Harlander², F. Dzibur³, A. Senkova⁴, B. Gieszer⁵, W. Klepetko¹, P. Jaksch¹, K. Hoetzenecker¹. ¹Thoracic surgery, Medical University of Vienna, Vienna, Austria, ²Pulmonary Diseases and Allergy, Ljubljana University Medical Centre, Ljubljana, Slovenia, ³Clinical Center for Pulmonary Diseases Jordanovac, University Hospital Centre Zagreb, Zagreb, Croatia, ⁴Pulmonology, University Clinic Bratislava, Bratislava, Slovakia, ⁵Thoracic surgery, Semmelweis University - National Institute of Oncology, Budapest, Hungary

(751) Dissecting Serial Immune Response Stages of Chronic Rejection after Murine Orthotopic Lung Transplantation; T. Heigl, J. Kaes, C. Aelbrecht, G. Vande Velde, A. Vanstapel, S. Verleden, A. Neyrinck, D. Van Raemdonck, G. Verleden, L. Ceulemans, E. Verbeken, R. Vos, B. Vanaudenaerde. *KU Leuven, Leuven, Belgium*

(752) Risk Assessment of Chronic Lung Allograft Dysfunction Phenotypes after Living-Donor Lobar Lung Transplantation According to the 2019 ISHLT Classification System; K. Matsubara, S. Otani, D. Shimizu, Y. Tomioka, T. Shiotani, H. Yamamoto, K. Miyoshi, M. Okazaki, S. Sugimoto, M. Yamane, S. Toyooka. *Okayama University, Okayama, Japan*

(753) Infinitix-BOS Trial: Multi-Center, Randomised, Double-Blind Placebo-Controlled Trial of Nintedanib in Lung Transplant Recipients with Bronchiolitis Obliterans Syndrome (BOS) Grade 0-p and Grade 1-2; O. Brugiere¹, C. Picard², J. Messika³, G. Weisenburger³, V. Bunel⁴, X. Demant⁵, c. Bon⁵, C. Macey⁵, J. Le Pavec⁶, G. Dauriat⁷, A. Crutu⁸, S. Hirschi⁹, b. Renaud Picard¹⁰, T. Degot¹⁰, M. Reynaud-Gaubert¹¹, B. Coiffard¹², B. Coltey¹³, C. Pison¹⁴, C. Saint Raymond¹⁵, a. Briault¹⁴, A. Hamid¹, L. Beaumont¹, A. Roux¹. ¹Transplantation pulmonaire, Hopital Foch, Suresnes, France, Paris, France, ²Transplantation pulmonaire, Hopital Foch, Suresnes, France, Suresnes, France, ³Transplantation pulmonaire, Hopital Bichat, Paris, France, ⁴Transplantation pulmonaire, Hopital Bichat, France, Paris, France, ⁵Transplantation pulmonaire, CHU Bordeaux, Bordeaux, France, ⁶Transplantation pulmonaire, Hopital Marie Lannelongue, Le Plessis Robinson, France, ⁷Transplantation pulmonaire, Hopital Marie Lannelongue, Paris, France, ⁸Transplantation pulmonaire, Hopital Marie Lannelongue, Paris, France, ⁹Transplantation pulmonaire, CHU Strasbourg, Paris, France, ¹⁰Transplantation pulmonaire, CHU Strasbourg, Strasbourg, France, ¹¹Transplantation pulmonaire, APHM Marseille, MArseille, France, ¹²Transplantation pulmonaire, CHU APHM Marseille, Marseille, France, ¹³Transplantation pulmonaire, CHU MArseille APHM, Marseille, France, ¹⁴Transplantation pulmonaire, CHU Grenoble, Grenoble, France, ¹⁵Transplantation pulmonaire, CHU grenoble, Grenoble, France

(754) Development in Lung Transplantation, Organ Shortage, Bronchiolitis Obliterans and Overall Survival in the USA, 2011-2018; E. Hofstetter¹, G. Boerner². ¹Breath Therapeutics, a Zambon Company, München, Germany, ²Breath Therapeutics, a Zambon Company, Menlo Park, CA

(755) Patients with Bronchiolitis Obliterans Syndrome (BOS) Have Later Onset of Acute Rejection Than BOS-Free Patients; T. Nakagiri, A. Knöfel, F. Ius, J. Salman, T. Siemeni, K. S. Hacker, A. Haverich. *Department of Cardiac, Thoracic, Transplantation and Vascular Surgery, Hannover Medical School, Hannover, Germany*

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(756) Is Logistically Motivated Ex Vivo Lung Perfusion a Good Idea?; C. Van De Wauwer¹, Z. L. Zhang¹, E. A. Verschuuren², C. T. Gan², W. van der Bij², M. E. Erasmus¹. ¹Department of Cardiothoracic Surgery, UMCG, Groningen, Netherlands, ²Department of Pulmonary Diseases and Lung Transplantation, UMCG, Groningen, Netherlands

(757) The Evolving Role of Ex Vivo Lung Perfusion during the COVID-19 Pandemic; K. S. Ayyat, T. Okamoto, I. Sakanoue, H. Elgharably, M. M. Budev, J. J. Yun, K. R. McCurry. Cleveland Clinic Foundation, Cleveland, OH

(758) Assessment of Lobar Oxygenation during Ex-Vivo Lung Perfusion May Predict Postoperative Outcomes; H. Niikawa, T. Okamoto, K. S. Ayyat, I. Sakanoue, J. J. Yun, K. R. McCurry. Thoracic and Cardiovascular Surgery, Cleveland Clinic, Cleveland, OH

(759) Clinical Outcomes of the Lund, Toronto, and Organ Care System Protocols for Normothermic Ex Vivo Lung Perfusion: A Systematic Review and Pursuit of Network Meta-Analysis; E. S. Knijff¹, M. A. Hu¹, Z. L. Zhang², M. E. Erasmus². ¹University Medical Center Groningen, Groningen, Netherlands, ²Cardiothoracic Surgery, University Medical Center Groningen, Groningen, Netherlands

(760) Extracorporeal Life Support Registry: Analysis of Ex Vivo Lung Perfusion Utilization in Donor after Cardiac Death and Donor after Brain Death; M. A. Kashem¹, G. Loor², M. Hartwig³, M. Villavicencio-Theoduloz⁴, A. L. Axtell⁴, P. Sanchez⁵, N. Ryssef⁵, S. Huddleston⁶, B. Bottiger³, D. Daoud⁷, H. Zhao⁸, Q. Wei⁷, A. S. Bussetty⁸, F. Ius⁹, G. Warnecke¹⁰, T. Machuca¹¹, D. Van Raemdonck¹², A. E. Frick¹², A. Neyrinck¹², S. Chandrashekar¹³, Y. Toyoda⁸. ¹Cardiovascular Surgery, Temple University Hospital, Philadelphia, PA, ²Cardiovascular Surgery, Baylor College of Medicine, Houston, TX, ³Duke University Health System, Durham, NC, ⁴Massachusetts General Hospital, Boston, MA, ⁵University of Pittsburgh Medical Center, Pittsburgh, PA, ⁶University of Minnesota Medical School, Minneapolis, MN, ⁷Baylor College of Medicine, Houston, TX, ⁸Temple University School of Medicine, Philadelphia, PA, ⁹Hannover Medical School, Hannover, Germany, ¹⁰Heidelberg University Hospital, Heidelberg, Germany, ¹¹University of Florida Health System, Gainesville, FL, ¹²University Hospital Leuven, Leuven, Belgium, ¹³University of Florida, Gainesville, FL

(761) Impact of Mobile Ex Vivo Lung Perfusion on Lung Transplant Finances; M. Urban¹, J. Boudreaux¹, H. M. Strah¹, B. Small¹, D. Berkheim¹, M. Moulton¹, F. Wilson², A. Siddique¹. ¹University of Nebraska Medical Center, Omaha, NE, ²University of Utah School of Medicine, Salt Lake City, UT

(762) Use of Ex Vivo Lung Perfusion for Lung Transplantation: Midterm Results; A. Koch¹, N. Pizanis¹, G. Ayoub¹, A. Slama², A. Weymann¹, V. Bessa³, C. Taube³, C. Aigner², A. Ruhparwar¹, M. Kamler¹. ¹Thoracic and Cardiovascular Surgery, Westgerman Lung Transplantation Center, University Hospital Essen, Essen, Germany, ²Thoracic Surgery, Westgerman Lung Transplantation Center, University Hospital Essen, Essen, Germany, ³Pulmonology, Westgerman Lung Transplantation Center, University Hospital Essen, Essen, Germany

(763) Development, Validation and Implementation of an Instrument to Measure Knowledge in Transplant Recipients; V. Schaevers¹, K. De Bondt², N. Duerinckx³, S. Berentsen⁴, M. De Vos⁴, S. Stulens⁴, C. Ferreira De Castro⁴, V. Vandenbossche², R. Vos¹, F. Dobbels⁴. ¹Pneumology, University Hospitals of Leuven, Leuven, Belgium, ²Nephrology, University Hospitals of Leuven, Leuven, Belgium, ³Cardiology, University Hospitals of Leuven, Leuven, Belgium, ⁴Catholic University Leuven, Leuven, Belgium

(764) May cDCD Donors Increases Incidence of Bronchial Complications after Lung Transplantation?; I. Bello¹, M. Montoya¹, M. Culebras², M. Ribas³, J. Sacanell⁴, C. Berastegui², A. Gómez⁵, M. Deu¹, A. Jauregui¹. ¹Thoracic Surgery, Vall d'Hebron University Hospital, Barcelona, Spain, ²Pulmonologist, Vall d'Hebron University Hospital, Barcelona, Spain, ³Anesthesiologist, Vall d'Hebron University Hospital, Barcelona, Spain, ⁴Critical Care Medicine, Vall d'Hebron University Hospital, Barcelona, Spain, ⁵Vall d'Hebron University Hospital, Barcelona, Spain

(765) Understanding Severe Hyperammonemia in Lung Transplantation; H. Kim¹, J. Lee¹, S. Kim², M. Park², S. Jeong³, H. Paik¹. ¹Department of Thoracic and Cardiovascular Surgery, Yonsei University College of Medicine, Seoul, Korea, Republic of, ²Division of pulmonology, Department of Internal Medicine, Yonsei University College of Medicine, Seoul, Korea, Republic of, ³Division of infectious disease, Department of Internal Medicine, Yonsei University College of Medicine, Seoul, Korea, Republic of

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(766) Renal Decline Following Lung Transplant; C. Heid¹, M. Khoury², C. Liu¹, K. Maaraoui¹, A. Kalsbeek¹, A. Hackmann¹, M. Wait¹, W. S. Ring¹, L. C. Huffman¹, M. Peltz¹. ¹Cardiovascular and Thoracic Surgery, University of Texas Southwestern, Dallas, TX, ²Surgery, University of Texas Southwestern, Dallas, TX

(767) Gastroparesis after Lung Transplantation is Common but Not Associated with Inferior Outcomes; M. Vasudevan¹, P. Hopkins², D. F. Hickling¹, C. Divithotawela², R. Naidoo³, P. F. Collins⁴, D. Chambers², J. Lee⁵. ¹Nutrition & Dietetics, The Prince Charles Hospital, Chermiside, Australia, ²Queensland Lung Transplant Service, The Prince Charles Hospital, Chermiside, Australia, ³Cardiothoracic Surgery, The Prince Charles Hospital, Chermiside, Australia, ⁴Nutrition & Dietetics, School of Allied Health Sciences, Griffith University, Gold Coast, Australia, ⁵Department of Nuclear Medicine Division of Medical Imaging, The Prince Charles Hospital, Chermiside, Australia

(768) Lung Herniation and Torsion Contributing to Persistent RV Dysfunction after Heart-Lung Transplant; V. Caputo¹, K. Stryker¹, S. Ahmed¹, S. Alsunaid¹, A. Mansour¹, M. Abbasi¹, S. Forest², S. Scheinin², H. Seethamraju¹. ¹Advanced Pulmonary Failure and Lung Transplantation, Montefiore Medical Center, Bronx, NY, ²Department of Cardiothoracic Surgery, Montefiore Medical Center, Bronx, NY

(769) Post-Transplant Lymphoproliferative Disorder in Lung Transplantation: A Single-Center Experience in Japan; D. Shimizu¹, S. Otani¹, Y. Tomioka², T. Shiotani², H. Yamamoto¹, K. Miyoshi¹, M. Okazaki¹, S. Sugimoto², M. Yamane¹, S. Toyooka¹. ¹General Thoracic Surgery, Okayama University Hospital, Okayama, Japan, ²General Thoracic Surgery, Organ Transplant Center, Okayama University Hospital, Okayama, Japan

(770) Treatment Strategy for Hyperammonemia in Lung Transplantation; H. Kim¹, H. Paik¹, S. Jeong², S. Kim³, M. Park³, J. Lee¹. ¹Department of Thoracic and Cardiovascular Surgery, Yonsei University College of Medicine, Seoul, Korea, Republic of, ²Division of infectious disease, Department of Internal Medicine, Yonsei University College of Medicine, Seoul, Korea, Republic of, ³Division of pulmonology, Department of Internal Medicine, Yonsei University College of Medicine, Seoul, Korea, Republic of

(771) Native Lung Complications in Single Lung Transplant Recipients; E. J. Wainstein¹, A. Da Lozzo², E. Beveraggi², A. Dietrich², D. Smith², J. Montagne², M. L. Orazi¹, G. Svetliza¹. ¹Internal Medicine, Hospital Italiano de Buenos Aires, Buenos Aires, Argentina, ²Surgery, Hospital Italiano de Buenos Aires, Buenos Aires, Argentina

(772) Cause of Death after Lung Transplantation - A Single Center Analysis; J. P. Ehrsam¹, C. Caviezel¹, D. Schneiter¹, S. Hillinger¹, M. M. Schuurmans², I. Opitz¹, I. Inci¹. ¹Thoracic Surgery, University Hospital Zurich, Zurich, Switzerland, ²Pneumology, University Hospital Zurich, Zurich, Switzerland

(773) Combining Plasmapheresis with Renal Replacement Therapy: Answer to Hyperammonemia Post Lung Transplantation?; U. Shah, P. Kumar, V. Rahulan, P. Dutta, S. Attawar. Heart & Lung Transplant Institute, KIMS, Telangana, India

(774) COVID-19 Disease in Lung Transplant Recipients: A Case Series; L. L. Seijo¹, A. Perez¹, N. Thakur¹, A. Venado¹, L. E. Leard¹, R. Shah¹, J. Singer¹, M. E. Kleinhenz¹, N. Kolaitis¹, J. A. Golden¹, J. Kukreja², B. Trinh², S. Hays¹. ¹Medicine, University of California, San Francisco, San Francisco, CA, ²Surgery, University of California, San Francisco, San Francisco, CA

(775) Lung Transplant Activity in France during the COVID-19 Outbreak; C. Cantrelle¹, C. Legeai¹, C. Jasseron¹, E. Sage², P. Mordant³, A. Olland⁴, O. Mercier⁵, P. Thomas⁶, F. Tronc⁷, J. Jougon⁸, F. Kerbaul¹, R. Dorent¹. ¹Agence de la biomédecine, SAINT-DENIS LA PLAINE, France, ²Thoracic Surgery, Foch Hospital, Suresnes, France, ³Thoracic Surgery, Bichat Hospital, Paris, France, ⁴Thoracic Surgery, Civil Hospital, Strasbourg, France, ⁵Thoracic Surgery, Marie-Lannelongue Hospital, Le Plessis Robinson, France, ⁶Thoracic Surgery, North Hospital, Marseille, France, ⁷Thoracic Surgery, Louis Pradel Hospital, Bron, France, ⁸Thoracic Surgery, Haut Lévêque Hospital, Bordeaux, France

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(776) Novel CCR5 Antagonist for the Treatment of Mild-Moderate COVID-19 Infection after Lung Transplant; J. P. Skendelas¹, D. Phan¹, V. Caputo², K. Stryker², S. Ahmed², P. Philippsborn², J. Thalappillil², S. A. Scheinin¹, H. Seethamraju². ¹Cardiothoracic and Vascular Surgery, Montefiore Medical Center, Bronx, NY, ²Cardiothoracic and Vascular Surgery, Division of Advanced Pulmonary Failure and Lung Transplantation, Montefiore Medical Center, Bronx, NY

(777) Impact of COVID Pandemic on Lung Transplantation Program: An Indian Experience; U. Shah, V. Rahulan, P. Kumar, P. Dutta, S. Attawar. Heart & Lung Transplant Institute, KIMS, Telangana, India

(778) COVID-19 in Lung-Transplant Recipients: A Descriptive Study; B. Rodrigues¹, D. Daoud², G. Li¹, J. Segraves¹, M. Hemmersbach-Miller³, G. Loo⁴, P. Garcha¹. ¹Medicine - Pulmonary - Lung Transplantation, Baylor College of Medicine, Houston, TX, ²Surgery / Core Research, Baylor College of Medicine, Houston, TX, ³Medicine - Infectious Disease, Baylor College of Medicine, Houston, TX, ⁴Cardiothoracic Transplant and Circulatory Support, Baylor College of Medicine, Houston, TX

(779) Case Series of Lung Transplants Done for COVID-19 Destroyed Lungs - Single Center Experience from India; A. Jindal¹, S. Rao K G², B. K R³. ¹Pulmonary Critical Care and Sleep Medicine, Heart and Lung Transplant Unit, MGM Healthcare, Chennai, Tamil Nadu, India, ²Cardiac Anesthesia and Intensive Care, Heart and Lung Transplant Unit, MGM Healthcare, Chennai, Tamil Nadu, India, ³Cardiac Sciences, Heart and Lung Transplant Unit, MGM Healthcare, Chennai, Tamil Nadu, India

(780) Ensuring Patient Safety and Data Integrity in Clinical Trials for the Treatment of Bronchiolitis Obliterans Syndrome (BOS) during the COVID-19 Pandemic; S. Prante Fernandes¹, T. Hagedorn¹, I. Salerio², D. Cuomo², D. Kappeler³, M. Tutone², S. Witte¹, V. Vaja². ¹Breath Therapeutics, a Zambon Company, GmbH, Munich, Germany, ²Zambon SpA, Bresso (MI), Italy, ³Breath Therapeutics, a Zambon Company, Menlo Park, CA

(781) Diaphragm Pacing in Lung Transplant Patients: To Identify and Treat Diaphragm Function Abnormalities; R. Onders¹, Y. Elgudin¹, Y. Abu-Omar¹, M. Pelletier¹, R. Schilz², K. Chavin¹, J. Sabik¹. ¹Surgery, University Hospitals Cleveland Medical Center, Cleveland, OH, ²Medicine, University Hospitals Cleveland Medical Center, Cleveland, OH

(782) Electrical Impedance Tomography for Positive End-Expiratory Pressure Setting after Bilateral Lung Transplantation; N. Sella¹, A. Boscolo¹, F. Zarantonello¹, I. Bonvecchio², G. Andreatta¹, T. Pettenuzzo¹, P. Ferrigno³, E. Serra¹, A. Dell'Amore³, F. Rea³, P. Navalesi¹. ¹Department of Medicine (DIMED) - Padova University Hospital, Anesthesia and Intensive Care Unit, Padova, Italy, ²Department of Medicine (DIMED) - Padova University Hospital, Padova School of Medicine, Padova, Italy, ³Department of Cardio-Thoracic and Vascular Sciences and Public Health - Padova University Hospital, Thoracic Surgery and Lung Transplantation Unit, Padova, Italy

(783) Blood Lactate Level Evolution during Lung Transplantation; J. Fessler¹, A. Vallee², A. Guirimand³, M. Fischler¹, M. Le Guen¹. ¹Foch Lung Transplant Team, Suresnes, France, ²Diagnosis and Therapeutic Center, Hypertension and Cardiovascular Prevention Unit, Hôtel-Dieu Hospital, Assistance Publique, Paris, France, ³Centre Chirurgical Marie Lannelongue, Plessis-Robinson, France

(784) Lung-Liver Transplantation Has a Protective Effect on Long-Term Survival in Cystic Fibrosis and Interstitial Pulmonary Fibrosis; A. Dani¹, F. Zafar¹, K. Thangappan¹, G. Tiao², A. Miethke³, D. Hayes⁴, D. L. Morales¹. ¹Cardiothoracic Surgery, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ²General Surgery, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ³Division of Gastroenterology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ⁴Division of Pulmonary Medicine, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

(785) Telemedicine with a Cell-Free DNA Based Monitoring Approach Maintains Lung Allograft Function While Reducing Frequency of Invasive Bronchoscopy; P. Shah¹, M. Keller², J. Mathew¹, M. Kelley¹, E. Nolley¹, S. Agbor-Enoh². ¹Pulmonary Critical Care, Johns Hopkins University, Baltimore, MD, ²Pulmonary Critical Care, NIH, Bethesda, MD

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(786) Diagnosis and Predicted Outcomes of Patients with Cystic Fibrosis Related Liver Disease Considered for Lung Transplantation; E. Khoshbin¹, M. Hudson², J. Dark¹, G. Meachery³, S. Clark¹. ¹Cardiothoracic Surgery, Newcastle Upon Tyne Hos NHS Foundation Trust, Newcastle Upon Tyne, United Kingdom, ²Hepatobiliary Medicine, Newcastle Upon Tyne Hos NHS Foundation Trust, Newcastle Upon Tyne, United Kingdom, ³Respiratory and Transplant Medicine, Newcastle Upon Tyne Hos NHS Foundation Trust, Newcastle Upon Tyne, United Kingdom

(787) Sarcopenia is Distinct from Physical Frailty and Significantly Associated with Length of Stay after Transplantation; A. Hu¹, A. Prosper¹, K. Ruchaslski¹, J. Huang², D. Sayah², S. Weigt², A. Ardehali³, R. Biniwale³, D. Goldwater⁴, J. M. Schaenman⁵. ¹Department of Radiology, UCLA School of Medicine, Los Angeles, CA, ²Division of Pulmonary Medicine, UCLA School of Medicine, Los Angeles, CA, ³Department of Cardiothoracic Surgery, UCLA School of Medicine, Los Angeles, CA, ⁴Division of Geriatrics, UCLA School of Medicine, Los Angeles, CA, ⁵Division of Infectious Diseases, UCLA School of Medicine, Los Angeles, CA

(788) Prognostic Implications of Abnormal Left-Right Lung Perfusion Differential on Routine Post-Transplant Ventilation-Perfusion Scans; D. Li¹, J. Abele², P. Sunner², A. Kapasi¹, A. Hirji¹, J. Weinkauff¹, D. Lien¹, R. Varughese¹, J. Nagendran¹, K. Halloran¹. ¹Department of Medicine, University of Alberta, Edmonton, AB, Canada, ²Department of Radiology and Diagnostic Imaging, University of Alberta, Edmonton, AB, Canada

(789) Acute Cellular Rejection in Lung Transplant: Can the Bronchoscopist Assess Transbronchial Biopsy Sample Adequacy?; K. Young¹, M. Neely², J. M. Reynolds³, K. Mahmood³, E. Pavlisko⁴, H. Ali¹. ¹Internal Medicine, Division of Pulmonary and Critical Care, Duke University Hospital, Durham, NC, ²Biostatistics and Bioinformatics, Duke University Hospital, Durham, NC, ³Internal Medicine, Division of Pulmonary, Allergy, and Critical Care, Duke University Hospital, Durham, NC, ⁴Pathology, Duke University Hospital, Durham, NC

(790) A Longitudinal Assessment of Donor Derived Cell Free DNA in Lung Transplant Recipients; J. B. Smith¹, J. Stumph¹, Y. Bryan², R. Peterson³, M. P. Steele¹, A. L. Gray¹. ¹Department of Medicine, University of Colorado, Aurora, CO, ²Transplant Surgery, University of Colorado, Aurora, CO, ³Department of Biostatistics and Informatics, University of Colorado, Aurora, CO

(791) Prognostic Significance of Asymptomatic Pulmonary Embolism on Routine Ventilation-Perfusion Scans after Lung Transplantation; D. Li¹, J. Abele², P. Sunner², A. Kapasi¹, R. Varughese¹, A. Hirji¹, J. Weinkauff¹, J. Nagendran³, D. Lien¹, K. Halloran¹. ¹Department of Medicine, University of Alberta, Edmonton, AB, Canada, ²Department of Radiology and Diagnostic Imaging, University of Alberta, Edmonton, AB, Canada, ³Department of Surgery, University of Alberta, Edmonton, AB, Canada

(792) Cardiothoracic Organ Utilisation during the SARS-CoV-2 Pandemic in the UK; G. Hardman¹, R. Hogg², M. Al-Aloul³, M. Berman⁴, S. Clark¹, K. Booth¹, J. H. Dark⁵, A. J. Fisher⁵, N. Al-Attar⁶. ¹Institute of Transplantation, Freeman Hospital, Newcastle Upon Tyne, UK, Newcastle upon Tyne, United Kingdom, ²Statistics and Clinical Studies, NHS Blood and Transplant, Bristol, United Kingdom, ³Wythenshawe Hospital, Manchester, United Kingdom, ⁴Papworth Hospital, Cambridge, United Kingdom, ⁵Translational and Clinical Research Institute, Newcastle University, Newcastle upon Tyne, United Kingdom, ⁶Cardiothoracic Advisory Group, Clinical Audit Group, NHS Blood and Transplant, Bristol, United Kingdom

(793) Assessing the Accuracy of the Lung Allocation Score; N. Dussault¹, R. Jablonski¹, E. Garrity¹, M. Churpek², W. Parker¹. ¹University of Chicago, Chicago, IL, ²University of Wisconsin-Madison, Madison, WI

(794) Clinical and Functional Outcomes after Lung Transplantation with Grafts from Donation after Circulatory (DCD) Donors. Preliminary Results of a Clinical Trial; A. Palleschi¹, A. Zanella², V. Musso², F. Damarco³, R. Carrinola³, A. Mazzucco², C. Uslenghi², V. Rossetti³, E. Benazzi³, G. Bonitta³, M. Zanierato⁴, G. Citerio⁵, F. Valenza², M. Cardillo⁶, M. Nosotti¹. ¹Department of Pathophysiology and Transplantation, University of Milan, Milan, Italy, ²University of Milan, Milan, Italy, ³Fondazione IRCCS Ca' Granda - Ospedale Maggiore Policlinico, Milan, Italy, ⁴University of Turin Medical School Hospital, Turin, Italy, ⁵University of Milan-Bicocca, Milan, Italy, ⁶National Transplant Center, Rome, Italy

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(795) Histologic Phenotypes and Outcomes in Single vs Double Lung Transplantation among Recipients with Interstitial Lung Disease; M. Leiva-Juarez¹, L. Benvenuto², J. Costa¹, A. Urso¹, B. Stanifer¹, P. Lemaitre¹, J. Sonett¹, M. Aversa², H. Robbins², L. Shah², S. Arcasoy², F. D'Ovidio¹. ¹*Thoracic Surgery and Lung Transplant, Columbia University, New York City, NY*, ²*Pulmonary, Allergy and Critical Care Medicine, Columbia University, New York City, NY*

(796) Donor Ventilation Parameters as Predictors for Length of Mechanical Ventilation after Lung Transplantation: Results of a Prospective Multicenter Study; A. Benazzo, S. Schwarz, F. Frommlet, K. Sinn, T. Schweiger, T. Klikovits, A. Hoda, B. Moser, J. Matilla, F. Renyi Vamos, G. Lang, P. Jaksch, M. Di Nardo, L. Del Sorbo, S. Taghavi, S. Keshavjee, W. Klepetko, M. Cypel, K. Hoetzenecker. *Thoracic Surgery, Medical University of Vienna, Vienna, Austria*

(797) Donor Age, Recipient Age and Transplant Type: How Their Interplay Affects Lung Transplants; K. Montgomery, Y. Toyoda, M. A. Kashem, G. Sunagawa, N. Shigemura, R. Yanagida, K. Minakata, S. Brann, E. Leotta. *Temple University, Philadelphia, PA*

(798) Single Lung Transplantation with a Rejected Contralateral Lung: Improved Assessment and Donor Lung Utilization in the Era of Ex Vivo Lung Perfusion; B. Dunne, J. Pozniak, J. L. Campo-Canaveral DeLaCruz, P. Lemaitre, Y. Begum, J. Allen, M. Cypel, M. de Perrot, L. Donahoe, K. Yasufuku, A. Pierre, T. K. Waddell, S. Keshavjee, J. C. Yeung. *University of Toronto, Toronto, ON, Canada*

(799) Two Years after the Removal of Donation Service Area from Lung Allocation in the US; R. R. Goff¹, M. Budev², E. D. Lease³. ¹*United Network for Organ Sharing, Richmond, VA*, ²*Cleveland Clinic, Cleveland, OH*, ³*Univ of Washington, Seattle, WA*

(800) Characterizing the Landscape of Non-Ideal Lungs in the US; A. M. Hallett¹, J. D. Motter¹, W. Lightle², D. L. Segev¹, N. Massarweh³. ¹*Department of Surgery, Johns Hopkins University School of Medicine, Baltimore, MD*, ²*Michael E DeBakey Department of Surgery, Baylor College of Medicine, Houston, TX*, ³*Section of Health Services Research, Department of Medicine, Baylor College of Medicine, Houston, TX*

(801) Multi-Center Validation of a Consensus-Based Scoring Guide for Evaluating Donor Lung Offers; C. C. Kennedy¹, M. Budev², K. Wille³, E. D. Lease⁴, S. Chandrashekar⁵, D. Levine⁶, D. Nunley⁷, K. Chan⁸, M. Wilson⁹, J. Hayanga¹⁰, N. Shigemura¹¹, A. Kumar¹², R. Girgis¹², N. Sharma¹³, D. Lyu¹⁴, S. Seghal¹⁵, A. Mattar¹⁶, G. Loo¹⁷. ¹*Mayo Clinic, Rochester, MN*, ²*Cleveland Clinic Foundation, Cleveland, OH*, ³*UAB, Birmingham, AL*, ⁴*UW Medicine, Seattle, WA*, ⁵*U of FL Gainesville, Gainesville, FL*, ⁶*UTHSCSA, San Antonio, TX*, ⁷*Ohio State, Columbus, OH*, ⁸*U of Michigan, Ann Arbor, MI*, ⁹*Halifax Medical Center, Daytona Beach, FL*, ¹⁰*West Virginia University, Morgantown, WV*, ¹¹*Temple University, Philadelphia, PA*, ¹²*Spectrum Health, Grand Rapids, MI*, ¹³*University of South Florida, Tampa, FL*, ¹⁴*University of Michigan, Ann Arbor, MI*, ¹⁵*Temple University Health System, Philadelphia, PA*, ¹⁶*Baylor College of Medicine, Houston, TX*, ¹⁷*Baylor College of Medicine, Houston, TX*

(802) Development of a Prediction Model for Donation after Circulatory Death Lung Donor Progression; B. J. Levvey¹, S. Okahara², M. McDonald³, R. D'Costa⁴, H. Opdam⁴, D. Pilcher⁵, G. Snell¹. ¹*Lung Transplant Service, Alfred Hospital, Melbourne, Australia*, ²*Okayama University Hospital, Okayama, Japan*, ³*Organ & Tissue Authority, Canberra, Australia*, ⁴*DonateLife Agency Victoria, Melbourne, Australia*, ⁵*ANZ Intensive Care Research Centre, Monash University, Melbourne, Australia*

(803) Geographic Disparities in Donor Lung Allocation before and after the November 2017 Change; L. Benvenuto¹, M. Anderson¹, M. Aversa¹, M. Snyder², S. Qayum¹, L. Shah¹, H. Robbins¹, B. P. Stanifer³, J. Costa³, J. Sonett³, P. Lemaitre³, F. D'Ovidio³, S. Arcasoy¹. ¹*Medicine, Columbia University Irving Medical Center, New York, NY*, ²*Medicine, University of Pittsburgh, New York, NY*, ³*Surgery, Columbia University Irving Medical Center, New York, NY*

(804) Histological Analysis of Donor Lung Derived Thrombi; J. Bergtop¹, K. L. Zhang², W. Timens³, L. H. Venema⁴, C. van de Wauwer⁵, M. E. Erasmus⁵, C. T. Gan¹, T. Lisman⁴, E. A. Verschuuren¹. ¹*Pulmonary Diseases and Tuberculosis, University Medical Centre Groningen, University of Groningen, Groningen, Netherlands*, ²*Cardio-Thoracic surgery, University Medical Centre Groningen, University of Groningen, Groningen*,

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

Netherlands, ³Pathology, University Medical Centre Groningen, University of Groningen, Groningen, Netherlands, ⁴Department of Transplantation Surgery, University Medical Centre Groningen, University of Groningen, Groningen, Netherlands, ⁵Cardio-Thoracic Surgery, University Medical Centre Groningen, University of Groningen, Groningen, Netherlands

(805) A Single Center Analysis of Increased Risk Donors Utilized in Lung Transplantation; E. H. Ander, M. A. Kashem, H. Zhao, N. Shigemura, G. Sunagawa, S. H. Brann, E. Leotta, R. Yanagida, Y. Toyoda. *Cardiothoracic Surgery, Temple University Hospital, Philadelphia, PA*

(806) Understanding Donor Organ Utilisation Decisions in UK Heart and Lung Transplantation: A Questionnaire Study; G. Hardman¹, M. Taylor², R. Ravikummar³, E. Thompson⁴, C. D. Ceresa⁵, K. Booth¹, S. Wigmore⁶, A. J. Fisher⁷, J. H. Dark⁸. ¹Cardiopulmonary Transplantation, Institute of Transplantation, Freeman Hospital, Newcastle Upon Tyne, UK, Newcastle upon Tyne, United Kingdom, ²Cardiopulmonary transplantation, Wythenshawe Hospital, Manchester, United Kingdom, ³Transplantation, Royal Infirmary of Edinburgh, Edinburgh, United Kingdom, ⁴Institute of Transplantation, Freeman Hospital, Newcastle Upon Tyne, UK, Newcastle upon Tyne, United Kingdom, ⁵University of Oxford, Oxford, United Kingdom, ⁶Royal Infirmary of Edinburgh, Edinburgh, United Kingdom, ⁷Newcastle University, Newcastle upon Tyne, United Kingdom, ⁸Cardiopulmonary transplantation, Newcastle University, Newcastle upon Tyne, United Kingdom

(807) Three Dimensional Printed Lung/Thorax Models - An Aid to Lung Transplant Size Matching in Fibrotic Lung Disease; E. Khoshbin¹, S. Sivarajah², J. Coey³, S. Clark¹. ¹Cardiothoracic Surgery, Newcastle Upon Tyne NHS Foundation Trust, Newcastle Upon Tyne, United Kingdom, ²St. George's University, Grenada, Grenada, ³Anatomy, St. George's University, Grenada, Grenada

(808) Time from Start of Agonal Phase to Pulmonary Artery Cross Clamp in Donor Cardiac Death Donors Does Not Correlate with Diminished Recipient Lung Function or Survival; R. Aggarwal, S. Jackson, N. Lemke, S. J. Huddleston. *Surgery, University of Minnesota, Minneapolis, MN*

(809) The Clinical Significance of Donor Lung Weight at Procurement and during Ex Vivo Lung Perfusion; T. Okamoto¹, K. S. Ayyat¹, I. Sakanoue¹, H. Niikawa¹, S. A. Said², U. Ahmad¹, S. Unai¹, A. Bribriescio¹, H. Elgharably¹, J. J. Yun¹, M. Budev³, K. R. McCurry¹. ¹Thoracic and Cardiovascular Surgery, Cleveland Clinic, Cleveland, OH, ²Department of Inflammation and Immunity, Lerner Research Institute, Cleveland Clinic, Cleveland, OH, ³Department of Respiratory Medicine, Cleveland Clinic, Cleveland, OH

(810) Lung Transplant Outcomes with Concomitant Heart Donation; C. M. Bobba¹, B. C. Keller², J. Rosenheck², M. C. Henn³, R. Chen³, N. A. Mokadam³, B. A. Whitson³, A. M. Ganapathi³. ¹College of Medicine, Ohio State University Wexner Medical Center, Columbus, OH, ²Division of Pulmonary, Critical Care, and Sleep Medicine, Ohio State University Wexner Medical Center, Columbus, OH, ³Division of Cardiac Surgery, Ohio State University Wexner Medical Center, Columbus, OH

(811) Influence of Donor-Recipient Age Mismatch in Young Lung Transplant Recipients; M. Franz¹, K. Aburahma¹, T. Siemeni¹, M. Avsar¹, D. Bobylev¹, N. Schwerk², C. Mueller², W. Sommer³, D. Boethig¹, M. Greer⁴, I. Tudorache⁵, G. Warnecke³, M. Hoepfer⁴, A. Haverich¹, C. Kuehn¹, J. Salman¹, F. Ius¹. ¹Department of Cardiothoracic, Transplant and Vascular Surgery, Hannover Medical School, Hannover, Germany, ²Department of Pediatrics, Hannover Medical School, Hannover, Germany, ³Department of Cardiac Surgery, Heidelberg University Hospital, Heidelberg, Germany, ⁴Department of Pulmonology, Hannover Medical School, Hannover, Germany, ⁵Department of Cardiac Surgery, University Hospital Duesseldorf, Duesseldorf, Germany

(812) 10-Year Experience with Postoperatively-Extended Intraoperative Extracorporeal Membrane Oxygenation in Lung Transplantation for Patients with Severe Pulmonary Hypertension; M. Franz¹, K. Aburahma¹, T. Siemeni¹, M. Avsar¹, D. Bobylev¹, N. Schwerk², C. Mueller², W. Sommer³, M. Greer⁴, I. Tudorache⁵, G. Warnecke³, M. Hoepfer⁴, A. Haverich¹, F. Ius¹, C. Kuehn¹, J. Salman¹. ¹Department of Cardiothoracic, Transplant and Vascular Surgery, Hannover Medical School, Hannover, Germany, ²Department of Pediatrics, Hannover Medical School, Hannover, Germany, ³Department of Cardiac Surgery, Heidelberg University Hospital, Heidelberg, Germany, ⁴Department of Pulmonology, Hannover Medical School, Hannover, Germany, ⁵Department of Cardiac Surgery, University Hospital Duesseldorf, Duesseldorf, Germany

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(813) *Unplanned Intraoperative ECMO Support during Double Lung Transplantation: Risk-Factors and Outcome Analysis*; A. Dell'Amore, P. Ferrigno, M. Schiavon, N. Sella, E. Faccioli, A. Pangoni, G. Lorenzoni, F. Pettenuzzo, D. Pittarello, E. Serra, F. Calabrese, M. Loy, P. Navalesi, F. Rea. *Department of CardioThoracic and Vascular Surgery University of Padua, University of Padua, Padova, Italy*

(814) *Extracorporeal Membrane Oxygenation in Lung Transplantation: Superior to Cardiopulmonary Bypass and Comparable to Off-Pump Strategy*; A. S. Bussetty¹, M. A. Kashem¹, H. Zhao², G. Sunagawa¹, E. Leotta¹, N. Shigemura¹, R. Yanagida¹, S. H. Brann¹, K. Minakata¹, Y. Toyoda¹. ¹*Cardiovascular Surgery, Temple University Hospital, Philadelphia, PA*, ²*Temple University Hospital, Philadelphia, PA*

(815) *Protective Role of ECMO on Reperfusion Injury and Acute Rejection in Lung Transplantation: A Pathological Analysis*; E. Faccioli¹, F. Pezzuto², M. Schiavon¹, A. Dell'Amore¹, G. Lorenzoni³, S. Vuljan², P. Ferrigno¹, F. Fortarezza², D. Gregori⁴, F. Calabrese², F. Rea¹. ¹*Department of Cardiac, Thoracic, Vascular Sciences and Public Health, Thoracic Surgery Unit, University of Padova, Padova, Italy*, ²*Department of Cardiac, Thoracic, Vascular Sciences and Public Health, Pathology Unit, University of Padova, Padova, Italy*, ³*Department of Cardiac, Thoracic, Vascular Sciences and Public Health, Biostatistics and Epidemiology Unit, University of Padova, Padova, Italy*, ⁴*Department of Cardiac, Thoracic, Vascular Sciences and Public Health, Biostatistics and epidemiology unit, University of Padova, Padova, Italy*

