

INTERNATIONAL SOCIETY FOR HEART AND LUNG TRANSPLANTATION

Twenty-Second Annual Meeting and Scientific Sessions
Final Program
April 10-13, 2002
Convening at the Hilton Washington and Towers, Washington, DC

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HIGHLIGHTS OF THE SCIENTIFIC PROGRAM

Don't miss the following at this year's meeting:

Invited Lecture Forums: This year, each Plenary Session will feature a one-hour lecture/panel discussion forum featuring addresses from international experts. Come and learn what's new with Immunosuppression, Mechanical Circulatory Support Devices for Heart Failure, and Cell Transplantation/Tissue Engineering.

Pioneers in Transplantation Lecture Series: We are pleased to continue our lecture series featuring addresses from pioneers in the field of thoracic transplantation. Join us this year for visions of the future as seen by Michael DeBakey, MD and Bruce Reitz, MD.

Provocative Debates: Closing the meeting with an energetic debate on an issue of polarized opinion has become one of the hallmarks of the ISHLT meeting. Join us for this year's debates, "Alternative Lists for Transplants are Rational and Ethical", and "COPD Should Not be an Indication for Lung Transplantation".

Case Reports: Learn from the experience of others during a variety of sunrise symposia focused on Sensational Successes and Fantastic Failures designed to wake you up and get your ideas and opinions flowing.

Basics of Transplantation: To encourage participation in this meeting among those who are new to transplantation, those in training, and those who are in need of a refresher course, we are offering a core curriculum educational track in the basics of transplantation immunology via the Friday Mid-Day Workshop.

CONTINUING MEDICAL EDUCATION INFORMATION

Accreditation

This activity has been planned and implemented in accordance with the Essentials and Standards of the Accreditation Council for Continuing Medical Education. The International Society for Heart and Lung Transplantation is accredited by the ACCME to provide continuing medical education for physicians. ISHLT designates this activity for a maximum of 32.75 hours in Category 1 credit toward the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

Category I Continuing Education Points for Transplant Coordinators (CEPTs) have been applied for through the American Board of Transplant Coordinators (ABTC).

The American Association of Critical Care Nurses (AACN) has approved this educational offering for up to 38.5 contact hours in CERP Category A.

Educational Objectives

The International Society for Heart and Lung Transplantation is a leading organization providing education for medical professionals involved in heart and lung transplantation. Because of the rapid advances in medicine in general and transplantation medicine specifically, transplant professionals are in need of regular opportunities to update and maintain their knowledge of advances and changes in transplant medicine. This meeting is designed to address their need.

Goals

To enable participants to learn about current practices, emerging technologies, and medical advances related to heart and lung transplantation and end-stage heart and lung disease; and to provide a forum for participants to engage in discussion, debate, and examination regarding the efficacy and applicability of these current practices, emerging technologies, and medical advances.

Target Audience

The audience for this program includes physicians, surgeons, scientists, nurses, and transplant coordinators engaged in the practice of heart and lung transplantation, the management and treatment of heart and lung transplant recipients, the management and treatment of patients with end-stage heart or lung disease, basic science or clinical research related to these fields, or specialties which cause them to become involved in the treatment of transplant recipients or patients with end stage heart or lung disease.

Learning Objectives

At the conclusion of this meeting, participants should be able to:

- * identify, prevent, and treat post-transplant complications of immunosuppression including infection, renal dysfunction, and post-transplant malignancy
- * compare and evaluate the relative advantages and disadvantages of various pharmacologic, non-pharmacologic, and biologic immunosuppression techniques
- * understand current and developing organ preservation/reperfusion techniques and the impact of these on the transplanted organ, and use that knowledge to optimize donor selection and extend the donor pool
- * compare and evaluate the advantages and disadvantages of various mechanical circulatory support systems and their associated patient selection criteria
- * describe the state of the art in clinical heart and lung failure treatment and the criteria for the selection of patients for transplant therapy
- * understand current animal models of basic science immunology and their application to the transplant setting
- * evaluate issues of controversy, such as age, prior transplantation, and systemic diseases, in the selection of candidates for heart and lung transplantation
- * understand the pathology of acute and chronic rejection and its application in the formulation of a definitive diagnosis of rejection
- * identify the issues unique to pediatric transplantation, and apply to pediatric transplantation the relevant practices and therapies of adult transplantation
- * evaluate the current and developing alternatives to orthotopic transplantation, including mechanical circulatory support, xenotransplantation, and a variety of surgical alternatives; assess the future of these therapies; and compare the value of these therapies as alternatives and/or bridges to transplantation
- * evaluate and implement the use of alternative methods of monitoring and treating rejection
- * identify, prevent, and treat donor-transmitted diseases