(816) *Transfusion Requirements during Lung Transplantation: Elective VA ECMO vs. Off-Pump*; H. V. Salfity¹, B. Bottiger², M. Cooter², J. Poisson³, L. Zaffiri⁴, M. G. Hartwig¹, J. Haney¹, I. Welsby², J. A. Klapper¹. ¹*Cardiothoracic Surgery, Duke University, Durham, NC*, ²*Anesthesiology, Duke University, Durham, NC*, ³*Pathology, Duke University, Durham, NC*, ⁴*Medicine, Duke University, Durham, NC*

(817) *Is Veno-Arterial ECMO as Safe and Effective as Veno-Venous ECMO for Bridging to Lung Transplantation?*; Y. Xia, W. Ragalie, R. Biniwale, P. Benharash, D. Sayah, A. Ardehali. *David Geffen School of Medicine, University of California-Los Angeles, Los Angeles, CA*

(819) *Veno-Arterial-Venous ECMO in Severe Primary Lung Graft Dysfunction, a Retrospective Monocenter Study*; M. Sarsam, M. Glorion, J. De Wolf, F. Cassiano, C. Pricopi, A. Chapelier, E. Sage. *Thoracic Surgery and Lung Transplantation, Foch Hospital, Suresnes, France*

(820) *Suboptimal Six Minute Walk Distance Does Not Impact Survival in Lung Transplant Recipients Bridged with Extracorporeal Support*; B. Lim¹, J. P. Skendelas¹, D. Phan¹, S. J. Forest¹, S. A. Scheinin¹, H. Seethamraju². ¹*Cardiothoracic and Vascular Surgery, Montefiore Medical Center, Bronx, NY*, ²*Cardiothoracic and Vascular Surgery, Division of Advanced Pulmonary Failure and Lung Transplantation, Montefiore Medical Center, Bronx, NY*

(821) *Early Results after Lung Transplantation in Patients Bridged with Extracorporeal Life Support: Experience from a 7-year Period*; A. Verzelli¹, D. Sef², P. Mohite², D. Garcia Saez², V. Trkulja³, B. Raj², A. Reed², A. Hurtado Doce¹, N. J. Lees¹, B. Mahesh², F. De Robertis², I. McGovern¹, A. Simon², U. Stock². ¹*Department of Anesthesia & Critical Care, Royal Brompton & Harefield NHS Foundation Trust, London, United Kingdom*, ²*Department of Cardiothoracic Transplantation and Mechanical Circulatory Support, Royal Brompton & Harefield NHS Foundation Trust, London, United Kingdom*, ³*Zagreb University School of Medicine, Zagreb, Croatia*

(822) *Treatment of Cytomegalovirus in Human Donor Lungs with a Novel Chemokine-Based Immunotoxin during Ex Vivo Lung Perfusion Prevents Viral Reactivation*; R. VP Ribeiro¹, T. Ku², V. H Ferreira², L. Pires¹, V. S Michaelsen¹, A. Wang¹, A. Ali¹, S. Moshkelgosha¹, M. Galasso¹, A. Gazzalle¹, J. Sinclair³, T. Kledal⁴, M. Liu¹, S. Keshavjee¹, L. G Singer⁵, D. Kumar², A. Humar², M. Cypel¹. ¹*Latner Thoracic Surgery Laboratories, Toronto General Research Institute, University Health Network, University of Toronto, Toronto, ON, Canada*, ²*Multi-Organ Transplant Program, University Health Network, University of Toronto, Toronto, ON, Canada*, ³*Department of Medicine, Addenbrooke's Hospital, University of Cambridge, Cambridge, United Kingdom*, ⁴*Laboratory of Molecular Pharmacology, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark*, ⁵*Toronto Lung Transplant Program, University Health Network, University of Toronto, Toronto, ON, Canada*

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(823) Multi-Omics Correlations Reveal Lipid Species Involved in Lung Allograft Adaptation; S. Widder, R. Gawish, M. Watzenboeck, A. Gorki, F. Quattrone, S. Schwarz, C. Lambers, P. Jaksch, K. Lakovits, S. Zahalka, N. Rahimi, P. Starkl, D. Symmank, T. Artner, K. Hoetzenecker, S. Knapp. *Medical University of Vienna, Vienna, Austria*

(824) Flow Cytometric Analysis of Systemic and Airway Neutrophil Maturation and Activation in Lung Transplant Patients; S. Cambier¹, M. Metzemaekers¹, B. Malengier-Devlies², A. Nooyens¹, A. Van Herck³, J. Kaes³, C. Aelbrecht³, A. Vanstapel³, S. E. Verleden³, G. M. Verleden³, D. E. Van Raemdonck³, A. P. Neyrinck⁴, L. J. Ceulemans³, R. Vos³, B. M. Vanaudenaerde³, P. Proost¹. ¹*Molecular Immunology (Rega Institute), Department of Microbiology, Immunology and Transplantation, Ku Leuven, Leuven, Belgium*, ²*Immunobiology (Rega Institute), Department of Microbiology, Immunology and Transplantation, Ku Leuven, Leuven, Belgium*, ³*Laboratory of Respiratory Diseases and Thoracic Surgery (BREATHE), Ku Leuven, Leuven, Belgium*, ⁴*Anesthesiology and Algology, Department of Cardiovascular Sciences, Ku Leuven, Leuven, Belgium*

(825) Gene Expression Change Related Inflammation Pathway during Rat EVLP and Heat Stress; J. Suh¹, S. Haam², S. Park². ¹*Thoracic Surgery, Yonsei University College of Medicine, Yongin Severance Hospital, Yongin, Korea, Republic of*, ²*Department of Thoracic and Cardiovascular Surgery, Ajou University Hospital, Ajou University School of Medicine, Suwon, Korea, Republic of*

(826) Daratumumab as Salvage Therapy in Pediatric Thoracic Organ Transplantation: An Addition to the Antibody Mediated Rejection Toolbox?; S. K. Nicholas¹, D. Cerminara², A. Reiland¹, C. Kam³, T. Humlicek², J. Spinner¹, W. Dreyer¹, M. Gazzaneo¹, E. Melicoff¹. ¹*Pediatrics, Baylor College of Medicine, Houston, TX*, ²*Pharmacy, Texas Children's Hospital, Houston, TX*, ³*Pharmacy, UNC Children's Hospital, Chapel Hill, NC*

(827) Daratumumab for Desensitization Therapy in Lung Transplant Candidates; G. Magda, A. L. Ramsey, R. Saggarr, M. Y. Shino, S. S. Weigt, E. F. Reed, M. Hickey, J. Zhang, C. Butler, N. Valenzuela, A. Ardehali, D. M. Sayah, A. DerHovanessian. *University of California, Los Angeles, CA*

(829) Efficacy and Tolerability of Sirolimus in Lymphangiomyomatosis Patients after Lung Transplantation: Single-Center Experience in Japan; Y. Suzuki¹, Y. Matsuda², Y. Watanabe¹, T. Hiramata¹, H. Oishi¹, T. Sado¹, M. Noda¹, Y. Hoshikawa², Y. Okada¹. ¹*Department of Thoracic Surgery, Institute of Development, Aging and Cancer, Tohoku University, Sendai, Japan*, ²*Department of Thoracic Surgery, Fujita Health University, Toyoake, Japan*

(830) Panel Reactive Antibodies (PRA) and Donor-Specific Antibodies (DSA) in Lung Transplantation: An Indian Experience; U. Shah, V. Rahulan, A. Kamath, S. Kumar, P. Kumar, P. Dutta, S. Attawar. *Heart & Lung Transplant Institute, KIMS, Telangana, India*

(831) Epidemiology of Infections in Adult Heart and Lung Transplant Recipients: A Single Center Experience; H. K. Arora¹, L. Colpitts², J. W. Baddley³, N. Erdmann². ¹*Internal medicine, University of Alabama at Birmingham, Birmingham, AL*, ²*Infectious diseases, University of Alabama at Birmingham, Birmingham, AL*, ³*Infectious diseases, University of Maryland, Baltimore, MD*

(832) Chronic Lung Allograft Dysfunction is Associated with Acute Rejection and High Levels of Cytomegalovirus Load in Blood (but Not in Lung); D. Piloni¹, E. Gabanti², M. Morosini¹, T. Oggionni¹, L. Saracino¹, V. Conio¹, V. Frangipane¹, G. Cassinelli², D. Lillieri², F. Meloni³. ¹*UOC Pneumologia, IRCCS Policlinico San Matteo, Pavia, Italy*, ²*UOC Laboratorio Genetica - Trapiantologia e Malattie Cardiovascolari, and Microbiologia e Virologia, IRCCS Policlinico San Matteo, Pavia, Italy*, ³*Dipartimento di Medicina Interna e Terapia Medica, Sezione di Pneumologia, Università di Pavia, Pavia, Italy*

(833) Impact of Donor Lung Pathogenic Bacteria on Post-Transplant Outcomes after Lung Transplantation; M. Kalani¹, M. Megri², S. Annangi², T. Rahman², R. Choate¹, S. Keshavamurthy³, M. Baz³, A. Maskey², S. Nandavaram². ¹*University Of Kentucky, Lexington, KY*, ²*Department of Medicine, University Of Kentucky, Lexington, KY*, ³*Department of Surgery, University Of Kentucky, Lexington, KY*

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(834) Incidence and Outcomes of Tuberculosis among Thoracic Organ Transplant Recipients in an Endemic Country - 15 Years of Evaluation; S. V. Campos¹, F. Pola Dos Reis², J. P. Pires¹, M. L. Lima¹, L. G. Abdalla², C. B. Cury², L. M. Fernandes², R. B. Teixeira¹, A. N. Costa¹, R. M. Carraro¹, F. Bacal³, P. M. Pêgo-Fernandes².

¹Pneumology, Instituto do Coracao, Hospital das Clinicas HCFMUSP, Faculdade de Medicina Universidade de Sao Paulo, Sao Paulo, Brazil, ²Thoracic Surgery, Instituto do Coracao, Hospital das Clinicas HCFMUSP, Faculdade de Medicina Universidade de Sao Paulo, Sao Paulo, Brazil, ³Cardiology, Instituto do Coracao, Hospital das Clinicas HCFMUSP, Faculdade de Medicina Universidade de Sao Paulo, Sao Paulo, Brazil

(835) Torque Teno Virus Does Not Predict Cytomegalovirus Infection Post-Lung Transplantation; A. Hirji¹, C. Mabilangan², K. Halloran¹, Q. M. Duan³, D. C. Lien¹, R. Varughese¹, A. Kapasi¹, J. Weinkauff¹, X. L. Pang², J. Preiksaitis². ¹Lung Transplant Program, University of Alberta, Edmonton, AB, Canada, ²University of Alberta, Edmonton, AB, Canada, ³Alberta Health Services, Edmonton, AB, Canada

(836) Pre-Transplant Frailty Assessment is Not Associated with Incidence of Pneumonia after Lung Transplantation; S. Chang¹, J. Huang², D. Sayah², S. Weigt², A. Ardehali³, R. Biniwale³, D. Goldwater⁴, J. M. Schaefer¹. ¹Medicine/Infectious Diseases, UCLA School of Medicine, Los Angeles, CA, ²Medicine/Pulmonology, UCLA School of Medicine, Los Angeles, CA, ³Cardiothoracic Surgery, UCLA School of Medicine, Los Angeles, CA, ⁴Medicine/Geriatrics, UCLA School of Medicine, Los Angeles, CA

(837) Biological Variation of Donor-Derived Cell-Free DNA in Lung Transplant Recipients; M. B. Keller¹, C. Mutebi², P. Shah³, D. Levine⁴, S. Aryal⁵, I. Timofte⁶, D. Ross⁷, B. Dale⁷, R. Woodward⁷, C. Giner⁴, J. Mathew³, A. Varghese⁶, S. Agbor-Enoh². ¹Department of Critical Care Medicine, National Institute of Health, Bethesda, MD, ²Laboratory of Applied Precision Omics (APO) & Laboratory of Transplantation Genomics, National Institute of Health, Bethesda, MD, ³Pulmonary and Critical Care Medicine, Johns Hopkins Hospital, Baltimore, MD, ⁴Pulmonary and Critical Care Medicine, University of Texas Health San Antonio, San Antonio, TX, ⁵Pulmonary and Critical Care Medicine, Inova Fairfax Hospital, Falls Church, VA, ⁶Division of Pulmonary and Critical Care Medicine, University of Maryland Medical Center, Baltimore, MD, ⁷CareDx, Brisbane, CA

(838) Invasive Aspergillosis (IA) in Lung Transplant Recipients (LTRs) with Isolated Positive Bronchoalveolar Lavage Galactomannan (BAL GM) in the First Month Post-Transplant; A. Pérez-Cortés Villalobos¹, T. Martinu², C. Chaparro², L. Singer², S. Keshavjee², S. Husain¹. ¹Multi Organ Transplant Unit, Division of Infectious Diseases, University Health Network, Toronto, ON, Canada, ²Lung Transplant Program, University Health Network, Toronto, ON, Canada

(839) Incidence of Infection during the First Year after Lung Transplant in a Colombian Center between 2007 and 2019; J. P. Neira Gomez¹, L. Ceballos Naranjo¹, E. Orozco Gomez¹, D. Gaviria Ortiz¹, Y. Aguilar Perez¹, G. E. Roncancio Villamil². ¹Universidad Pontificia Bolivariana, Medellin, Colombia, ²Clinica Cardio VID, Medellin, Colombia

(841) Systemic Corticosteroids and Lung Function Recovery after Respiratory Viral Infection in Lung Transplant Recipients; V. Gandhi, A. Kapasi, J. Weinkauff, D. Lien, R. Varughese, A. Hirji, C. Cervera, K. Halloran. Department of Medicine, University of Alberta, Edmonton, AB, Canada

(842) Tolerance of Anti-CMV Prophylaxis with Valganciclovir One-Year Treatment in D+/R- Lung Transplant Patients. A Single-Center Retrospective Study; C. Roy¹, S. Colin de Verdière¹, L. Beaumont¹, C. Picard¹, S. de Miranda¹, A. Hamid¹, O. Brugière¹, F. Parquin², E. Farfour³, A. Roux¹. ¹Pulmonology, Transplantation, Foch Hospital, Suresnes, France, ²Pulmonology Intensive Care Unit, Foch Hospital, Suresnes, France, ³Virology, Foch Hospital, Suresnes, France

(843) Histoplasma in Explanted Tissue of Lung Transplant Recipients (LTRs) from a Moderate Endemic Region; A. Pérez-Cortés Villalobos¹, C. Rotstein¹, T. Martinu², C. Chaparro², L. Singer², S. Keshavjee², S. Husain¹. ¹Multi Organ Transplant Unit, Division of Infectious Diseases, University Health Network, Toronto, ON, Canada, ²Lung Transplant Program, University Health Network, Toronto, ON, Canada

(844) Mycobacteria Tales Post Lung Transplantation: An Indian Experience; U. Shah, V. Rahulan, P. Kumar, P. Dutta, S. Attawar. Heart & Lung Transplant Institute, KIMS, Telangana, India

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(845) Impact of Primary Clostridium Difficile Prophylaxis in Thoracic Transplant Recipients; T. C. Lewis¹, C. Merchan², S. Arnouk², G. L. Piper³, A. Fagnoli⁴, C. G. Gidea¹, A. Reventovich¹, L. Angel¹, M. Lesko¹, S. Chang⁴, N. Moazami⁴, D. E. Smith⁴, Z. Kon⁴. ¹Transplant Institute, NYU Langone Health, New York, NY, ²Pharmacy, NYU Langone Health, New York, NY, ³Surgery, NYU Langone Health, New York, NY, ⁴Cardiothoracic Surgery, NYU Langone Health, New York, NY

(846) Characterization of Mycobacterial Findings before and after Lung and Heart-Lung Transplantation; E. Heliövaara, J. Tikkanen, S. Puputti, M. Halme. Helsinki University Central Hospital, Helsinki, Finland

(847) Enteral Delivery of Posaconazole or Izaconazole in Patients with Inability to Swallow Tablets Can Achieve Therapeutic Drug Levels: A Single Center Pilot Study; T. D. Dieringer, J. M. Schaeffer, M. R. Davis. Infectious Diseases, University of California Los Angeles, Los Angeles, CA

(848) Clinical Significance of Commensal Bacteria Isolated from Bronchoalveolar Lavage of Lung Transplant Recipients; L. Levy¹, E. Huszti², J. Tikkanen², J. Fernandez-Castillo², R. Ghany², S. Keshavjee², L. Singer², S. Husain², T. Martinu². ¹Sheba Medical Center, Ramat Gan, Israel, ²Toronto General Hospital / University Health Network, Toronto, ON, Canada

(849) Isavuconazole in Lung Transplant Recipients: A Retrospective Case Series to Appraise Clinical Efficacy; A. Braddy, P. Ly, Z. Butt, A. Reed, M. Carby, H. Lyster, V. Gerovasili. Cardiothoracic Transplantation & Mechanical Circulatory Support Service, Royal Brompton & Harefield NHS Foundation Trust, Harefield, Uxbridge, United Kingdom

(850) Risk Factors and Rates of Fungal Infection in Lung Transplant Recipients Who Receive Posaconazole and Inhaled Amphotericin Combination Prophylaxis Therapy; A. A. Perez, J. P. Singer, D. Calabrese, A. Venado, J. Greenland, L. E. Leard, R. J. Shah, N. A. Kolaitis, J. A. Golden, M. Kleinhenz, J. Kukreja, B. Trinh, S. R. Hays. UCSF, San Francisco, CA

(851) Evaluation of Protocolized Cytomegalovirus Intravenous Immune Globulin in High Risk Lung Transplant Recipients on Development of CMV-Viremia; A. N. Yun¹, G. Waldman¹, C. C. Rogers¹, T. L. Astor², J. Clark¹. ¹Pharmacy, Massachusetts General Hospital, Boston, MA, ²Pulmonary and Critical Care, Massachusetts General Hospital, Boston, MA

(852) Successful Multi-Modal Treatment of Endobronchial Mucormycosis Infection of Native Lung after Lung Transplant; K. Stryker¹, S. Ahmed¹, V. Caputo¹, S. Alsunaid¹, A. Mansour¹, M. Abbasi¹, S. Forest², H. Seethamraju¹, S. Scheinin². ¹Advanced Pulmonary Failure and Lung Transplantation, Montefiore Medical Center, Bronx, NY, ²Department of Cardiothoracic Surgery, Montefiore Medical Center, Bronx, NY

(853) Custodiol-MP for Ex Vivo Lung Perfusion - A Comparison in a DCDD Pig Model; A. Koch¹, K. Kalka¹, Z. Keldenich¹, H. Carstens², B. Walter³, U. Rauen³, A. Weymann⁴, A. Ruhparwar⁵, G. Reiner⁶, M. Kamler¹. ¹Department of Thoracic and Cardiovascular Surgery, Division of Thoracic Transplantation, University Hospital Essen, Essen, Germany, ²Department of Cardiothoracic Surgery, Center of Cardiology, Cologne, Germany, ³Institut für Physiologische Chemie, Essen, Germany, ⁴Department of Thoracic and Cardiovascular Surgery, University Hospital Essen, Essen, Germany, ⁵Department of Thoracic and Cardiovascular Surgery, University Hospital Essen, Essen, Germany, ⁶Department of Veterinary Clinical Sciences, Justus-Liebig-University, Gießen, Germany

(854) Regulatory T Cells and the Effect of Ex Vivo Preservation on the Development of Transplant Arteriosclerosis in a Humanized Mouse Model; A. Knoefel¹, T. Siemeni¹, F. Ius¹, M. Avsar¹, K. Hacker¹, J. Salman¹, A. Haverich¹, C. Falk¹, G. Warnecke². ¹MHH, Hannover, Germany, ²Universitätsklinikum, Heidelberg, Germany

(855) Normothermic Liquid Ventilation Attenuates Inflammation from Ischemia-Reperfusion Injury in an Ex Vivo Rat Model; D. C. Becerra¹, H. Linge², S. C. Jeffs¹, S. Roberts², J. O², H. Ott², H. Ott². ¹Surgery, Duke University, Durham, NC, ²Surgery, Massachusetts General Hospital, Boston, MA

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(856) Impact of Heparin on Endothelial Glycocalyx in Lung Grafts during Ex Vivo Lung Perfusion; K. Noda¹, B. J. Philips¹, X. Ren², P. G. Sanchez¹. ¹Department of Cardiothoracic Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA, ²Department of Biomedical Engineering, Carnegie Mellon University, Pittsburgh, PA

(857) Novel Therapy: Extra Corporal Hemoperfusion Regenerated Pulmonary Function and Reduce Primary Graft Dysfunction in an ARDS Pig EVLP and Lung Transplantation Model; H. Ghaidan¹, S. Hyllén¹, N. Gvazava², M. Stenlo¹, E. Broberg¹, D. Edström¹, A. Niroomand¹, F. Olm², O. Hallgren², L. Pierre¹, D. Wagner², S. Lindstedt¹. ¹Lund Univ Hospital, Lund, Sweden, ²Lund University, Lund, Sweden

(858) Establishing an Economical and Widely Accessible DCD Animal Abattoir Model for Donor Lungs Using Ex Vivo Lung Perfusion; Z. L. Zhang¹, N. Moeslund², M. A. Hu¹, C. van de Wauwer¹, E. A. Verschuuren¹, H. Eiskjaer², M. E. Erasmus¹. ¹Cardio-thoracic surgery, University Medical Center Groningen, Groningen, Netherlands, ²Cardiology, Aarhus University Hospital, Aarhus, Denmark

(859) Composition of Ex Vivo Lung Perfusion Solutions and Kinetics Define Differential Cytokine and Chemokine Secretion in a Porcine Cardiac Arrest Model of Lung Preservation; L. M. Radomsky¹, A. Koch², C. Olbertz², Y. Liu², J. F. Kuehne¹, K. Beushausen¹, J. Keil¹, U. Rauen³, C. S. Falk¹, M. Kamler². ¹Institute of Transplant Immunology, Hannover Medical School, Hannover, Germany, ²Thoracic Transplantation, Department of Thoracic and Cardiovascular Surgery, University Hospital Essen, Essen, Germany, ³Institute of Physiological Chemistry, University Hospital Essen, Essen, Germany

(860) Experimental Lung Donor Models for Transplant; K. A. Oliveira-Braga, N. A. Nepomuceno, L. M. Ruiz, V. S. Vilela, G. T. Calheiros, P. A. Oliveira-Melo, P. M. Pêgo-Fernandes. *Cirurgia Torácica, Laboratorio de Pesquisa em Cirurgia Torácica, Instituto do Coracao, Hospital das Clinicas HCFMUSP, Faculdade de Medicina, Universidade de Sao Paulo., Sao Paulo, Brazil*

(861) The UNCX Polymorphism is Associated with the Development of Renal Dysfunction after Lung Transplantation; Y. Tomioka, S. Sugimoto, K. Matsubara, D. Shimizu, H. Yamamoto, T. Shiotani, K. Miyoshi, S. Ohtani, M. Okazaki, M. Yamane, S. Toyooka. *General Thoracic Surgery, Okayama University Hospital, okayama, Japan*

(862) Nicotinamide Adenine Dinucleotide (NAD⁺) Improves Lung Function in Rat Lung Ex-Vivo Lung Perfusion Model; J. P. Ehrsam¹, S. Arni¹, J. Chen¹, H. Rodriguez Cetina Biefer², I. Opitz¹, I. Inci¹. ¹Thoracic Surgery, University Hospital Zurich, Zurich, Switzerland, ²Cardiothoracic and Vascular Surgery, German Heart Center Berlin, Berlin, Germany

(863) The Reliability and Validity of Donor Tissue Biopsies in Lung Transplantation; B. T. Chao¹, A. T. Sage¹, M. Cypel¹, M. Liu¹, J. Yeung¹, X. Bai¹, D. Van Raemdonck², L. Ceulemans², A. Neyrinck², S. Verleden², S. Keshavjee¹. ¹Latner Thoracic Surgery Research Laboratories, University Health Network, Toronto, ON, Canada, ²BREATHE, Department of CHROMETA, KU Leuven, Leuven, Belgium

(864) A Closer Radiological Look at Chronic Rejection after Murine Orthotopic Lung Transplantation; J. Kaes, T. Heigl, C. Aelbrecht, G. Vande Velde, A. Vanstapel, S. Verleden, A. Neyrinck, D. Van Raemdonck, G. Verleden, L. Ceulemans, R. Vos, B. Vanaudenaerde. *KU Leuven, Leuven, Belgium*

(865) Efficacy of Three-Dimensional Computed Tomography Volumetry for Recipients in Downsizing Oversized Grafts in Brain-Dead Donor Lung Transplantation; R. Fujimoto, D. Nakajima, S. Tanaka, Y. Yutaka, Y. Yamada, A. Ohsumi, M. Hamaji, T. Menju, H. Date. *Kyoto University, Kyoto, Japan*

(866) Experience-Dependent Pathological Variations in Minor-Mismatched Mouse Lung Transplantation; M. Kawashima¹, J. Oliver¹, T. Watanabe¹, N. Huang¹, C. Konoeda¹, H. Oishi¹, S. Hirayama¹, D. Hwang², S. Keshavjee¹, S. Juvet¹, T. Martinu¹. ¹Latner Thoracic Research Laboratories, Toronto General Hospital Research Institute, Toronto, ON, Canada, ²Laboratory Medicine and Molecular Diagnostics, Sunnybrook Hospital, Toronto, ON, Canada

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(867) Is Dysphagia a Pre-Existing Condition in Individuals Undergoing Lung Transplantation? Radiographic Swallowing Safety Profiles before and after Lung Transplantation; T. Segalewitz¹, J. Colsky², J. Dallal York³, K. Croft¹, L. DiBiase³, A. Anderson³, A. Pelaez⁴, A. Shahmohammadi⁴, M. Pipkin⁴, T. Machuca⁴, E. K. Plowman¹. ¹Speech, Language and Hearing Sciences, University of Florida, Gainesville, FL, ²Department of Rehabilitation, University of Florida, Gainesville, FL, ³College of Public Health and Health Professions, University of Florida, Gainesville, FL, ⁴Department of Cardiothoracic Surgery, University of Florida, Gainesville, FL

(868) Impact of Prone Positioning after Lung Transplantation - A Single Center Experience; A. E. Frick¹, J. Schiefer², S. Schwarz¹, A. Benazzo¹, P. Faybik², W. Klepetko¹, P. Jaksch¹, K. Hoetzenecker¹. ¹Department of Thoracic Surgery, Medical University of Vienna, Vienna, Austria, ²Department of Anaesthesiology, Intensive Care Medicine and Pain Management, Medical University of Vienna, Vienna, Austria

(869) Dysphagia in Lung Transplant Recipients: Prevalence, Risk Factors and Health-Related Outcomes; J. Dallal York¹, J. Colsky², K. Croft³, T. Segalewitz³, L. DiBiase¹, A. Anderson¹, A. Palaez⁴, A. Shahmohammadi⁴, M. Pipkin⁴, T. Machuca⁴, E. K. Plowman³. ¹College of Public Health and Health Professions, University of Florida, Gainesville, FL, ²Department of Rehabilitation, University of Florida, Gainesville, FL, ³Speech, Language and Hearing Sciences, University of Florida, Gainesville, FL, ⁴Department of Cardiothoracic Surgery, University of Florida, Gainesville, FL

(870) Lung Transplantation: Is the Switch to Interrupted Suturing Worth it?; K. Montgomery, Y. Toyoda, M. A. Kashem, G. Sunagawa, N. Shigemura, R. Yanagida, K. Minakata, S. Brann, E. Leotta. *Cardiovascular Surgery, Temple University, Philadelphia, PA*

(871) Thrombotic Microangiopathy in Lung Transplantation: Clinical Characteristics and Outcome; P. Gazengel¹, E. Lefevre², M. Zaidan², C. Picard³, V. Bunel⁴, E. Eschapasse⁵, R. Kessler⁶, X. Demant⁷, G. Dauriat¹, S. Dolidon¹, A. Hanna¹, O. Mercier¹, E. Fadel¹, J. Le Pavec¹. ¹Marie Lannelongue, Le Plessis Robinson, France, ²Hopital Kremlin Bicetre, Kremlin Bicetre, France, ³Hôpital Foch, Suresnes, France, ⁴Hôpital Bichat, Paris, France, ⁵CHU Nantes, Nantes, France, ⁶CHRU Strasbourg, Strasbourg, France, ⁷CHU Bordeaux, Bordeaux, France

(872) Comparison of Estimated Energy Requirements in Lung Transplant Candidates; D. F. Hickling¹, E. R. Twine¹, J. R. Walsh¹, P. M. Hopkins¹, D. C. Chambers¹, S. Y. Tan², P. F. Collins³. ¹Queensland Lung Transplant Service, The Prince Charles Hospital, Brisbane, Australia, ²Queensland University of Technology, Brisbane, Australia, ³Griffith University, Gold Coast, Australia

(873) Prevalence of Prandial Aspiration, before and after Lung Transplantation: Proof of Concept in a UK Tertiary Hospital; C. Dawson¹, R. Thompson², N. Sharma³. ¹Speech and Language Therapy, Queen Elizabeth Hospital Birmingham, Birmingham, United Kingdom, ²Respiratory Medicine, Queen Elizabeth Hospital Birmingham, Birmingham, United Kingdom, ³Head and Neck Surgery-ENT, Queen Elizabeth Hospital Birmingham, Birmingham, United Kingdom

(874) Post-Operative Pain Management in Lung Transplant Recipients: A Focus on Opioid Use; E. Choe. Respiratory Medicine, Auckland City Hospital, Auckland, New Zealand

(875) Lung Transplantation during COVID19 Pandemic: Latam Experience; A. M. Bertolotti¹, E. Wainstein², M. Samano³, M. Wong Jaen⁴, N. Tommasino⁵, F. Undurraga⁶, V. Linacre⁷, L. J. Tellez⁸, R. Zapata Gonzalez⁹, L. Fernades¹⁰, J. Camargo¹¹, M. Velasquez¹², C. Andrade¹³, H. Nietmann¹⁴, J. Palacios¹⁵, M. Candiotti¹, J. M. Osses¹⁶, R. Ahumada¹⁶, R. Favaloro¹, E. Beveraggi², A. Da Lozzo², G. Svetliza², J. E. Afonso Jr³, U. Chavarria⁴, S. Sanchez⁴, P. Curbelo⁵, A. Musetti⁵, C. Chao⁵, D. Lazo Perez⁶, C. Sepulveda Landeros⁷, J. Melo Tanner¹⁷, F. Varon⁸, J. C. Garzon⁸, H. Ortega Jaramillo¹⁸, G. Roncancio Villamil¹⁹, S. Camargo¹¹, L. Sanchez¹¹, F. Perin¹¹, S. Schio¹¹, I. Cujjiño²⁰, W. Martinez²⁰. ¹Intrathoracic Transplantation and Heart Failure Division, University Hospital Favaloro Foundation, Buenos Aires, Argentina, ²Lung Transplantation, Hospital Italiano de Buenos Aires, Buenos Aires, Argentina, ³Lung Transplantation, Hospital Israelita Albert Einstein, Sao Paulo, Brazil, ⁴Lung Transplantation, Hospital Christus Muguerza Alta Especialidad, Monterrey, Mexico, ⁵Lung Transplantation, Programa Nacional de Trasplante Pulmonar, Montevideo, Uruguay, ⁶Lung Transplantation, Clinica Las Condes, Santiago, Chile, ⁷Lung Transplantation, Instituto Nacional del Tórax / Clinica Santa María, Santiago, Chile, ⁸Lung Transplantation,

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

Fundación Cardio Infantil, Bogotá, Colombia, ⁹Lung Transplantation, Clínica CardioVID, Medellín, Colombia, ¹⁰Lung Transplantation, Hospital das Clinicas INCOR, Sao Paulo, Brazil, ¹¹Lung Transplantation, Irmandade Santa Casa de Misericórdia, Porto Alegre, Brazil, ¹²Lung Transplantation, Fundación Valle de Lili, Cali, Colombia, ¹³Lung Transplantation, Hospital das Clinicas, Porto Alegre, Brazil, ¹⁴Lung Transplantation, Hospital de Base, Sao Jose de Rio Preto, Brazil, ¹⁵Lung Transplantation, Hospital Guillermo Almenara, Lima, Peru, ¹⁶Lung Transplantation, University Hospital Favaloro Foundation, Buenos Aires, Argentina, ¹⁷Lung Transplantation, Instituto Nacional del Torax / Clínica Las Condes, Santiago, Chile, ¹⁸Lung Transplantation, Clínica CardioVID, Medellín, Colombia, ¹⁹Lung Transplantation, Clínica CardioVID, Medellín, Colombia, ²⁰Lung Transplantation, Fundación Valle de Lili, Cali, Colombia

(876) To Cath or Not to Cath: Pediatric Lung Transplant Candidates without a Diagnosis of Pulmonary Hypertension; K. Thangappan¹, A. Guzman-Gomez¹, F. Zafar¹, R. Hirsch², S. Shahanavaz², M. G. Schechter³, D. Hayes³, D. L. Morales¹. ¹Cardiothoracic Surgery, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ²Cardiology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ³Pulmonology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

(877) Risk Factors for Bronchiolitis Obliterans Syndrome in Pediatric Lung Transplant Recipients; K. Thangappan¹, D. L. Morales¹, D. Winlaw¹, D. Hayes², C. Towe², M. G. Schechter², F. Zafar¹. ¹Cardiothoracic Surgery, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ²Pulmonology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

(878) What are the Expectations for Length of Stay after Pediatric Lung Transplantation?; K. Thangappan¹, L. Haney¹, F. Zafar¹, M. Hossain², Y. Zhang², J. Steger³, M. Schechter³, C. Towe³, D. L. Morales¹. ¹Cardiothoracic Surgery, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ²Biostatistics and Epidemiology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ³Pulmonology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

(879) Pediatric Lung Transplantation-Intermediate Outcomes of a Japanese Center; S. Otani, Y. Tomioka, K. Matsubara, D. Shimizu, H. Yamamoto, T. Shiotani, K. Suzawa, K. Miyoshi, H. Yamamoto, M. Okazaki, S. Sugimoto, M. Yamane, S. Toyooka. General Thoracic Surgery/Organ Transplant Center, Okayama University Hospital, Okayama, Japan

(880) Fifteen-Year Single Center Experience with Lung Transplantation in Pediatric Patients Younger Than 12 Years Old; E. Ius¹, J. Salman¹, C. Müller², J. Carlens², K. Aburahma¹, M. Franz¹, A. Niehaus¹, I. Tudorache³, W. Sommer⁴, M. Greer⁵, A. Horke¹, C. Kühn¹, A. Haverich¹, M. Avsar¹, D. Bobylev¹, G. Warnecke⁴, N. Schwerk². ¹Department of Cardiothoracic, Transplant and Vascular Surgery, Hannover Medical School, Hannover, Germany, ²Department of Paediatrics, Hannover Medical School, Hannover, Germany, ³Department of Cardiac Surgery, University Hospital Düsseldorf, Düsseldorf, Germany, ⁴Department of Cardiac surgery, Heidelberg Medical School, Heidelberg, Germany, ⁵Department of Respiratory Medicine, Hannover Medical School, Hannover, Germany

(881) A Multicentric Evaluation of Pediatric Lung Transplantation in Italy; M. Schiavon¹, S. Camagni², F. Venuta³, L. Rosso⁴, M. Boffini⁵, F. Parisi⁶, A. Bertani⁷, F. Meloni⁸, P. Paladini⁹, E. Faccioli¹⁰, M. Colledan², D. Diso¹¹, M. Cattaneo¹², F. Scalini¹³, S. Alfieri⁶, M. Morosini¹⁴, L. Luzzi¹⁵, G. Lorenzoni¹⁰, A. Dell'Amore¹⁰, F. Rea¹⁰. ¹Cardiac, Thoracic and Vascular Sciences, University of Padua, Padova, Italy, ²Department of Organ Failure and Transplantation, ASST Giovanni XXIII, Bergamo, Italy, ³Department of Thoracic Surgery, University of Rome, Rome, Italy, ⁴Department of Pathophysiology and Transplantation, University of Milan, Milano, Italy, ⁵Surgical sciences, University of Torino, Torino, Italy, ⁶Thoracic Transplant and Pulmonary Hypertension Unit, Bambino Gesù Children Hospital, Roma, Italy, ⁷Division of Thoracic Surgery and Lung Transplantation, IRCCS ISMETT - UPMC, Palermo, Italy, ⁸Respir Dis Department, IRCCS San Matteo Foundation and University Pavia, Pavia, Italy, ⁹University of Siena, Siena, Italy, ¹⁰Cardiac, Thoracic, Vascular Sciences and Public health, University of Padua, Padova, Italy, ¹¹University of Rome, Rome, Italy, ¹²University of Milano, Milano, Italy, ¹³University of Torino, Torino, Italy, ¹⁴Respir Dis Department, IRCCS San Matteo Foundation Pavia, Pavia, Italy, ¹⁵Azienda Ospedaliera Le Scotte, Siena, Italy

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(882) Low Rates of Growth in Paediatric Lung and Heart-Lung Transplant Recipients and Effects on Spirometry; H. Buzacott, G. P. Westall, B. M. Borg, G. I. Snell. *Department of Respiratory Medicine, Alfred Health, Melbourne, Australia*

(883) Severely Low BMI Percentile is Associated with Higher Mortality Rate in Children Listed for Lung Transplant; J. S. Heidel¹, A. Dani¹, D. Hayes², C. Towe², M. Schecter², Y. Zhang³, M. Hossain³, F. Zafar¹, D. L. Morales¹. ¹*Cardiothoracic Surgery, Cincinnati Children's Hospital Medical Center, Cincinnati, OH*, ²*Pulmonary Medicine, Cincinnati Children's Hospital Medical Center, Cincinnati, OH*, ³*Biostatistics and Epidemiology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH*

(884) Pediatric Lung Transplant for Pleuroparenchymal Fibroelastosis: Single Center Experience; D. S. Moreno McNeill¹, D. R. Spielberg¹, S. Das¹, G. B. Mallory¹, J. S. Heinle², E. Melicoff¹. ¹*Pediatric Pulmonary, Baylor College of Medicine/Texas Children's Hospital, Houston, TX*, ²*Congenital Heart Surgery, Baylor College of Medicine/Texas Children's Hospital, Houston, TX*

(885) Thoracic Epidural Analgesia Improves Outcomes after Lung Transplant; C. Bowles¹, W. Keeyapaj², J. Brodt², G. Dhillon³, Y. J. Woo¹, W. Hiesinger¹, J. W. MacArthur¹. ¹*Cardiothoracic Surgery, Stanford University, Palo Alto, CA*, ²*Adult Cardiothoracic Anesthesia, Stanford University, Palo Alto, CA*, ³*Pulmonary and Critical Care Medicine, Stanford University, Palo Alto, CA*

(886) A Closer Look at Risk Factors Associated with Airway Complications in Lung Transplantation; G. Li¹, B. Mankidy¹, Z. Liu², B. Rodrigues¹, H. Choi³, M. Li², D. Daoud⁴, A. Mattar⁴, J. Coster⁴, P. Garcha¹, P. Carrott⁴, A. Shafii⁴, G. Loo⁴. ¹*Pulmonary and Critical Care Medicine, Baylor College of Medicine, Houston, TX*, ²*Statistics, Rice University, Houston, TX*, ³*College of Medicine, Baylor College of Medicine, Houston, TX*, ⁴*Surgery, Baylor College of Medicine, Houston, TX*