Disclosure

Current guidelines state that participants in CME activities should be made aware of any affiliation or financial interest that may affect a speaker's presentation. Each speaker has been requested to complete a disclosure statement. The names of the speakers declaring such affiliations are shown below. Additionally, all speakers have been asked to verbally disclose at the start of their presentation any financial interest or affiliations and to indicate if a product they are discussing is not labeled for the use under discussion or is still investigational.

FACULTY/PRESENTATION	COMPANY AFFILIATION	RELATIONSHIP
Bruno M. Meiser, MD Abstract #83	Fujisawa	Consultant
Michael C.Y. Chan, MD, FRCPC Abstract #111, #113	Fujisawa	Unrestricted Research Grant
Si M. Pham, MD Abstract #121	Fujisawa	Unrestricted Research Grant
Christopher G.A. McGregor, MD, FRCS Abstract #187	Nextran	Direct Research Support
Abdul Kashem, MD, PhD Abstract #197	Cardio Clasp, Inc.	Principle Investigator
Marlene Rose, PhD Abstract #227	Proteome Sciences PLC	Consultant
Murray H. Kown, MD Abstract #237	Cellgate, Inc.	Shareholder
Wayne D. Babcock , BSN Abstract #239	Advanced Respiratory	Research Support
Wolfgang F. Konertz, Jr., MD Abstract #266	Acorn, Inc.	Research Grant
Robert L. Kormos, MD Abstract #270	Thoratec	Advisory Board
Hani N. Sabbah, PhD Abstract #274	Acorn Cardiovascular	Consultant/Research Grant Support
Richard J. Kowalski, PhD Abstract #307	Cylex, Inc.	Employee
Seiichiro Murata, MD Abstract #308	Athero Genics, Inc.	Employee
Andreas Zuckerman, MD Abstract #314	SangStat	Speaker
Wayne Richenbacher, MD Satellite Symposium 1	Thoratec	Principal Investigator
Walter E. Pae, Jr., MD Satellite Symposium 1	Arrow International	Pennsylvania State Affiliation/Financial Interest
Richard N. Pierson, III, MD Satellite Symposium 1	Novacor/WorldHeart	Trial Investigator
Leslie W. Miller, MD Satellite Symposium 1	Thoratec	Funded Investigator

Shaf Keshavjee, MD Satellite Symposium 2	Vitrolife	Consultant
Duncan J. Stewart, MD, FRCPC Satellite Symposium 3	Northern Therapeutic, Inc.	Founding Scientist
Lynne Stevenson, MD Satellite Symposium 4	Scios, Inc.	Consultant
Bradley J. Martin Satellite Symposium 5	Osiris Therapeutics	CEO
Doris A. Taylor, PhD Satellite Symposium 5	Bioheart, Inc.	Consultant/Board Member
Anne Keogh, MBBS, MD Invited Lecture Forum	Wyeth	Clinical Trial Principal Investigator
Irving Weissman, MD Invited Lecture Forum	Amgen, Stem Cells, Inc., Celtrans Inc. (formerly Systemix)	Stockholder, Director, Funding
Eric A. Rose, MD Invited Lecture Forum	Thoratec	Research Support
Bruce R. Rosengard, MD Invited Lecture Forum	Novartis	Consultant
Patrick M. McCarthy, MD Invited Lecture Forum	Gezyme	Scientific Advisory Board
Joel D. Cooper, MD Mid-Day Workshop 2	Broncos, Inc.	Consultant
Joren C. Madsen, MD, DPhil Mid-Day Workshop 3	Wyeth-Ayerst/Novartis	Research Support/ Consultant
Thomas D. Wekerle, MD Mid-Day Workshop 3	Novartis Pharma AG	Research Agreement
Jon Kobashigawa, MD Mid-Day Workshop 4	Novartis, Roche, Fujisawa	Research Grants
Robert E. Shaddy, MD Mid-Day Workshop 5	Glaxo Smith Kline	Consultant/Grant Funding
Hermann Reichenspurner, MD, PhD Mid-Day Workshop 6 Sunrise Symposium 11	Fujisawa/Myocor, Inc.	Consultant
Stig Steen, MD, PhD Sunrise Symposium 6	Vitrolife	Supplier of Lung Evaluation Solution
Jack Copeland, MD Sunrise Symposium 9	Syn-Cardia (CardioWest)	Founder
Mark M. Boucek, MD Sunrise Symposium 10	SangStat, AGA Medical, NMT Medical, Glaxo	Speaker, Consultant
Keith McNeil, FRACP Sunrise Symposium 11 Closing Plenary-Debate	Roche	Steering Committee Member

The International Society for Heart and Lung Transplantation is most grateful for the educational grants and the support of our corporate partners towards this Twenty-Second Annual Meeting and Scientific Sessions

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SCIENTIFIC PROGRAM

Note: All meetings and activities will take place at the Hilton Washington and Towers unless otherwise specified. All papers will be presented in English.

WEDNESDAY, APRIL 10, 2002

8:00 am – 6:00 pm

Speaker Ready Room (Bancroft)

9:30 am – 11:00 am

ISHLT Registry Committee Meeting (Caucus)

10:00 am - 6:00 pm

Registration Desk Open (Concourse)

11:00 am – 12:30 pm

ISHLT Editorial Board Meeting (Thoroughbred)

12:30 pm – 3:00 pm

Satellite Symposium 1: Ongoing Trials in Mechanical Circulatory Support (International Ballroom Center)

Moderators: Robert L. Kormos, MD and John Dunning, FRCS

12:30 pm **Performance of the Heartmate VE**

Walter Dembitsky, MD, Sharp Memorial Hospital, San Diego, CA

12:45 pm **Management of Medical Patients in the REMATCH Trial**

Dale G. Renlund, MD, LDS Hospital, Salt Lake City, UT

1:00 pm **Management of Patients with the Heartmate VE LVAD in the REMATCH Trial**

Wayne E. Richenbacher, MD, Iowa City, IA

1:15 pm **Inotropes and Outcomes in the REMATCH Trial**

Leslie W. Miller, MD, University of Minnesota, Minneapolis, MN

1:30 pm **INTREPID**

Richard N. Pierson, III, MD, Vanderbilt University, Nashville, TN

1:45 pm **Abiocor**

Robert D. Dowling, MD, University of Louisville, Louisville, KY

2:00 pm **Axial Flow Devices**

Patrick M. McCarthy, MD, Cleveland Clinic Foundation, Cleveland, OH

2:15 pm **Lion Heart**

Walter E. Pae, Jr., Milton S. Hershey Medical Center, Hershey, PA

12:30 pm – 3:00 pm

Satellite Symposium 2: The Thoracic Organ Donor: Evaluation and Management (International Ballroom West)

Moderators, Heart: Bruce R. Rosengard, MD and Vivek Rao, MD, PhD

Moderators, Lung: Shaf Keshavjee, MD and Gregory I. Snell, MD, MBBS

12:30 pm **Heart: Where We've Been**

James K. Kirklin, MD, University of Alabama at Birmingham, Birmingham, AL

12:50 pm **Heart: Where We're Going**

Jonathan G. Zaroff, MD, University of California, San Francisco, CA

1:10 pm **Lung: Review of Evidence/Consensus Statements for Current Recommendations Regarding Lung Donor Acceptability**

Jonathan B. Orens, MD, Johns Hopkins Hospital, Baltimore, MD

1:25 pm **Lung: Review of Evidence/Consensus Statements for Current Recommendations Regarding Donor Infection Transmission**