(887) Baseline Gas Transfer (KCO) and Accessible Alveolar Volume (V_A) after Lung Transplant: Determinants and Relative Contributions on Graft Survival; D. R. Darley, M. A. Malouf, P. MacDonald, M. Plit. *Lung Transplant, St Vincent's Hospital, Sydney, Australia*

(888) Single Lung Transplantation in Patients under 50: Single Center and UNOS Analysis; S. Mutyala, T. Tran, M. A. Kashem, H. Zhao, N. Shigemura, Y. Toyoda. *Department of Cardiothoracic Surgery, Temple University Hospital, Philadelphia, PA*

(889) Survival Outcomes of Combined Lung and Abdominal Organ Transplants; M. M. El-Sayed Ahmed¹, S. Z. Shah², N. Zhang³, M. Thomas¹, S. Jacob¹, I. A. Makey¹, B. Sareyyupoglu¹, K. P. Landolfo¹, S. M. Pham¹. ¹*Cardiothoracic Surgery, Mayo Clinic, Jacksonville, FL*, ²*Transplantation, Mayo Clinic, Jacksonville, FL*, ³*Biomedical Statistics and Informatics, Mayo Clinic, Phoenix, AZ*

(890) The Effect of Disease Type on Changes in Total Lung Volume after Lung Transplantation Measured by Three-Dimensional (3D) CT Reconstruction; J. Suh¹, N. Son², J. Lee³, M. Park⁴, S. Kim⁴, S. Jeong⁴, H. Paik⁵. ¹*Thoracic and Cardiovascular Surgery, Yongin Severance Hospital, Yonsei University College of Medicine, Yongin, Korea, Republic of*, ²*Center for Digital Health, Yongin Severance Hospital, Yonsei University College of Medicine, Yongin, Korea, Republic of*, ³*Thoracic Surgery, Yonsei University College of Medicine, Seoul, Korea, Republic of*, ⁴*Internal Medicine, Yonsei University College of Medicine, Seoul, Korea, Republic of*, ⁵*Thoracic and Cardiovascular Surgery, Yonsei University College of Medicine, Seoul, Korea, Republic of*

(891) Combination of Neutrophil to Lymphocyte Ratio and Glasgow Prognostic Score Improves Prognostic Accuracy in Lung Transplantation: Validation of 9 Preoperative Prognostic Scoring Methods; H. Yamamoto¹, S. Sugimoto¹, E. Suzuki², Y. Tomioka¹, T. Shiotani¹, D. Shimizu¹, K. Matsubara¹, K. Miyoshi¹, S. Otani¹, M. Okazaki¹, M. Yamane¹, S. Toyooka¹. ¹*Department of General Thoracic Surgery and Organ Transplant Center, Okayama University Hospital, Okayama, Japan*, ²*Department of Epidemiology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan*

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(892) Establishing the Hungarian Lung Transplantation Program How International Cooperation Can Help to Set up a New Program; B. Gieszer¹, F. Renyi-Vamos¹, I. Madurka¹, J. Elek², P. Jaksch³, G. Lang³, K. Hoetzenecker³, W. Klepetko³. ¹Thoracic Surgery, National Institute of Oncology, Semmelweis University, Budapest, Hungary, ²Thoracic Surgery, National Institute of Oncology, Budapest, Hungary, ³Thoracic Surgery, Medical University of Vienna, Vienna, Austria

(893) Acute Kidney Injury in Post-Lung Transplant Patients a Single Center Retrospective Review; M. M. Botros¹, K. Jackson², W. Jensen³, P. Singh⁴, B. Keller¹. ¹Pulmonary Critical Care & Sleep Medicine, The Ohio State University, Columbus, OH, ²Center for Biostatistics, The Ohio State University, Columbus, OH, ³Internal Medicine, The Ohio State University, Columbus, OH, ⁴Department of Internal Medicine, Division of Nephrology., The Ohio State University, Columbus, OH

(894) Weight Change and Outcomes in Lung Transplant Recipients; M. Collins¹, A. O'Boye¹, G. Perottino², L. Pesce², R. Tomic¹. ¹Northwestern Memorial Hospital, Chicago, IL, ²Northwestern University, Chicago, IL

(895) Use of Apixaban after Lung Transplant for Atrial Fibrillation and Treatment of Venous Thromboembolism; A. Nikodem¹, L. Cherrier¹, A. Nasar¹, A. Ashwini², C. Fann¹. ¹Pharmacy, St. Joseph's Hospital and Medical Center, Phoenix, AZ, ²St. Joseph's Hospital and Medical Center, Phoenix, AZ

(896) Nutritional Supplementation and Neuromuscular Electrical Stimulation in Lung Transplant Patients; I. Timofte¹, C. Wells², K. Hersi¹, A. Ryan³, A. M. Varghese¹, R. Vesselinov³, A. Iacono¹, J. Assadi¹, D. Davis⁴, G. Li³, D. Herr⁵, T. Harrington¹, B. Griffith⁶, C. Lau⁷, A. Krupnick MD⁷, R. Madathil⁶, J. Rabin⁵, G. Alon², E. Parker³, D. Baer⁸, L. Magder³, M. L. Terrin³, A. Verceles¹. ¹Pulmonary and Critical Care Medicine, University of Maryland Medical Center, Baltimore, MD, ²Physical Therapy, University of Maryland Medical Center, Baltimore, MD, ³Epidemiology, University of Maryland Medical Center, Baltimore, MD, ⁴Radiology, University of Maryland Medical Center, Baltimore, MD, ⁵Critical Care Medicine, University of Maryland Medical Center, Baltimore, MD, ⁶Cardiothoracic Surgery, University of Maryland Medical Center, Baltimore, MD, ⁷Thoracic Surgery, University of Maryland Medical Center, Baltimore, MD, ⁸Clinical Nutrition, University of Maryland Medical Center, Baltimore, MD

(897) Multi-Organ Transplant in Cystic Fibrosis and its Impact on Long-Term Survival; K. Rawal¹, T. Martinu¹, S. Juvet¹, A. Stephenson², S. Keshavjee¹, C. Chaparro¹. ¹Ajmera Family Transplant Centre, Toronto Lung Transplant Program, University Health Network, University of Toronto, Toronto, ON, Canada, ²Cystic Fibrosis, Respiriology, St Michael's Hospital, University of Toronto, Toronto, ON, Canada

(898) Lung Transplantation as Acute 'Rescue' Therapy; M. M. Howsare¹, J. Rosenheck¹, B. C. Keller¹, S. Kirkby¹, A. Ganapathi², B. Whitson², G. S. Bauldoff³, M. A. Nahush², D. R. Nunley¹. ¹Pulmonary, Critical Care, and Sleep Medicine, Ohio State University College of Medicine, Columbus, OH, ²Cardiac Surgery, Ohio State University College of Medicine, Columbus, OH, ³Nursing, Ohio State University College of Nursing, Columbus, OH

(900) Metal Endobronchial Stents in Lung Transplant Recipients is Associated with Good Long Term Outcome; S. Izhakian¹, B. Pertzov¹, O. Gorelik², M. Kramer¹. ¹Pulmonary Institute, Rabin Medical Center, Petah Tikva, Israel, Israel, ²Shamir Medical Center, Zerifin, Israel

(901) Do We Really Need to Do Lung Transplants at Night?; W. Ragalie, Y. Xia, D. Ross, J. Ho, J. Neelankavil, S. Patel, C. Lee, D. Sayah, A. Ardehali. David Geffen School of Medicine, University of California-Los Angeles, Los Angeles, CA

(902) Frailty Measurements are Poor Predictor of Lung Transplantation Outcomes; R. Tomic¹, G. M. Perottino², M. Collins¹, A. Oboye³, A. Amblavanan¹, M. Sala¹. ¹Northwestern Memorial Hospital, Chicago, IL, ²Northwestern University, Chicago, IL, ³Froedtert Hospital, Milwaukee, WI

(903) Donor-Recipient Body Mass Index Matching in Lung Transplantation; W. R. Lightle¹, A. Hallett², J. Motter², G. Loo³, P. Carrott³, D. Segev², N. N. Massarweh¹. ¹Center for Innovations in Quality, Effectiveness, and Safety, Michael E. DeBakey VA Medical Center, Houston, TX, ²Johns Hopkins University School of Medicine, Department of Surgery, Baltimore, MD, ³Baylor College of Medicine, Houston, TX

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(904) Increased Post-Operative Ventilation Time in Lung Transplant Recipients with Left Ventricular Diastolic Dysfunction; E. Klipsch¹, R. Rachwan², T. Hathaway¹, I. Kutkut³, C. Hage², D. Roe², R. S. Mangus². ¹Indiana University School of Medicine, Indianapolis, IN, ²IU Health, Indianapolis, IN, ³New York Presbyterian Hospital, New York, NY

(905) Management of Positive Prospective Cross Matches in Lung Transplant Recipients: Outcomes from a Single-Center Experience; S. Krishnan, G. Sathiyamoorthy, R. J. Hadley, C. K. Lawson, J. K. McDermott, S. M. Mietz, M. Leacche, E. T. Murphy, R. E. Giris. *Spectrum Health, Grand Rapids, MI*

(906) Impact of Pulmonary Artery Pressure on Survival Outcome of Single- and Double-Lung Transplantation in Chronic Obstructive Pulmonary Disease Patients; S. Mutyala, M. A. Kashem, J. Kanaparthi, N. Shigemura, M. Suryapalam, E. Leotta, G. Sunagawa, K. Minakata, Y. Toyoda. *Temple University Hospital, Philadelphia, PA*

(907) A Single Center Study of Donor Age & Lung Transplant Type in Idiopathic Pulmonary Fibrosis; E. H. Ander, M. A. Kashem, H. Zhao, N. Shigemura, G. Sunagawa, S. H. Brann, E. Leotta, R. Yanagida, Y. Toyoda. *Cardiothoracic Surgery, Temple University Hospital, Philadelphia, PA*

(909) Mortality and Development of Cancer in Lung Transplant Recipients with Advanced Age; I. J. Mahoney¹, M. R. Anderson², M. M. Leiva-Juarez³, J. Costa³, B. P. Stanifer³, P. H. Lemaitre³, J. R. Sonett³, M. M. Aversa², H. Y. Robbins², S. B. Qayum², L. Shah², F. D'Ovidio³, S. M. Arcasoy², L. J. Benvenuto². ¹Department of Medicine, College of Physicians and Surgeons, Columbia University, New York, NY, ²Department of Medicine, Division Pulmonary and Critical Care Medicine, College of Physicians and Surgeons, Columbia University, New York, NY, ³Department of Surgery, College of Physicians and Surgeons, Columbia University, New York, NY

(910) Hospitalization Status at Time of Lung Transplant for Interstitial Lung Disease Does Not Affect Post Transplant Outcomes; R. A. Varughese¹, D. Li¹, A. Exarchakou², A. Kapasi¹, J. Nagendran³, J. Weinkauff¹, D. Lien¹, A. Hirji¹, K. Halloran¹. ¹Medicine, University of Alberta, Edmonton, AB, Canada, ²Department of Non-Communicable Disease Epidemiology, London School of Hygiene and Tropical Medicine, London, United Kingdom, ³Surgery, University of Alberta, Edmonton, AB, Canada

(911) Association between Pre-Transplantation Cognitive Impairment and Early Post-Transplantation Outcomes; W. S. Ahmed¹, N. Chowdhury², S. Mathur³, S. Abbey⁴, H. J. Ross⁵, L. G. Singer⁶. ¹Department of Medicine, University of Toronto, Toronto, ON, Canada, ²Toronto Lung Transplant Program, University Health Network, Toronto, ON, Canada, ³Department of Physical Therapy, University of Toronto, Toronto, ON, Canada, ⁴Department of Psychiatry, University of Toronto, Toronto, ON, Canada, ⁵Division of Cardiology, Peter Munk Cardiac Centre, UHN, Ted Rogers Centre for Heart Research, University of Toronto, Toronto, ON, Canada, ⁶Toronto Lung Transplant Program, UHN, Division of Respiriology, Department of Medicine, University of Toronto, Toronto, ON, Canada

(912) Outcomes after Lung Re-Transplantation: A Single-Center Experience; H. Kehara, R. Yanagida, A. Kashem, C. Mangukia, G. Sunagawa, S. Brann, E. Leotta, R. Boova, N. Shigemura, K. Minakata, Y. Toyoda. *LKSOM at Temple University, Philadelphia, PA*

(913) The Effect of Post Operative Tracheostomy on Outcomes in Lung Transplant Patients; A. Thapaliya, L. M. Marinak, C. S. King, A. W. Brown, K. Ahmad, V. Khangoora, S. D. Nathan, O. A. Shlobin. *Advanced Lung Diseases & Lung Transplant Program, INOVA Fairfax Hospital, Falls Church, VA*

(914) A Single-Center Analysis of Survival Outcome between Donor after Cardiac Death and Donor after Brain Death; A. Bussetty¹, S. Mutyala², K. Montgomery², M. A. Kashem², H. Zhao², N. Shigemura², Y. Toyoda². ¹Temple University Hospital, Philadelphia, PA, ²Department of Cardiothoracic Surgery, Temple University Hospital, Philadelphia, PA

(915) Initial Results on Lung Transplantation in a Vietnamese Hospital; U. H. Nguyen¹, Q. T. Pham¹, T. V. Vu¹, T. T. Ta¹, L. H. Pham¹, A. V. Nguyen¹, D. K. Trinh². ¹Cardiovascular and Thoracic Center, Viet Duc University Hospital, HA NOI, Viet Nam, ²Surgical Anesthesiology Center, Viet Duc University Hospital, HA NOI, Viet Nam

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(916) Risk Factor for Overall Mortality in Lung and Cardiopulmonary Transplantation: A Monocentric Cohort Study from 2006 to 2018; M. Penhouet. Pulmonology department, CHU Nantes, Nantes, France

(917) Optimization of Lung Explant Sampling to Achieve Accurate Diagnosis; M. J. Cecchini¹, S. Gjorgova Gjeorgjievski¹, N. Steinle¹, E. S. Yi¹, J. M. Boland¹, J. J. Maleszewski¹, M. C. Bois¹, R. C. Daly², J. P. Scott³, A. C. Roden¹. ¹Department of Laboratory Medicine and Pathology, Mayo Clinic, Rochester, MN, ²Department of Cardiovascular Surgery, Mayo Clinic, Rochester, MN, ³Division of Pulmonary and Critical Care Medicine, Mayo Clinic, Rochester, MN

(918) Developing a Digitally Enabled Health and Wellbeing Multidisciplinary Review of Transplant: A Pilot Study; S. Crasto¹, Z. Butt², P. Ly², M. Sanchez³, H. Lyster², A. Igra⁴, A. Reed¹, M. Carby¹, V. Gerovasili¹. ¹Department of Cardiothoracic Transplantation and Mechanical Circulatory Support, Royal Brompton and Harefield NHS Foundation Trust, London, United Kingdom, ²Pharmacy Directorate - Transplantation & VADs, Royal Brompton and Harefield NHS Foundation Trust, London, United Kingdom, ³Psychological Medicine, Royal Brompton and Harefield NHS Foundation Trust, London, United Kingdom, ⁴Innovation & Technology, Royal Brompton and Harefield NHS Foundation Trust, London, United Kingdom

(919) Cell Free DNA Levels in Patients with Acute Rejection after Lung Transplantation; I. Timofte¹, M. Keller², A. Varghese¹, D. Levine³, S. Aryal⁴, P. Shah², R. Vesselinov⁵, D. Ross⁶, R. Woodward⁶, B. Dale⁶, M. Terrin¹, A. Iacono¹, S. Agbor-Enoh². ¹Pulmonary and Critical Care, UMMC, Baltimore, MD, ²Pulmonary and Critical Care, Johns Hopkins, Baltimore, MD, ³UT Health San Antonio, San Antonio, TX, ⁴Pulmonary and Critical Care, Inova, Baltimore, MD, ⁵Epidemiology and Public Health, UMMC, Baltimore, MD, ⁶CareDx, Brisbane, CA

(920) Survival Outcomes of Redo Lung Transplantation: UNOS Database; T. N. Tran¹, M. Kashem², H. Zhao¹, G. Sunagawa², N. Shigemura², R. Yanagida², H. Kehara², Y. Toyoda². ¹Lewis Katz School of Medicine, Temple University, Philadelphia, PA, ²Cardiothoracic Surgery, Temple University Medical Center, Philadelphia, PA

(921) Lung Transplantation for Acute Respiratory Distress Syndrome: A Multicenter Experience; A. E. Frick¹, C. Gan², R. Vos³, D. Kifjak¹, A. P. Neyrinck⁴, W. Klepetko¹, P. Jaksch¹, E. M. Verschuuren², K. Hoetzenecker¹. ¹Department of Thoracic Surgery, Medical University of Vienna, Vienna, Austria, ²Department of Pulmonary Diseases, University Medical Centre Groningen, Groningen, Netherlands, ³BREATHE, Leuven Lung Transplant Unit, Department of Chronic Diseases, Metabolism and Ageing (Chromet, University Hospital Leuven, Vienna, Belgium, ⁴Department of Respiratory Diseases, University Hospitals Leuven, Leuven, Belgium

(922) The Changing Face of Lung Transplant Waiting Lists in the Era of CFTR Modulators; K. Dave¹, V. Gerovasili², N. J. Simmonds³, M. Carby², A. Reed². ¹Adult Cystic Fibrosis Department and Department of Cardiothoracic Transplantation, Royal Brompton and Harefield NHS Trust, London, United Kingdom, ²Department of Cardiothoracic Transplantation and Mechanical Circulatory Support, Royal Brompton and Harefield NHS Trust, London, United Kingdom, ³Adult Cystic Fibrosis Department, Royal Brompton and Harefield NHS Trust, London, United Kingdom

(923) Short and Long Term Outcomes for Scleroderma Related Lung Transplantation; E. M. Schumer, S. Saddoughi, C. Kennedy, V. Khullar, A. Pochettino, R. C. Daly. Mayo Clinic, Rochester, MN

(924) Lung Transplant Survival Regarding Past and Concomitant Cardiac Revascularization; T. Tran¹, M. Kashem², J. Kanaparthi¹, H. Zhao¹, S. Brann², E. Leotta², K. Minakata², R. Yanagida², G. Sunagawa², N. Shigemura², Y. Toyoda². ¹Lewis Katz School of Medicine, Temple University, Philadelphia, PA, ²Cardiothoracic Surgery, Temple University Medical Center, Philadelphia, PA

(925) Lung Transplant is Feasible in Developing Countries with Severe Shortage of Organ Donors: Experiences from Vietnam; N. V. Nguyen¹, L. V. Dinh¹, N. T. Nguyen¹, N. V. Nguyen¹, T. V. Vu¹, H. N. Nguyen¹, H. V. Nguyen¹, T. T. Le¹, C. V. Cung¹, T. T. Nguyen¹, H. T. Nguyen¹, T. T. Vo¹, M. L. Nguyen¹, H. N. Le¹, A. T. Nguyen². ¹Vietnam National Lung Hospital, Hanoi, Viet Nam, ²Hanoi Medical University, Hanoi, Viet Nam

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(926) Height Difference in Donor-Recipient Sex Mismatch is Significant in Single Lung Transplant Patients with Chronic Obstructive Pulmonary Disease; D. K. Phan, J. P. Skendelas, S. J. Forest, S. A. Scheinin, H. Seethamraju. *Cardiovascular and Thoracic Surgery, Montefiore Medical Center, Bronx, NY*

(927) Coronary Artery Disease Screening for Lung Transplant Candidates; M. L. Lima¹, F. Pola Dos Reis², J. P. Pires¹, S. V. Campos¹, L. G. Abdalla², L. M. Fernandes², C. B. Cury², R. O. Teixeira¹, A. N. Costa¹, R. M. Carraro¹, P. M. Pêgo-Fernandes². ¹*Pneumology, Instituto do Coracao, Hospital das Clinicas HCFMUSP, Faculdade de Medicina Universidade de Sao Paulo, Sao Paulo, Brazil,* ²*Thoracic Surgery, Instituto do Coracao, Hospital das Clinicas HCFMUSP, Faculdade de Medicina Universidade de Sao Paulo, Sao Paulo, Brazil*

(928) Outcome of ECMO as a Bridge to Lung Transplantation: Largest Experience from India; S. Kumar, V. Rahulan, P. A. John, M. B. Nagaraj, U. Shah, P. Kumar, A. Kamath, P. Dutta, S. Attawar. *Heart and Lung Transplant Institute, KIMS, Hyderabad, India*

(930) Safety of Anti-Fibrotic Therapy for Interstitial Lung Disease Prior to Lung Transplantation; D. Nakajima, S. Tanaka, Y. Yamada, Y. Yutaka, A. Ohsumi, M. Hamaji, H. Date. *Kyoto University, Kyoto, Japan*

(931) Perioperative Desensitization for Sensitized Lung Transplant Candidates; S. Nandavaram¹, A. Shahmohammadi², S. Chandrashekar², A. Emtiazjoo², H. Alnuaimat², C. Lin², L. Benninger², V. Scheuble³, M. Pipkin⁴, M. Rackauskas⁴, T. Machuca⁴, A. Pelaez². ¹*d, University Of Florida, Gainesville, FL,* ²*Department of Medicine, University Of Florida, Gainesville, FL,* ³*University Of Florida, Gainesville, FL,* ⁴*Department of Surgery, University Of Florida, Gainesville, FL*

(932) Titanicking the Clamshell. Anchoring the Bilateral Thoracosternotomy Incision with Titanium Plates, Screws and Sternal Band. Our Experience in Fifty Consecutive Patients of Double Lung Transplantation; P. A. John, M. Nagaraj, U. Shah, S. Kumar, A. Kamath, P. Kumar, P. Dutta, V. Rahulan, S. Attawar. *Heart and Lung Transplant Institute, KIMS, Hyderabad, India*

(933) Retailoring Donor-Recipient Size Mismatch in Double Lung Transplantation, Non-Anatomical Pulmonary Resections, Gratifying Early Surgical Outcomes; P. A. John, S. Kumar, U. Shah, M. B. Nagaraj, A. Kamath, P. Kumar, P. Dutta, V. Rahulan, S. Attawar. *Heart and Lung Transplant Institute, KIMS, Hyderabad, India*

(934) Impact of Transplanting Hepatitis C Nucleic Acid Testing Positive (NAT+) Donors to Hepatitis C Virus NAT- Cardiothoracic Recipients; M. Hudson, A. Webb, A. Logan, A. Silverman, A. Brueckner. *Pharmacy, Tampa General Hospital, Tampa, FL*

(935) Safety of Cumulative Dose Anti-Thymocyte Globulin in Lung Transplant; C. Pham¹, A. Chaplain², B. J. Pierce¹, D. T. Nguyen³, E. A. Graviss³, A. Goodarzi⁴, S. W. Yau⁴, J. G. Youssef⁴, H. J. Huang⁴. ¹*Department of Pharmacy, Houston Methodist Hospital, Houston, TX,* ²*University of Houston College of Pharmacy, Houston, TX,* ³*Department of Pathology and Genomic Medicine, Houston Methodist Hospital, Houston, TX,* ⁴*Department of Medicine, Houston Methodist Hospital, Houston, TX*

(936) Inhalation of IL-1 Receptor Antagonist (ALTA-2530) Achieves Stable and Prolonged Pulmonary Exposure in Nonclinical Studies Supportive of Development for Bronchiolitis Obliterans Syndrome; S. Wring¹, M. Palacios¹, K. Crizer¹, P. Kuehl², M. Reed³, C. McKernan⁴, J. Hasted⁵. ¹*Translational Medicine, Altavant Sciences, Cary, NC,* ²*Lovelace BioMedical, Albuquerque, NM,* ³*Coelus LLC, Albuquerque, NM,* ⁴*Duke University, Durham, NC,* ⁵*JDP Pharma Consulting, LLC, San Carlos, CA*

(937) Tacrolimus Dosage Adjustments after Posaconazole Discontinuation in Lung Transplant Recipients; S. T. Sterling, S. A. Heeney, M. C. Morrison, K. M. Harrison. *Pharmacy, Vanderbilt University Medical Center, Nashville, TN*

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(938) Effectiveness and Safety of Direct Oral Anticoagulants versus Warfarin in Lung Transplant Recipients; C. J. Iasella¹, C. A. Moore², R. Rivosecchi², L. Sacha², M. R. Morrell³, P. G. Sanchez⁴, J. F. McDyer³, J. C. Coons¹.
¹Pharmacy and Therapeutics, University of Pittsburgh, Pittsburgh, PA, ²Pharmacy, UPMC Presbyterian Hospital, Pittsburgh, PA, ³Pulmonary, Allergy and Critical Care Medicine, University of Pittsburgh, Pittsburgh, PA, ⁴Cardiothoracic Surgery, University of Pittsburgh, Pittsburgh, PA

(939) A Single Centre Experience of Isavuconazole in Lung Transplant Recipients: Effects on Sirolimus and Tacrolimus Concentrations; P. Ly¹, A. Braddy², Z. Butt¹, M. Carby², A. Reed², V. Gerovasili², H. Lyster¹.
¹Pharmacy Department, Royal Brompton and Harefield NHS Trust, London, United Kingdom, ²Department of Cardiothoracic Transplantation and Mechanical Circulatory Support, Royal Brompton and Harefield NHS Trust, London, United Kingdom

(940) A Novel Post-Transplant Multimodal Antibody Management Protocol for Highly Sensitized Lung Transplant Recipients; K. A. Young¹, K. Beermann², A. Hulbert², H. Berry³, H. Ali¹, J. M. Reynolds¹. ¹Internal Medicine, Division of Pulmonary, Allergy, and Critical Care, Duke University Hospital, Durham, NC, ²Pharmacy, Duke University Hospital, Durham, NC, ³PharmD, Duke University Hospital, Durham, NC

(941) Elexacaftor/Ivacaftor/Tezacaftor in Lung Transplant Recipients: A Case Series; L. M. Potter¹, B. Vargas², S. M. Rotolo¹, C. Q. McEwen³, K. Tsui⁴. ¹Department of Pharmacy, University of Chicago Medicine, Chicago, IL, ²College of Pharmacy, Roosevelt University, Chicago, IL, ³Department of Nutrition, University of Chicago Medicine, Chicago, IL, ⁴Department of Medicine, University of Chicago Medicine, Chicago, IL

(942) Amiodarone Use in Lung Transplant Recipients with New Onset Atrial Arrhythmias; T. Hathaway¹, E. Klipsch¹, R. Rachwan², I. Kutkut³, D. Roe², C. Hage², R. S. Mangus². ¹Indiana University School of Medicine, Indianapolis, IN, ²IU Health, Indianapolis, IN, ³New York Presbyterian Hospital, New York, NY

(943) Safety and Efficacy of Basiliximab for Immunosuppression Holiday in Lung Transplant Patients; M. M. Eiting¹, J. E. Clark¹, T. Astor², C. C. Rogers¹, J. Palafox², G. Waldman¹. ¹Pharmacy, Massachusetts General Hospital, Boston, MA, ²Pulmonary and Critical Care, Massachusetts General Hospital, Boston, MA

(944) Evaluation of Therapeutic Knowledge in Lung Transplant Recipients: Preliminary Results of a New Assessment Tool; R. Sanabrias Fernandez de Sevilla¹, M. Calvo Salvador¹, M. Aguilar Pérez², R. Laporta Hernandez², M. Lázaro Carrasco de la Fuente², M. Oregui Zarauz², T. Muñoz Gomez², A. Sánchez Guerrero¹, P. Ussetti Gil². ¹Pharmacy Department, University Puerta de Hierro Majadahonda Hospital, Madrid, Spain, ²Pulmonology Department, University Puerta de Hierro Majadahonda Hospital, Madrid, Spain

(945) Tacrolimus Dose Requirements in Lung Transplant Recipients on Systemic Azole Antifungals: The Influence of Race; K. S. Walter¹, T. Wert², R. Coakley³, L. J. Lobo³, R. A. Evans¹. ¹Department of Pharmacy, University of North Carolina Medical Center, Chapel Hill, NC, ²Eshelman School of Pharmacy, University of North Carolina, Chapel Hill, NC, ³Department of Medicine, University of North Carolina, Chapel Hill, NC

(946) CYP3A4 Polymorphisms and Acute Cellular Rejection in Lung Transplant Patients; A. Terravecchia¹, A. Beitelshees¹, D. Garbis¹, R. Vesselinov¹, A. Gandhi¹, N. Ladikos², A. Iacono¹, S. Pham³, I. Timofte¹. ¹Pulmonary and Critical Care, University of Maryland Medical Center, Baltimore, MD, ²Pulmonary and Critical Care, Suburban Hospital, Johns Hopkins Medicine, Baltimore, MD, ³Pulmonary and Critical Care, Mayo Clinic-Jacksonville, Jacksonville, FL

(947) Effects of Donor Smoking History on Early Post-Transplant Lung Function Measured by Oscillometry; N. Belousova¹, J. Ma², J. Wu³, A. Vasileva¹, R. Nadji¹, E. DeHaas¹, Q. W. Huang³, L. Singer³, S. Keshavjee⁴, R. Ghany⁵, T. Martinu⁴, J. Tikkanen⁴, M. Cypel⁴, C. Ryan⁵, C. Chow⁴. ¹Medicine, Toronto General Hospital, Toronto, ON, Canada, ²Biomedical Research Unit, Toronto General Hospital, Toronto, ON, Canada, ³Respirology, Toronto General Hospital, Toronto, ON, Canada, ⁴Lung Transplantation, Toronto General Hospital, Toronto, ON, Canada, ⁵Toronto General Hospital, Toronto, ON, Canada

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(948) Novel Measurements of Respiratory System Mechanics Demonstrate Important Features of Donor-Recipient Lung Volume Matching That May Link to Subsequent Chronic Lung Allograft Dysfunction; K. Nilsen¹, D. R. Darley², B. Levvey¹, B. M. Borg¹, J. Vazirani¹, J. Sim², R. Shirol², M. Plit², G. Snell¹. ¹Respiratory Medicine, The Alfred Hospital, Melbourne, Australia, ²Lung Transplant & Thoracic Medicine Unit, Saint Vincent's Hospital, Sydney, Australia

(949) Rising PGD Incidence Parallels Increased Recipient Disease Severity; E. Cantu¹, J. Diamond², Y. Suzuki¹, M. Cevasco¹, C. Bermudez¹, L. Dallara¹, T. Harmon¹, C. Vivar Ramon¹, S. Palmer³, L. Snyder³, M. G. Hartwig⁴, C. Calfee⁵, J. Kukreja⁶, J. Greenland⁵, J. Singer⁵, C. Hage⁷, K. M. Wille⁸, L. Benvenuto⁹, V. Lama¹⁰, J. Orens¹¹, P. Shah¹¹, J. McDyer¹², M. Crespo², M. Shashaty², G. Dhillon¹³, J. Hsu¹⁴, R. Gallop¹⁵, J. Christie². ¹Surgery, University of Pennsylvania, Philadelphia, PA, ²Medicine, University of Pennsylvania, Philadelphia, PA, ³Medicine, Duke University, Durham, NC, ⁴Surgery, Duke University, Durham, NC, ⁵Medicine, UCSF, San Francisco, CA, ⁶Surgery, UCSF, San Francisco, CA, ⁷Medicine, Indiana University, Indianapolis, IN, ⁸Medicine, University of Alabama at Birmingham, Birmingham, AL, ⁹Medicine, Columbia University, New York, NY, ¹⁰Medicine, University of Michigan, Ann Arbor, MI, ¹¹Medicine, Johns Hopkins University, Baltimore, MD, ¹²Medicine, University of Pittsburgh, Pittsburgh, PA, ¹³Medicine, Stanford University, Stanford, CA, ¹⁴Biostatistics, University of Pennsylvania, Philadelphia, PA, ¹⁵Mathematics, West Chester University, West Chester, PA

(950) Alveolar Epithelial Damage and Dysfunction as Common Features of Ischemia/Reperfusion Injury and Primary Graft Dysfunction in Lung Transplants; C. Landry¹, D. Adam¹, A. Privé², S. Bégin², A. Menaouar², J. Cailhier¹, P. Ferraro³, E. Brochiero¹. ¹Département de Médecine/Université de Montréal, CRCHUM/CHUM, Montréal, QC, Canada, ²CRCHUM/CHUM, Montréal, QC, Canada, ³Département de Chirurgie/Université de Montréal, CRCHUM/CHUM, Montréal, QC, Canada

(951) High Grade Primary Graft Dysfunction after Lung Transplantation is Associated with Acute Rejection but Not Chronic Allograft Dysfunction; H. Elgharably¹, K. S. Ayyat¹, T. Okamoto¹, L. Thuita², J. J. Yun¹, U. Ahmad¹, K. R. McCurry¹. ¹Thoracic & Cardiovascular Surgery, Cleveland Clinic, Cleveland, OH, ²Quantitative Health Sciences, Cleveland Clinic, Cleveland, OH

(952) Relationship between Phenotypic Characteristics from the Donors, Predictive Biomarkers from the Donor Grafts and the Development of Primary Graft Dysfunction in Lung Transplant Recipients; D. Adam¹, C. Landry¹, A. Privé², S. Bégin², A. Jalbert¹, C. Poirier¹, M. Chassé¹, E. Charbonney³, P. Ferraro⁴, E. Brochiero¹. ¹Département de Médecine, Université de Montréal, CRCHUM/CHUM, Montréal, QC, Canada, ²CRCHUM/CHUM, Montréal, QC, Canada, ³Département de Médecine, Université de Montréal, CRCHUM/CHUM et Centre de Recherche de l'HSCM, Montréal, QC, Canada, ⁴Département de Chirurgie, Université de Montréal, CRCHUM/CHUM, Montréal, QC, Canada

(953) Machine-Learning for Primary Graft Dysfunction in Lung Transplantation; J. Fessler¹, A. Vallee², C. Gouy-Pailler³, M. Davignon¹, M. Fischler¹, M. Le Guen¹. ¹Foch Lung Transplant Team, Suresnes, France, ²Diagnosis and Therapeutic Center, Hypertension and Cardiovascular Prevention Unit, Hôtel-Dieu Hospital, Assistance Publique, Paris, France, ³The French Alternative Energies and Atomic Energy Commission (CEA), Gif-sur-Yvette, France

(954) Predictors of Primary Graft Dysfunction Following Bilateral Lung Transplantation; M. Olejniczak¹, S. Jackson², S. Richardson³, D. Siers², S. Huddleston⁴, T. Perry³. ¹Anesthesiology, University of Minnesota, Minneapolis, MN, ²Univeristy of Minnesota, Minneapolis, MN, ³Anesthesiology, Univeristy of Minnesota, Minneapolis, MN, ⁴Division of Cardiothoracic Surgery, Department of Surgery, Univeristy of Minnesota, Minneapolis, MN

(955) Tele-Rehabilitation during the COVID-19 Pandemic: Experience of a Large Lung Transplant Program; L. Wickerson, D. Helm, C. Gottesman, D. Rozenberg, L. G. Singer, S. Keshavjee, A. Sidhu. University Health Network, Toronto, ON, Canada

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(956) Screening for Severe Hypogammaglobulinemia in Lung Transplant Recipients; I. M. Otani¹, J. Lew², M. Casey², A. Perez¹, L. Zhang³, L. Leard¹, S. Hays¹. ¹Medicine - Pulmonary, Critical Care, Allergy and Sleep, UCSF, San Francisco, CA, ²Medicine, UCSF, San Francisco, CA, ³Medicine - Epidemiology and Biostatistics, UCSF, San Francisco, CA

(957) Hypogammaglobulinemia Identification and Management in Lung Transplant Patients: Survey of Provider Practices; M. Casey, J. Lew, S. Hays, L. Leard, I. Otani. UCSF, San Francisco, CA

(958) Waste Not, Want Not: Decreasing Wastage through the Utilization of Thermal Controlled Technology with Ex Vivo Lung Perfusion; B. Johnson¹, J. Bucio², V. Jeevanandam², T. Song², G. Wool³. ¹Perfusion Services, UChicago Medicine, Chicago, IL, ²Department of Surgery, University of Chicago, Chicago, IL, ³Department of Pathology, University of Chicago, Chicago, IL

(959) Decreasing 30-day Readmissions for Pleural Effusions after Lung Transplant; J. T. Teraoka¹, K. H. Nguyen¹, D. Hart¹, S. Peace¹, L. Leard², G. Iyer², D. Gordon², B. Zuckerman², J. Pascual², J. Ponzio², A. Perez², N. Budanova³, Y. Gesthalter², B. Trinh⁴, J. Kukreja⁴, S. Hays², A. Venado². ¹School of Medicine, University of California San Francisco, San Francisco, CA, ²Department of Medicine, Division of Pulmonary, Critical Care, Allergy, and Sleep Medicine, University of California San Francisco, San Francisco, CA, ³Department of Adult Quality Improvement, University of California San Francisco, San Francisco, CA, ⁴Department of Surgery, Division of Adult Cardiothoracic Surgery, University of California San Francisco, San Francisco, CA

(960) One-year Mortality after Lung Transplant is Not a Reliable Indicator of Lung Transplant Center Performance; E. Wakeam. Thoracic Surgery, University of Michigan, ANN ARBOR, MI

(961) Seven-Year Clinical Results of an IgA-and IgM-Enriched Human Immunoglobulin-Based Therapy for Antibody-Mediated Rejection after Lung Transplantation; J. Salman¹, K. Aburahma¹, T. Siemeni¹, M. Avsar¹, D. Bobylev¹, N. Schwerk², W. Sommer³, M. Greer⁴, I. Tudorache⁵, C. S. Falk⁶, C. Kühn¹, A. Haverich¹, G. Warnecke³, F. Ius¹. ¹Department of Cardiothoracic, Transplant and Vascular Surgery, Hannover Medical School, Hannover, Germany, ²Department of Paediatrics, Hannover Medical School, Hannover, Germany, ³Department of Cardiac surgery, Heidelberg Medical School, Heidelberg, Germany, ⁴Department of Respiratory Medicine, Hannover Medical School, Hannover, Germany, ⁵Department of Cardiac Surgery, University Hospital Düsseldorf, Düsseldorf, Germany, ⁶Institute of Transplant Immunology, Hannover Medical School, Hannover, Germany

(962) Preformed Donor Specific Antibodies in Lung Transplantation - Perioperative Desensitization Using IgA- and IgM-Enriched Immunoglobulins; J. Salman¹, K. Aburahma¹, T. Siemeni¹, M. Avsar¹, D. Bobylev¹, N. Schwerk², M. Greer³, W. Sommer⁴, I. Tudorache⁵, C. S. Falk⁶, C. Kühn¹, A. Haverich¹, G. Warnecke⁴, F. Ius¹. ¹Department of Cardiothoracic, Transplant and Vascular Surgery, Hannover Medical School, Hannover, Germany, ²Department of Paediatrics, Hannover Medical School, Hannover, Germany, ³Department of Respiratory Medicine, Hannover Medical School, Hannover, Germany, ⁴Department of Cardiac surgery, Heidelberg Medical School, Heidelberg, Germany, ⁵Department of Cardiac Surgery, University Hospital Düsseldorf, Düsseldorf, Germany, ⁶Institute of Transplant Immunology, Hannover Medical School, Hannover, Germany

(963) Antibody-Mediated Rejection of the Lung in Patients with Short Telomeres; R. R. Fan, C. Newton, V. Kaza. Internal Medicine, University of Texas Southwestern Medical Center, Dallas, TX

(964) Prospective Study of Comparison between Transbronchial Forceps Biopsy and Cryoprobe in the Diagnosis of Acute Rejection after Lung Transplantation; E. Daffrè, D. Tosi, R. Carrinola, I. Righi, F. Damarco, P. Mendogni, A. Palleschi, M. Nosotti, A. Mazzucco, C. Diotti, L. Rosso. Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy

(965) Transbronchial Cryobiopsy Compared to Forceps Biopsy for Diagnosis of Acute Cellular Rejection in Lung Transplant Recipients; C. Steinack¹, A. Gaspert², J. Rüschoff², F. Gautschi¹, R. Hage¹, M. Schuurmans¹, D. Franzen¹. ¹Department of Pulmonology, University hospital Zurich, 8091 Zurich, Switzerland, ²Institute of Pathology and Molecular Pathology, University hospital Zurich, 8091 Zurich, Switzerland

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(966) Annual Surveillance Biopsies for Detection of Acute Cellular Rejection Have Limited Utility More Than Two Years Post-Transplant; C. M. Shaver, S. G. Norfolk, I. M. Robbins. *Allergy, Pulmonary, and Critical Care Medicine, Vanderbilt University Medical Center, Nashville, TN*

(967) Patterns of Daily Physical Activity and Sedentary Behaviors in Recent Lung Transplant Recipients; M. M. Altamimi¹, K. Jones¹, E. Moon¹, M. L. Vendetti¹, B. Willey¹, A. L. Hergenroeder², M. Morrell³, F. Sciruba³, A. DeVito Dabbs¹, C. Imes¹. ¹*School of Nursing, University of Pittsburgh, Pittsburgh, PA*, ²*School of Health & Rehabilitation Science, Department of Physical Therapy, University of Pittsburgh, Pittsburgh, PA*, ³*Division of Pulmonary, Allergy, and Critical Care Medicine, University of Pittsburgh, Pittsburgh, PA*

(968) Biomechanical Properties of the Porcine Trachea before and after Decellularization for Airway Transplantation; A. B. Guimaraes¹, A. T. Correa¹, P. M. Pego-Fernandes¹, M. J. Maizato², I. A. Cestari², P. F. Cardoso¹. ¹*Division of Thoracic Surgery, LIM 61, Organ and Tissue Laboratory, Instituto do Coração, Hospital das Clínicas HCFMUSP, Faculdade de Medicina, Universidade de Sao Paulo, Sao Paulo, SP, Brazil*, ²*Bioengenharia, Instituto do Coração, Hospital das Clínicas HCFMUSP, Faculdade de Medicina, Universidade de Sao Paulo, Sao Paulo, SP, Brazil*

(969) Jehovah's Witness Patients "Going the Extra Mile" for Bloodless LVAD Implantation; U. A. Siddiqi, P. S. Combs, C. Stonebraker, E. Gonzales, S. Mirzai, A. Lee, J. Cruz, K. Hu, T. Symalla, C. LaBuhn, S. Pinney, V. Jeevanandam. *University of Chicago, Chicago, IL*

(970) Thromboelastography of Limited Benefit in LVAD Patient Management; S. J. Fanelli¹, M. Elzeneini², A. Mahmoud³, E. I. Jeng⁴, G. Arnaoutakis⁴, M. Al-Ani³, A. Parker³, J. Vilaro³, J. Aranda³, M. M. Ahmed³. ¹*College of Medicine, University of Florida, Gainesville, FL*, ²*Internal Medicine, University of Florida, Gainesville, FL*, ³*Cardiovascular Medicine, University of Florida, Gainesville, FL*, ⁴*Thoracic and Cardiovascular Surgery, University of Florida, Gainesville, FL*

(971) Absolute Risk of Death is Lower in Left Ventricular Assist Device Patients with Good Anticoagulation Control; E. Janssen¹, N. van Rein², F. van der Meer³, S. Beeres¹, J. Jukema¹, L. Tops¹. ¹*Cardiology, Leiden University Medical Center, Leiden, Netherlands*, ²*Clinical Epidemiology, Leiden University Medical Center, Leiden, Netherlands*, ³*Thrombosis and Hemostasis, Leiden University Medical Center, Leiden, Netherlands*

(972) Time out of Therapeutic Range and Relationship with Thrombotic and Bleeding Outcomes amongst Patients with HeartMate 3 Continuous Flow Left Ventricular Assist Device; C. Louis¹, K. C. McGann², M. Bjelic¹, R. Bhagat², C. Cheyne¹, B. Barrus¹, S. Prasad¹, I. Gosev¹. ¹*Cardiothoracic Surgery, URMC, Rochester, NY*, ²*University of Rochester School of Medicine & Dentistry, URMC, Rochester, NY*

(974) Percent Time in Goal Range While on Bivalirudin or Heparin for Ventricular Assist Device Anticoagulation at a Single Children's Hospital; C. Boulos¹, J. Lee¹, J. Murray², J. Moss¹, S. Chen². ¹*Department of Pharmacy, Lucile Packard Children's Hospital Stanford, Palo Alto, CA*, ²*Department of Pediatrics, Stanford University School of Medicine, Palo Alto, CA*

(975) Safety of Direct Oral Anticoagulants in Left Ventricular Assist Device Patients; C. A. Kos¹, H. Lamba², R. Delgado³, P. Kazemian⁴, K. Barn¹. ¹*Advanced Heart Failure, Deborah Heart and Lung Center, Browns Mills, NJ*, ²*Surgery, Baylor College of Medicine, Browns Mills, NJ*, ³*Advanced Heart Failure & Transplant, Baylor College of Medicine, Houston, TX*, ⁴*Electrophysiology, Deborah Heart and Lung Center, Browns Mills, NJ*

(976) Neointima-Inducing Inflow Cannula for over 5 Years after Left Ventricular Assist Device Implantation; Y. Yamada, R. Hoki, N. Kikuchi, Y. Ichihara, H. Hattori, S. Saito, S. Nunoda, H. Niinami. *Department of Cardiovascular Surgery, Tokyo Women's Medical University, Tokyo, Japan*

(977) A Less Than 81mg of Aspirin in Heart Mate 3 is Safe Irrespective of Amount of Platelet Inhibition; R. A. Rao, L. Schenkelberg, K. Ballut, M. Jones, K. Saleem, J. Pickrrel, S. Korous, M. Guglin. *Advanced Heart Failure and Transplant Cardiology, Indiana University School of Medicine, Indianapolis, IN*

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(978) Elevated Blood Pressure Before Left Ventricular Assist Device Support Implant is Associated with an Increased Risk of Stroke; F. Castagna¹, S. Patel¹, S. Vukelic¹, S. Madan¹, O. Saeed¹, D. Sims¹, D. Goldstin², U. P. Jorde¹. ¹Cardiology, Montefiore Medical Center, New York City, NY, ²Cardiothoracic Surgery, Montefiore Medical Center, New York City, NY

(979) Argatroban as an Alternative Anticoagulant in Impella Supported Patients; H. Shah¹, A. I. Papolos², E. J. Molina³, S. S. Najjar⁴, A. Kadakkal⁴, M. Hofmeyer⁴, B. B. Kenigsberg², F. H. Sheikh⁴, P. H. Lam⁴, H. Kitahara³, J. E. Cohen³, L. Peters⁵, C. G. Willis⁵, C. F. Barnett². ¹Dept of Internal Medicine, Medstar Washington Hospital Center, Washington, DC, ²Dept of Cardiology, Medstar Washington Hospital Center, Washington, DC, ³Dept of Cardiac Surgery, Medstar Washington Hospital Center, Washington, DC, ⁴Dept of Cardiology-Advanced Heart Failure & Transplant, Medstar Washington Hospital Center, Washington, DC, ⁵Dept of Pharmacy, Medstar Washington Hospital Center, Washington, DC

(980) International Normalized Ratio Elevation as a Marker for Clinical Change in Mechanical Circulatory Support Patients; R. H. Cosgrove¹, T. Kazui², R. L. Basken¹, R. G. Smith³, J. R. Finger¹, S. D. Lick², N. K. Sweitzer⁴. ¹Department of Pharmacy Services, Banner University Medical Center - Tucson, Tucson, AZ, ²Department of Surgery, Division of Cardiothoracic Surgery, University of Arizona, Tucson, AZ, ³Artificial Heart Department, Banner University Medical Center - Tucson, Tucson, AZ, ⁴Department of Medicine, University of Arizona, Tucson, AZ

(981) Relationship between Von Willebrand Factor and Gastrointestinal Bleeding Compared EVAHEART and HeartMate II; S. Shintomi. Department of Cardiovascular Surgery, Tokyo Women's Medical University Hospital, Shinjuku, Japan

(982) Agreement between Anti-Factor Xa and Activated Partial Thromboplastin Time Measurements in Syncardia Total Artificial Heart Recipients Receiving Postoperative Anticoagulation with Unfractionated Heparin; M. Monteagudo Vela¹, C. Bowles¹, B. Raj¹, D. Robinson², A. Simon¹. ¹Department of Cardiothoracic Transplantation and Mechanical Circulatory Support, Harefield Hospital, London, United Kingdom, ²Department of Mathematics, University of Sussex, Brighton, United Kingdom

(983) Severe Pulmonary Hemorrhage after Left Ventricular Assist Device Implantation - Gambling with Luck?; M. I. Freundt, B. Panholzer, K. Huenges, C. Aldinger, C. Friedrich, J. Cremer, A. Haneya. Cardiovascular Surgery, University Hospital of Schleswig-Holstein, Campus Kiel, Kiel, Germany

(984) Seasonal Variation in Epistaxis Recurrence and Mortality in Left Ventricular Assist Device Patients; U. A. Siddiqi, P. S. Combs, S. Pinney, V. Jeevanandam. University of Chicago, Chicago, IL

(985) Associations of Gene Polymorphism in Kazakhstani Patients with Implanted LVAD; M. Zhalbinova¹, S. Rakhimova², M. Bekbosynova³, S. Andosova³, B. Abdirova³, A. Akilzhanova². ¹L. N. Gumilyov Eurasian National University, Nur-Sultan, Kazakhstan, ²National Laboratory Astana, Nazarbayev University, Nur-Sultan, Kazakhstan, ³JSC "National Research Cardiac Surgery Center", Nur-Sultan, Kazakhstan

(986) Reversal and Resumption of Anti-Thrombotic Therapy in VAD-Related Hemorrhage; R. Ikeda, Y. Ichihara, Y. Yamada, S. Saito, T. Nishinaka, H. Niinami. Department of Cardiovascular Surgery, Tokyo Women's Medical University, Tokyo, Japan

(987) Self-Efficacy and Adherence among Caregivers of Patients Implanted with Left Ventricular Assist Devices; J. Casida¹, S. E. Schroeder², K. Freed³, L. Young⁴, M. Pavol⁵. ¹School of Nursing, Johns Hopkins University, Baltimore, MD, ²Mechanical Circulatory Support, Bryan Heart Hospital, Lincoln, NE, ³VAD Program, Johns Hopkins Medicine, Baltimore, MD, ⁴School of Nursing, Augusta University, Augusta, GA, ⁵Neurology and Rehabilitation and Regenerative Medicine, Columbia University Medical Center, New York, NY

(988) Proper Left Ventricular Assist Device Outpatients Monitoring: VAD Coordinator Interface Despite COVID-19 Pandemic; S. Boschi, G. Gravina, M. Masetti, L. Giovannini, P. Prestinenzi, M. Sabatino, A. Loforte, S. Martin Suarez, A. Russo, D. Pacini, L. Potena. Bologna Academic Hospital, Bologna, Italy

POSTER TOPICS -- ADVANCED LUNG FAILURE AND TRANSPLANTATION

(989) Preoperative Diuretic Resistance and Risk of Right Heart Failure (RHF) Post-LVAD Implantation; D. Huang¹, P. Lacombe¹, G. Gulati², G. Couper³, K. Masashi³, J. Upshaw², A. Vest², D. DeNofrio², M. Kiernan². ¹Medicine, Tufts Medical Center, Boston, MA, ²Cardiology, Tufts Medical Center, Boston, MA, ³Surgery, Tufts Medical Center, Boston, MA

(990) Outflow Graft Narrowing of the Heartmate 3 Left Ventricular Assist Device: Incidence, Imaging Findings, and Outcomes; S. S. Jain, J. A. Fried, K. J. Clerkin, J. Raikhelkar, J. M. Griffin, P. Colombo, M. Yuzefpolskaya, Y. Naka, K. Takeda, G. Sayer, N. Uriel, J. Leb. *NewYork-Presbyterian/Columbia, New York, NY*

(991) Outcomes after Cardiovascular Implantable Electronic Device Pulse Generator Replacement in Patients with Durable Left Ventricular Assist Devices; D. H. Brahmhatt¹, K. Mirza², V. Rao³, R. Noad¹, A. Alba¹, F. Gustafsson², F. Billia¹, N. Aleksova¹. ¹Division of Cardiology, Peter Munk Cardiac Centre, University Health Network, Toronto, ON, Canada, ²Department of Cardiology, Rigshospitalet, University of Copenhagen, Copenhagen, Denmark, ³Division of Cardiovascular Surgery, Peter Munk Cardiac Centre, University Health Network, Toronto, ON, Canada

(992) Defining Predictors of RVAD Weaning Post-LVAD Implantation in a Multi-Institutional Retrospective Cohort; S. Kumar¹, M. H. Derbala², M. Rivas-Lasarte³, J. Ferrall², M. Cefalu², S. M. Rashid³, D. T. Joseph⁴, D. J. Goldstein⁵, U. P. Jorde³, A. Bhimaraj¹, E. E. Suarez⁶, S. A. Smith², D. B. Sims³, A. Guha¹. ¹Cardiology, Houston Methodist DeBakey Heart and Vascular Center, Houston, TX, ²Cardiology, The Ohio State University Wexner Medical Center, Columbus, OH, ³Cardiology, Montefiore Medical Center, Bronx, NY, ⁴Internal Medicine, Houston Methodist Hospital, Houston, TX, ⁵Cardiothoracic and Vascular Surgery, Montefiore Medical Center, Bronx, NY, ⁶Cardiothoracic Surgery, Houston Methodist DeBakey Heart and Vascular Center, Houston, TX

(993) Driveline Infections after Implantation of a Left Ventricular Assist Device; K. Vandersmissen¹, M. Roppe¹, W. Droogne², S. Jacobs¹, B. Meyns¹. ¹Cardiac Surgery, UZ Leuven, Leuven, Belgium, ²Cardiology, UZ Leuven, Leuven, Belgium

(994) Bridge from Central Extracorporeal Life Support to Durable LVAD in Acute Heart Failure Elevates a Risk of Stroke Long-Term; K. Tonai, S. Fukushima, N. Tadokoro, N. Fukushima, T. Fujita. *Department of Cardiovascular Surgery, National Cerebral and Cardiovascular Center, Suita-City, Osaka, Japan*

(995) Durable Left Ventricular Assist Device Outflow Graft Obstructions: Clinical Characteristics and Outcomes; C. J. Peters, M. Vidula, R. S. Zhang, T. C. Hanff, P. Atluri, C. Bermudez, M. Acker, J. Giri, L. R. Goldberg, J. Mazurek, K. Urgo, J. Wald, D. Jagasia, E. Y. Birati. *Cardiology, University of Pennsylvania, Philadelphia, PA*

(996) Arrhythmia Burden from Implantable Device Interrogation during Long-Term Follow-Up in LVAD Patients; H. Vidula, A. Chen, S. Tankut, A. Yoruk, J. Alexis, I. Gosev, D. Huang, M. Aktas, S. Mcnitt, I. Goldenberg, A. Younis. *Univ of Rochester, Rochester, NY*

(997) Causes and Temporal Patterns of Hospital Readmissions after Implantation of the HeartMate 3 Left Ventricular Assist Device: A Comparison with HeartMate II; H. Shih¹, Y. Ning², P. Kurlansky¹, A. Melehy¹, Y. Kaku¹, V. Topkara¹, M. Yuzefpolskaya³, P. Colombo³, G. Sayer³, N. Uriel³, Y. Naka¹, K. Takeda¹. ¹Division of Cardiothoracic and Vascular Surgery, Department of Surgery, Columbia University Medical Center, New York, NY, ²Department of Surgery, Center for Innovation and Outcomes Research, Columbia University Medical Center, New York, NY, ³Division of Cardiology, Department of Medicine, Columbia University Medical Center, New York, NY

(998) Driveline Fractures in the Heartmate II Left Ventricular Assist Device - A Single Center Experience in Asia; K. L. Kerk, T. E. Tan, V. Chao, J. Tay, C. L. Neo, J. Tan, J. Leam, C. Sivathasan. *National Heart Centre Singapore, Singapore, Singapore*

(999) A Novel Metrics to Predict Right Heart Failure after Left Ventricular Assist Device Implantation; E. Valente¹, C. Stefanidis², J. Vachiéry¹, C. Dewachter¹, E. Engelman³, F. Vanden Eyden², A. Roussoulières¹. ¹Cardiology, Hôpital Erasme, Brussels, Belgium, ²Cardiac Surgery, Hôpital Erasme, Brussels, Belgium, ³EW Data Analysis, Hôpital Erasme, Brussels, Belgium

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1000) Relapsing Low Flow Alarms Due to Abnormal Inflow Cannula Position in Patients with Left Ventricular Assist Devices; C. Zijderhand¹, W. Knol², R. Budde², J. Bekkers¹, A. Bogers¹, K. Caliskan³. ¹Cardiothoracic Surgery, Erasmus Medical Center, Rotterdam, Netherlands, ²Cardiovascular Radiology, Erasmus Medical Center, Rotterdam, Netherlands, ³Cardiology, Erasmus Medical Center, Rotterdam, Netherlands

(1001) Increased Risk of Pleural Effusion Requiring Therapeutic Drainage Following 3rd Generation vs 2nd Generation Left Ventricular Assist Device Implantation. A Single Centre Analysis; P. D. Callan, K. Santhanakrishnan, S. Shaw, V. Mehta, M. Al-Aloul, S. Kore, I. Dimarakis, R. Venkateswaran. Wythenshawe Hospital Cardiothoracic Transplant Unit, Manchester Foundation Trust, Manchester, United Kingdom

(1002) “Baskets” of Concomitant Adverse Events Post LVAD Implantation; F. Movahedi¹, J. F. Antaki². ¹Electrical and Computer Engineering, University of Pittsburgh, Pittsburgh, PA, ²Biomedical Engineering, Cornell University, Ithaca, NY

(1003) Risk of Stroke in Patients with Left Ventricular Assist Device Who Had Myocardial Recovery; S. Sundaraveel, M. Urban, J. Um, A. Albulushi. University of Nebraska Medical Center, Omaha, NE

(1004) Clinical Characteristics and Outcomes of Extracorporeal Membrane Oxygenation Support in COVID-19: Retrospective Study of Single Center Experience; C. Kurihara, A. Manerikar, V. Kandula, A. Bharat. Northwestern University Feinberg School of Medicine, Chicago, IL

(1005) A Case Series of Black and Hispanic COVID-19 Patients Treated with ECMO; C. Tejera Quesada¹, K. Chen¹, R. Reddy¹, E. Grajeda², P. Dayanand², A. Sabates², W. Ghumman², R. Chait². ¹Division of Internal Medicine, University of Miami/ JFK Medical Center, Atlantis, FL, ²Division of Cardiology, University of Miami/ JFK Medical Center, Atlantis, FL

(1006) Risk Factors and Clinical Significance of Vasoplegia after LVAD Implantation; A. El Rafei¹, J. Schultz², M. Masotti³, V. Maharaj², M. Fraser², M. Mutschler², C. M. Martin², T. Alexy², F. Kamdar², R. Knoper⁴, A. Shaffer⁴, R. John⁴, R. Cogswell². ¹Department of Medicine, University of Minnesota, Minneapolis, MN, ²Department of Medicine, Division of Cardiology, University of Minnesota, Minneapolis, MN, ³Department of Biostatistics, University of Minnesota, Minneapolis, MN, ⁴Department of Surgery, Division of Cardiovascular Surgery, University of Minnesota, Minneapolis, MN

(1007) Corticosteroids as Adjunct Therapy for Refractory Vasoplegia Following Left Ventricular Assist Device Implantation; D. Logan, T. Luu, B. Lakhani, B. Howard, M. Wilim, M. Rivas, D. Snipelisky. Wellstar Kennestone, Marietta, GA

(1008) Post Left Ventricular Assist Device Implantation Platelets Count Alterations are Related to Gender, Race and Early Mortality; A. Milwidsky¹, M. Haroun², O. Saeed¹, D. Goldstein³, S. J. Forest³, M. Uehara³, T. Chinnadurai⁴, S. Madan¹, U. Jorde¹. ¹Heart Failure, Cardiac Transplantation & Mechanical Circulatory Support, Division of Cardiology, Montefiore Medical Center, New York, NY, ²Medicine, Montefiore Medical Center, New York, NY, ³Cardiothoracic Surgery, Montefiore Medical Center, New York, NY, ⁴Cardiology, Montefiore Medical Center, New York, NY

(1009) A Comparison of Novel Developed Centrifugal-Flow and Conventional Pulsatile-Flow Extracorporeal Left Ventricular Assist Devices as Bridging Strategy in Patients with Refractory Heart Failure; Sub-Analysis of NCVC-BTD_01 Trial; T. Watanabe¹, O. Seguchi¹, M. Yanase¹, T. Fujita², S. Nakajima¹, K. Kuroda¹, H. Mochizuki¹, E. Anegawa¹, Y. Sujino¹, N. Yagi¹, K. Yoshitake¹, S. Fukushima², T. Saito², N. Tadokoro², N. Kitahata¹, T. Tsukiya³, N. Katagiri³, T. Mizuno¹, K. Onda⁴, E. Tatsumi³, N. Fukushima¹. ¹Transplantation, National Cerebral and Cardiovascular Center, Suita, Japan, ²Cardiovascular Surgery, National Cerebral and Cardiovascular Center, Suita, Japan, ³Artificial Organs, National Cerebral and Cardiovascular Center, Suita, Japan, ⁴Data science, National Cerebral and Cardiovascular Center, Suita, Japan

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1010) Outcomes of Temporary Percutaneous Right Ventricular Assist Devices in Right Ventricular Failure; A. Akhmerov¹, M. Kearns², L. Chou¹, M. Aguilon¹, D. Megna¹, D. Emerson¹, F. Esmailian¹, A. Trento¹, D. Ramzy¹.
¹Cardiac Surgery, Cedars-Sinai Medical Center, Los Angeles, CA, ²Cardiac Surgery, Cedars-Sinai Medical Center, LOS ANGELES, CA

(1011) Anatomical Human Fitting of the Bivacor Total Artificial Heart; S. Emmanuel¹, P. Jansz¹, D. McGiffin², C. Kure², A. Watson¹, M. Connellan¹, E. Granger¹, D. Timms³, C. Hayward¹. ¹St Vincent's Hospital (Sydney), Darlinghurst, Australia, ²The Alfred Hospital, Melbourne, Australia, ³BiVACOR Inc, Houston, TX

(1012) Hands-up! Dealing with Electromagnetic Interference in Maglev LVADs; B. Schnegg¹, R. Deveza¹, T. Meredith¹, D. Robson¹, A. Schnegg-Kaufmann², N. Kaufmann³, M. Fürholz³, C. Hayward¹. ¹Heart and Lung clinic, St.-Vincent Hospital, Darlinghurst, Australia, ²Lowy Cancer Research Centre and School of Medical Sciences, Faculty of Medicine, University of New South Wales, Sydney, Australia, ³Centre for Advanced Heart Failure, Inselspital, Bern University Hospital, Bern, Switzerland

(1013) The Utility of Televisits in Patients with a Left Ventricular Assist Device; S. Slomovich¹, J. Raikhelkar¹, J. Fried¹, J. Griffin¹, K. Clerkin¹, Z. B. Roth¹, A. Kim¹, M. Farr¹, V. Topkara¹, F. Latif¹, K. Axsom¹, M. Yuzefpolskaya¹, P. Colombo¹, K. Takeda², Y. Naka², N. Uriel¹, G. Sayer¹. ¹Medicine, Columbia University Irving Medical Center, New York, NY, ²Surgery, Columbia University Irving Medical Center, New York, NY

(1014) Incidence and Clinical Findings Associated to Incomplete Hemodynamic Unloading of the Left Ventricle under LVAD Support; M. J. RUIZ-CANO, L. Ramazyan, R. Schramm, S. Rojas Hernandez, L. Paluszkiwicz, J. Gummert, M. Morshuis. *Thorax- und Cardiovascular Surgery, Herz- und Diabeteszentrum NRW, Bad Oeynhausen, Bad Oeynhausen, Germany*

(1015) Telehealth for Left Ventricular Assist Device Patients: Current Perceptions and Practices in the United States; H. Vidula¹, B. Barrus¹, S. Feitell², A. Kilic³, D. Moin⁴, N. Moss⁵, O. Saeed⁶, S. Shah⁷, P. Atluri⁸, E. Birati⁸.
¹Univ of Rochester, Rochester, NY, ²Rochester General Hospital, Rochester, NY, ³University of Pittsburgh, Pittsburgh, PA, ⁴Robert Wood Johnson Medical Center, New Brunswick, NJ, ⁵Mt Sinai, New York City, NY, ⁶Montefiore, New York City, NY, ⁷Northwell, New York City, NY, ⁸Univ of Pennsylvania, Philadelphia, PA

(1016) Lung Ultrasound in Left Ventricular Assist Device Patients: A Feasibility Study; M. Rivas-Lasarte, N. Wan, D. Fauvel, M. Taveras, S. Vukelic, O. Saeed, U. P. Jorde, D. B. Sims. *Cardiology, Montefiore Medical Center, Bronx, NY, NY*

(1017) Hypertrophic Cardiomyopathy with Left Ventricular Systolic Dysfunction: Clinical Outcome after Implantable Continuous-Flow Left Ventricular Assist Device Implantation; N. Yagi¹, O. Seguchi¹, Y. Masanobu¹, W. Takuya¹, K. Kensuke¹, N. Seiko¹, M. Hiroki¹, Y. Koichi¹, S. Yasumori¹, A. Eiji¹, I. Yoichi¹, K. Shotaro¹, T. Naoki², S. Tetsuya², F. Satsuki², F. Tomoyuki², F. Norihide¹. ¹Transplant Medicine, National Cerebral and Cardiovascular Center Hospital, Suita, Japan, ²Cardiovascular Surgery, National Cerebral and Cardiovascular Center Hospital, Suita, Japan

(1018) Cannula Position Confirmation before Transportation of Venovenous ECMO Patients is Not Necessary: A Mobile ECMO Program Experience; A. Jaiswal¹, N. Gadel², E. Kurtzman¹, C. Drake¹, D. Underhill³, J. Gluck¹.
¹Advanced Heart Failure and Transplant, Hartford Hospital, Hartford, CT, ²Department of Internal Medicine, University of Connecticut, Farmington, CT, ³Cardiothoracic surgery, Hartford Hospital, Hartford, CT

(1019) Racial Differences in In-Hospital Outcomes after the Use of Temporary Mechanical Circulatory Support as a Bridge to Heart Transplant; E. Siddiqui¹, A. K. Okoh², M. Tibuakuu³, S. Hirji⁴, I. Hameed⁵, A. Osho⁶, S. Singh², J. Grewal², M. Montgomery², M. Camacho², C. A. Bravo⁷. ¹Cardiology, NYU Langone Medical Center, New York, NY, ²Cardiology, RWJ Barnabas Health Newark Beth Israel Medical Center, Newark, NJ, ³Cardiology, Johns Hopkins University Hospital, Baltimore, MD, ⁴Brigham and Womens Hospital, Harvard School of Medicine., Boston, MA, ⁵Cardiology, Yale University Hospital, New Haven, CT, ⁶Cardiology, Massachusetts General Hospital, Harvard School of Medicine., Boston, MA, ⁷Cardiology, Department of Medicine, Division of Cardiology, University of Washington, Washington, WA

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1020) An Analysis of Cardiac Amyloidosis Patients in Cardiogenic Shock Bridged with Temporary Mechanical Circulatory Support to Durable Left Ventricular Assist Device and Heart Transplant; V. K. Randhawa¹, R. Lee¹, L. Ives¹, E. G. Soltesz¹, M. Z. Tong¹, R. C. Starling¹, J. Hernandez-Montfort², M. Hanna¹, J. D. Estep¹. ¹Cleveland Clinic Foundation, Cleveland, OH, ²Cleveland Clinic Florida, Weston, FL

(1021) Short and Long-Term Outcomes of Venous-Arterial ECMO for Treatment of Perioperative Cardiogenic Shock in 576 Patients Undergoing Cardiac Surgery; A. Aboud¹, B. Fujita¹, F. Hütting², A. Zittermann², R. Al-Khalil², L. Kitzner², S. Ensminger¹, J. Gummert². ¹Cardiac Surgery, University Schleswig Holstein, Luebeck, Germany, ²Cardiac Surgery, Heart and Diabetes Center Bad Oeynhausen, Bad Oeynhausen, Germany

(1022) Clinical and Hemodynamic Efficacy of Left Ventricular Unloading during Venous-Arterial Extracorporeal Membrane Oxygenation; S. Char¹, J. Fried², A. Melehy¹, A. Masoumi², G. Sayer², N. Uriel², Y. Naka¹, S. Mehta¹, G. O'Connell¹, Y. Ning³, P. Kurlansky³, K. Takeda¹. ¹Department of Surgery, Division of Cardiothoracic and Vascular Surgery, Columbia University Medical Center, New York, NY, ²Department of Medicine, Division of Cardiology, Columbia University Medical Center, New York, NY, ³Department of Surgery, Center for Innovation and Outcomes Research, Columbia University Medical Center, New York, NY

(1023) Early Clinical Experience with Impella 5.5 at a Large Tertiary Care Center; P. J. Kennel¹, H. Lumish¹, Y. Kaku², J. Fried¹, A. Kirtane¹, D. Karpalotis¹, H. Takayama², Y. Naka², G. Sayer¹, N. Uriel¹, K. Takeda¹, A. Masoumi¹. ¹Cardiology, Columbia University Medical Center, New York, NY, ²Cardiothoracic Surgery, Columbia University Medical Center, New York, NY

(1024) Role of Scoring Systems Calculation in Predicting Extracorporeal Life Support Patients' Outcomes: A Single Centre Experience; A. Loforte, M. Fiorentino, G. Gliozzi, G. Cavalli, G. Coppola, C. Mariani, L. Botta, S. Martin Suarez, D. Pacini. Cardio-Thorac-Vascular Department, S. Orsola Hospital, University of Bologna, Bologna, Italy

(1025) The Impella 5.5 as a Short Term Mechanical Circulatory Support Device in High Risk Cardiac Surgery; N. D. Patel. Cardiac Surgery, Palm Beach Gardens Medical Center, Palm Beach Gardens, FL

(1026) Impact of Mitral Valve Prosthesis on Stroke after Insertion of Venous-Arterial Membrane Oxygenation for Postcardiotomy Shock; S. Ohira, D. Spielvogel, R. Malekan, J. B. Goldberg, P. J. Spencer, S. L. Lansman, M. Kai. Cardiothoracic Surgery, Westchester Medical Center, Valhalla, NY

(1027) Outcomes of Venous-Venous Extracorporeal Membrane Oxygenation for Post-Cardiotomy Acute Respiratory Distress Syndrome; L. Hafen, J. J. Squiers, M. Hamandi, W. Brinkman, K. Harrington, K. Hutcheson, G. Jett, D. Moore, W. Ryan, J. Schaffer, R. Smith, J. DiMaio, T. George. Baylor Scott & White The Heart Hospital, Plano, TX

(1028) A Bridged Approach to Heart Transplantation Using ECMO and Total Artificial Heart Implantation; P. Noly¹, J. Moriguchi², K. Shah³, A. Anyanwau⁴, C. Mahr⁵, E. Skipper⁶, M. Cossette¹, Y. Lamarche¹, M. Carrier¹. ¹Montreal Heart Institute, Montreal, QC, Canada, ²CedarS-Sinai Heart Institute, Los Angeles, QC, ³Pauley Heart Center, Virginia Commonwealth University, QC, ⁴Icahn School of Medicine at Mount Sinai, New York, QC, ⁵University of Washington, Seattle, QC, ⁶Carolinas Medical Center, Charlotte, QC

(1029) The Weight is Over...Obesity Does Not Adversely Affect Venous-Arterial Extracorporeal Membrane Oxygenation Outcomes; M. Salna¹, J. Fried², A. Masoumi², A. Melehy¹, Y. Ning¹, P. Kurlansky¹, D. Brodie², G. Sayer², N. Uriel², Y. Naka¹, H. Takayama¹, K. Takeda¹. ¹Surgery, Columbia University Irving Medical Center, New York, NY, ²Medicine, Columbia University Irving Medical Center, New York, NY

(1030) Venous-Arterial to Venous Venous Extra-Corporeal Membrane Oxygenation Conversion Methodology for Improving Cardiogenic Shock Outcomes: A Paradigm Shift; C. G. Gidea¹, B. Toy², A. Reyentovich¹, A. Fargnoli², G. Piper², T. Lewis¹, T. Saraon¹, S. Rao¹, R. Goldberg¹, B. Kadosh¹, Z. Kon², N. Moazami², D. Smith². ¹Advanced Heart Failure and Heart Transplantation, NYU Langone Health, New York, NY, ²Department of Cardiothoracic Surgery, NYU Langone Health, New York, NY

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1031) Use of Venoarterial Extracorporeal Membrane Oxygenation in the Management of Massive Pulmonary Embolism and Cardiac Arrest; G. Makdisi¹, T. Tribble², M. Sekela². ¹Albany College of Medicine, Albany, NY, ²University of Kentucky, Lexington, KY

(1032) Contemporary Outcomes for Cardiogenic Shock Patients Bridged to Advanced Heart Therapies with Temporary Mechanical Circulatory Support; S. K. Singh¹, I. Anzai², Y. Kaku¹, J. Fried³, A. Masoumi³, L. Farhana³, M. Farr³, M. Yuzefpolskaya³, P. Colombo³, G. Sayer³, N. Uriel¹, Y. Naka¹, K. Takeda¹. ¹Surgery, New York Presbyterian Columbia University Medical Center, New York, NY, ²Columbia University Medical Center, New York, NY, ³Medicine, New York Presbyterian Columbia University Medical Center, New York, NY

(1033) The Role of Temporary Surgical Ventricular Assist Device for Treatment of Acute Myocardial Infarction and Refractory Cardiogenic Shock in the Percutaneous Device Era; S. K. Singh¹, L. Witer¹, Y. Kaku¹, A. Masoumi², J. Fried², M. Yuzefpolskaya², P. C. Colombo², G. Syer², N. Uriel², Y. Naka¹, H. Takayama¹, K. Takeda¹. ¹Surgery, New York Presbyterian Columbia University Medical Center, New York, NY, ²Medicine, New York Presbyterian Columbia University Medical Center, New York, NY

(1034) Use of Percutaneous Continuous Flow Ventricular Assist Devices in Adults with Congenital Heart Disease; C. R. Broda¹, W. C. Frankel², A. P. Nair³, H. P. Tunuguntla¹, M. C. Anders⁴, S. C. Tume⁴, E. J. Hickey⁵, A. M. Qureshi¹, D. R. Parekh¹, A. B. Civitello³, I. Adachi⁵. ¹Pediatric and Adult Congenital Cardiology, Texas Children's Hospital/Baylor College of Medicine, Houston, TX, ²Baylor College of Medicine, Houston, TX, ³Cardiology, Baylor St. Luke's Medical Center/Baylor College of Medicine, Houston, TX, ⁴Critical Care, Texas Children's Hospital/Baylor College of Medicine, Houston, TX, ⁵Congenital Heart Surgery, Texas Children's Hospital/Baylor College of Medicine, Houston, TX

(1035) Outcome of CentriMag Extracorporeal Mechanical Circulatory Support Use in Critical Cardiogenic Shock (INTERMACS I) Patients; A. Joshi, V. Mehta, J. Hasan, J. Dimarakis, J. Barnard, P. Callan, S. Shaw, R. Venkateswaran. Cardiothoracic and Transplant, Wythenshawe Hospital, Manchester, United Kingdom

(1036) Switching to Impella 5.0 Decreases Need for Transfusion in Patients Undergoing Temporary Mechanical Circulatory Support; L. Castro¹, S. Zipfel¹, G. Söffker¹, E. Lubos², M. Rybczniski², H. Grahn², B. Schrage², A. Gebauer¹, M. J. Barten¹, D. Westermann², H. Reichenspurner¹, A. M. Bernhardt¹. ¹Department of Cardiovascular Surgery, Univ Heart and Vascular Ctr Hamburg, Hamburg, Germany, ²Department of Cardiology, Univ Heart and Vascular Ctr Hamburg, Hamburg, Germany

(1037) FDG PET/CT for Early Detection of Ventricular Assist Device Infection Prior to Positive Microbiological Culture; W. J. Klass¹, L. A. Ziegler², E. N. Sorensen¹, V. Dilsizian³, E. D. Feller⁴. ¹Division of Cardiac Surgery, University of Maryland Medical Center, Baltimore, MD, ²Division of Cardiac Surgery, University of Pittsburgh Medical Center Procirca Mechanical Circulatory Support, Pittsburgh, PA, ³Division of Nuclear Medicine, University of Maryland Medical Center, Baltimore, MD, ⁴Division of Cardiology, University of Maryland Medical Center, Baltimore, MD

(1038) Association between Continuous Flow Left Ventricular Assist Device Infections Requiring Long-Term Antibiotic Use and Post Heart Transplant Morbidity and Mortality; J. K. Vishram-Nielsen¹, M. Lambadaris², J. Amadio², S. Husain², V. Rao², F. Billia², A. Alba². ¹Department of Cardiology, Rigshospitalet, University Hospital of Copenhagen, & Heart Failure and Transplantation Program, Toronto General Hospital, University Health Network, Toronto, ON, Canada, ²Heart Failure and Transplantation Program, Toronto General Hospital, University Health Network, Toronto, ON, Canada

(1039) A 10 Years Retrospective Cohort Review on Driveline Infection in Ventricular Assist Devices; B. Schnegg¹, G. Spano², F. Gisler³, L. Walti⁴, A. Schnegg-Kaufmann⁵, M. Martinelli², M. Fürholz², C. Hayward⁶. ¹Heart and Lung Clinic, St.-Vincent Hospital, Darlinghurst, Australia, ²Centre for Advanced Heart Failure, Inselspital, Bern University Hospital, Bern, Switzerland, ³Department of Cardiac Surgery, Inselspital, Bern University Hospital, Bern, Switzerland, ⁴Infectious Disease Department, Inselspital, Bern University Hospital, Bern, Switzerland, ⁵Lowy Cancer Research Centre and School of Medical Sciences, Faculty of Medicine, University of New South Wales, Sydney, Australia, ⁶Heart and Lung Clinic, St.-Vincent's Hospital, Darlinghurst, Australia

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1040) Primary Prevention Strategies for Driveline Infection during Left Ventricular Assist Device Support: A Survey of 55 Centers within the United States; O. Saeed¹, N. Moss², B. Barrus³, H. Vidula⁴, S. Shah⁵, S. Feitell⁶, A. Kilic⁷, D. Moin⁸, P. Atluri⁹, E. Barati¹⁰. ¹Medicine (Cardiology), Montefiore Medical Center, Bronx, NY, ²Medicine (Cardiology), Mount Sinai Medical Center, New York, NY, ³Cardiothoracic Surgery, University of Rochester Medical Center, Rochester, NY, ⁴Medicine (Cardiology), University of Rochester Medical Center, Rochester, NY, ⁵Medicine (Cardiology), NorthWell Health, Manhasset, NY, ⁶Medicine (Cardiology), Rochester Regional Medical Center, Bronx, NY, ⁷Cardiothoracic Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA, ⁸Medicine (Cardiology), Robert Wood Johnson University Hospital, New Brunswick, NJ, ⁹Cardiothoracic Surgery, University of Pennsylvania, Philadelphia, PA, ¹⁰Medicine (Cardiology), University of Pennsylvania, Philadelphia, PA