Edward R. Garrity, Jr., MD, Loyola University Medical Center, Maywood, IL

1:40 pm **Lung: Potential for Development of a Lung Donor Score**

Thomas K. Waddell, MD, Toronto General Hospital, Toronto, Ontario, Canada

1:55 pm **Lung: Interventions/Strategies to Optimize the Use of Current Lung Donors**

Shaf Keshavjee, MD, University of Toronto, Toronto, Ontario, Canada

2:10 pm **Lung: Novel Approaches to Enlarge the Donor Pool**

Leif Eriksson, MD, University Hospital of Lund, Lund, Sweden

Discussion

2:00 pm - 8:00 pm

Exhibitor Set Up (Exhibit Hall)

2:00 pm - 8:00 pm

Poster Display Session 1 Set-Up (Exhibit Hall)

3:00 pm - 3:30 pm

Coffee Break (Concourse)

3:30 pm – 6:00 pm

Satellite Symposium 3: Updates on Pulmonary Hypertension (International Ballroom East)

Supported in part by an educational grant from Actelion Pharmaceuticals, Inc.

Moderators: Lewis J. Rubin, MD and Ivan Robbins, MD

3:30 pm Pathology and Reversibility of Pulmonary Hypertension in Children

Marlene Rabinovitch, MD, Hospital for Sick Children, Toronto, Ontario, Canada

4:00 pm Management of Pulmonary Hypertension in Children

Nancy D. Bridges, MD, Mount Sinai Medical Center, New York, NY

4:30 pm New Therapies in Pulmonary Hypertension

Anne Keogh, MD, MBBS, St. Vincent's Hospital, Sydney, Australia

5:00 pm Cell Based Therapy for Pulmonary Hypertension

Duncan J. Stewart, MD, University of Toronto, Toronto, Ontario, Canada

3:30 pm – 6:00 pm

Satellite Symposium 4: Clinical Trials: Challenges and Limitations (International Ballroom Center)

Moderators: O. Howard Frazier, MD and Roland Hetzer, MD

3:30 pm Trial Design for Clinical Lung Replacement Therapy: ECMO, Liquid Ventilation, and the Artificial Lung

Ronald B. Hirschl, MD, University of Michigan, Ann Arbor, MI

4:00 pm REMATCH: If I Had to Do It Again

James W. Long, MD, LDS Hospital, Salt Lake City, UT

4:30 pm ESCAPE: Is it the Trial I Wanted it to Be?

Lynne Warner-Stevenson, MD, Brigham and Women's Hospital, Boston, MA

5:00 pm Heart Transplantation: Do We Need a Randomized Trial?

James B. Young, MD, Cleveland Clinic Foundation, Cleveland, OH

3:30 pm – 6:00 pm

Satellite Symposium 5: Cellular Replacement Strategies for the Failing Heart (International Ballroom West)

Moderators: Doris A. Taylor, PhD and Richard D. Weisel, MD

3:30 pm The Use of Autologous Skeletal Myoblasts and Marrow Derived Stem Cells for Myocardial Regeneration and Repair

Doris A. Taylor, PhD, Duke University Medical Center, Durham, NC

4:00 pm Human Adult Bone Marrow Endothelial Progenitors: Potential Use for Ischemic Heart Disease

Silviu Itescu, MD, Columbia Presbyterian Hospital, New York, NY

4:30 pm Human Mesenchymal Stem Cells: What is their Potential?

Bradley J. Martin, OSIRIS Therapeutics, Baltimore, MD

5:00 pm Bone Marrow Stem Cells for Myocardial Regeneration in a Rodent Model of Myocardial Injury

Donald Orlic, MD, PhD, National Institutes of Health, Bethesda, MD

5:30 pm Embryonic Stem Cells for Cardiac Repair and Cardiomyocyte Cell Division

Loren Field, PhD, University of Indiana, Indianapolis, IN

6:00 pm – 7:00 pm

Cell Transplantation/Tissue Engineering Scientific Council Meeting (International Ballroom West)

6:00 pm – 11:00 pm

ISHLT Board of Directors Meeting (Map)

Thursday, April 11, 2002

6:00 am – 6:00 pm

Speaker Ready Room (Bancroft)