(1041) Incidence of Surgical-Related Infections in Temporary Mechanical Circulatory Support Patients Using Narrow Spectrum versus Broad Spectrum Peri-Operative Antibiotic Prophylaxis; L. Lam¹, L. Czer², R. Cole², M. Zhao³, S. Chen³, T. Le³, L. Kasper³, T. Singer-Englar², M. Aguillon², K. Knabe², N. Huie², W. Chen², C. Runyan², J. Moriguchi², R. Zabner², J. A. Kobashigawa², F. Esmailian². ¹Cedars-Sinai Medical Center, Los Angeles, CA, ²Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA, ³UCSF School of Pharmacy, San Francisco, CA

(1042) Fevers after Impella Implantation are Common but Rarely Clinically Significant; A. T. Lanfear¹, M. Hoffman¹, M. Hamandi¹, J. J. Squiers¹, A. Afzal², D. A. Rawitscher², J. M. DiMaio³, T. J. George³. ¹Cardiovascular Research, Baylor Scott & White--The Heart Hospital, Plano, TX, ²Cardiology, Baylor Scott & White--The Heart Hospital, Plano, TX, ³Cardiothoracic Surgery, Baylor Scott & White--The Heart Hospital, Plano, TX

(1043) Limitation of ROC in Evaluation of Classifiers for Imbalanced Data; F. Movahedi¹, J. F. Antaki². ¹Electrical and Computer Engineering, University of Pittsburgh, Pittsburgh, PA, ²Biomedical Engineering, Cornell University, Ithaca, NY

(1044) Micro RNA Expression of Heart Failure Patients and Responses to Left Ventricular Assistant Device Support; K. Dhar, H. Basma, F. Qiu, J. Um, B. Lowes. Internal Medicine, University of Nebraska Medical Center, Omaha, NE

(1045) Preoperative Body Mass Index < 45 Kg/m² Predicts Clinical Success after Bariatric Surgery in Patients with Ventricular Assist Devices; A. daSilva-deAbreu¹, B. Alhafez², K. Garikapati³, Y. Curbelo-Pena⁴, J. Wooldridge⁵, S. Desai³, C. Eiswirth³, S. Krim³, H. Patel³, J. F. Loro-Ferrer⁶, C. J. Lavie³, H. O. Ventura³, S. A. Mandras³. ¹Ochsner Clinic Foundation; The UQ Ochsner Clinical School; Universidad de Las Palmas de Gran Canaria, New Orleans and Las Palmas de Gran Canaria (Spain), LA, ²Department of Internal Medicine, Ohio State University, Columbus, OH, ³John Ochsner Heart & Vascular Institute, Ochsner Clinic Foundation, New Orleans, LA, ⁴Service of General Surgery, Consorci Sanitari de l'Alt Penedes i Garraf, Barcelona, Spain, ⁵Department of General Surgery, Ochsner Clinic Foundation, New Orleans, LA, ⁶Universidad de Las Palmas de Gran Canaria, Las Palmas de Gran Canaria, Spain

(1046) Effects and Outcomes of Pulmonary Function Testing after Left Ventricular Assist Device Implantation; R. Wu¹, S. Zhang², R. Mhaskar³, C. Caldeira⁴, G. Makdisi⁵. ¹Cardiology, University of South Florida, Tampa, FL, ²University of South Florida, Tampa, FL, ³Internal Medicine, University of South Florida, Tampa, FL, ⁴Cardiothoracic Surgery, Largo Medical Center, Largo, FL, ⁵Cardiothoracic Surgery, Albany Medical Center, Albany, NY

(1047) A Signal in the Noise: Noninvasive Acoustical Evaluation of Continuous Flow Left Ventricular Assist Device; D. Rodgers¹, C. Raikar¹, E. Kruse², P. Combs¹, J. Mazurski², J. Cruz¹, S. Lupo¹, K. Hu³, B. Smith², A. B. Nguyen², B. Chung², S. Kalantari², N. Sarswat², G. Kim², J. Grinstein², N. Uriel², C. Labuhn¹, D. Onsager¹, T. Song¹, N. Hibino¹, T. Ota¹, S. Pinney², V. Jeevanandam¹. ¹Cardiac Surgery, University of Chicago, Chicago, IL, ²Cardiology, University of Chicago, Chicago, IL, ³University of Chicago, Chicago, IL

(1048) Estimation of Total Cardiac Output Using Non-Invasive Parameters in HeartMate 3 Patients; E. Castagna¹, G. M. Mondellini², L. Braghieri², A. Kim², K. Takeda², Y. Naka², G. T. Sayer², N. Uriel², M. Yuzefpolskaya², P. C. Colombo². ¹Albert Einstein College of Medicine, Montefiore Medical Center, Bronx, NY, ²Columbia University Irving Medical Center, New York, NY

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1049) Comparison of Hemodynamic and Biochemical Impact of Two Micro-Axial Ventricular Assist Devices [Impella 5.5 vs. 5.0]; M. Kawabori¹, I. C. Nickel¹, T. Nordan¹, C. Hirst², M. A. Khan¹, K. L. Thayer¹, N. K. Kapur¹. ¹Tufts Medical Center, Boston, MA, ²University of Tennessee Medical Center, Knoxville, TN

(1050) Association of Multidisciplinary Heart Failure Team with Outcomes in Patients Requiring Extracorporeal Membrane Oxygenation; G. Gabra¹, I. Hamour¹, M. Soliman¹, W. El Tahlawy¹, Y. Manla², F. Al Badarin¹, G. Bajwa³, F. Alsindi¹, H. Ghalib¹, R. Ferrer¹, V. Kakar⁴, F. Bader¹. ¹Cardiology, Heart and Vascular Institute, Cleveland Clinic Abu Dhabi, Abu Dhabi, United Arab Emirates, ²Research Department, Heart and Vascular Institute, Cleveland Clinic Abu Dhabi, Abu Dhabi, United Arab Emirates, ³Cardiac Surgery, Heart and Vascular Institute, Cleveland Clinic Abu Dhabi, Abu Dhabi, United Arab Emirates, ⁴Critical Care Institute, Critical Care institute, Cleveland Clinic Abu Dhabi, Abu Dhabi, United Arab Emirates

(1051) Chronic Hemolysis May Predict Mortality in Patients with Ventricular Assist Devices; S. Conte¹, S. Barua¹, C. Cherrett¹, A. Adji¹, J. Engelman¹, D. Robson¹, C. Bragg², K. Kearney¹, P. Jain¹, P. Macdonald¹, K. Muthiah¹, C. Hayward¹. ¹Cardiology, St Vincent's Hospital Sydney, Darlinghurst, NSW, Australia, ²Cardiothoracic Surgery, St Vincent's Hospital Sydney, Darlinghurst, NSW, Australia

(1052) Risk Prediction Model for Survival of Wait List Patients on Axial CF-LVAD: A UNOS Database Analysis; N. Nair¹, D. Du², Z. Hu², E. Gongora³. ¹Division of Cardiology, Dept of Internal Medicine, Texas Tech health Sciences Center, Lubbock, TX, ²Department of Industrial, Mechanical, Structural Engineering, Texas Tech University, Lubbock, TX, ³Department of Cardiac Surgery, UAB, Birmingham, AL

(1053) Utility of the INTERMACS Database on Studying Psychosocial Risk Factors in LVAD Patients; V. Patel¹, J. Martens², J. Choi³, C. Cheyne⁴, S. McNitt⁴, M. Nickels³, I. Gosev⁴, J. Alexis⁴, L. Chen⁴. ¹Internal Medicine, University of Rochester, Rochester, NY, ²University of Rochester, Rochester, NY, ³Psychiatry, University of Rochester, Rochester, NY, ⁴Cardiology, University of Rochester, Rochester, NY

(1054) The Pressure is on: Single Center's Experience with Negative Pressure Wound Therapy and Driveline Infection; D. Fauvel, M. Taveras, J. P. Skendelas, R. Bartash, D. Nnani, J. Oviedo, S. Forest, M. Uehara, S. R. Patel, D. J. Goldstein, U. P. Jorde. Cardiothoracic Surgery, Montefiore Medical Center, Bronx, NY

(1055) Primary Causes of Hospitalization among Patients with Left Ventricular Assist Devices; J. Cai¹, W. Xia², E. Akhbabue³, S. Setoguchi¹, I. Okwuosa⁴, P. Greenberg². ¹Internal Medicine, Rutgers - Robert Wood Johnson Medical School, New Brunswick, NJ, ²Biostatistics, Rutgers University, New Brunswick, NJ, ³Cardiology, Rutgers - Robert Wood Johnson Medical School, New Brunswick, NJ, ⁴Cardiology, Northwestern University, Chicago, IL

(1056) Cardiac Power Output and Cardiac Power Efficiency Show Prognostic Value in LVAD Patients; T. Miller¹, M. Belkin¹, U. Siddiqi², D. Rodgers¹, A. Kanelidis¹, N. Uriel³, T. Song², T. Ota², S. Kalantari¹, N. Sarswat¹, A. Nguyen¹, B. Chung¹, G. Kim¹, B. Smith¹, V. Jeevanandam², S. Pinney¹, J. Grinstein¹. ¹Department of Medicine, Section of Cardiology, University of Chicago Medicine, Chicago, IL, ²Department of Surgery, Section of Cardiac Surgery, University of Chicago Medicine, Chicago, IL, ³Division of Cardiology, Department of Medicine, Columbia University Vagelos College of Physicians and Surgeons, NYC, NY

(1057) Left Ventricular Assist Device Decommissioning, the Journey so Far - Single Centre Experience; V. Pingle, A. Woods, M. Izanee, A. Shah, N. Robinson, S. Tovey, J. Jungschleger, T. Butt, G. MacGowan, A. McDiarmid, S. Schueler. Freeman Hospital, Newcastle Upon Tyne, United Kingdom

(1058) Long-Term Outcomes of Adults with Congenital Heart Disease Supported by Durable Continuous-Flow Ventricular Assist Devices; W. C. Frankel¹, C. R. Broda², A. P. Nair³, W. J. Dreyer², H. P. Tunuguntla², D. R. Parekh², O. H. Frazier³, E. J. Hickey⁴, I. Adachi⁴, A. B. Civitello³. ¹Baylor College of Medicine, Houston, TX, ²Lillie Frank Abercrombie Section of Cardiology, Department of Pediatrics, Baylor College of Medicine and Texas Children's Hospital, Houston, TX, ³Division of Cardiothoracic Transplantation and Circulatory Support, Department of Surgery, Baylor College of Medicine, Houston, TX, ⁴Division of Congenital Heart Surgery, Department of Surgery, Baylor College of Medicine and Texas Children's Hospital, Houston, TX

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1059) Results of Multicenter Evaluation of Plug Use for LVAD Explantation; E. Potapov¹, N. Politis², S. Rieger², M. Karck³, M. Weyand⁴, T. Walther⁵, F. Emrich⁵, H. Reichenspurner⁶, A. Bernhardt⁶, M. J. Barten⁶, P. Svenarud⁷, J. Gummert⁸, A. Simon⁹, D. Sef⁹, T. Doenst¹⁰, D. Tsyganenko¹, V. Falk¹. ¹Department of Cardiothoracic and Vascular Surgery, German Heart Center Berlin, Berlin, Germany, ²Applied Research, Abbott Medical GmbH, Eschborn, Germany, ³Department of Cardiac Surgery, Heidelberg University Hospital, Heidelberg, Germany, ⁴Department of Cardiac Surgery, University of Erlangen-Nuremberg, Erlangen, Germany, ⁵Department of Cardiac Surgery, Johann-Wolfgang-Goethe University, Frankfurt, Germany, ⁶Department of Cardiovascular Surgery, University Heart and Vascular Center Hamburg, Hamburg, Germany, ⁷Department of Cardiothoracic Surgery, Karolinska University Hospital, Stockholm, Sweden, ⁸Department of Thoracic and Cardiovascular Surgery, Heart and Diabetes Center NRW Ruhr-University of Bochum, Bad Oeynhausen, Germany, ⁹Department of Cardiothoracic Surgery & Transplant Unit, Royal Brompton & Harefield NHS Foundation Trust, London, United Kingdom, ¹⁰Department of Cardiothoracic Surgery, Jena University Hospital, Jena, Germany

(1060) Flow Pulsatility and Outcomes in Continuous-Flow Ventricular Assist Devices; S. Conte¹, S. Barua¹, C. Cherrett¹, A. Adji¹, J. Engelman¹, D. Robson¹, C. Bragg², K. Kearney¹, P. Jain¹, P. Macdonald¹, K. Muthiah¹, C. Hayward¹. ¹Cardiology, St Vincent's Hospital Sydney, Darlinghurst, NSW, Australia, ²Cardiothoracic Surgery, St Vincent's Hospital Sydney, Darlinghurst, NSW, Australia

(1061) Diffusion Lung Capacity (DL_{CO}) Correlates with Pre-Implant Pulmonary Hypertension and Predicts Outcome in Patients with HF Implanted with a LVAD; F. Macera¹, A. Roussoulières¹, C. Dewachter¹, C. Stefanidis², F. Vanden Eynden², A. Bondue¹, J. Vachiéry¹. ¹Dept of Cardiology, Hôpital Erasme, Université Libre de Bruxelles, Brussels, Belgium, ²Dept of Cardiac Surgery, Hôpital Erasme, Université Libre de Bruxelles, Brussels, Belgium

(1062) Analysis of Trends and Outcomes of 90-Day Readmissions after Left Ventricular Assist Device Implantation; H. Ueyama¹, A. Malik², T. Kuno¹, P. Alvarez³, A. Briasoulis². ¹Icahn School of Medicine at Mount Sinai, Mount Sinai Beth Israel, New York, NY, ²University of Iowa, Iowa, IA, ³Cleveland Clinic, Ohio, OH

(1063) Multicenter Italian Study on Radial Mechanically Assisted Circulatory Support (MIRAMACS): Preliminary Results; A. Loforte¹, G. Gliozzi¹, M. Attisani², A. Montalto³, A. Iacovoni⁴, F. Onorati⁵, M. Maiani⁶, M. Scandroglio⁷, A. Terzi⁴, M. De Bonis⁷, G. Faggian⁵, U. Livi⁶, F. Musumeci³, M. Rinaldi², D. Pacini¹. ¹Cardio-Thorac-Vascular Department, S. Orsola Hospital, University of Bologna, Bologna, Italy, ²Cardiothoracic Surgery Department, Città della Salute e della Scienza, Molinette, University of Turin, Turin, Italy, ³Cardiac Surgery and Heart Transplantation Department, S. Camillo-Forlanini Hospital, Rome, Italy, ⁴Cardiovascular Department, Papa Giovanni XXIII Hospital, Bergamo, Italy, ⁵Cardiac Surgery Department, University of Verona, Verona, Italy, ⁶Cardiothoracic Surgery Department, Santa Maria della Misericordia University Hospital, Udine, Italy, ⁷Advanced Heart Failure and Mechanical Circulatory Support Program, Vita-Salute San Raffaele University Hospital, IRCCS, Milan, Italy

(1064) Trends in Renal Function Prior to and after LVAD Placement and Association with Post LVAD Mortality; V. Maharaj¹, M. Masotti², J. Schultz¹, C. M. Martin¹, R. John³, T. Alexy¹, T. Thenappan¹, R. Knoper⁴, A. Shaffer⁴, R. Cogswell¹. ¹Department of Medicine, Division of Cardiology, University of Minnesota, Minneapolis, MN, ²Department of Biostatistics, University of Minnesota, Minneapolis, MN, ³Department of Surgery, Division of Cardiothoracic Surgery, University of Minnesota, Minneapolis, MN, ⁴Department of Surgery, Division of Cardiothoracic Surgery, University of Minnesota, Minneapolis, MN

(1065) Outcomes over One and a Half Decade Following HeartMate II versus HeartMate 3 Left Ventricular Assist Device Therapy: The Rotterdam Experience; Y. C. Yalcin¹, M. Rasheed¹, R. Muslem², J. J. Brugs³, A. A. Constantinescu², O. C. Manintveld¹, O. Birim³, J. A. Bekkers³, A. J. Bogers³, K. Caliskan². ¹Cardiology & Cardiothoracic surgery, Erasmus University, Rotterdam, Netherlands, ²Cardiology, Erasmus University, Rotterdam, Netherlands, ³Cardiothoracic surgery, Erasmus University, Rotterdam, Netherlands

(1066) Optimization Prior to Left Ventricular Assist Device Implantation is Associated with Reduced Risk of Severe Early Post-Implant Complications; A. Rosenbaum¹, B. W. Ternus², J. Stulak³, A. Clavell¹, S. Schettler³, A. Behfar¹, J. Jentzer¹. ¹Cardiovascular Medicine, Mayo Clinic, Rochester, MN, ²Medicine, Mayo Clinic, Madison, WI, ³Cardiovascular Surgery, Mayo Clinic, Rochester, MN

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1067) HVAD Lavare Cycle Reduces Cerebrovascular Events and Improves Survival; C. G. Gidea¹, A. Emmarco¹, A. Reyentovich¹, J. Pavone¹, A. Fagnoli², T. Saraon¹, S. Rao¹, R. Goldberg¹, B. Kadosh¹, Z. Kon³, N. Moazami³, D. Smith³. ¹Advanced Heart Failure and Heart Transplantation, NYU Langone Health, New York, NY, ²Cardiothoracic Surgery Department, NYU Langone Health, New York, NY, ³Department of Cardiothoracic Surgery, NYU Langone Health, New York, NY

(1068) From Heart Failure via Biventricular Assist Device to Heart Transplantation; J. Kremer, A. El-Dor, M. Farag, W. Sommer, U. Tochtermann, G. Warnecke, M. Karck, A. L. Meyer. *Cardiac Surgery, University Hospital Heidelberg, Heidelberg, Germany*

(1069) Race by Gender after Mechanical Circulatory Support: Impact on Survival and Adverse Events; J. J. Teuteberg¹, S. Pamboukian², S. Lee³, A. Tatoes⁴, W. Hiesinger⁵, C. Milano⁶, E. McGee⁷, W. Cotts⁸. ¹Cardiology, Stanford University Medical Center, Stanford, CA, ²Cardiology, University of Alabama Medical Center, Birmingham, AL, ³Cardiology, Spectrum Health, Grand Rapids, MI, ⁴Cardiothoracic Surgery, Advocate Christ Medical Center, Oak Lawn, IL, ⁵Cardiothoracic Surgery, Stanford University Medical Center, Stanford, CA, ⁶Cardiothoracic Surgery, Duke University, Durham, NC, ⁷Cardiothoracic Surgery, Loyola University, Maywood, IL, ⁸Cardiology, Advocate Christ Medical Center, Oak Lawn, IL

(1070) Impact of Gastrointestinal Bleeding Following LVAD Implant in a Destination Therapy Population; J. D. Rich¹, S. Najjar², M. Keebler³, C. Mahr⁴, N. A. Mokadam⁵, E. D. Feller⁶, M. Kiernan⁷. ¹Cardiology, Northwestern Memorial Hospital, Chicago, IL, ²Cardiology, MedStar Washington Hospital Center, Washington, DC, ³Cardiology, University of Pittsburgh Medical Center, Pittsburgh, PA, ⁴Cardiology, University of Washington, Seattle, WA, ⁵Cardiothoracic Surgery, Ohio State University, Columbus, OH, ⁶Cardiology, University of Maryland, Baltimore, MD, ⁷Cardiology, Tufts University, Boston, MA

(1071) Comparison of Outcomes between Permanent and Temporary Right Ventricular Assist Devices Following Left Ventricular Assist Device Implantation; J. Farag¹, M. Bailey², A. Zimmet¹, D. McGiffin¹, S. F. Marasco¹. ¹The Alfred Hospital, Melbourne, Australia, ²Monash University, Melbourne, Australia

(1072) Persistent Functional Mitral Regurgitation 1 Year after Left Ventricular Assist Device Implantation: Prognostic Impact and Preoperative Echocardiographic Features; J. Pausch, O. Bhadra, E. Girdauskas, M. Barten, H. Reichenspurner, A. Bernhardt. *Department of Cardiovascular Surgery, University Heart & Vascular Center Hamburg, 20251, Germany*

(1073) Destination LVAD Therapy in African American (AA) Recipients: A Single Center Experience; S. Shadman¹, S. Ahmed², A. Nawaz³, M. Hofmeyer⁴, A. Kadakkal⁴, P. H. Lam⁴, S. D. Rao⁴, M. E. Rodrigo⁴, T. I. Elliott², H. Kitahara⁵, S. S. Najjar⁴, E. J. Molina⁵, F. H. Sheikh⁴. ¹Department of Medicine, University of Maryland Medical System, Cheverly, MD, ²Heart and Vascular Institute, Medstar Washington Hospital Center, Washington, DC, ³Georgetown University School of Medicine, Washington, DC, ⁴Cardiology, Medstar Heart and Vascular Institute, Washington, DC, ⁵Cardiac Surgery, Medstar Heart and Vascular Institute, Washington, DC

(1074) Total Artificial Heart versus Bi-Ventricular Assist Device: Meta-Analysis of Long-Term Survival and Systematic Review; M. Carrier, W. Ben Ali, A. Ducharme, Y. Lamarche. *Cardiac Surgery, Montreal Heart Institute, Montréal, QC, Canada*

(1075) Impact of Individual Surgeon Volume on Outcomes Following LVAD Implantation; J. C. Boudreaux¹, M. Urban², A. W. Castleberry², J. Y. Um², M. J. Moulton², A. Siddique². ¹University of Nebraska Medical Center, Omaha, NE, ²Cardiothoracic Surgery, University of Nebraska Medical Center, Omaha, NE

(1076) Acute Kidney Injury Predicts Outcomes Following Ventricular Assist Device Insertion; C. A. Cherrett, S. Barua, S. Conte, A. Adji, J. Engelman, D. Robson, K. Kearney, C. Bragg, P. Jain, B. Schnegg, P. McDonald, K. Muthiah, C. Hayward. *St Vincent's Hospital, Sydney, Australia*

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1077) Aortic Insufficiency Following Heartmate 3 Implant in Patients on Temporary Mechanical Circulatory Support; K. Oh¹, J. A. Fried¹, A. Masoumi¹, N. Diakos¹, M. Yuzefpolskaya¹, P. C. Colombo¹, K. J. Clerkin¹, J. K. Raikhelkhar¹, J. M. Griffin¹, H. Takayama², K. Takeda², Y. Naka², G. T. Sayer¹, N. Uriel¹. ¹Medicine - Division of Cardiology, Columbia University Irving Medical Center, New York, NY, ²Surgery, Division of Cardiothoracic Surgery, Columbia University Irving Medical Center, New York, NY

(1078) Recovery of RV Function Determines Outcomes of Extracorporeal Biventricular Support for Acute Biventricular Failure; N. Tadokoro, S. Fukushima, T. Saito, T. Taguchi, O. Seguchi, M. Yanase, N. Fukushima, T. Fujita. *Cardiovascular Surgery, National Cerebral and Cardiovascular Center, Suita, Japan*

(1079) Impact of Ventricular Assist Devices on Cardiac Transplant Recipient Survival Outcomes; M. Kashem¹, T. Tran², M. Suryapalam³, V. Rakita¹, E. Hamad¹, K. Minakata¹, Y. Toyoda¹. ¹Cardiothoracic Surgery, Temple University Medical Center, Philadelphia, PA, ²Lewis Katz School of Medicine, Temple University, Philadelphia, PA, ³Temple University, Philadelphia, PA

(1080) Brazilian Unicentric Experience of Implanting Long-Term Ventricular Assist Devices; B. S. Rangel, A. B. Pereira, N. R. Quintanilha, B. Biselli, V. B. Batista, A. L. Nascimento, M. S. Avila, S. I. Rizk, F. B. Jatene, F. R. Galas, R. K. Filho, S. M. Ferreira. *Cardiology, Hospital Sirio Libanes, Sao Paulo, Brazil*

(1081) The Impact of Renal Dysfunction in Mechanical Circulatory Support Device Patients on Post-Heart Transplant Outcomes; J. Patel, M. Kittleson, R. Cole, N. Patel, T. Singer-Englar, C. Runyan, D. Geft, L. Czer, D. Ramzy, F. Esmailian, J. Moriguchi, J. A. Kobashigawa. *Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA*

(1082) Left Ventricular Assist Device Exchange to HeartMate III Using Minimally Invasive Approach; A. R. Patel, N. H. Patel, V. Bhattad, A. Leal, C. Guerrero Miranda, Z. A. Hashmi, D. M. Meyer, S. Hall, A. Rafael. *Cardiology, Baylor University Medical Center, Dallas, TX*

(1083) Exploring Preoperative Hypocalcemia as a Biomarker for Post Left Ventricular Assist Device Survival and Adverse Events; K. Stawiarski, O. Agboola, R. Bonde, P. Bonde. *Bonde Artificial Heart Lab, Yale School of Medicine, New Haven, CT*

(1084) Effects of Patient Distance from LVAD Implant Center on Outcomes and Quality of Life; A. Gallandt, M. Prario, K. Drezek, J. Richards, K. Ton, S. Thomas, D. D'Alessandro, M. Villavicencio-Theoduloz, E. Coglianese. *Massachusetts General Hospital, Boston, MA*

(1085) Increased Mean Platelet Volume is Associated with Decreased Survival in Cardiogenic Shock Patients Receiving Mechanical Circulatory Support; M. Harutyunyan¹, M. Torosoff². ¹Albany Medical College, Albany, NY, ²Department of Cardiovascular Disease, Albany Medical Center, Albany, NY

(1086) Outcomes Following Elective Temporary RVAD Support in Patients Who are Undergoing LVAD Implantation: A Bridge Too Far?; M. I. Mohamed Mydin, S. Balasubramanian, A. Woods, V. Pathania, K. Freystaetter, N. Robinson-Smith, S. Tovey, J. Jungschleger, T. A. Butt, A. McDiarmid, A. R. Shah, G. MacGowan, S. Schueler. *Cardiothoracic Transplant and MCS, Freeman Hospital, Newcastle upon Tyne, United Kingdom*

(1087) Upfront Impella 5.0 vs. Prior Mechanical Circulatory Support Use in Cardiogenic Shock: A Single Center Experience; M. J. Bashline, O. Kola, A. Kilic, C. Sciortino, C. Toma, S. Mulukutla, J. Fowler, G. Hickey. *Heart and Vascular Institute, University of Pittsburgh Medical Center, Pittsburgh, PA*

(1088) Predictors of Worsening Renal Function in Patients Supported with Ventricular Assist Devices; S. Barua, S. Conte, C. Cherrett, A. Adji, J. Engelman, D. Robson, K. Kearney, C. Bragg, P. Jain, B. Schnegg, P. Macdonald, K. Muthiah, C. Hayward. *Cardiology, St Vincent's Hospital Sydney, Darlinghurst, Australia*

(1089) Bridge to Transplant Outcomes with Axillary Intra-Aortic Balloon Pump versus Durable Left Ventricular Assist Device in the Current UNOS Heart Allocation System; J. F. Friedman, R. Ung, P. Patel, J. C. Leoni, D. S. Yip, R. Goswami. *Mayo Clinic Florida, Jacksonville, FL*

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1090) Double Bridge May Result Similar 5-year Outcome after Heart Transplantation; Y. Chen, C. Tsao, C. Wang, N. Chou, N. Chi, H. Chou, H. Yu. *Cardiovascular Surgery, National Taiwan University Hospital, Taipei, Taiwan*

(1091) The Impact of Diabetes Control on Outcomes in Patients with Left Ventricular Assist Devices; D. Mohebbali¹, K. F. Kennedy², S. R. Motiwala², P. Quintero², E. W. Grandin², A. R. Garan², M. A. Sabe². ¹Smidt Heart Institute, Cedars-Sinai Medical Center, Los Angeles, CA, ²Cardiovascular Division, Beth Israel Deaconess Medical Center, Boston, MA

(1092) Mean Arterial Pressure is Not Associated with Hemocompatibility-Related Outcomes in LVAD Patients; T. Miller¹, M. Belkin¹, U. Siddiqi², A. Kanelidis¹, D. Rodgers¹, N. Uriel¹, T. Song², T. Ota², S. Kalantari¹, N. Sarswat¹, A. Nguyen¹, B. Chung¹, G. Kim¹, B. Smith¹, V. Jeevanandam², S. Pinney¹, J. Grinstein¹. ¹Department of Medicine, Section of Cardiology, University of Chicago Medicine, Chicago, IL, ²Department of Surgery, Section of Cardiac Surgery, University of Chicago Medicine, Chicago, IL

(1093) Chances of Prolonged 5- and 10-year Survival after Continuous-Flow LVAD Implantation?; G. V. Letsou¹, F. I. Musfee², J. K. Ho¹, O. H. Frazier³. ¹Baylor College of Med, Houston, TX, ²University of Texas School of Public Health, Houston, TX, ³Texas Heart Institute, Baylor College of Med, Houston, TX

(1094) Survival Outcomes with Regards to Implant Strategies in Heart Transplantation; K. Montgomery, E. H. Ander, T. Tran, V. Rakita, S. Brann, Y. Toyoda, E. Hamad. *Cardiovascular Surgery, Temple University, Philadelphia, PA*

(1095) The Burden of Readmissions in the First Year with an LVAD: Predictors and Associated Quality of Life Outcomes; M. Prario, N. Sutaria, A. Gallandt, K. Drezek, J. Richards, K. Ton, S. Thomas, D. D'Alessandro, M. Villavicencio, E. Coglianese. *Massachusetts General Hospital, Boston, MA*

(1096) An Analysis of Driveline Infections with Left Ventricular Assist Devices Utilizing Carbothane versus Pellethane Driveline Sheaths; A. K. Ravichandran¹, J. A. Cowger², E. D. Feller³, C. Mahr⁴, W. Hiesinger⁵, L. Klein⁶, M. V. Jacoski⁷, B. Lampert⁸, N. Moazami⁹. ¹Cardiology, St Vincent Health, Indianapolis, IN, ²Cardiology, Henry Ford Hospital, Detroit, MI, ³Cardiology, University of Maryland, Baltimore, MD, ⁴Cardiology, University of Washington, Seattle, WA, ⁵Cardiothoracic Surgery, Stanford University Medical Center, Stanford, CA, ⁶Cardiology, University of Calif San Francisco Medical Center, San Francisco, CA, ⁷Medical Affairs, Medtronic Inc, Minneapolis, MN, ⁸Cardiology, Ohio State University Wexner Medical Center, Columbus, OH, ⁹Cardiac Surgery, NYU Langone Health, New York, NY

(1097) An Analysis of Post-Implant Severe Right Heart Failure in Real-World Use of the HeartWare™ HVAD™ System in Destination Therapy; R. J. Tedford¹, E. Potapov², J. A. Cowger³, C. Hayward⁴, J. D. Rich⁵, M. Kusmierczyk⁶, M. V. Jacoski⁷, K. Lavine⁸, N. Moazami⁹. ¹Cardiology, Medical University of South Carolina, Charleston, SC, ²Cardiothoracic Surgery, German Heart Center, Berlin, Germany, ³Cardiology, Henry Ford Hospital, Detroit, MI, ⁴Cardiology, St. Vincent's Hospital, Sydney, Australia, ⁵Cardiology, Northwestern Memorial Hospital, Chicago, IL, ⁶Cardiology, Cardinal Stefan Wyszyński Institute of Cardiology, Warszawa, Poland, ⁷Medical Affairs, Medtronic, Minneapolis, MN, ⁸Cardiology, Barnes Jewish Hospital, St Louis, MO, ⁹Cardiothoracic Surgery, NYU Langone Health, New York, NY

(1098) A Propensity Score Matched Comparison of Heartmate 3 and HeartWare HVAD Epistaxis Outcomes; U. A. Siddiqi, P. S. Combs, S. Pinney, V. Jeevanandam. *University of Chicago, Chicago, IL*

(1099) Red Cell Distribution Width to Assess Heart Failure Post Left Ventricular Assist Device Implantation; K. Stawiarski, O. Agboola, R. Bonde, P. Bonde. *Bonde Artificial Heart Lab, Yale School of Medicine, New Haven, CT*

(1100) Learning from the Learning Curve in Heartmate II Implantation: Low Volumes Do Not Equate Bad Outcomes; M. Hébert¹, P. Noly¹, Y. Lamarche¹, I. Bouhout¹, E. Hage-Moussa¹, G. Giraldeau², N. Racine², A. Ducharme², M. Carrier¹. ¹Cardiac Surgery, Montreal Heart Institute, Montreal, QC, Canada, ²Cardiology, Montreal Heart Institute, Montreal, QC, Canada

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1101) Home-Based Palliative Care Visits for DT-LVAD Patients; K. Milley¹, J. Camuso¹, T. Logan¹, A. Anthony¹, M. Villavicencio-Theoduloz², S. Thomas¹, D. D'Alessandro², E. Coglianese¹, J. Gallagher³, V. Ton¹. ¹Cardiology, Massachusetts General Hospital, Boston, MA, ²Cardiac Surgery, Massachusetts General Hospital, Boston, MA, ³Palliative Care, Massachusetts General Hospital, Boston, MA

(1102) Impact of Acute Liver Injury Prior to Left Ventricular Assist Device Therapy; J. Schultz¹, M. Masotti², V. Maharaj¹, A. El Rafei³, A. Shaffer⁴, R. John⁴, C. M. Martin¹, M. Pritzker¹, F. Kamdar¹, R. Cogswell¹. ¹Department of Medicine, Division of Cardiology, University of Minnesota, Minneapolis, MN, ²Department of Biostatistics, University of Minnesota, Minneapolis, MN, ³Department of Medicine, University of Minnesota, Minneapolis, MN, ⁴Department of Surgery, Division of Cardiovascular Surgery, University of Minnesota, Minneapolis, MN

(1103) Machine Learning for Prognostication in Patients Undergoing LVAD Implantation; S. John¹, Y. Ignatyeva², B. Greenberg², A. Lin², N. Wettersten², M. Urey², P. Kim², K. Hong², H. Tran², J. Silva Encisco², V. Pretorius³, A. Yagil⁴, E. Adler². ¹Internal Medicine, University of California, San Diego, La Jolla, CA, ²Cardiology, University of California, San Diego, La Jolla, CA, ³Cardiothoracic Surgery, University of California, San Diego, La Jolla, CA, ⁴Physics, University of California, San Diego, La Jolla, CA

(1104) Axillary Impella® Improves Risk Stratification for Early, Severe Right Heart Failure Following Durable LVAD Implantation; B. H. Hsi¹, D. T. Joseph², A. Guha¹, J. H. Kim¹. ¹Cardiology, Houston Methodist DeBakey Heart and Vascular Center, Houston, TX, ²Internal Medicine, Houston Methodist Hospital, Houston, TX

(1105) Predicting Significant Right Ventricular Failure Post-LVAD Implantation Using CMR Compared to Echocardiography and Right Heart Catheterisation; M. Shanmuganathan, P. Rajani, E. Androulakis, S. Moledina, G. Sarri, J. Robertus, K. Kiff, V. Baston, O. Dar, F. Riesgo-Gil, A. Simon, U. Stock, J. Wong. Cardiology, Harefield Hospital, London, United Kingdom

(1106) Trends in Body Mass Index before and after Left Ventricular Assist Device and Association with Pectoralis Muscle Measures: Evidence for Progressive Sarcopenia Prior to LVAD Implantation; J. Schultz¹, A. Hoeg², M. Masotti³, L. Teigen⁴, R. John⁵, A. Shaffer⁵, C. M. Martin¹, T. Alexy¹, R. Cogswell¹. ¹Department of Medicine, Division of Cardiology, University of Minnesota, Minneapolis, MN, ²School of Public Health, University of Minnesota, Minneapolis, MN, ³Department of Biostatistics, University of Minnesota, Minneapolis, MN, ⁴Department of Medicine, Division of Gastroenterology, Hepatology, and Nutrition, University of Minnesota, Minneapolis, MN, ⁵Department of Surgery, Division of Cardiovascular Surgery, University of Minnesota, Minneapolis, MN

(1107) Disparity in Use of Left Ventricular Assist Devices among African American Patients with Medicare; T. Cascino¹, M. P. Thompson¹, S. Somanchi², A. Brescia¹, M. Pienta¹, M. Colvin¹, F. D. Pagan¹, D. S. Likosky¹, K. D. Aaronson¹, J. S. Likosky¹. ¹University of Michigan, Ann Arbor, MI, ²University of Notre Dame, South Bend, IN

(1108) Race, Temporary Mechanical Circulatory Support, and Clinical Outcomes after the 2018 US Adult Heart Allocation System Policy Change; A. K. Okoh¹, M. R. Mehra², R. Tayal³, S. G. Drakos⁴, S. Machado⁵, M. G. Yin⁴, L. Y. Lee¹, K. S. Shah⁴, M. J. Russo⁶, M. Vaduganathan⁷, J. Stehlik⁸. ¹Cardiology, RWJ Barnabas Health Rutgers RWJ University Hospital, New Brunswick, NJ, ²Cardiology, Brigham and Womens Hospital, Harvard School of Medicine., Boston, NJ, ³Cardiology, RWJ Barnabas Health Newark Beth Israel Medical Center, Newark, NJ, ⁴Cardiology, University of Utah School of Medicine, Salt Lake City, UT, ⁵London School of Economics, London, UK, London, United Kingdom, ⁶RWJ Barnabas Health Rutgers RWJ University Hospital, New Brunswick, NJ, ⁷Brigham and Womens Hospital, Harvard School of Medicine., Boston, NJ, ⁸University of Utah School of Medicine, Salt Lake City, UT

(1109) Prognostic Value of Cardiopulmonary Exercise Test Parameters in Ventricular Assist Device Therapy; A. Dorken Gallastegi¹, D. G. Ergi¹, Ü. Kahraman¹, B. Yagmur², E. Çınar³, H. Üzümcügil Karapolat³, S. Nalbantgil², Ç. Engin¹, T. Yagdi¹, M. Özbaran¹. ¹Cardiovascular Surgery, Ege University School of Medicine, Izmir, Turkey, ²Cardiology, Ege University School of Medicine, Izmir, Turkey, ³Physical Medicine and Rehabilitation, Ege University School of Medicine, Izmir, Turkey

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

- (1110) Development and Validation of Specific Post-Transplant Risk Scores According to the Circulatory Support Status at Transplant: A UNOS Database Analysis;** G. Coutance¹, E. Kransdorf², J. Moriguchi², A. Loupy³, J. Kobashigawa², J. Patel². ¹Heart Transplantation, Groupe Hospitalier Pitié-Salpêtrière, Paris, France, ²Heart Transplantation, Cedars Sinai Medical Center, Los Angeles, CA, ³Paris Transplant Group, Paris, France
- (1111) Adoption of ISHLT Recommendations for Psychosocial Evaluation of LVAD Candidates;** M. Clancy¹, A. Jessop². ¹Occupational Therapy, Good Shepherd Penn Partners, Philadelphia, PA, ²Public Health, Western Michigan University, Kalamazoo, MI
- (1112) Tobacco Cessation in Destination Therapy Ventricular Assist Device Patients: Results of an International Survey;** P. S. Combs, U. A. Siddiqi, W. Cohen, V. Jeevanandam. University of Chicago, Chicago, IL
- (1113) The Role of Impella in the Management of Cardiogenic Shock in Heart Transplant Patients at a Pediatric Center;** H. P. Tunuguntla¹, S. Choudhry¹, K. Puri², J. A. Spinner¹, S. W. Denfield¹, W. J. Dreyer¹, J. F. Price¹, K. Hope¹, A. M. Qureshi¹, D. R. Parekh¹, I. Adachi³, S. C. Tume². ¹Pediatric Cardiology, Texas Children's Hospital, Houston, TX, ²Pediatric Critical Care, Texas Children's Hospital, Houston, TX, ³Congenital Heart Surgery, Texas Children's Hospital, Houston, TX
- (1114) Compassionate Deactivation of Pediatric Ventricular Assist Device Support: Lessons Learned from Our First 14 Cases;** S. A. Hollander¹, B. D. Kaufman², L. D. Sacks², K. Ryan², J. M. Murray³, C. Bui², B. Gregori⁴, D. N. Rosenthal², D. Char⁵. ¹Stanford University, Stanford, CA, ²Pediatrics (Cardiology), Stanford University, Stanford, CA, ³Solid Organ Transplant Services, Lucile Packard Children's Hospital Stanford, Stanford, CA, ⁴Social Work Services, Lucile Packard Children's Hospital Stanford, Palo Alto, CA, ⁵Anesthesia (Pediatric Cardiac), Stanford University, Stanford, CA
- (1115) Long-Term Outcome of LVAD in Duchenne Population with End Stage Cardiomyopathy;** R. Adorisio¹, N. Cantarutti¹, D. D'Amario², M. Grandinetti³, A. D'Amico⁴, G. Perri¹, S. Filippelli¹, F. Drago¹, A. Amodeo¹. ¹Cardiology, Cardiac Surgery and Heart Lung Transplant, Bambino Gesù Hospital, Rome, Italy, ²Cardiology Cardiac Surgery, Catholic University, Rome, Italy, ³Cardiology and Cardiac Surgery, Catholic University, Rome, Italy, ⁴Neurology, Bambino Gesù Hospital, Rome, Italy
- (1116) A Model to Evaluate Effect of Patient-Pump Mismatch on Thrombosis in a Pediatric Pulsatile Ventricular Assist Device;** S. Kidambi¹, S. Moye¹, O. Jahadi², R. Shad¹, S. Paul², A. Shiu³, M. Ma¹. ¹Cardiothoracic Surgery, Stanford University Medical Center, Palo Alto, CA, ²Division of Pediatric Cardiac Surgery, Lucile Packard Children's Hospital, Palo Alto, CA, ³Division of Pediatric Cardiology, Lucile Packard Children's Hospital, Palo Alto, CA
- (1117) Outcomes of Mechanical Circulatory Support in Infants with Congenital Heart Disease Listed for Heart Transplant;** J. B. Edelson, J. W. Rossano, O. Okunowo, H. Griffis, M. J. O'Connor, C. Wittlieb-Weber, K. Y. Lin, C. E. Mascio, J. W. Gaynor, K. Maeda, J. M. Chen, S. M. Fuller, D. S. Burstein. Children's Hospital of Philadelphia, Philadelphia, PA
- (1118) Single Center Experience with the Heartmate 3 Continuous-Flow Ventricular Assist Device in Pediatric Patients;** M. Trezzi, G. Brancaccio, S. Filippelli, L. Galletti, R. Adorisio, R. Iacobelli, C. Giorni, D. Selvaggio, A. Amodeo. Bambino Gesù Children's Hospital IRCCS, Rome, Italy
- (1119) The ACTION Quality Improvement Collaborative: 2020 Annual Report;** D. N. Rosenthal¹, F. Zafar², C. Villa², C. Vanderpluym³, D. Peng⁴, J. Murray⁵, L. Smyth², A. Lorts². ¹Stanford University, Palo Alto, CA, ²Pediatrics, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ³Pediatric Cardiology, Boston Children's Hospital, Boston, MA, ⁴Pediatrics, University of Michigan, Ann Arbor, MI, ⁵Pediatric Cardiology, Lucile Packard Children's Hospital, Palo Alto, CA
- (1120) HeartMate-III Implantation in Small Body Surface Area, a Case Series;** F. Alshamdin, F. Khaliel. Cardiac Surgery, King Faisal Specialist Hospital & RC, Riyadh, Saudi Arabia

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1121) Evaluation of Pain Management in Patients Undergoing LVAD Therapy via Thoracotomy and Median Sternotomy Approach; E. Lushaj, A. Fiedler, R. Dhingra, J. Hermsen, J. Smith. *University of Wisconsin, Madison, WI*

(1122) Prognostic Impact of Peri-Operative Thrombocytopenia on Outcomes of Left Ventricular Assist Device Implantation; Y. Hong¹, B. Medoff², Y. Wang³, F. Thoma³, A. Kilic⁴. ¹*Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA*, ²*Internal Medicine, University of Pittsburgh Medical Center, Pittsburgh, PA*, ³*Heart and Vascular Institute, University of Pittsburgh Medical Center, Pittsburgh, PA*, ⁴*Cardiothoracic Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA*

(1123) Early Post-Operative Hyperlactatemia as a Prognostic Indicator for Left Ventricular Assist Device Implantation; Y. Hong¹, C. Wynkoop², T. Zhu³, Y. Wang⁴, F. Thoma⁴, A. Kilic⁵. ¹*Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA*, ²*Internal Medicine, University of Pittsburgh Medical Center, Pittsburgh, PA*, ³*School of Medicine, University of Pittsburgh, Pittsburgh, PA*, ⁴*Heart and Vascular Institute, University of Pittsburgh Medical Center, Pittsburgh, PA*, ⁵*Cardiac Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA*

(1124) Effects of ACE Inhibitors, Angiotensin Receptor Blockers and Angiotensin Receptor-Nepilysin Inhibitors on Survival Free from Gastrointestinal Bleeding in HeartMate 3 Patients - A Marginal Structural Modeling Analysis; G. M. Mondellini¹, J. Qi², L. Braghieri¹, A. Pinsino³, A. J. Kim¹, T. Melie¹, V. R. Feldman¹, K. Takeda¹, Y. Naka¹, G. T. Sayer¹, N. Uriel¹, I. Diaz⁴, M. Yuzefpolskaya¹, K. L. Hoffman⁵, P. C. Colombo¹. ¹*Columbia University Irving Medical Center, New York, NY*, ²*Weill Cornell, New York, NY*, ³*Albert Einstein College of Medicine Health + Hospitals/Jacobi, Bronx, NY*, ⁴*Weill Cornell School of Medicine, New York, NY*, ⁵*Weill Cornell Medicine, New York, NY*

(1125) Safety and Effectiveness of Sacubitril/Valsartan in Patients with a Left Ventricular Assist Device; L. B. Straw¹, S. Bowe², B. Sloan², L. G. Reihart¹, C. R. Mardis², P. J. McCann¹, R. S. Napier¹, A. Mardis¹. ¹*Prisma Health, Columbia, SC*, ²*University of South Carolina College of Pharmacy, Columbia, SC*

(1126) Postoperative Tolvaptan Use in Left Ventricular Assist Device Implantation Patients: The TOLVAD Study; M. N. Belkin¹, T. Imamura², A. Kanelidis¹, M. Henry¹, T. Fujino³, V. Kagan¹, K. Meehan¹, J. Okray¹, S. Creighton¹, C. LaBuhn¹, T. Song¹, T. Ota¹, V. Jeevanandam¹, A. B. Nguyen¹, B. B. Chung¹, B. A. Smith¹, S. Kalantari¹, J. Grinstein¹, N. Sarswat¹, S. P. Pinney¹, G. Sayer⁴, G. Kim¹, N. Uriel⁴. ¹*University of Chicago, Chicago, IL*, ²*Second Department of Internal Medicine, University of Toyama, Toyama, Japan*, ³*Department of Cardiovascular Medicine, Kyushu University Hospital, Fukuoka, Japan*, ⁴*Columbia University, New York, NY*

(1127) RAAS Inhibition Provides Improvement in 1 Year Mortality Post LVAD Implantation; S. J. Fanelli¹, M. Elzeneini², A. Mahmoud³, E. I. Jeng⁴, G. Arnaoutakis⁴, A. Parker³, M. Al-Ani³, J. Vilaro³, J. Aranda³, M. M. Ahmed³. ¹*College of Medicine, University of Florida, Gainesville, FL*, ²*Internal Medicine, University of Florida, Gainesville, FL*, ³*Cardiovascular Medicine, University of Florida, Gainesville, FL*, ⁴*Thoracic and Cardiovascular Surgery, University of Florida, Gainesville, FL*

(1128) Effect of Early Post-Operative Intravenous Iron Replacement in Patients with HeartMate III; R. Vesper¹, P. Iyer¹, K. Granger², C. T. Doligalski¹, L. Kemp¹, M. Byku³, I. Hollis¹. ¹*Pharmacy, University of North Carolina Medical Center, Chapel Hill, NC*, ²*University of North Carolina Eshelman School of Pharmacy, Chapel Hill, NC*, ³*Cardiology, University of North Carolina Medical Center, Chapel Hill, NC*

(1129) Outcomes of Systemic Anticoagulation with Bivalirudin for Impella 5.0; C. Fabrizio, M. N. Levito, R. Rivosecchi, M. Bashline, B. Slocum, A. Kilic, G. Hickey, J. Fowler, E. Horn. *Heart and Vascular Institute, UPMC, Pittsburgh, PA*

(1130) Optimizing Utilization of SGLT2 Inhibitors in an Outpatient LVAD Population; G. M. DuBruille¹, L. Straw¹, C. R. Mardis², M. J. Scalese¹, R. Barfield², P. J. McCann¹, R. S. Napier¹, A. Mardis¹. ¹*Prisma Health, Columbia, SC*, ²*University of South Carolina College of Pharmacy, Columbia, SC*

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1131) Will a Rising SGLT2 Inhibitor Tide Lift All GDMT Boats; A. Mardis¹, G. M. DuBruille¹, L. B. Straw¹, R. K. Barfield², R. S. Napier¹, P. J. McCann¹, C. R. Mardis². ¹Prisma Health, Columbia, SC, ²University of South Carolina College of Pharmacy, Columbia, SC

(1132) Left Ventricular Assist Device Flow Pattern Analysis Using Computational Fluid Dynamics at the Time of Invasive Hemodynamic Ramp Study: Using Patient-Specific Data to Optimize the Ramp Study; J. Grinstein¹, P. J. Blanco², C. A. Bulant³, R. Torii⁴, C. V. Bourantas⁵, P. A. Lemos⁶, H. Garcia-Garcia⁷. ¹University of Chicago, Chicago, IL, ²National Laboratory for Scientific Computing, Petrópolis, Brazil, ³National Scientific and Technical Research Council (CONICET), Buenos Aires, Argentina, ⁴University College of London, London, United Kingdom, ⁵Barts Heart Centre, London, United Kingdom, ⁶Heart Institute, University of São Paulo Medical School, São Paulo, Brazil, ⁷MedStar Cardiovascular Research Network, Washington, DC

(1133) Estimated versus Actual Oxygen Consumption in Patients Supported with LVADs; I. Bole¹, D. Rodgers², B. Smith¹, A. Nguyen¹, B. Chung¹, S. Kalantari¹, N. Sarswat¹, G. Kim¹, T. Song², T. Ota², V. Jeevanandam², S. Pinney¹, J. Grinstein¹. ¹Department of Medicine, University of Chicago, Chicago, IL, ²Department of Surgery, University of Chicago, Chicago, IL

(1134) Changes of Aortic Tissue MicroRNA/mRNA Expression in Patients with Long-Term Left Ventricular Assist Device; P. Ivak, D. Dlouha, J. Pitha, M. Konarik, Z. Tucanova, D. Hlavacek, I. Netuka. Institute for Clinical and Experimental Medicine, Prague 4, Czech Republic

(1135) Markers of Right Ventricle Dysfunction Predict Exercise Capacity on Left Ventricular Assist Device (LVAD) Patients; N. Bouzas-Cruz¹, A. Koshy², O. Gonzalez-Fernandez³, C. Ferrera⁴, T. Green², N. Okwose⁵, A. Woods², S. Tovey², N. Robinson-Smith², A. McDiarmid², G. Parry², J. Gonzalez-Juanatey¹, S. Schueler², G. MacGowan². ¹Cardiology, Hospital Clínico Universitario de Santiago de Compostela, Santiago de Compostela, Spain, ²Cardiology, Freeman Hospital, Newcastle upon Tyne, United Kingdom, ³Cardiology, Hospital Universitario La Paz, Madrid, Spain, ⁴Cardiology, Hospital Clínico San Carlos, Madrid, Spain, ⁵Newcastle University Biosciences and Translational and Clinical Research Institutes, Newcastle University, Newcastle upon Tyne, United Kingdom

(1136) A Deep Learning Approach for Estimation of Pulmonary Capillary Wedge Pressure for Heart Failure Patient with LVAD; M. Fetanat¹, M. Stevens¹, P. Jain², C. Hayward², N. Lovell¹. ¹Graduate School of Biomedical Engineering, UNSW, Sydney, Australia, ²Cardiology Department, St Vincent's Hospital, Sydney, Australia

(1137) Combining Invasive Cardiopulmonary Exercise Testing with Computational Fluid Dynamics to Better Understand LVAD Fluid Mechanics during Exercise; J. Grinstein¹, P. J. Blanco², C. A. Bulant³, R. Torii⁴, C. V. Bourantas⁵, P. A. Lemos⁶, H. Garcia-Garcia⁷. ¹University of Chicago, Chicago, IL, ²National Laboratory for Scientific Computing, Petrópolis, Brazil, ³National Scientific and Technical Research Council (CONICET), Buenos Aires, Argentina, ⁴University College of London, London, United Kingdom, ⁵Barts Heart Centre, London, United Kingdom, ⁶Heart Institute, University of São Paulo Medical School, São Paulo, Brazil, ⁷MedStar Cardiovascular Research Network, Washington, DC

(1138) Arterial Pulsatility in Patients with Continuous Flow Left Ventricular Assist Device Support: Comparing Velocity and Mean Arterial Pressure; S. Emmanuel, A. Adji, D. Robson, P. Jain, C. Hayward. St Vincent's Hospital (Sydney), Darlinghurst, Australia

(1139) Enhanced Recovery after Surgery in Patients Implanted with Left Ventricular Assist Device; D. Lindenmuth¹, K. Chase², C. Cheyne³, M. Bjelic², I. Gosev². ¹Department of Anesthesiology and Perioperative Medicine, University of Rochester Medical Center, Rochester, NY, ²Department of Surgery, Division of Cardiothoracic Surgery, University of Rochester Medical Center, Rochester, NY, ³Department of Medicine, University of Rochester Medical Center, Rochester, NY

(1140) How are Patients with Advanced Heart Failure Informed about Living with an LVAD?; N. F. Rasheed¹, U. A. Siddiqi², P. S. Combs², J. Casida³. ¹University of Missouri-Kansas City, Kansas City, MO, ²Cardiac and Thoracic Surgery, University of Chicago, Chicago, IL, ³School of Nursing, Johns Hopkins University, Baltimore, MD

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1141) Decreasing Driveline Infections in Patients Supported on Ventricular Assist Devices: A Care Pathway Approach; J. Seretny¹, T. Pidborochynski², H. Buchholz³, D. H. Freed³, R. MacArthur³, N. Dubyk⁴, L. Cunliffe⁴, O. Zelaya⁴, J. Conway⁵. ¹University of Alberta, Edmonton, AB, Canada, ²Pediatric Cardiology, University of Alberta, Edmonton, AB, Canada, ³Surgery, University of Alberta, Edmonton, AB, Canada, ⁴Cardiac Surgery, Mazankowski Alberta Heart Institute, Edmonton, AB, Canada, ⁵Pediatric Cardiology, Stollery Children's Hospital, Edmonton, AB, Canada

(1142) A Care Pathway Approach to Reduce Driveline Infections: Compliance and Outcomes; T. Pidborochynski¹, J. Seretny², H. Buchholz³, D. H. Freed³, R. MacArthur³, N. Dubyk⁴, L. Cunliffe⁴, O. Zelaya⁴, J. Conway⁵. ¹Pediatric Cardiology, University of Alberta, Edmonton, AB, Canada, ²University of Alberta, Edmonton, AB, Canada, ³Surgery, University of Alberta, Edmonton, AB, Canada, ⁴Cardiac Surgery, Mazankowski Alberta Heart Institute, Edmonton, AB, Canada, ⁵Pediatric Cardiology, Stollery Children's Hospital, Edmonton, AB, Canada

(1143) Impact of Type of Left Ventricular Assist Device (LVAD) on Health-Related Quality of Life during Prolonged LVAD Support; M. Asase¹, T. Watanabe², M. Takegami², K. Nishimura², K. Kinugawa³, T. Nishimura⁴, K. Toda⁵, Y. Saiki⁶, H. Niinami⁷, S. Nunoda⁸, G. Matsumiya⁹, M. Nishimura¹⁰, H. Arai¹¹, M. Yanase², T. Nakatani¹², Y. Sakata¹³, M. Ono¹⁴, K. Nin¹⁵, N. Fukushima². ¹Department of Human Health Sciences, Graduate School of Medicine, Kyoto University, 2)Department of Transplant Medicine, National Cerebral and Cardiovascular Center, 1)Kyoto 2)Suita, Japan, ²Department of Transplant Medicine, National Cerebral and Cardiovascular Center, Suita, Japan, ³Second Department of Internal Medicine, University of Toyama, Toyama, Japan, ⁴Department of Cardiovascular and Thoracic Surgery, Ehime University, Matsuyama, Japan, ⁵Department of Cardiovascular Surgery, Osaka University, Suita, Japan, ⁶Division of Cardiovascular Surgery, Tohoku University, Sendai, Japan, ⁷Department of Cardiovascular Surgery, Tokyo Women's Medical University, Tokyo, Japan, ⁸Department of Therapeutic Strategy for Severe Heart Failure, Tokyo Women's Medical University, Tokyo, Japan, ⁹Department of Cardiovascular Surgery, Chiba University, Chiba, Japan, ¹⁰Department of Cardiovascular Surgery, Tottori University, Tottori, Japan, ¹¹Department of Cardiovascular Surgery, Tokyo Medical and Dental University, Tokyo, Japan, ¹²Maki Hospital, Osaka, Japan, ¹³Department of Cardiovascular Medicine, Osaka University, Suita, Japan, ¹⁴Department of Cardiac Surgery, University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8655, Japan, ¹⁵Department of Human Health Sciences, Graduate School of Medicine, Kyoto university, Kyoto, Japan

(1145) A Conceptual Definition of Quality of Life for People Living with an Implanted Destination Therapy Left Ventricular Assist Device; D. Dwyer¹, J. Doering², J. Casida³. ¹School of Nursing, University of Wisconsin-Madison, Madison, WI, ²College of Nursing, University of Wisconsin-Milwaukee, Milwaukee, WI, ³School of Nursing, Johns Hopkins University, Baltimore, MD

(1146) Research Engagement and Experiences of Participants in the Mechanical Circulatory Support: Measures of Adjustment and Quality of Life (MCS A-QOL) Study; A. J. Carroll, E. A. Hahn, K. L. Grady. Northwestern University Feinberg School of Medicine, Chicago, IL

(1147) An Analysis of Implant Approach and Impact on Early Outcomes in Real-World Use of the HeartWare™ HVAD™ System; D. T. Pham¹, N. Moazami², D. Saeed³, E. Adler⁴, J. Schmitto⁵, S. Putnik⁶, S. Schueler⁷, C. Salerno⁸, E. Potapov⁹. ¹Cardiac Surgery, Northwestern Memorial Hospital, Chicago, IL, ²Cardiac Surgery, NYU Langone Health, New York, NY, ³Cardiac Surgery, Leipzig Heart Center, Leipzig, Germany, ⁴Cardiology, University of California San Diego, San Diego, CA, ⁵Cardiac Surgery, Hannover Medical School, Hannover, Germany, ⁶Cardiac Surgery, University of Belgrade, Belgrade, Serbia, ⁷Cardiac Surgery, Freeman Hospital Newcastle, Newcastle, United Kingdom, ⁸Cardiac Surgery, St Vincent Health, Indianapolis, IN, ⁹Cardiothoracic Surgery, Berlin Heart Center, Berlin, Germany

(1148) Driveline Infection: Reroute or Not to Reroute, That is the Question; D. K. Phan¹, D. J. Goldstein¹, D. Chauhan², J. P. Skendelas¹, Y. Puius³, D. Fauvel¹, M. Taveras¹, S. J. Forest¹. ¹Cardiovascular and Thoracic Surgery, Montefiore Medical Center, Bronx, NY, ²Cardiovascular and Thoracic Surgery, Emory University Hospital, Atlanta, GA, ³Division of Infectious Disease, Montefiore Medical Center, Bronx, NY

POSTER TOPICS – MECHANICAL CIRCULATORY SUPPORT

(1149) Evaluation of Thoracotomy versus Median Sternotomy Approach in Third-Generation Left Ventricular Assist Device Implantation; D. Drullinsky¹, A. Pawale¹, T. Wu¹, R. Harap², J. Rich³, K. Ghafourian⁴, J. Wilcox³, E. Vorovich³, I. Okwuosa³, A. Tibrewala³, F. Ahmad³, A. Andrei¹, D. Pham¹. ¹Cardiac Surgery, Northwestern University, Chicago, IL, ²Cardiology - Heart Failure, Northwestern University, Chicago, IL, ³Advance Heart Failure & Transplant Cardiology, Northwestern University, Chicago, IL, ⁴Advanced Heart Failure and Transplant Cardiology, Northwestern University, Chicago, IL

(1150) A Simplified Temporary Right Ventricular Assist Device (RVAD) during LVAD Implantation - Low Risk, Easy to Do and Ideal for Patient Rehabilitation; M. I. Mohamed Mydin, A. Woods, V. N. Pingle, N. Robinson-Smith, S. Tovey, J. Jungschleger, T. A. Butt, A. R. Shah, A. McDiarmid, G. McGowan, S. Schueler. *Cardiothoracic Transplantation and MCS, Freeman Hospital, Newcastle upon Tyne, United Kingdom*

(1151) Comparing HVAD Inflow Cannula Angle between Median Sternotomy and Thoracotomy; M. Pearman¹, S. Emmanuel², C. Hayward², P. Jansz². ¹The University of Notre Dame (Sydney), Darlinghurst, Australia, ²St Vincent's Hospital (Sydney), Darlinghurst, Australia

(1152) Minimally Invasive Left Ventricular Assist Device Implantation: A Systematic Review and Meta-Analysis; R. V. Ribeiro¹, J. Lee², S. Singh¹, T. M. Yau¹, J. O. Friedrich³, B. Yanagawa¹. ¹Cardiovascular Surgery, University of Toronto, Toronto, ON, Canada, ²University of Toronto, Toronto, ON, Canada, ³Critical Care Medicine, University of Toronto, Toronto, ON, Canada

(1153) Surgical Development for a Novel Transcutaneous Energy Transfer Method for Long-Term Mechanical Circulatory Support; K. Jonsson¹, B. Bern², G. Maltese³, P. Klockar⁴, G. Dellgren¹. ¹Cardiothoracic Surgery, Sahlgrenska University Hospital, Gothenburg, Sweden, ²InVivoPower AB, Gothenburg, Sweden, ³Plastic Surgery, Sahlgrenska University Hospital, Gothenburg, Sweden, ⁴Civinco consulting, Gothenburg, Sweden

(1154) HeartMate III™ Implantation: A Novel Technique to Reduce the Incidence of Perioperative Bleeding and the Use of Intraoperative Blood Products; N. H. Patel¹, D. Meyer², R. Gottlieb¹, C. Guerrero-Miranda¹, S. Hall¹, A. K. Jamil³, J. S. van Zyl³, J. Felius³, A. Rafael². ¹Department of Cardiology, Division of Heart Failure, Baylor University Medical Center, Dallas, TX, ²Department of Cardiac Surgery, Division of Thoracic Transplantation, Baylor University Medical Center, Dallas, TX, ³Baylor Scott & White Research Institute, Baylor University Medical Center, Dallas, TX

(1155) From Wide Open Spaces to Tiny Robot Holes: Single-Center Comparison of Implant Techniques for Left Ventricular Assist Device (LVAD) Implantation; H. R. Smith¹, M. C. Smith², A. N. Collier¹, A. T. Coletti¹. ¹Center for Advanced Heart Disease and Transplantation, Providence Sacred Heart Medical Center, Spokane, WA, ²Northwest Heart and Lung Surgical Associates, Providence Sacred Heart Medical Center, Spokane, WA

(1156) Off-Pump Implant Strategy for the Jarvik 2000 LVAD; S. Corona¹, M. Naliato¹, A. Apostolo², P. Agostoni², L. Salvi³, F. Alamanni¹. ¹Cardiac Surgery, Centro Cardiologico Monzino IRCCS, Milan, Italy, ²Heart Failure and Clinical Cardiology, Centro Cardiologico Monzino IRCCS, Milan, Italy, ³Anaesthesia and Intensive Care Unit, Centro Cardiologico Monzino IRCCS, Milan, Italy

(1157) Eventually, Every VAD Gets Turned Off: A Mixed Methods Analysis of In-Hospital LVAD Deactivations; M. Singh¹, A. Rao², A. Kelemen², S. Ahmed¹, H. Groninger². ¹Division of Cardiology, MedStar Heart and Vascular Institute, MedStar Washington Hospital Center, Washington, DC, ²Section of Palliative Medicine, Department of Medicine, MedStar Washington Hospital Center; Georgetown University School of Medicine, Washington, DC

(1158) Change in Caregiver Increases Risk for Driveline Infection; M. Johnson, S. Gilardi, T. Cobb, J. Miller, L. Varick, T. Smith, J. McKay, T. Raymond, T. O'Brien, E. Chung, G. Egnaczyk. *The Christ Hospital, Cincinnati, OH*

(1159) A Review of Ventricular Assist Device Patients' Compliance in INR Reporting Using a New App-Based Programme Compared with Telephone Surveillance; S. Tovey, N. Robinson-Smith, A. Woods, A. McDiarmid, G. A. MacGowan, S. Schueler. *Freeman Hospital Newcastle upon Tyne NHS Foundation Trust, Newcastle upon Tyne, United Kingdom*

POSTER TOPICS – PULMONARY VASCULAR DISEASE (PAH & CTEPH)

(1160) Chronic Thromboembolic Pulmonary Hypertension: An Analysis of the Australian and New Zealand Experience; K. Kearney¹, J. Gold², C. Corrigan¹, K. Dhital¹, D. Boshell¹, D. Haydock³, D. McGiffin⁴, B. Thomson⁵, N. Collins⁶, R. Cordina⁷, N. Dwyer⁸, J. Feenstra⁵, M. Lavender⁹, J. Wrobel⁹, H. Whitford⁴, T. Williams⁴, D. Keating⁴, K. Whyte³, T. McWilliams¹⁰, A. Keogh¹, G. Strange¹¹, E. Kotlyar¹, J. Anderson¹², E. M. Lau⁷. ¹St Vincents Hospital, Darlinghurst, Australia, ²Liverpool Hospital, Sydney, Australia, ³Auckland District Health Board, Auckland, New Zealand, ⁴The Alfred Hospital, Melbourne, Australia, ⁵Prince Charles Hospital, Brisbane, Australia, ⁶John Hunter Hospital, Newcastle, Australia, ⁷Royal Prince Alfred Hospital, Camperdown, Australia, ⁸Royal Hobart Hospital, Hobart, Australia, ⁹Fiona Stanley Hospital, Perth, Australia, ¹⁰Auckland City Hospital, Auckland, New Zealand, ¹¹University of Notre Dame, Fremantle, Australia, ¹²Sunshine Coast University Hospital, Birtinya, Australia

(1161) Pulmonary Thrombo-Endarterectomy for Chronic Thromboembolic Pulmonary Artery Hypertension: 17 Years Single Center Experience. Impact of Multidisciplinary Team Approach; S. Martin-Suarez¹, A. Loforte¹, G. Gliozzi¹, M. Fiorentino¹, G. G. Cavalli¹, V. Pagano¹, N. Galiè², D. Pacini¹. ¹Cardiac Surgery Unit, Cardio Thoracic and Vascular Department, S.Orsola Hospital, Bologna, Italy, ²Cardiology Unit, Cardio Thoracic and Vascular Department, S.Orsola Hospital, Bologna, Italy

(1162) Automated Right-to-Left Ventricle Ratio Calculation for Outcome Prediction in Surgical CTEPH; S. Shikhare¹, I. Balki², Y. Shi³, J. Kavanagh⁴, L. Donahoe⁵, D. Rozenberg², W. Xu³, M. de Perrot⁵, M. McInnis⁶. ¹Diagnostic Radiology, Khoo Teck Puat Hospital, Singapore, Singapore, ²Department of Medicine, University of Toronto, Toronto, ON, Canada, ³Department of Biostatistics, Princess Margaret Cancer Center, Toronto, ON, Canada, ⁴Department of Medical Imaging, University of Toronto, Toronto, ON, Canada, ⁵Department of Surgery, University of Toronto, Toronto, ON, Canada, ⁶Medical Imaging, University of Toronto, Toronto, ON, Canada

(1163) Fate of Tricuspid Valve Regurgitation after Pulmonary Endarterectomy in Chronic Thromboembolic Pulmonary Hypertension; A. Melehy¹, E. B. Rosenzweig², D. Brady², A. Su¹, Y. Ning³, J. Chan¹, M. Bacchetta⁴, P. Kurlansky¹, K. Takeda¹. ¹Division of Cardiothoracic and Vascular Surgery, Department of Surgery, Columbia University Medical Center, New York, NY, ²Division of Cardiology, Department of Pediatrics, Columbia University Medical Center, New York, NY, ³Center of Innovation and Outcomes Research, Department of Surgery, Columbia University Medical Center, New York, NY, ⁴Departments of Thoracic and Cardiac Surgery, Vanderbilt University Medical Center, Nashville, TN

(1164) Right Atrial Function Index in Chronic Thromboembolic Pulmonary Hypertension before and after Pulmonary Thromboendarterectomy; A. Tigges¹, D. Wong², D. Blanchard¹. ¹UC San Diego, La Jolla, CA, ²Sharp Rees-Stealy, La Mesa, CA

(1165) Features of Chronic Thromboembolic Pulmonary Hypertension Clinical Trials; M. McInnis¹, C. T. Chow¹, A. Boutet¹, S. Mafeld¹, T. John², J. Granton², K. McRae³, L. Donahoe⁴, M. de Perrot⁴. ¹Medical Imaging, University of Toronto, Toronto, ON, Canada, ²Department of Medicine, University of Toronto, Toronto, ON, Canada, ³Department of Anesthesia and Pain Management, Toronto General Hospital, Toronto, ON, Canada, ⁴Department of Surgery, University of Toronto, Toronto, ON, Canada

(1166) Assessing Sex-Based Differences in Survival after Pulmonary Thromboendarterectomy for Chronic Thromboembolic Pulmonary Hypertension; A. Su¹, E. B. Rosenzweig², A. Melehy¹, Y. Ning³, M. Bacchetta⁴, P. Kurlansky³, K. Takeda¹. ¹Department of Surgery, Division of Cardiothoracic and Vascular Surgery, Columbia University Medical Center, New York, NY, ²Division of Pediatric Cardiology, Department of Pediatrics, Columbia University Medical Center, New York, NY, ³Center of Innovation and Outcomes Research, Department of Surgery, Columbia University Medical Center, New York, NY, ⁴Departments of Thoracic and Cardiac Surgery, Vanderbilt University Medical Center, Nashville, TN

(1167) Initiating a Chronic Thromboembolic Pulmonary Hypertension and Pulmonary Endarterectomy Program Based on a Single Center Experience in Lebanon; B. Osman, I. Bou Akel, T. Tulaimat, P. Sfeir, J. Borgi. Surgery, American University of Beirut, Hamra, Lebanon

POSTER TOPICS – PULMONARY VASCULAR DISEASE (PAH & CTEPH)

(1168) Proteomic Profile in Children and Young Adult Patients with Pulmonary Hypertension Due to Complex Congenital Heart Disease: An Observational Cohort Study; R. Adorisio¹, N. Cantarutti¹, S. Levi Mortera², A. Sidorina², P. Vernocchi³, A. Baban¹, F. Drago¹, L. Putignani⁴, A. Amodeo¹. ¹Cardiology, Cardiac Surgery and Heart Lung Transplant, Bambino Gesù Hospital, Rome, Italy, ²Research Laboratories, Bambino Gesù Hospital, Rome, Italy, ³Human Microbioma, Bambino Gesù Hospital, Rome, Italy, ⁴Bambino Gesù Hospital, Rome, Italy

(1169) Pulmonary Hypertension in Rural Minnesota; C. B. Gitter¹, S. Ebnet¹, C. W. Schmidt¹, L. Stanberry¹, P. M. Eckman², E. R. Fenstad³. ¹Minneapolis Heart Institute Foundation, Minneapolis, MN, ²Minneapolis Heart Institute, Minneapolis, MN, ³Minneapolis Heart Institute, Baxter, MN

(1170) Increased Incidence of Supraventricular and Ventricular Arrhythmias in Patients with Pulmonary Hypertension Awaiting for Heart Transplantation; T. K. Urbanowicz¹, M. Michalak², H. Baszynska³, A. Olasińska-Wisniewska³, E. Straburzynska Migaj⁴, M. Jemielity⁵. ¹Cardiac Surgery and Transplantology, Poznan Univ of Medical Sciences, Poznan, Poland, ²Department of Computer Science and Statistics, Poznan Univ of Medical Sciences, Poznan, Poland, ³Cardiac Surgery and Transplantology, Poznan University of Medical Sciences, Poznan, Poland, ⁴1st Cardiology Department, Ewa Straburzynska Migaj, Poznan, Poland, ⁵Cardiac Surgery and Transplantology, Poznan University of medical Sciences, Poznan, Poland

(1171) Pulmonary Vasodilator Use in Children with Heterotaxy Syndrome Undergoing Surgical Intervention for Congenital Heart Disease; M. R. Varma, M. P. McCormick, D. A. Adebo, M. D. Brown. Pediatric Cardiology, University of Texas Health Science Center at Houston, Houston, TX

(1172) Analysis of Risk Assessment Tools in the REPLACE Study; R. L. Benza¹, G. Simonneau², H. A. Ghofrani³, P. A. Corris⁴, S. Rosenkranz⁵, D. Langleben⁶, M. Chang⁷, F. Kleinjung⁷, C. Meier⁷, M. M. Hoeper⁸. ¹Division of Cardiovascular Diseases, The Ohio State University, Columbus, OH, ²Assistance Publique–Hôpitaux de Paris, Service de Pneumologie, Hôpital Bicêtre, Université Paris-Saclay, Laboratoire d'Excellence en Recherche sur le Médicament et Innovation Thérapeutique, and Inserm U999, Le Kremlin-Bicêtre, France, France, ³University of Giessen and Marburg Lung Center, member of the German Center for Lung Research (DZL), Giessen, Germany, Department of Pneumology, Kerckhoff Clinic, Bad Nauheim, Germany and Department of Medicine, Imperial College London, London, United Kingdom, ⁴Translational and Clinical Research Institute, Newcastle University, Newcastle upon Tyne, United Kingdom, ⁵Clinic III for Internal Medicine (Cardiology), Cologne Cardiovascular Research Center (CCRC), and Center for Molecular Medicine Cologne (CMMC), University of Cologne, Cologne, Germany, ⁶Center for Pulmonary Vascular Disease and Lady Davis Institute, Jewish General Hospital, McGill University, Montreal, QC, Canada, ⁷Global Medical Affairs, Bayer AG, Berlin, Germany, ⁸Clinic for Respiratory Medicine, Hannover Medical School, member of the German Center for Lung Research (DZL), Hannover, Germany

(1173) Effects of Parenteral Prostacyclin Therapy on Echocardiographic Variables; P. Manthena, S. Ghosh, T. Shah, K. Chin. University of Texas, Southwestern Medical Center, Dallas, TX

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: ADVANCED HEART FAILURE AND TRANSPLANTATION

(1178) *Behcet's Disease Unmasked after Heart Transplantation*; J. Bell, K. Takeda, J. Haythe, M. Szabolcs, J. Griffin, L. Geskin, T. Fanek, M. Gaine, K. Axsom. *Columbia University Medical Center, New York, NY*

(1179) *Bridge to Remission in Biventricular Cardiogenic Shock Associated with Endocrine Cardiomyopathy*; N. Hanna¹, K. Leung¹, L. Hernandez¹, J. Sleiman¹, D. Miranda Ruiz¹, E. Perez¹, A. Sarkar¹, M. Nimmagadda¹, E. Heller², A. Lewis Camargo³, M. Zandiyeh⁴, J. Madison⁵, A. Alvarez⁵, A. Shriver⁵, D. Sabatino⁵, N. Schtupak⁵, D. Verghese⁶, C. Sheffield⁷, N. A. Brozzi⁷, E. Hakemi¹, E. Noguera⁸, G. Cudemus⁸, L. Fermin⁸, S. Minear⁸, M. Velez¹, V. Navas⁹, R. Cubeddu¹, J. Navia⁷, J. Hernandez-Montfort¹. ¹*Cardiology, Cleveland Clinic Florida, Weston, FL*, ²*Cardiology, Delray Medical Center, Delray Beach, FL*, ³*Internal Medicine, Cleveland Clinic Florida, Weston, FL*, ⁴*Internal medicine, Cleveland Clinic Florida, Weston, FL*, ⁵*Critical Care Medicine, Cleveland Clinic Florida, Weston, FL*, ⁶*Internal Medicine, AMITA Health Saint Joseph Hospital, Chicago, IL*, ⁷*Cardiothoracic Surgery, Cleveland Clinic Florida, Weston, FL*, ⁸*Anesthesiology, Cleveland Clinic Florida, Weston, FL*, ⁹*Cleveland Clinic Florida, Weston, FL*

(1180) *Successful Heart Transplantation in a Pan-Inflammatory Patient with Interstitial Lung Disease*; G. N. Vaidya¹, A. Kolodziej¹, R. Malyala², N. Reddy¹, W. O'Connor³, E. Birks¹. ¹*Cardiology- Advanced Heart Failure, University of Kentucky, Lexington, KY*, ²*Cardiothoracic Surgery, University of Kentucky, Lexington, KY*, ³*Pathology, University of Kentucky, Lexington, KY*

(1181) *Drugs, Bugs, and the ECMO Unplugged: A Case of a 61-year-old with Cardiogenic Shock and Utility of Palliative Bedside ECMO De-Escalation*; K. Kopecky¹, C. Mathew², T. Gong¹, D. Enter¹, M. Shalabi², B. Blough¹, A. Alam¹, S. Hall¹. ¹*Baylor University Medical Center, Dallas, TX*, ²*Texas A&M University College of Medicine, Bryan, TX*

(1182) *A Case of Vascular Behcet's Leading to Cardiogenic Shock Requiring VA-ECMO*; B. S. Doumouras¹, M. Gewarges¹, A. Luk¹, D. W. Dodington², M. A. Seidman³, T. M. Yau⁴, A. Czarnecki⁵, C. Pagnoux⁶, N. Aleksova¹. ¹*Ted Rogers Centre for Heart Research, Peter Munk Cardiac Centre, University Health Network, University of Toronto, Toronto, ON, Canada*, ²*Department of Laboratory Medicine and Pathobiology, University of Toronto, Toronto, ON, Canada*, ³*Department of Laboratory Medicine and Pathobiology, University of Toronto and Laboratory Medicine Program, University Health Network, Toronto, ON, Canada*, ⁴*Ted Rogers Centre for Heart Research, Peter Munk Cardiac Centre, University Health Network and Division of Cardiovascular Surgery, University of Toronto, Toronto, ON, Canada*, ⁵*Schulich Heart Centre, Sunnybrook Health Sciences Centre and Department of Medicine, University of Toronto, Toronto, ON, Canada*, ⁶*Vasculitis Clinic, Division of Rheumatology, Department of Medicine, University of Toronto, Toronto, ON, Canada*

(1183) *Left Ventricular Assist Device Implantation in a COVID-19 Positive Patient*; E. P. Dib, S. Joseph, N. Patel, A. Rafael, D. Meyer, A. Bindra, S. Hall, T. Gong. *Baylor University Medical Center, Dallas, TX*