7:00 am - 8:00 am

Morning Coffee/Continental Breakfast (Exhibit Hall)

7:00 am - 8:30 am

Exhibits Open (Exhibit Hall)

7:00 am - 10:00 am

Poster Display Session 1 Set-Up Continued (Exhibit Hall)

7:00 am - 6:30 pm

Registration Desk Open (Concourse)

8:00 am - 9:00 am

OPENING PLENARY SESSION (International Ballroom Center)

Moderators: James B. Young, MD and Robert C. Robbins, MD

8:00 am **Welcome**

James B. Young, MD, ISHLT President, Cleveland Clinic Foundation, Cleveland, OH

8:05 am **Scientific Program Report**

Robert C. Robbins, MD, ISHLT Scientific Program Chair, Stanford University, Palo Alto, CA

8:15 am **Registry Report**

Marshall I. Hertz, MD, ISHLT Transplant Registry Medical Director, University of Minnesota, Minneapolis, MN

Paul Mohacsi, MD, ISHLT Transplant Registry Associate Medical Director, University of Berne, Berne, Switzerland

Mario Deng, MD, ISHLT MCSDB Database Medical Director, Columbia University, New York, NY

Featured Abstract

8:45 am (1) Safety and Efficacy of Everolimus (RAD) as Part of a Triple Immunosuppressive Regimen in De Novo

Cardiac Transplant Recipients: Six Month Analysis

H. Eisen,¹ R. Dorent,² D. Mancini,³ H. Valantine,⁴ M. Vigano,⁵ R. Starling,⁶ J. Lind,⁷ P. Bernhardt,⁸ K. Abeywickrama,⁸ the RAD B253 Study Group, ¹Temple University, Philadelphia, PA; ²Hopital La Pitie Salpetriere, Paris, France; ³Columbia Presbyterian Medical Center, New York, NY; ⁴Stanford University, Stanford, CA; ⁵Policlinico San Matteo, Pavia, Italy; ⁶Cleveland Clinic Foundation, Cleveland, OH; ⁷Novartis Pharmaceuticals, Summit, NJ; ⁸Novartis Pharma AG, Basel, Switzerland

9:00 am – 10:00 am

PLENARY SESSION INVITED LECTURE FORUM (International Ballroom Center)

Immunosuppression: An Evolving Art and Science

Moderators: James B. Young, MD and Robert C. Robbins, MD

TOR Inhibitors

Bruce R. Rosengard, MD, University of Pennsylvania Health System, Philadelphia, PA

Depletional Strategies and Agents and Co-Stimulation Blockade

Allan D. Kirk, MD, PhD, National Institutes of Health, Bethesda, MD

Rapamycin: Results of a Randomised Trial Following Heart Transplantation

Anne Keogh, MD, St. Vincent's Hospital, Sydney, Australia

Panel Discussion

10:00 am - 10:30 am

Coffee Break (Exhibit Hall)

10:00 am – 2:00 pm

Exhibits Open (Exhibit Hall)

10:30 am - Noon

CONCURRENT SESSION 1

Clinical Heart Transplantation 1: The Cardiac Transplant Research Database: A Decade of Insight (International Ballroom Center)

Moderators: James B. Young, MD and Marshall I. Hertz, MD

Invited Lecture: Scientific Horizons of the CTRD

James K. Kirklin, MD, University of Alabama at Birmingham, Birmingham, AL

Invited Lecture: The Art and Science of Multi-Center Databases

David Naftel, PhD, University of Alabama at Birmingham, Birmingham, AL

11:00 am (2) Malignancy And Death From Malignancy After Heart Transplantation, A Multicenter Time Related Risk Analysis

C.W. Yancy, Jr., D.C. Naftel, D. Renlund, A.B. Van Bakel, G.W. Dec, F. Lee, R.M. Oren, G. Ewald, P. Kaiser, R.C. Bourge, for the Cardiac Transplant Research Database (CTRD), University of Alabama at Birmingham, Birmingham, AL

11:15 am (3) Fatal Rejection After Cardiac Transplantation: Risk Factors and Era Effects From a 10-Year Multiinstitutional Analysis