(1184) *Recovery from COVID-19 Pneumonia in a Heart Transplant Recipient*; A. Bakhsh¹, M. AlSaeed², M. Ibrahim³, Y. AlHebaishi⁴, M. AlBarrak⁵, S. AlAmro⁶, A. Ezzeddien¹, A. AlKhushail⁷, A. Amro¹. ¹*Heart Failure and Transplant, Prince Sultan Cardiac Centre, Riyadh, Saudi Arabia*, ²*Division of Infectious Disease, Prince Sultan Military Medical City PSMCC, Riyadh, Saudi Arabia*, ³*Cardiology, Prince Sultan Cardiac Centre, Riyadh, Saudi Arabia*, ⁴*Heart Failure, Transplant and Electrophysiology, Prince Sultan Cardiac Centre, Riyadh, Saudi Arabia*, ⁵*Intensive Care, Prince Sultan Cardiac Centre, Riyadh, Saudi Arabia*, ⁶*Cardiac Clinical Pharmacist, Prince Sultan Cardiac Centre, Riyadh, Saudi Arabia*, ⁷*Interventional Cardiology, Prince Sultan Cardiac Centre, Riyadh, Saudi Arabia*

(1185) *Aortic and Renal Artery Thrombosis as the First Clinical Manifestation of COVID-19 in a Heart Transplant Recipient*; D. S. Belfort, C. R. Cafezeiro, D. A. Furlan, M. S. Lira, R. C. Dantas, C. A. Aragão, I. W. Campos, M. S. Ávila, S. Mangini, L. B. Seguro, F. G. Marcondes-Braga, F. Bacal. *Heart Institute - HCFMUSP, São Paulo, Brazil*

(1186) *COVID-19 Infection in a 13-year-old Heart Transplant Recipient in Immediate Post Transplant Period - A Case Report*; I. Biswas¹, A. Bahl², B. Kumar¹, H. Singh³, S. K. Thingnam³, G. D. Puri¹. ¹*Anaesthesia and Intensive Care, Postgraduate Institute of Medical Education and Research, Chandigarh, Chandigarh, India*, ²*Cardiology, Postgraduate Institute of Medical Education and Research, Chandigarh, Chandigarh, India*,

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: ADVANCED HEART FAILURE AND TRANSPLANTATION

³*Cardiothoracic and Vascular Surgery, Postgraduate Institute of Medical Education and Research, Chandigarh, Chandigarh, India*

(1187) Venous Thromboembolism as an Initial Manifestation of COVID-19 in a Heart Transplant Patient; R. C. Tourinho Dantas, M. Lira, D. Belfort, C. Aragão, C. Murad, M. Ávila, L. Seguro, S. Mangini, I. Campos, F. Marcondes-Braga, F. Bacal. *Transplante Cardíaco, Instituto do Coração - HCFMUSP, São Paulo, Brazil*

(1188) Longest Storage Period with Static Hypothermic Preservation in Cardiac Transplantation: Initial Experience in the West Coast; B. A. Guenthart, A. Alassar, T. Koyano, S. La Francesca, J. L. Chan, A. Krishnan, J. W. MacArthur, Y. Shudo, W. Hiesinger, Y. Woo. *Cardiothoracic Surgery, Stanford University, Stanford, CA*

(1189) Effect of Donor Heart Preservation Temperature Monitoring Technology on Primary Graft Dysfunction and Outcomes in Heart Transplantation; A. M. Tutunjian¹, M. Kawabori², T. Nordan¹, Y. Zhan², F. Y. Chen², K. G. Warner², H. Rastegar², G. S. Couper². ¹*Tufts University School of Medicine, Boston, MA*, ²*CardioVascular Center, Tufts Medical Center, Boston, MA*

(1190) A Transplanted Broken Heart Healed with Time and Temporary Mechanical Circulatory Support; F. Meinert, J. Kremer, W. Sommer, G. Warnecke, M. Karck, A. L. Meyer. *Cardiac Surgery, University Hospital Heidelberg, Heidelberg, Germany*

(1191) Chylopericardium as a Rare Entity Following Orthotopic Heart Transplantation; T. S. Wang, M. Molina, M. Norris, P. Mather. *Cardiology, Hospital of University of Pennsylvania, Philadelphia, PA*

(1192) Left Atrial Intramural Hematoma Leading to Low Cardiac Output after Heart Transplantation; R. D. Andal. *Transplant, Royal Papworth Hospital, Cambridge, United Kingdom*

(1193) Refractory Hypotension Following Heart Transplantation; A. Abudan¹, B. Kidd², P. Hild², B. Gupta³. ¹*Department of Internal Medicine, University of Kansas Medical Center, Kansas City, KS*, ²*Department of Anesthesiology, University of Kansas Medical Center, Kansas City, KS*, ³*Department of Cardiovascular Medicine, University of Kansas Medical Center, Kansas City, KS*

(1194) Features of Posterior Reversible Encephalopathy Syndrome 3 Days Following Tacrolimus Initiation in Heart Transplant Recipient; H. Nazeer, N. Sarswat, B. Smith, J. Grinstein, S. Kalantari, A. Nguyen, G. Kim, S. Pinney, B. Chung. *Advanced Heart Failure and Transplant, University of Chicago, Chicago, IL*

(1195) Transient Left Bundle Branch Block Associated with Septal Edema after Orthotopic Heart and Lung Transplant; A. Lin, E. Adler, V. Pretorius, J. Silva. *University of California San Diego, San Diego, CA*

(1196) Immediate ECMO Initiation Leads to Graft Recovery in Delayed Graft Failure after Heart Transplant; C. E. Hironaka¹, T. Nordan¹, M. Kawabori², Y. Zhan², F. Y. Chen², G. S. Couper². ¹*Tufts University School of Medicine, Boston, MA*, ²*Tufts Medical Center, Boston, MA*

(1197) Quick Action is the Ticket to a New Life: Appropriate Recognition and Response with VA ECMO Use for Primary Graft Dysfunction; N. Rohant. *Advanced Heart Failure and Transplant Cardiology, UCSF, San Francisco, CA*

(1198) Acute Pancreatitis with Hemorrhagic Pseudocyst in a Heart-Transplant Patient; M. Mahgoub¹, A. Bakhsh², A. Alanazi¹. ¹*Adult Cardiology Department, Prince Sultan Cardiac Centre, Riyadh, Saudi Arabia*, ²*Adult Cardiology, Division of Heart Function and Transplant, Prince Sultan Cardiac Centre, Riyadh, Saudi Arabia*

(1199) Beck's Quadrad? A Rare Case of Pericardial Tamponade Presenting as Transient Pre-Excitation Early after Cardiac Transplantation; N. Mehta¹, N. Sarswat¹, B. Smith¹, S. Kalantari¹, A. Nguyen¹, B. Chung¹, G. Upadhyay¹, R. Kalathiya¹, G. Kim¹, V. Jeevanandam², S. Pinney¹, J. Grinstein¹. ¹*Department of Cardiology, University of Chicago Medical Center, Chicago, IL*, ²*Department of Cardiothoracic Surgery, University of Chicago Medical Center, Chicago, IL*

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: ADVANCED HEART FAILURE AND TRANSPLANTATION

(1200) *The Use of Cardiac Resynchronization Therapy for Heart Failure in Patients One Year and Under*; S. Hussain, R. Darragh, J. J. Parent, M. Ayers. Riley Hospital for Children, Indianapolis, IN

(1201) *Episodic Myocardial Injury: Consider Desmoplakin Cardiomyopathy!*; A. Power¹, C. Chen², E. Profita², B. D. Kaufman², D. N. Rosenthal², S. Chen², J. C. Dykes². ¹Department of Pediatrics, UT Southwestern Medical Center, Dallas, TX, ²Department of Pediatrics, Stanford University School of Medicine, Palo Alto, CA

(1202) *Sheehan Syndrome Leading to Acute Systolic and Diastolic Heart Failure: A Case Report*; A. T. Lemieux¹, K. Kopecky², W. Sovic¹, A. Patel¹, A. Bindra². ¹Department of Internal Medicine, Baylor University Medical Center, Dallas, TX, ²Department of Cardiology, Baylor University Medical Center, Dallas, TX

(1203) *Cardiac Tumor and Arrhythmia Induced Cardiomyopathy: Management with Pace Suppression*; S. Raymundo, A. Escobar, J. Alejos, G. Satou, K. Shannon. Pediatric Cardiology, UCLA Mattel Children's Hospital, Los Angeles, CA

(1204) *Hemodynamic Effect of Ivabradine in Young Girl with Acute Heart Failure*; E. Mencarelli, R. Adorisio, N. cantarutti, L. Amato, M. De Ioris, D. Perrotta, F. Drago, A. Amodeo. Pediatric Hospital bambino gesù, Rome, Italy

(1205) *Use of Patisiran Following Heart Transplant in a Patient with Hereditary Transthyretin Cardiac Amyloidosis and Polyneuropathy*; M. A. Urey¹, A. L. Topik², J. L. Saulog², K. Leas², T. Boarman², J. M. Kozuch³, M. J. Mariski³, V. N. Nguyen³, E. D. Adler¹. ¹Cardiology, UC San Diego, La Jolla, CA, ²Transplant, UC San Diego, La Jolla, CA, ³Pharmacy, UC San Diego, La Jolla, CA

(1206) *First Case in Spanish Heart Transplant Registry of Heart and Kidney Transplant Related to Fabry Disease*; J. L. Domínguez-Cano¹, D. Rangel-Sousa¹, A. D. Grande-Trillo¹, A. Adsuar-Gómez², F. M. González-Roncero³, J. Acosta-Martínez⁴, D. López-Herrera⁴, J. Borrego-Domínguez², J. Sobrino-Marquez¹. ¹(1) Advance Heart Failure and Heart Transplant Unit. Department of Cardiology., Virgen del Rocío University Hospital, Seville, Spain, ²Cardiovascular Surgery Unit. Department of Cardiology, Virgen del Rocío University Hospital, Seville, Spain, ³Renal Transplant Unit. Department of Nephrology, Virgen del Rocío University Hospital, Seville, Spain, ⁴Department of Anesthesiology, Virgen del Rocío University Hospital, Seville, Spain

(1207) *Like Father, Like Son*; P. Roldan¹, B. Nazer², J. Steiner³. ¹Cardiology, Oregon Health Science University, Portland, OR, ²Electrophysiology - Cardiology, Oregon Health Science University, Portland, OR, ³Advanced Heart Failure / Transplant - Cardiology, Oregon Health Science University, Portland, OR

(1208) *"The Road Not Taken": Successful Use of CardioMEMS to Optimize a Patient in Stage D Heart Failure*; R. Rengarajan¹, G. Milligan¹, N. Minniefield², D. Cheeran², S. Banerjee², S. Hall¹, S. Joseph¹, A. Alam¹. ¹Cardiology, Baylor University Medical Center, Dallas, TX, ²Cardiology, Veterans Affairs North Texas Health Care System, Dallas, TX

(1209) *Journey Exploring the Evasive Cause of Cardiomyopathy in a 27 Year Old*; M. Pelter, A. Srivastava. Scripps Clinic, La Jolla, CA

(1210) *Non-Invasive Scintigraphy in the Identification of Treatable Transthyretin Cardiac Amyloid*; J. Cai¹, J. Rock², B. Oberweis². ¹Internal Medicine, Rutgers - Robert Wood Johnson Medical School, New Brunswick, NJ, ²Cardiology, Rutgers - Robert Wood Johnson Medical School, New Brunswick, NJ

(1211) *Rapidly Progressing Heart Failure from Presumed AL Amyloid*; D. S. Katzianer, J. Vojnika, R. J. Alvarez. Medicine, Thomas Jefferson University Hospital, Philadelphia, PA

(1212) *Pulmonary Wild Type TTR Amyloidosis in a Post Orthotopic Heart Transplant Patient*; S. F. Sorci, C. Alpert, S. Murali. Advanced Heart Failure and Transplant Cardiology, Allegheny General Hospital, Pittsburgh, PA

(1213) *Role of Everolimus in Providing Protection from CMV Infection after Transplant by Improving T-cell Specific Immunity*; E. García-Romero¹, C. Díez-López¹, A. Olivella¹, J. Roca¹, O. Bestard², N. Sabé³, N. Manito¹, J. González-Costello¹. ¹Cardiology, Hospital Universitario de Bellvitge, Barcelona, Spain, ²Nephrology, Hospital

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: ADVANCED HEART FAILURE AND TRANSPLANTATION

Universitario de Bellvitge, Barcelona, Spain, ³Infectious Disease, Hospital Universitario de Bellvitge, Barcelona, Spain

(1214) Trichosporonosis Causing Mycotic Aortic Root Pseudoaneurysm after Cardiac Transplantation; A. Morley-Smith, D. Quinn, M. Mukadam, A. Ranasinghe, M. Bhabra, J. Mascaro, C. Chue, S. Lim. *Cardiothoracic Transplantation, Queen Elizabeth Hospital, Birmingham, United Kingdom*

(1215) Cutaneous Mycobacterium Chelonae Infection in a Heart Transplant Recipient; F. Ara, E. Lim, S. Bhagra, S. Pettit, C. Lewis, J. Parameshwar, A. Kydd. *Advanced Heart Failure and Cardiac Transplantation, Royal Papworth NHS Trust, Cambridge, United Kingdom*

(1216) West Nile Viral Meningitis in a Heart Transplant Recipient; J. M. Duran, A. Birs, E. Epstein, E. D. Adler. *Medicine, Division of Cardiology, UC San Diego Medical Center, La Jolla, CA*

(1217) Benznidazole Therapy Post-Heart Transplant and Surveillance Trypanosoma cruzi Testing with Donor Specific Antibodies; M. Norris¹, M. R. Molina², T. Wang², M. S. Tanna², P. Mather². ¹Pharmacy, Hospital of the University of Pennsylvania, Philadelphia, PA, ²Cardiovascular Medicine / Transplant, Hospital of the University of Pennsylvania, Philadelphia, PA

(1218) Disseminated Deep Dermal Trichophyton Rubrum Infection in a Heart Transplant Recipient; E. R. Woolcock, F. Ara, S. Bhagra, C. Lewis, S. Pettit, J. Parameshwar, A. Kydd. *Transplant, Royal Papworth Hospital, Cambridge, United Kingdom*

(1219) Case Report: Extracorporeal Photophoresis for Treatment of Severe Cytomegalovirus Infection after Heart Transplantation in a Patient with Giant Cell Myocarditis; J. Konertz, A. Bernhardt, H. Reichensperner, M. Barten. *Cardiothoracic Surgery, UHZ, Hamburg, Germany*

(1220) Protein Losing Enteropathy - Clinical Resolution Post Heart Transplant and Recurrence after CMV Enteritis; M. D. Worme, F. Scolari, S. Kozuszko, R. Alonso-Gonzalez. *Cardiology, Toronto General Hospital, Toronto, ON, Canada*

(1221) Unusual Ocular Complication of VZV Reactivation Following Heart Transplant; E. Crespo, E. Z. Rahman, R. Shah, C. Greven, T. J. O'Neil, IV. *Wake Forest Baptist Health, Winston Salem, NC*

(1222) Challenges of BK Viremia in Heart Transplant Recipient with Multiple Comorbidities; L. Norris¹, M. Patregani². ¹Children's National Hospital, Washington, DC, ²Maine Medical Center, Portland, ME

(1223) Verruconus gallopava CNS Infection in a Heart-Kidney Transplant Recipient; M. L. Cheng, D. Amratia. *Medicine, Emory, Atlanta, GA*

(1224) Pharmacotherapy Modifications Due to Drug Interactions with Concomitant Fungal Prophylaxis and Nontuberculous Mycobacteria Treatment after Transplant; J. Clark¹, G. Waldman¹, R. G. Gandhi¹, G. D. Lewis², V. Ton², A. M. Van Beuning², A. Gerlach³, C. N. Kotton². ¹Pharmacy, Massachusetts General Hospital, Boston, MA, ²Massachusetts General Hospital, Harvard Medical School, Boston, MA, ³Massachusetts General Hospital, Boston, MA

(1225) Heart Retransplantation from an Anti-HBcore Positive Donor; A. Kuczaj, S. Warwas, P. Przybyłowski, M. Zembala. *Silesian Center for Heart Diseases in Zabrze, Poland, Zabrze, Poland*

(1226) Mycotic Pseudoaneurysm of the Ascending Aorta after Heart Transplantation; S. Kugler¹, M. Pólos¹, Á. Király¹, Á. Koppányi¹, T. Varga², Z. Szakál-Tóth¹, N. Parázs¹, T. Teszák¹, Z. Tarjányi¹, G. Prinz³, I. Hartyánszky¹, Z. Szabolcs¹, B. Merkely¹, B. Sax¹. ¹Heart and Vascular Center, Semmelweis University, Budapest, Hungary, ²Department of Anaesthesiology and Intensive Therapy, Semmelweis University, Budapest, Hungary, ³Central Hospital of Southern Pest National Institute of Hematology and Infectious Diseases, Budapest, Hungary

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: ADVANCED HEART FAILURE AND TRANSPLANTATION

- (1227) *Neurochagas: A Rare Case of Reactivation of Chagas Disease after Heart Transplantation*; C. A. Aragao, I. W. Campos, R. T. Dantas, M. T. Lira, D. S. Belfort, C. M. Murad, M. S. Avila, L. F. Seguro, S. Mangini, T. V. Strabelli, F. M. Braga, F. Bacal. *Transplant Nucleus, Heart Institute, São Paulo, Brazil*
- (1228) *Bisphosphonate Use in Cardiac Transplant Patients on Dialysis: A Case Series*; A. Crawford, M. Baird, A. Brewster, D. Yaranov. *Baptist Memorial Healthcare - Memphis, Memphis, TN*
- (1229) *Giant Cell Myocarditis after Orthotopic Heart Transplant*; M. Barat, A. Lin, G. Lin, V. Pretorius, E. Adler. *University of California San Diego, San Diego, CA*
- (1230) *Tacrolimus Level Variability in Setting of Gastric Sleeve*; G. Waldman¹, J. E. Clark², C. C. Rogers², A. Gerlach³, E. Coglianesi³, V. Ton³. ¹Massachusetts General Hospital, Boston, MA, ²Pharmacy, Massachusetts General Hospital, Boston, MA, ³Cardiology, Massachusetts General Hospital, Boston, MA
- (1231) *Stratification of Arrhythmic Risk Using Remote Patient Monitoring in a Heart Transplant Recipient with Coronary Allograft Vasculopathy*; N. Žorž, G. Poglajen, V. Andročec, B. Vrtovec. *Advanced Heart Failure and Transplantation Center, Dept. of Cardiology, University Medical Center, Ljubljana, Slovenia*
- (1232) *Dueling Malignancies: A Rare Instance of Both Kaposi Sarcoma and Cardiac Plasmacytoma in a Patient Post OHT*; H. Nazeer, S. Pinney, B. Smith, B. Chung, P. McMullen, A. Nguyen, J. Grinstein, N. Sarswat, G. Kim, S. Kalantari. *Advanced Heart Failure and Transplant, University of Chicago, Chicago, IL*
- (1233) *Trauma after the Gift of Life: Identification and Treatment of Post-Traumatic Stress Disorders in Heart Transplant Recipients*; L. Peters, C. McIlvennan. *University of Colorado, Aurora, CO*
- (1234) *Recurrent Granulomatous Myocarditis after Heart Transplant*; A. M. Parker, M. Al-Ani, B. Stewart, J. Vilaro, J. Aranda, M. Ahmed. *University of Florida, Gainesville, FL*
- (1235) *Tacrolimus Induced Severe Cerebral and Coronary Vasospasm after Heart Transplantation*; H. Lee¹, L. Kim¹, M. Kim², S. Song². ¹Cardiology Department, Pusan National University Hospital, Busan, Korea, Republic of, ²Thoracic Surgery Department, Pusan National University Hospital, Busan, Korea, Republic of
- (1236) *Severe Myopathy Following Heart Transplantation in a Patient with Danon Disease*; J. Guzman Bofarull¹, L. Castillo¹, J. Milisenda², A. García Álvarez¹, M. Castel¹, E. Sandoval³, T. López Sobrino¹, M. Farrero¹, F. Pérez-Villa¹. ¹Department of Cardiology (ICCV), Hospital Clínic de Barcelona, Barcelona, Spain, ²Department of Internal Medicine, Hospital Clínic de Barcelona, Barcelona, Spain, ³Department of Cardiac Surgery (ICCV), Hospital Clínic de Barcelona, Barcelona, Spain
- (1237) *Calcineurin Inhibitor Sparing Immunosuppression in a 12-year-old Heart Transplant Recipient with a Single Kidney*; C. A. Atkins, T. M. Hoffman, M. F. Pizzuto. *Department of Pediatrics, University of North Carolina, Chapel Hill, NC*
- (1238) *Resolution of Nodular Regenerative Hyperplasia Following Heart Transplant*; J. A. Rushakoff¹, E. Kransdorf¹, M. Guindi¹, J. Patel², J. A. Kobashigawa². ¹Cedars-Sinai Medical Center, Los Angeles, CA, ²Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA
- (1239) *Deferoxamine as a Treatment for Cardiac Siderosis Induced Cardiomyopathy Post Liver Transplantation*; C. Fabrizio, G. Hickey, R. Ramani. *Heart and Vascular Institute, UPMC, Pittsburgh, PA*
- (1240) *A Rare Case of Pancytopenia Post Heart Transplant*; I. Sesay, V. Rakita, E. Hamad, J. Hoosain, N. Afari-Armah. *Advanced Heart Failure and Transplantation, Temple University Hospital, Philadelphia, PA*

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: ADVANCED HEART FAILURE AND TRANSPLANTATION

(1241) A Novel Protocol for the Evaluation and Management of Patients for Successful HeartMate III Explantation; A. Seliem¹, A. Rafael², S. Hall², C. Guerrero-Miranda³. ¹Advanced Heart Failure and Transplant, Loma Linda University Medical Center, Loma Linda, CA, ²Advanced Heart Failure and Transplant, Baylor University Medical Center, Dallas, TX, ³Advanced Heart Failure and Transplant, Baylor University Medical Center, Dalls, TX

(1242) Variation in CardioMEMS Pressure Measurements Due to Frequent Changes in Altitude in a Patient with HeartMate III LVAD; A. Hamadeh¹, G. P. Milligan¹, N. E. Minniefield², D. Cheeran², S. Banerjee², S. Hall¹, S. Joseph³, A. Alam¹. ¹Baylor University Medical Center, Dallas, TX, ²VA North Texas Healthcare Center, Dallas, TX, ³University of Maryland Medical Center, Baltimore, TX

(1243) Eculizumab for Treatment of Biopsy Negative Rejection in Heart Transplantation; K. M. Murphy¹, J. Stephen², D. E. Steidley¹, J. L. Rosenthal¹, B. W. Hardaway¹, R. L. Scott¹, T. Coco³, L. M. LeMond¹. ¹Cardiovascular Diseases, Mayo Clinic Arizona, Phoenix, AZ, ²Pharmacy, Mayo Clinic Arizona, Phoenix, AZ, ³Heart Transplant and Care Management, Mayo Clinic Arizona, Phoenix, AZ

(1244) Impact of Colectomy with Ileostomy in Immunosuppression Management after Heart Transplantation Mycophenolate Mofetil Levels Secondary to Ileostomy; A. Olivella San Emeterio, C. Diez Lopez, E. García Romero, R. Rigo Bonnin, S. Gil Vernet, N. Lloberas Blanch, J. Ricardo Frago, J. Roca Elias, N. Manito Lorite, J. Gonzalez Costello. *Cardiology, Bellvitge Hospital, Hospitalet de Llobregat, Spain*

(1245) Role of Memory B Cells in Antibody Mediated Rejection: A Proof of Concept; A. Olivella San Emeterio¹, C. Diez Lopez¹, E. García Romero¹, A. Torija Recasens², J. Roca Elias¹, N. Manito Lorite¹, O. Bestard Matamoros³, J. González Costello¹. ¹Cardiology, Bellvitge Hospital, Hospitalet de Llobregat, Spain, ²Immunology, Bellvitge Hospital, Hospitalet de Llobregat, Spain, ³Nephrology, Bellvitge Hospital, Hospitalet de Llobregat, Spain

(1246) Allosensitization in Heart Transplantation: The Importance of a Comprehensive Approach; J. Bell¹, M. Yuzefpolskaya¹, F. Latif¹, S. Restaino¹, N. Uriel¹, G. Sayer¹, D. Dadhania², M. Farr¹, V. Sharma², M. Habal¹. ¹Columbia University Medical Center, New York, NY, ²Weill Cornell Medicine, New York, NY

(1247) Use of Daratumumab for Desensitization Prior to Cardiac Transplantation: A Case Report; A. Curtis, A. Guha, A. Bhimaraj, J. Kim, E. Suarez, B. Trachtenberg, J. Krisl. *Houston Methodist Hospital, Houston, TX*

(1248) Ofatumumab and Tocilizumab Desensitization in a Highly Sensitized Recipient: A Case Report; J. Hoang¹, A. Guha², A. Bhimaraj², J. Kim², E. Suarez², B. Trachtenberg², J. Krisl¹. ¹Pharmacy, Houston Methodist Hospital, Houston, TX, ²Houston Methodist DeBakey Heart and Vascular Center, Houston Methodist Hospital, Houston, TX

(1249) Early Antibody-Mediated Rejection in Non-Pre-Sensitized Heart Transplant Recipient; M. S. Lira, D. Sá Pereira Belfort, R. Cavalcanti Tourinho Dantas, C. Aurélio Santos Aragão, M. Samuel Ávila, L. Seguro, S. Mangini, I. Wozniak Campos, F. Marcondes-Braga, F. Bacal. *Instituto do Coração da Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil*

(1250) Ca125 as an Early Marker for Graft Dysfunction in Antibody-Mediated Rejection: Guidance for Therapy; E. Ram¹, J. Lavee¹, E. Raanani¹, J. Patel², Y. Peled¹. ¹Sheba Medical Center and Tel Aviv University, Ramat Gan, Israel, ²Cedars-Sinai Heart Institute and David Geffen School of Medicine, Los Angeles, CA

(1251) Treatment of Angiotensin Type 1 Receptor Antibody Mediated Rejection in a Heart Transplant Recipient; K. W. Botkin. *Department of Pharmacy, Barnes-Jewish Hospital, Saint Louis, MO*

(1252) Correction of Anomalous Pulmonary Venous Return during Heart Transplantation; S. East¹, R. Wu¹, D. Rinde-Hoffman², E. Belli³. ¹Cardiology, University of South Florida, Tampa, FL, ²Cardiology, Tampa General Medical Group, Tampa, FL, ³Cardiothoracic Surgery, University of South Florida, Tampa, FL

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: ADVANCED HEART FAILURE AND TRANSPLANTATION

(1253) Pediatric Orthotopic Heart Transplant Requiring a Novel Cardiotomy with Anastomoses at the Atrioventricular Groove; L. Greiten¹, B. Reemtsen¹, C. Eisenring², M. S. Renno¹, O. Mendez¹. ¹College of Medicine, University of Arkansas for Medical Sciences, Little Rock, AR, ²Cardiothoracic Surgery, Arkansas Children's Hospital, Little Rock, AR

(1254) Acute Idiopathic Pulmonic and Tricuspid Regurgitation after Heart Transplant; S. Antoine¹, M. Al-Ani¹, P. Patel², A. Parker¹, J. Vilaro¹, M. Bleiweis¹. ¹Cardiology, University of Florida, Gainesville, FL, ²Cardiology, University of Florida, Jacksonville, FL

(1255) Recurrent Cardiac Myxoma Treated with Cardiac Transplantation: A Case Report; C. M. Murad, J. C. Braz, I. S. Mockdece, V. M. Ocampo, F. G. Marcondes-Braga, I. W. Campo, S. P. Steffen, L. B. Seguro, S. Mangini, M. S. Ávila, V. D. Aiello, F. A. Gaiotto, F. Bacal. *Cardiac Transplantation, Heart Institute/InCor, São Paulo, Brazil*

(1256) Case of Outflow Graft Obstruction from Extrinsic Compression in HM III LVAD; L. Labrada¹, P. Patil¹, H. Maresky², J. Hoosain¹, V. Rakita¹, E. Hamad¹, Y. Toyoda³, N. Afari-Armah¹. ¹Cardiology, Temple University, Philadelphia, PA, ²Radiology, Temple University, Philadelphia, PA, ³Cardiovascular Surgery, Temple University, Philadelphia, PA

(1257) The Perfect Match: A Combination of Cangrelor and Heparin for Heparin-Induced Thrombocytopenia during Cardiopulmonary Bypass in Heart and Kidney Transplant; N. Kabra¹, M. McLennon¹, Y. Gernhofer², M. Mariski¹, V. Pretorius², H. Tran¹, B. Cronin³. ¹Advanced Heart Failure and Transplantation, University of Southern California (UCSD), La Jolla, CA, ²Cardiothoracic Surgery, University of Southern California (UCSD), La Jolla, CA, ³Anesthesia, University of Southern California (UCSD), La Jolla, CA

(1258) Colostomy Reversal in a Patient with an LVAD: A Case Report; A. T. Lemieux¹, N. Patel², S. Leeds³, W. Lichliter⁴, R. D. Baxter⁵, D. Meyer⁶, K. Kopecky², A. Bindra². ¹Department of Internal Medicine, Baylor University Medical Center, Dallas, TX, ²Department of Cardiology, Baylor University Medical Center, Dallas, TX, ³Division of Minimally Invasive Surgery, Baylor University Medical Center, Dallas, TX, ⁴Division of Colorectal Surgery, Baylor University Medical Center, Dallas, TX, ⁵Department of Cardiothoracic Surgery, Baylor Scott and White, The Heart Hospital, Plano, TX, ⁶Division of Cardiothoracic Surgery, Baylor University Medical Center, Dallas, TX

(1259) Intracardiac Thrombus Following Pediatric Heart Transplant: New Heart, New Problem?; S. Kaushal¹, S. Sachdeva¹, C. Caldarone², S. Choudhry¹, K. D. Hope¹, H. P. Tunuguntla¹, J. A. Spinner¹. ¹Pediatric Cardiology, Baylor College of Medicine/Texas Children's Hospital, Houston, TX, ²Pediatric Congenital Heart Surgery, Baylor College of Medicine/Texas Children's Hospital, Houston, TX

(1260) Long-Term Triple Temporary Mechanical Circulatory Support as a Bridge to Triple Organ Transplant; E. I. Jeng¹, O. M. Sharaf², A. Parker³, J. Vilaro³, M. Al-Ani³, M. Ahmed³, J. Aranda³, T. Beduschi⁴, M. S. Bleiweis¹. ¹University of Florida Department of Surgery, Division of Thoracic and Cardiovascular Surgery, Gainesville, FL, ²University of Florida College of Medicine, Gainesville, FL, ³University of Florida College of Medicine, Division of Cardiovascular Medicine, Gainesville, FL, ⁴University of Florida Department of Surgery, Division of Transplantation and Hepatobiliary Surgery, Gainesville, FL

(1261) The Novel Use of Mechanical Circulatory Support to Demonstrate Pulmonary Hypertension Reversibility in Mitral Stenosis; A. Sparks, M. Kawabori, T. Nordan, C. Hironaka, Y. Zahn, F. Chen, G. Couper. *Tufts Medical Center, Boston, MA*

(1262) An Abnormal Heart Lung Connection: A Case of Coronary Artery Fistula Formation Post Orthotopic Heart Transplantation; V. Patel¹, E. Armenia², C. Cove², M. Leigh², K. Kaproth³, L. Chen². ¹Internal Medicine, University of Rochester, Rochester, NY, ²Cardiology, University of Rochester, Rochester, NY, ³Radiology, University of Rochester, Rochester, NY

(1263) Case Report: Cold Atmospheric Plasma as a Treatment Option for Superficial Wound Healing Disorders after Heart Transplantation; J. Konertz, A. Bernhardt, B. Sill, H. Reichensperner, M. Barten. *Department of Cardiothoracic Surgery, UHZ, Hamburg, Germany*

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: ADVANCED HEART FAILURE AND TRANSPLANTATION

(1264) Penetrating Giant Pseudoaneurysm of the Left Ventricle Complicating a Combined Heart-Liver Transplant; M. Dela Cruz, J. Grinstein. Cardiology, University of Chicago, Chicago, IL

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: ADVANCED LUNG FAILURE AND TRANSPLANTATION

(1265) First Successful Lung Transplantation for Pulmonary Fibrosis Due to Severe COVID-19 Infection in the US; C. Kurihara, A. Bharat. Northwestern University Feinberg School of Medicine, Chicago, IL

(1266) Bilateral Lung Transplantation for End-Stage Respiratory Failure from COVID-19 Pneumonia; N. Maniar¹, J. Coster², G. Li¹, J. Segraves¹, M. Hemmersbach-Miller³, A. Shafii², K. Liao², A. Matar², G. Loo², P. Garcha¹. ¹Internal Medicine - Pulmonary, Critical Care and Sleep Medicine, Baylor College of Medicine, Houston, TX, ²Surgery - Cardiothoracic Transplant and Circulatory Support, Baylor College of Medicine, Houston, TX, ³Internal Medicine - Infectious Diseases, Baylor College of Medicine, Houston, TX

(1267) Lung Transplantation in COVID 19 ARDS - Short Term Outcomes; E. Gok, M. Patel, B. P. Stojkovic, J. Patel, K. Dinh, R. Hussein, B. Akkanti, I. Gregoric, S. S. Jyothula. *Advanced Cardiopulmonary Therapies and Transplantation, University of Texas Memorial Hermann Heart and Vascular Institute, Houston, TX*

(1268) Rapid Clinical Recovery from Critical COVID-19 Pneumonia with Vasoactive Intestinal Peptide Treatment; S. Beshay¹, J. G. Youssef¹, F. Zahiruddin¹, M. Al-Saadi¹, S. Yau², A. Goodarzi², H. Huang², J. Javitt³. ¹Department of Academic Pulmonology, Houston Methodist Hospital, Houston, TX, ²Houston Methodist Pulmonary Transplant Center, Houston Methodist Hospital, Houston, TX, ³Johns Hopkins University, Baltimore, MD

(1269) SARS-CoV-2 Re-Infection in a Lung Transplant Recipient; B. Buddhdev, K. McAnally, S. Tokman. Norton Thoracic Institute, Phoenix, AZ

(1270) Two Cases of Spontaneous Bleeding in Lung Transplant Recipients Treated with Systemic Anticoagulation for COVID-19; M. T. Olson¹, A. Omar², S. Tokman², J. Carigo², R. Walia², A. Arjuna². ¹University of Arizona College of Medicine - Phoenix, Phoenix, AZ, ²Norton Thoracic Institute, St. Joseph's Hospital and Medical Center, Phoenix, AZ

(1271) Sars-CoV-2 Infection in Lung Transplant Patients - Single Center Experience in Portugal; C. L. Figueiredo¹, A. Magalhães¹, A. S. Santos¹, J. E. Reis², A. Borba¹, L. Semedo¹, P. Calvino², J. Cardoso¹, J. Fragata². ¹Pulmonology and Portuguese Lung Transplant Center, Hospital Santa Marta, CHULC, Lisboa, Portugal, ²Cardiothoracic Surgery and Portuguese Lung Transplant Center, Hospital Santa Marta, CHULC, Lisboa, Portugal

(1272) Four Cases of COVID-19 Infection in Lung Transplant Recipients; S. Türkkän¹, M. F. Sahin¹, M. A. Beyoglu¹, A. Yazicioglu¹, Y. T. Tekce², E. Yekeler¹. ¹Department of General Thoracic Surgery and Lung Transplantation, Ankara City Hospital, University of Health Sciences, Ankara, Turkey, ²Department of Infectious Diseases, Ankara City Hospital, University of Health Sciences, Ankara, Turkey

(1273) Bilateral Orthotopic Lung Transplantation after Resection of Benign Solitary Fibrous Tumor in the Donor Lung; S. Balasubramanya¹, D. Sayah², A. Ardehali¹. ¹Cardiac Surgery, University of California Los Angeles (UCLA), Ronald Reagan UCLA Medical Center, Los Angeles, CA, ²Division of Pulmonology, University of California Los Angeles (UCLA), Ronald Reagan UCLA Medical Center, Los Angeles, CA

(1274) Thoracoscopic Bilobectomy after Bilateral Single Sequential Lung Transplantation in a Cystic Fibrosis Patient with Post-Transplant Airway Stenosis; N. Mayer, P. Perikleous, G. Doukas, J. Finch, E. Beddow, V. Anikin, N. Asadi. *Thoracic Surgery, Royal Brompton&Harefield Foundation Trust, Harefield, United Kingdom*

(1275) Long-Term Survival Following Inadvertent Transplant Lung Venous and Pleural Migration of Lipiodol after Attempted Embolization for Post-Lung Transplant (Ltx) Chylothorax; H. Buzacott, J. Vazirani, G. I. Snell. *Department of Respiratory Medicine, Alfred Health, Melbourne, Australia*

(1276) An Unusual Course of Donor-Transmitted Angiosarcoma after Lung Transplantation; S. Bos¹, L. Daniëls², L. Michaux³, I. Vanden Bempt³, S. Vermeer³, S. Woei-A-Jin⁴, P. Schöffski⁴, B. Weynand⁵, R. Sciots⁵, S. Declercq⁶, D. E. Van Raemdonck⁷, L. J. Ceulemans⁷, L. J. Dupont¹, G. M. Verleden¹, R. Vos¹. ¹Respiratory Diseases, UZ Leuven, Leuven, Belgium, ²Histocompatibility and Immunogenetics Laboratory (HILA), Red Cross-Flanders, Mechelen, Belgium, ³Center for Human Genetics, UZ Leuven, Leuven, Belgium, ⁴General Medical Oncology, Leuven Cancer Institute, UZ Leuven, Leuven, Belgium, ⁵Pathology, UZ Leuven, Leuven, Belgium, ⁶Pathology, ZNA Middelheim Hospital, Antwerp, Belgium, ⁷Thoracic Surgery, UZ Leuven, Leuven, Belgium

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: ADVANCED LUNG FAILURE AND TRANSPLANTATION

(1277) **Early Post-Transplant Persistent Pneumothorax, Dehiscence or No Dehiscence?**; O. Shtraichman¹, M. M. Crespo¹, D. Dibardino¹, C. Bermudez², A. Courtwright¹. ¹Pulmonary and Critical Care Medicine, University of Pennsylvania, Philadelphia, PA, ²Cardiothoracic Surgery, University of Pennsylvania, Philadelphia, PA

(1278) **Surgical Management of Bronchial Stump Complication in Cadaveric Lobar Lung Transplantation**; J. P. Ehrsam, O. Lauk, S. Hillinger, D. Schneider, I. Opitz, M. Schuurmans, I. Inci. *Thoracic Surgery, University Hospital Zurich, Zurich, Switzerland*

(1279) **Splitting the Lungs in a Box for Single Lung Transplantation**; C. Mangukia¹, A. Kashem¹, J. Levy², N. Shigemura¹, Y. Toyoda¹. ¹Cardiothoracic Surgery, Temple University Hospital, Philadelphia, PA, ²Temple University Hospital, Philadelphia, PA

(1280) **Should We Assess the Donor's Lymph Nodes during Lung Procurement? How to Manage When Lymph Node Tuberculosis is Found**; J. E. Reis¹, R. Costa¹, C. Figueiredo¹, J. Silva¹, N. Murinello², L. Semedo², P. Calvino¹, J. Cardoso², J. Fragata¹. ¹Cardiothoracic Surgery, Hospital de Santa Marta - CHLC, Lisbon, Portugal, ²Pulmonology, Hospital de Santa Marta - CHLC, Lisbon, Portugal

(1281) **Tunneled Pleural Catheter to Manage Recurrent Post-Transplant Effusion**; J. Rosenheck¹, A. Revelo¹, M. M. Howsare¹, B. C. Keller¹, S. Kirkby¹, A. Ganapathi², B. Whitson², N. A. Mokadam², D. R. Nunley¹. ¹Pulmonary, Sleep and Critical Care Medicine, Ohio State University Wexner Medical Center, Columbus, OH, ²Cardiac Surgery, Ohio State University Wexner Medical Center, Columbus, OH