J. Jarcho, R.N. Brown, B.K. Rayburn, A.L. Smith, J.M. Herre, F. Smart, B.S. Clemson, M.R. Pritzker, S. Tsiang, J.K. Kirklin, for the Cardiac Transplant Research Database (CTRD), University of Alabama at Birmingham, Birmingham, AL

11:30 am (4) Advanced Allograft Coronary Artery Disease: Interaction Between Pre and Post-Transplant Risk Factors From a 10-Year Multi-Institutional Study

J.P. Boehmer, R.N. Brown, C.V. Leier, A. Heroux, G. Torre-Amione, L.E. Wagoner, L.E. Miller, H.J. Eisen, P. Fraiser, J.K. Kirklin, for the Cardiac Transplant Research Database (CTRD), University of Alabama at Birmingham, Birmingham, AL

11:45 am (5) The Impact of Era and Co-Morbidity on the Incidence of Infection After Cardiac Transplantation: A 10-Year Multi-Institutional Study

D.C. McGiffin, D.C. Naftel, B. Czerska, R.S.D. Higgins, E.K. Kasper, O.H. Frazier, K. Aaronson, S. Davis, K. Thomas, R.C. Bourge, for the Cardiac Transplant Research Database (CTRD), University of Alabama at Birmingham, Birmingham, AL

10:30 am - Noon

CONCURRENT SESSION 2

Donor Management, Preservation, and Organ Distribution 1: Innovations in Donor Management and Organ

Preservation (International Ballroom East)

Moderators: Shaf Keshavjee, MD and Andres Varela, PhD

10:30 am (6) Ameliorated Reperfusion Injury in Lung Transplantation After Reduction of Brain Death Induced Inflammatory Graft Damage in the Donor

C.H. Wigfield,^{1,3} H.D. Golledge,² B.K. Shenton,³ J.A. Kirby,³ J.H. Dark,^{1,3} ¹Department of Cardiothoracic Surgery and Transplantation, Freeman Hospital, Newcastle upon Tyne, United Kingdom; ²Comparative Biology Centre, University of Newcastle, Newcastle upon Tyne, United Kingdom; ³Department of Surgery, University of Newcastle, Newcastle upon Tyne, United Kingdom

10:45 am (7) Functional Assessment of the Non-Heart-Beating Donor Lung Offers Improved Preservation

J.D. Aitchison,¹ H.E. Orr,² P. Flecknell,² J.A. Kirby,³ J.H. Dark,^{1,1} ¹Cardiopulmonary Transplantation, Freeman Hospital, Newcastle upon Tyne, United Kingdom; ²Comparative Biology Centre, University of Newcastle upon Tyne, Newcastle upon Tyne, United Kingdom; ³Department of Surgery, University of Newcastle upon Tyne, Newcastle upon Tyne, United Kingdom

11:00 am (8) Should We Ventilate or Cool the Pulmonary Graft Inside the Non-Heart-Beating Donor?

F.R. Rega,¹ N.C. Jannis,¹ G.M. Verleden,² W.J. Flameng,¹ T.E. Lerut,³ D.E. Van Raemdonck,^{1,3} ¹Center for Experimental Surgery and Anesthesiology, Catholic University of Leuven, Leuven, Belgium; ²Laboratory of Pneumology, Catholic University of Leuven, Leuven, Belgium; ³Department of Thoracic Surgery, University Hospital Gasthuisberg, Leuven, Belgium

11:15 am (9) Vascular Immunotargeting to Lung Graft Endothelium

B.D. Kozower,¹ T.D. Sweitzer,² S.A. Kanaan,¹ T. Tagawa,¹ S.M. Albelda,² V.R. Muzykantov,² G.A. Patterson,¹ ¹Washington University Medical School, St. Louis, MO; ²University of Pennsylvania Medical Center, Philadelphia, PA

11:30 am (10) Pig Lung Transplantation Using Extracellular Type Preservation Solutions