(1282) **Coronary Thrombosis after Rabbit-ATG in LTx Recipient**; D. Razia, S. Tokman, A. Omar, B. Buddhdev, H. Abdelrazek, R. Walia, A. Arjuna. *Norton Thoracic Institute, Phoenix, AZ*

(1283) **Drug-Induced Thrombotic Microangiopathy Caused by Ciprofloxacin Use in a Lung Transplant Recipient**; A. Arjuna¹, M. T. Olson², L. Cherrier³, R. Tenorio¹, H. Abdelrazek¹. ¹Norton Thoracic Institute, St. Joseph's Hospital and Medical Center, Phoenix, AZ, ²University of Arizona College of Medicine - Phoenix, Phoenix, AZ, ³Department of Pharmacy, St. Joseph's Hospital and Medical Center, Phoenix, AZ

(1284) **Carfilzomib-Induced Pneumotoxicity in a Lung Transplant Recipient**; D. Razia, A. Arjuna, A. Omar, B. Buddhdev, H. Abdelrazek, R. Walia, S. Tokman. *Norton Thoracic Institute, Phoenix, AZ*

(1285) **Thrombocytosis as a Marker of Allograft Rejection in Lung Transplantation: A Case Series**; M. T. Olson¹, H. Abdelrazek², K. McAnally², D. Bowman², B. Buddhdev², A. Arjuna². ¹University of Arizona College of Medicine - Phoenix, Phoenix, AZ, ²Norton Thoracic Institute, St. Joseph's Hospital and Medical Center, Phoenix, AZ

(1286) **Successful Eradication of De Novo C1q-Binding Donor-Specific Antibodies with Rituximab Monotherapy**; K. Moghbeli¹, Q. Xu², A. Zeevi², M. Morrell¹. ¹Pulmonary, Allergy and Critical Care Medicine, UPMC, Pittsburgh, PA, ²Pathology, UPMC, Pittsburgh, PA

(1287) **Diffuse Panbronchiolitis after Lung Transplantation. A New Form of Acute Rejection?**; M. A. Beyoglu¹, S. Turkkan¹, M. F. Sahin¹, A. Yazicioglu¹, F. Demirag², E. Yekeler¹. ¹Department of General Thoracic Surgery and Lung Transplantation, Ankara City Hospital, University of Health Sciences, Ankara, Turkey, ²Department of Pathology, Atatürk Chest Disease and Thoracic Surgery Hospital, University of Health Sciences, Ankara, Turkey

(1288) **Antibody Mediated Rejection of Unrelated Donor Lung**; A. A. Fekete, S. W. Yau, J. G. Youssef, A. Goodarzi, H. J. Huang. *Houston Methodist Hospital, Houston, TX*

(1289) **Challenges in Lung Re-Transplantation Following Antibody-Mediated Rejection**; L. Zaffiri. *Pulmonary and Critical Care, Duke University, Durham, NC*

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: ADVANCED LUNG FAILURE AND TRANSPLANTATION

(1290) BDUMP: A Rare Case of Vision Loss in a Lung Transplant Recipient; M. Barraza¹, J. Rosenheck², B. C. Keller², I. Livshitz³, M. M. Howsare². ¹Internal Medicine, Ohio State University Medical Center, Columbus, OH, ²Pulmonary, Critical Care, and Sleep Medicine, Ohio State University Medical Center, Columbus, OH, ³Ophthalmology, Ohio State University Medical Center, Columbus, OH

(1291) Rare Case of Neutrophilic Dermatitis in Lung Transplant Recipient; S. Grocholski¹, L. Soong², L. Verma², M. Robbins³, D. Kabbani³, R. Varughese¹, A. Hirji¹, K. Halloran¹, A. Kapasi¹, D. Lien¹, J. Weinkauff¹. ¹Division of Pulmonary Medicine, Department of Medicine, University of Alberta, Edmonton, AB, Canada, ²Division of Dermatology, Department of Medicine, University of Alberta, Edmonton, AB, Canada, ³Division of Infectious Disease, Department of Medicine, University of Alberta, Edmonton, AB, Canada

(1292) Hemophagocytic Lymphohistiocytosis in a Lung Transplant Recipient; D. Rudym¹, M. Lesko¹, S. Chang², Z. Kon², K. Sureau³, V. LaMaina³, T. Lewis⁴, L. Angel¹. ¹Transplant Institute, Department of Medicine, New York University Langone Health, New York, NY, ²Transplant Institute, Department of Thoracic Surgery, New York University Langone Health, New York, NY, ³Transplant Institute, Department of Cardiothoracic Surgery, New York University Langone Health, New York, NY, ⁴Transplant Institute, Department of Pharmacy, New York University Langone Health, New York, NY

(1293) Passenger Lymphocyte Syndrome in a Pediatric Lung Transplant Recipient with Previous Bone Marrow Transplantation; N. Avdimiretz¹, M. P. Solomon². ¹Pediatric Respiriology & Pediatric Lung Transplantation, Stollery Children's Hospital, Edmonton, AB, Canada, ²Pediatric Respiriology & Pediatric Lung Transplantation, Hospital for Sick Children, Toronto, ON, Canada

(1294) Elevated Liver Function in a Bilateral Lung Transplant Recipient with Scleroderma: Is the Medication to Blame?; M. T. Olson¹, A. Omar², S. McCartney², H. Mohamed², B. Buddhdev², A. Arjuna². ¹University of Arizona College of Medicine - Phoenix, Phoenix, AZ, ²Norton Thoracic Institute, St. Joseph's Hospital and Medical Center, Phoenix, AZ

(1295) A Case of Occult Myocarditis Causing Fatal Arrhythmia in a Cystic Fibrosis Patient Subjected to Retransplantation; M. Mammana, A. Dell'Amore, P. Ferrigno, E. Faccioli, M. Perazzolo Marra, C. Basso, F. Calabrese, F. Rea. Department of Cardiac, Thoracic, Vascular Sciences and Public Health, University of Padua, Padua, Italy

(1296) Erdheim-Chester Disease in a Patient after Double Lung Transplantation for Pulmonary Langerhans Cell Histiocytosis; D. Kifjak¹, R. Milos¹, P. Jaksch², G. Muraközy², K. Hoetzenecker², H. Prosch¹. ¹Department of Biomedical Imaging and Image-Guided Therapy, Medical University of Vienna, Vienna, Austria, ²Division of Thoracic Surgery, Medical University of Vienna, Vienna, Austria

(1297) Fatal Early-Onset Invasive Aspergillosis in a Recipient Receiving Lungs from a Marijuana-Smoking Donor; E. Faccioli¹, F. Pezzuto², A. Dell'Amore¹, F. Lunardi², C. Giraud³, M. Mammana¹, M. Schiavon¹, A. Ciminelli⁴, F. Calabrese², M. Loy¹, F. Rea¹. ¹Department of Cardiac, Thoracic, Vascular Sciences and Public Health, Thoracic Surgery Unit, University of Padova, Padova, Italy, ²Department of Cardiac, Thoracic, Vascular Sciences and Public Health, Pathology Unit, University of Padova, Padova, Italy, ³Department of Medicine, Radiology Unit, University of Padova, Padova, Italy, ⁴Forensic Pathology Center "CML", Portogruaro (VE), Italy

(1298) Abdominal Malakoplakia Secondary to Disseminated Mycobacterium Avium Complex after Lung Transplant; J. Christensen, A. Miliken, J. Brown, G. Dhillon. Lung Transplant, Stanford Healthcare, Stanford, CA

(1299) Use of Maribavir and Letermovir for Ganciclovir-Resistant Cytomegalovirus Infection in Lung Transplant Recipients; H. M. Underwood¹, A. Cordry¹, M. Baz². ¹Department of Pharmacy, University of Kentucky HealthCare, Lexington, KY, ²Department of Pulmonology, University of Kentucky HealthCare, Lexington, KY

(1300) Pleural Cryptococcosis in Lung Transplant Patient; C. Chao¹, N. Tommasino¹, E. Quintana², L. Bódega³, A. Musetti¹, P. Curbelo¹. ¹Lung Transplant Program, National Resources Funds, Montevideo, Uruguay, ²Pneumology, COMERO Centre, Rocha, Uruguay, ³Pathology, Maciel Hospital, Montevideo, Uruguay

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: ADVANCED LUNG FAILURE AND TRANSPLANTATION

(1301) A Rare Case of Symmetrical Cutaneous Alternaria Infections after Bilateral Lung Transplant; J. Magin¹, L. D. Snyder¹, C. Wolfe², H. A. Ali¹. ¹Pulmonary, Allergy, and Critical Care Medicine, Duke University, Durham, NC, ²Division of Infectious Diseases, Duke University, Durham, NC

(1302) Disseminated Mycobacterium Fortuitum Infection in Bilateral Lung Transplant Recipient; C. Nichols, M. Howsare, D. R. Nunley, S. Sarwar, M. Sobhanie. *The Ohio State University, Columbus, OH*

(1303) A Case of Unremitting Cellulitis in a Lung Transplant Recipient: What is the Infectious Etiology?; M. T. Olson¹, C. Rogers², W. D. Anderson³, S. Barake⁴, A. Arjuna². ¹University of Arizona College of Medicine - Phoenix, Phoenix, AZ, ²Norton Thoracic Institute, St. Joseph's Hospital and Medical Center, Phoenix, AZ, ³Department of Pathology, St. Joseph's Hospital and Medical Center, Phoenix, AZ, ⁴Department of Infectious Disease, St. Joseph's Hospital and Medical Center, Phoenix, AZ

(1304) Sapovirus Gastroenteritis in a Lung Transplant Recipient; K. Richards, G. Li, P. Garcha. *Pulmonary, Critical Care and Sleep Medicine, Baylor College of Medicine, Houston, TX*

(1305) Isavuconazole for Invasive Fungal Infection in a Lung Transplant Patient; N. Naithani¹, K. L. Dawson², H. M. Underwood³, B. Leahy³, M. Pitts³, J. Co³, M. A. Baz³. ¹Pulmonary, Critical Care and Sleep Medicine, University of Kentucky, Lexington, KY, ²Pharmacy Practice and Science, University of Kentucky, Lexington, KY, ³Lung Transplant, University of Kentucky, Lexington, KY

(1306) BK Virus Associated Nephropathy (BKVAN) in a Lung Transplant Recipient in the Setting of Augmented Immunosuppression; J. E. Reed¹, Y. Bryan¹, J. B. Smith². ¹Transplant Surgery, University of Colorado School of Medicine, Aurora, CO, ²Pulmonary Sciences and Critical Care, University of Colorado School of Medicine, Aurora, CO

(1307) Bilateral Lobar Lung Transplantation after Smoke Inhalation Injury - A Case Report; E. Olsson¹, M. Silverborn², U. Smedh³, G. C. Riise¹, J. M. Magnusson¹, G. Dellgren². ¹Transplant Institute, Sahlgrenska University Hospital, Gothenburg, Sweden, ²Thoracic Surgery, Sahlgrenska University Hospital, Gothenburg, Sweden, ³Surgery, Sahlgrenska University Hospital, Gothenburg, Sweden

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: MECHANICAL CIRCULATORY SUPPORT

(1308) Cangrelor and Heparin for Left Ventricular Assist Device Implantation in a Patient with Heparin-Induced Thrombocytopenia; S. Mishra¹, J. Hoosain², V. Rakita², N. Afari-Armah², G. Sunagawa³, Y. Toyoda³, E. Hamad². ¹Internal Medicine, Lewis Katz School of Medicine-Temple University, Philadelphia, PA, ²Heart and Vascular Institute, Section of Cardiology, Lewis Katz School of Medicine-Temple University, Philadelphia, PA, ³Division of Cardiovascular Surgery, Lewis Katz School of Medicine-Temple University, Philadelphia, PA

(1309) Less Invasive HeartMate 3 Left Ventricular Assist Device Implantation under Deep Hypothermic Circulatory Arrest for Severely Calcified Aorta; R. Rengarajan¹, D. Enter², D. Meyer², A. Rafael², C. Guerrero¹. ¹Cardiology, Baylor University Medical Center, Dallas, TX, ²Cardiac Surgery, Baylor University Medical Center, Dallas, TX

(1310) Three-Field LVAD Implantation Completely Avoids Dissection of the Heart in Patients with Previous Sternotomy; A. J. Sbrocchi¹, B. A. Houston², R. J. Tedford², L. Lozonschi³. ¹Department of Surgery, Division of Cardiothoracic Surgery, Medical University of South Carolina, Charleston, SC, ²Department of Medicine, Division of Cardiology, Medical University of South Carolina, Charleston, SC, ³Department of Surgery, Division of Cardiothoracic Surgery, University of South Florida, Tampa, FL

(1311) The First Reported Case of COVID-19 Myocarditis Managed with Biventricular Impella Support; J. Ruiz¹, F. Kandah¹, M. Ganji¹, R. Goswami². ¹Cardiology, University of Florida-COM Jacksonville, Jacksonville, FL, ²Cardiology, Mayo Clinic Hospital, Jacksonville, FL

(1312) Heart Mate II Deactivation Using a Left Atrial Appendage Occluder in the Outflow Cannula; A. B. Pereira¹, D. S. Belfort², B. Biselli¹, P. H. Melo¹, M. S. Ávila¹, R. L. Hames¹, S. I. Rizk¹, B. S. Rangel¹, V. B. Batista¹, A. A. Abizaid¹, R. Kalil Filho¹, P. M. Fernandes¹, F. S. Brito Junior¹, S. M. Ferreira¹. ¹Cardiology, Hospital Sirio Libanes, Sao Paulo, Brazil, ²Cardiology, Incor - Instituto do Coração do Hospital das Clínicas da FMUSP, Sao Paulo, Brazil

(1313) Cardiac Tamponade from Biodebris Accumulation in Long Term HVAD Support; D. Gumber¹, B. Medalion², M. C. Kontos¹, C. R. Trankle¹, Z. M. Gertz¹, K. B. Shah¹, I. Tchoukina¹. ¹Cardiology, Virginia Commonwealth University Pauley Heart Center, Richmond, VA, ²Cardiology, Virginia Commonwealth University Cardiothoracic Surgery, Richmond, VA

(1314) Left Ventricular Assist Device Graft Obstruction Relieved by Transcutaneous Stenting in a Teenage Patient; V. Benvenuto, W. Ravekes, R. Ringel. *Pediatric Cardiology, Johns Hopkins Hospital, Baltimore, MD*

(1315) Assisting the Heart to Assist the Lungs: LVAD Support in Restrictive Physiology and Pulmonary Hypertension; K. Puri¹, R. D. Coleman², I. Adachi³, J. A. Spinner⁴, S. Choudhry⁴, S. W. Denfield⁴, W. J. Dreyer⁴, J. F. Price⁴, H. P. Tunuguntla⁴. ¹Pediatric Critical Care Medicine, Baylor College of Medicine, Houston, TX, ²Pediatric Critical Care Medicine and Pediatric Pulmonology, Baylor College of Medicine, Houston, TX, ³Congenital Heart Surgery, Baylor College of Medicine, Houston, TX, ⁴Pediatric Cardiology, Baylor College of Medicine, Houston, TX

(1316) Vertical Ventricular Assist Device Placement to Systemic Right Ventricle for a Patient with Corrected Transposition of the Great Arteries and Mesocardia; H. Yoshida. *The Department of Cardiovascular Surgery, Tokyo Women's Medical University, Tokyo, Shinjuku, Japan*

(1317) Management of Iatrogenic VSD during Systemic RVAD Implantation: Case Report; M. X. Deng¹, J. A. Laks², A. Jeewa³, M. Mazwi⁴, E. Jean-St-Michel⁵, A. Maurich⁶, O. Honjo⁷. ¹Medicine, University of Ottawa, Ottawa, ON, Canada, ²Cardiology, Credit Valley Hospital, Mississauga, ON, Canada, ³Pediatric Cardiology, The Hospital for Sick Children, Toronto, ON, Canada, ⁴Critical Care Medicine, The Hospital for Sick Children, Toronto, ON, Canada, ⁵Pediatric cardiology, The Hospital for Sick Children, Toronto, ON, Canada, ⁶Nursing, The Hospital for Sick Children, Toronto, ON, Canada, ⁷Cardiovascular Surgery, The Hospital for Sick Children, Toronto, ON, Canada

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: MECHANICAL CIRCULATORY SUPPORT

(1318) *The Influence of Sacubitril/Nepriylsin Inhibition on Ventricular Assist Device Haemodynamics - A Case Report*; T. Meredith¹, B. Schnegg¹, D. Robson¹, A. Schnegg-Kaufmann², C. Hayward¹. ¹Heart and Lung Transplant Unit, St Vincent's Hospital, Sydney, Darlinghurst, Australia, ²University of New South Wales, Sydney, Australia

(1319) *Early Use of Impella RP in the Setting of Acute Massive Pulmonary Embolism Related Acute Right Ventricular Failure*; R. Vijaykrishnan, A. Solsi. Creighton University, Phoenix, AZ

(1320) *Fulminant Myocarditis in Fontan Patient Treated with Mechanical Circulatory Support and Heartmate 3*; D. Y. Lu¹, M. G. Karas¹, E. M. Horn¹, U. Krishnan¹, P. Goyal¹, R. Bhatt¹, H. S. Singh¹, E. Iannacone¹, B. Worku¹, Y. Naka², L. K. Kim¹, I. Sobol¹. ¹New York Presbyterian Hospital - Weill Cornell Medical Center, New York, NY, ²New York Presbyterian Hospital - Columbia University Medical Center, New York, NY

(1321) *"Clipping the Leak" - A Case Series of Transcatheter Mitral Valve Repair after Left Ventricular Assist Device*; S. K. Shah¹, S. Vullaganti¹, S. Maybaum¹, B. Lima², H. Fernandez², G. Stevens¹, K. Davidson², B. Rutkin¹, S. Wilson¹, E. Koss¹, S. Vatsia², D. T. Majure³. ¹Cardiology, Northwell Health, Manhasset, NY, ²Cardiothoracic Surgery, Northwell Health, Manhasset, NY, ³Cardiology, Weill Cornell Medicine, Manhattan, NY

(1322) *Effect of Radiation in Patients with HeartMate 3 LVAD Therapy*; N. Butt¹, M. Hofmeyer², M. E. Rodrigo², S. Rao², A. Kadakkal², T. I. Elliott², E. J. Molina², S. S. Najjar², F. H. Sheikh². ¹Internal Medicine, MedStar Washington Hospital Center, Washington, DC, ²Cardiology, MedStar Heart and Vascular Institute, Washington, DC

(1323) *A Novel Hybrid Single Ventricular Assist Device (SVAD) Strategy for a Neonate with Ventricular Septal Defect, Aortic Arch Hypoplasia, and Biventricular Dysfunction*; M. S. Ploutz¹, L. J. May¹, D. Boucek¹, A. Lal¹, K. Molina¹, E. R. Griffiths². ¹Pediatric Cardiology, University of Utah, Salt Lake City, UT, ²Pediatric Cardiothoracic Surgery, University of Utah, Salt Lake City, UT

(1324) *To VAD or Not to VAD: A Case of Durable Left Ventricular Assist Device Implantation in a COVID-19 Patient*; M. Ignaszewski¹, K. Pandrangi², M. Kabbany¹, J. E. Wilcox¹, E. E. Vorovich¹, A. Tibrewala¹, Y. Raza¹, F. Ahmad¹, K. Ghafourian¹, J. D. Rich¹, A. A. Pawale¹, D. T. Pham¹, C. W. Yancy¹, I. S. Okwuosa¹. ¹Northwestern Memorial Hospital, Chicago, IL, ²Internal Medicine, Northwestern Memorial Hospital, Chicago, IL

(1325) *Biventricular Assist Device Support of a Child with Intractable Arrhythmias Secondary to Histiocytoid Cardiomyopathy*; D. A. Magnetta¹, A. Reichhold¹, P. T. Thrush¹, M. Monge², G. Webster¹, A. Joong¹. ¹Pediatric Cardiology, Lurie Children's Hospital of Chicago, Chicago, IL, ²Pediatric Cardiothoracic Surgery, Lurie Children's Hospital of Chicago, Chicago, IL

(1326) *Therapeutic Plasma Exchange for Treatment of Heparin Induced Thrombocytopenia in a Patient Undergoing Left Ventricular Assist Device Implantation*; C. H. Rawitscher, A. M. Afzal, T. J. George. Cardiology, The Heart Hospital Baylor Plano, Plano, TX

(1327) *Left Atrial Venous-Arterial Extracorporeal Membrane Oxygenation (LAVA-ECMO) is a Feasible Option for Patients in Cardiogenic Shock for Whom Impella Offloading is Contraindicated*; B. Rai¹, C. J. Rosse¹, K. L. Gorder², S. G. Rudick², E. S. Chung², T. E. Raymond², T. M. O'Brien², G. F. Egnaczyk², G. F. Answini³, J. M. Griffin³, J. Smith³, S. M. Hasan³, J. Choo², T. D. Smith². ¹Internal Medicine, The Christ Hospital, Cincinnati, OH, ²Cardiology, The Christ Hospital, Cincinnati, OH, ³Cardiovascular Surgery, The Christ Hospital, Cincinnati, OH

(1328) *Berlin Heart Explantation Systematic Approach Protocol in a Single Center Experience*; D. M. Torpoco Rivera¹, J. Schneider², J. Dentel³, S. Sehgal¹. ¹Pediatric Cardiology, Children's Hospital of Michigan, Detroit, MI, ²Pediatric Critical Care, Children's Hospital of Michigan, Detroit, MI, ³Cardiovascular Surgery, Children's Hospital of Michigan, Detroit, MI

(1329) *Using Aortic Arch Short Axis Views during Transesophageal Echocardiographic Examination Facilitates Right Ventricular Assist Device Imaging*; A. M. Tutunjian¹, J. P. Ortoleva², C. Hironaka¹, T. Nordan¹, Y. Zhan³, F. Y. Chen³, G. S. Couper³, M. Kawabori³. ¹Tufts University School of Medicine, Boston, MA, ²Anesthesia, Tufts Medical Center, Boston, MA, ³CardioVascular Center, Tufts Medical Center, Boston, MA

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: MECHANICAL CIRCULATORY SUPPORT

(1330) LVAD- Antibiotic and Warfarin Alert; C. P. Kessler Iglesias¹, B. Schnegg¹, N. Dharan², C. Lao³, J. Joseph⁴, D. Marriott², C. Hayward¹. ¹Heart and Lung Clinic, St.-Vincent Hospital, Darlinghurst, Australia, ²Infectious Disease Department, St.-Vincent Hospital, Darlinghurst, Australia, ³St Vincent's Hospital Sydney Pharmacy Department, St.-Vincent's Hospital, Darlinghurst, Australia, ⁴Department of Haematology, St.-Vincent's Hospital, Darlinghurst, Australia

(1331) Successful Implantation of Impella 5.5 Device and Subsequent Recovery in a Pediatric Patient with Small Arterial Vessels; S. Shugh¹, M. Chrisant¹, L. D'Addese¹, I. Turner², S. Bibevski², F. Scholl². ¹Heart Institute, Joe DiMaggio Children's Hospital, Hollywood, FL, ²Heart Institute, Cardiothoracic Surgery, Joe DiMaggio Children's Hospital, Hollywood, FL

(1332) False Positive Hepatitis C Virus Serologies in Pediatric Patients with Left Ventricular Assist Devices; G. S. Moorthy, K. P. Wood, Y. Chang, S. Kirmani, M. Carboni. Department of Pediatrics, Duke University Hospital, Durham, NC

(1333) Low Flow Alarms! A Case of Percutaneous LVAD Decommissioning; V. Raju¹, E. Hiner¹, A. Javois², D. Patel², A. A. Andrade¹, S. Pauwaa¹, C. Sciamanna¹, J. Pillarella¹, G. Macaluso¹, A. Joshni¹, M. Dia¹, W. Cotts¹, N. Graney¹, S. Hicks¹, K. Kuper², P. Pappas³, A. Tatoes³, N. Narang¹. ¹Advocate Christ Medical Center/University of Illinois-Chicago, Chicago, IL, ²Advocate Christ Medical Center, Chicago, IL, ³Advocate Christ Medical Center/Rush University Medical Center, Chicago, IL

(1334) Myocarditis as a Manifestation of a T Cell Lymphoproliferative Disorder in a Patient Undergoing Left Ventricular Assistance Device Implantation; V. S. Hahn¹, A. Ghorbani¹, S. Hsu¹, S. Lewsey¹, K. Sharma¹, I. Wittstein¹, K. Freed¹, R. Sweren², J. Handler³, N. Wagner-Johnston³, C. Sperati⁴, J. Chrispin¹, L. M. Wake⁵, M. Halushka⁵, A. Kilic⁶, N. Gilotra¹. ¹Cardiology, Johns Hopkins University, Baltimore, MD, ²Dermatology, Johns Hopkins University, Baltimore, MD, ³Oncology, Johns Hopkins University, Baltimore, MD, ⁴Nephrology, Johns Hopkins University, Baltimore, MD, ⁵Pathology, Johns Hopkins University, Baltimore, MD, ⁶Cardiac Surgery, Johns Hopkins University, Baltimore, MD

(1335) Seven Years of Ventricular Assist Device Support on Dabigatran; F. Rorris, D. Koutsavli, C. Charitos. Thoracic and Cardiovascular Surgery, Evangelismos General Hospital, Athens, Greece

(1336) Cardiobacterium Valvarum Bacteremia in a Left Ventricular Assist Device Recipient: Case Report and Review of the Literature; R. N. Kumar¹, J. Rich², V. Stosor¹, M. P. Angarone¹. ¹Infectious Diseases, Northwestern University, Chicago, IL, ²Cardiology, Northwestern University, Chicago, IL

(1337) A Hemolytic Event in a Heartmate 3 Patient in the Setting of Polycythemia; N. Butt¹, J. Grinstein², S. S. Najjar³, F. H. Sheik³. ¹Internal Medicine, MedStar Washington Hospital Center, Washington, DC, ²Cardiology, UChicago Medicine, Chicago, IL, ³Cardiology, MedStar Heart and Vascular Institute, Washington, DC

(1338) COVID-19 Complicating Perioperative Management of Left Ventricular Assist Device Implantation; D. S. Belfort, B. Biselli, S. M. Brandão, B. R. Gomes, M. S. Lira, R. C. Dantas, C. A. Aragão, F. R. Galas, F. A. Gaiotto, F. B. Jatene, E. A. Bocchi, S. M. Ferreira. Heart Institute - HCFMUSP, São Paulo, Brazil

(1339) Venovenous Extracorporeal Membrane Oxygenation - Rapid Recovery for Post-Surgical Negative Pressure Pulmonary Edema; K. Patel¹, B. Rai¹, M. J. Scott², T. M. O'Brien³. ¹The Christ Hospital, Cincinnati, OH, ²Tri-State Pulmonary Associates, Cincinnati, OH, ³Ohio Heart and Vascular, Cincinnati, OH

(1340) The Root of All Thrombi: Coronary Artery Thromboembolism Post Heartmate3; B. Gheyath¹, R. V. Khatiwala², M. A. Gibson¹, M. Cadeiras¹, I. A. Ebong¹. ¹Cardiovascular Medicine, UC Davis Health, Sacramento, CA, ²Internal Medicine, UC Davis Health, Sacramento, CA

(1341) Emergent Left Ventricular Assist Device Pump Exchange Concomitant with Aortic Valve Closure Due to Pump Thrombosis and Aortic Insufficiency; K. Fairbairn, T. Kazui. Department of Cardiothoracic Surgery, University of Arizona, Tucson, AZ

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: MECHANICAL CIRCULATORY SUPPORT

(1342) HVAD Decommission in a Failing Mustard: Making Virtue out of Necessity; O. Gonzalez Fernandez¹, F. De Rita², A. Hasan², S. Schueler², G. MacGowan³, K. Jansen³. ¹Cardiology, Hospital La Paz, Madrid, Spain, ²Cardiothoracic Surgery, Freeman Hospital, Newcastle upon Tyne, United Kingdom, ³Cardiology, Freeman Hospital, Newcastle upon Tyne, United Kingdom

(1343) Successful Short-Term ECPPELLA Support as a Bridge to Recovery Following STEMI Complicated by Refractory Cardiogenic Shock Despite Emergency PCI; C. Mangukia, S. H. Brann, G. Sunagawa, B. O'Murchu, Y. Toyoda. Temple University Hospital, Philadelphia, PA

(1344) Loeffler's Endocarditis Treated with Total Artificial Heart as Bridge to Transplant; G. T. Gibson¹, S. Rangasamy¹, J. Contreras¹, A. Singhvi¹, A. Fox¹, N. Moss¹, M. G. Triveri¹, A. Lala¹, D. Mancini¹, S. Itagaki², A. C. Anyanwu², A. Parikh¹. ¹Medicine, Cardiology, The Zena and Michael A. Wiener Cardiovascular Institute, Icahn School of Medicine at Mount Sinai, New York, NY, ²Cardiovascular Surgery, Icahn School of Medicine at Mount Sinai, New York, NY

(1345) Heparin-Induced Thrombocytopenia and Thrombosis with Axillary Impella 5.5 as Bridge-to-Transplant; R. Pinnelas, R. Cole, D. Megna, J. Lorber, D. Ramzy, D. Emerson, L. Benck, S. Sedrak, L. Czer, D. Chang, F. Esmailian, J. A. Kobashigawa, J. Moriguchi. Smidt Heart Institute at Cedars-Sinai, Los Angeles, CA

(1346) Dynamic LVAD Inflow Cannula Obstruction Due to Mobile Thrombi; G. T. Gibson¹, S. Rangasamy¹, J. Contreras¹, J. Roldan¹, S. Mitter¹, M. Barghash¹, D. Mancini¹, A. C. Anyanwu², A. Lala¹, N. Moss¹. ¹Medicine, Cardiology, The Zena and Michael A. Wiener Cardiovascular Institute, Icahn School of Medicine at Mount Sinai, New York, NY, ²Cardiovascular Surgery, Icahn School of Medicine at Mount Sinai, New York, NY

(1347) Simultaneous Multi-Vascular Bed Imaging in a Patient Supported by a Continuous-Flow LVAD; I. Bole¹, D. Rodgers², B. Smith¹, A. Nguyen¹, B. Chung¹, S. Kalantari¹, N. Sarswat¹, G. Kim¹, T. Song², T. Ota², V. Jeevanandam², E. Kruse¹, C. Kordeck³, C. Kramer³, S. Pinney¹, J. Grinstein¹. ¹Department of Medicine, University of Chicago, Chicago, IL, ²Department of Surgery, University of Chicago, Chicago, IL, ³Department of Neurology, University of Chicago, Chicago, IL

(1348) Performing under Pressure: Invasive Hemodynamics to Diagnose and Guide Treatment of LVAD Outflow Graft Stenosis; M. N. Belkin, A. P. Shah, S. Nathan, R. Kalathiya, T. Song, T. Ota, V. Jeevanandam, A. B. Nguyen, B. B. Chung, B. A. Smith, S. Kalantari, N. Sarswat, G. Kim, S. P. Pinney, J. Grinstein. University of Chicago, Chicago, IL

(1349) Heart* to Heart*: Thrombosed HeartWare LVAD Exchanged to a Heartmate 3 LVAD; S. Newman, N. Wan, S. Patel, M. Taveras, D. Fauvel, S. Forest, M. Uehara, Y. Rochlani, P. Edwards, U. Jorde, D. Goldstein, D. Sims. Montefiore Medical Center, Bronx, NY

(1350) More Than Just Suckdown: Hemodynamics of Intermittent Inflow Cannula Obstruction; D. Brahmabhatt¹, S. Rahman¹, R. J. Cusimano², F. Billia¹, Y. Moayed¹. ¹Cardiology, University Health Network, Toronto, ON, Canada, ²Cardiovascular Surgery, University Health Network, Toronto, ON, Canada

(1351) Fusion of Bovine Tissue Aortic Valve Leaflets in a Patient with Left Ventricular Assist Device: A Case Report; N. H. Patel¹, V. B. Bhattad¹, A. Leal², A. R. Patel¹, D. Meyer², A. Rafael², S. Hall¹, A. Bindra¹. ¹Department of Cardiology, Division of Heart Failure, Baylor University Medical Center, Dallas, TX, ²Department of Cardiothoracic Surgery, Baylor University Medical Center, Dallas, TX

(1352) Bypassing the Ordinary: A Patient's Unique Journey to Reach His Destination; C. A. Kos¹, P. Burns², R. Ross², M. Muntazar³, M. Neary³, M. Moshiyakhov⁴, K. Barn¹. ¹Advanced Heart Failure, Deborah Heart and Lung Center, Browns Mills, NJ, ²Surgery, Deborah Heart and Lung Center, Browns Mills, NJ, ³Anesthesiology, Deborah Heart and Lung Center, Browns Mills, NJ, ⁴Cardiology, Deborah Heart and Lung Center, Browns Mills, NJ

(1353) 1,2,3: Use of Ang II in a HM3; A. Andrade, G. Gavrilos, J. Pillarella, N. Narang, C. Sciamanna, S. Pauwaa, G. Macaluso, W. Cotts, A. Tatoes, P. Pappas. Cardiology, Advocate Christ MC, Oak Lawn, IL

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: MECHANICAL CIRCULATORY SUPPORT

(1354) Restoring the Flow! Superior Vena Cava (SVC) Obstruction Following ProtekDuo^(TM) Insertion; S. D. Minns¹, H. Singh¹, S. Lim². ¹Cardiac Anaesthesia, University Hospital Birmingham, Birmingham, United Kingdom, ²Cardiology, University Hospital Birmingham, Birmingham, United Kingdom

(1355) Treatment of Anti-Body Mediated Rejection Complicated by Cardiogenic Shock with a Temporary Left Ventricular Assist Device as a Bridge to Recovery; C. Fabrizio, E. Horn, N. Stokes, Z. Rhinehart, G. Hickey, M. Keebler. Heart and Vascular Institute, UPMC, Pittsburgh, PA

(1356) Parenteral Antiplatelet Agents in Three Patients Receiving VA-ECMO Support to Maintain Drug-Eluting Stent Patency; B. M. Colvin¹, R. Rivosecchi². ¹Department of Pharmacy, WVU Medicine, Morgantown, WV, ²Department of Pharmacy, UPMC Presbyterian Hospital, Pittsburgh, PA

(1357) Systemic tPA Treatment for Thrombosis in a Patient with Dilated Cardiomyopathy on Berlin Heart; L. D. Glass¹, R. Murthy², P. Pastuszko². ¹Pediatric Cardiology, The Children's Heart Center at Mount Sinai, New York, NY, ²Cardiovascular Surgery, Mount Sinai Hospital, New York, NY

(1358) A Pseudotwist Pattern of LVAD Outflow Graft Stenosis - A Cautionary Tale; Z. Tucanova¹, M. Pokorny¹, O. Szarszoi¹, P. Ivak¹, M. Hegarova², H. Riha³, I. Netuka¹. ¹Department of Cardiovascular Surgery, Institute for Clinical and Experimental Medicine, Prague, Czech Republic, ²Department of Cardiology, Institute for Clinical and Experimental Medicine, Prague, Czech Republic, ³Department of Anesthesiology and Intensive Care Medicine, Institute for Clinical and Experimental Medicine, Prague, Czech Republic

(1359) Fusion Cardiac Resynchronization Therapy in an LVAD Patient from Two Devices and Crossing Leads; A. D. Egorova, L. van Erven, S. L. Beeres, L. Tops. Cardiology, Leiden University Medical Center, Leiden, Netherlands

(1360) Bedside VA-ECMO Cannulation for a Patient with CTEPH and RV Failure; E. K. Powell¹, C. Pasrija², A. Menne¹, D. Haase³, M. Ghoreishi², B. Griffith². ¹Emergency Medicine, University of Maryland School of Medicine, Baltimore, MD, ²Cardiac Surgery, University of Maryland School of Medicine, Baltimore, MD, ³Emergency Medicine and Surgery, University of Maryland School of Medicine, Baltimore, MD

(1361) Two Cases of Wearing an Implantable Ventricular Assist Device in the Late Postoperative Period after the Fontan Operation *Two Cases of Wearing an Implantable Ventricular Assist Device in the Late Postoperative Period after the Fontan Operation;* S. Fujita, T. Ushijima, S. Oda, Y. Tanoue, A. Shiose. Cardiovascular Surgery, Kyushu University, Fukuoka, Japan

(1362) "Clots and Failures" A Case of COVID-19 Causing STEMI and Persistent Cardiogenic Shock Ultimately Requiring LVAD; D. Rai¹, Z. Anjum¹, M. Tahir¹, R. Pandey¹, S. Thakkar¹, A. Zaheer², S. Feitell³, S. Khodjaev¹, E. Lee³, V. Parikh³. ¹Internal Medicine, Rochester Regional Health, Rochester, NY, ²Internal Medicine, Gujrat Hospital, Gujrat, Pakistan, ³Cardiology, Rochester Regional Health, Rochester, NY

(1363) Sustained Ventricular Fibrillation in a Conscious Pediatric LVAD Patient; A. J. Howell¹, J. L. Ashkanase², J. A. Laks¹, K. George¹, L. Fazari¹, A. Maurich¹, M. Mazwi³, O. Honjo⁴, A. Jeewa¹, A. Bulic¹, E. Jean-St-Michel¹. ¹Cardiology, The Hospital For Sick Children, Toronto, ON, Canada, ²Pediatric Cardiology, McMaster Children's Hospital, Hamilton, ON, Canada, ³Critical Care Medicine, The Hospital For Sick Children, Toronto, ON, Canada, ⁴Cardiovascular Surgery, The Hospital For Sick Children, Toronto, ON, Canada

(1364) Across Two Bridges to a Heart Transplant; J. J. Thomas. CVTS, Lisie Heart Institute, Kochi, India

(1365) ECMO for Critically Ill COVID-19 with ARDS: A Case Series; D. Rai¹, M. Tahir¹, R. Pandey¹, A. Kharsa¹, F. Furqan¹, S. Thakkar¹, A. Zaheer², S. Khodjaev³, S. Feitell³, E. Lee³, V. Parikh³. ¹Internal Medicine, Rochester Regional Health, Rochester, NY, ²Internal Medicine, Gujrat Hospital, Gujrat, Pakistan, ³Cardiology, Rochester Regional Health, Rochester, NY

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: MECHANICAL CIRCULATORY SUPPORT

(1366) *Multiple Bridging: Recovery, Decision, Transplantation, Recovery*; A. Morley-Smith¹, D. Quinn¹, S. Khan², M. Mukadam¹, S. Rooney¹, M. Bhabra¹, J. Mascaro¹, A. Ranasinghe¹, C. Chue¹, S. Lim¹. ¹*Cardiothoracic Transplantation, Queen Elizabeth Hospital, Birmingham, United Kingdom*, ²*Cardiology, Queen Elizabeth Hospital, Birmingham, United Kingdom*

POSTER TOPICS – EARLY CAREER CLINICAL CASE REPORTS: PULMONARY VASCULAR DISEASE (PAH & CTEPH)

(1367) *RV Failure in Pulmonary Hypertension Amplified by Secondary Hemochromatosis*; A. S. Sadek, A. Patil, M. P. Gannon, A. Vaidya. *Cardiology, Temple University Hospital, Philadelphia, PA*

(1368) *Is Inhaled Therapy Better Than IV? Challenges of PVOD*; N. Chima¹, M. Caccamo². ¹*West Virginia University, Morgantown, WV*, ²*Heart & Vascular Institute, West Virginia University, Morgantown, WV*

(1369) *"Pseudo-CTEPH": A Case of a CTEPH Mimic That May Result in Unnecessary Surgery*; J. Hoosain, A. Sadek, W. R. Auger, A. Vaidya, P. Forfia. *Cardiology, Temple University Hospital, Philadelphia, PA*