U.F.W. Franke,¹ T. Wittwer,¹ A. Fehrenbach,² T. Sandhaus,¹ F. Pfeifer,¹ T. Mueller,³ H. Schubert,³ P. Petrow,⁴ H. Kosmehl,⁴ J. Richter,² T. Wahlers,¹ ¹Department of Cardiothoracic and Vascular Surgery, Friedrich-Schiller-University, Jena, Germany; ²Department of Electron Microscopy, University Goettingen, Goettingen, Germany; ³Institute of Laboratory Animal Science, Friedrich-Schiller-University, Jena, Germany; ⁴Department of Pathology, Friedrich-Schiller-University, Jena, Germany

11:45 am (11) Effect of Perfadex® in Clinical Lung Preservation

C.T. Mueller,¹ F. Kur,² H. Fuerst,¹ B. Reichart,² ¹Department of Surgery, Ludwig-Maximilians University, Munich, Germany; ²Department of Cardiac Surgery, Ludwig-Maximilians University, Munich, Germany

10:30 am - Noon

CONCURRENT SESSION 3

Pathology of Heart and Lung Transplantation (International Ballroom West)

Moderators: Martin J. Goddard, FRCS and Gerald J. Berry, MD

10:30 am (12) **Origin of Neointimal Smooth Muscle Cells in Human Cardiac Allograft Coronary Artery Vasculopathy**
C. Atkinson, J. Horsley, M. Southwood, C. Phillpotts, J. Wallwork, M.J. Goddard, Pathology, Papworth Hospital, Cambridge, United Kingdom

10:45 am (13) **Interleukin-1 β and Risk of Coronary Artery Disease in Heart Transplant Patients**
C.A. Labarrere,¹ R.W. Benner,¹ D.R. Nelson,² M.H. Al-Hassani,¹ S.J. Miller,⁴ H.J. Eisen,³ ¹Division of Experimental Pathology, Methodist Research Institute at Clarian Health, Indianapolis, IN; ²Department of Biostatistics and Epidemiology, Cleveland Clinic Foundation, Cleveland, OH; ³Department of Cardiology, Temple University, Philadelphia, PA; ⁴Methodist Research Institute at Clarian Health, Indianapolis, IN

11:00 am (14) **The Loss of Function of Fas-L May Contribute to the Accelerated Nature of Transplant Coronary Artery Vasculopathy**
C. Atkinson, N. Dennett, R. Barcia, M. Southwood, J. Wallwork, J. McLeod, M. Goddard, Pathology, Papworth Hospital, Cambridge, United Kingdom

11:15 am (15) **Complement Deposition Is More Frequent in Female Recipients of Cardiac Transplants**
W.M. Baldwin, III,¹ L.P. Armstrong,¹ A.A. Zachary,² E.K. Kasper,² J.V. Conte, jr,³ R.H. Hruban,¹ E.R. Rodriguez,¹ ¹Pathology, Johns Hopkins, Baltimore, MD; ²Medicine, Johns Hopkins, Baltimore, MD; ³Surgery, Johns Hopkins, Baltimore, MD

11:30 am (16) **Angiogenesis Within the Intimal Proliferation That Characterises Transplant Coronary Artery Vasculopathy**
C. Atkinson, J. Silk, R. Pitman, J. Horsley, C. Phillpotts, J. Wallwork, M. Goddard, Pathology, Papworth Hospital, Cambridge, United Kingdom

11:45 am (17) **Expression of Endothelial Adhesion Molecules and Thrombomodulin in Cardiac Transplantation**
S. Stoica, C. Atkinson, D. Satchithananda, L. Sharples, M. Southwood, M. Goddard, S. Large, Transplantation, Papworth Hospital, Cambridge, United Kingdom

Noon – 12:45 pm
Box Lunch Pick-Up

12:15 pm - 1:45 pm

Mid-Day Workshop 1: Nursing (International Ballroom Center)
Moderators: Tiffany M. Buda, BSN and Connie White-Williams, MSN

Chronic Disease Management Model in the Post Transplant Population

Joan Miller, RN, Stanford University Medical Center, Stanford, CA

Are Your Transplant Candidates Optimally Managed: Heart Failure for the Transplant Coordinator

Nancy M. Albert, MSN, Cleveland Clinic Foundation, Cleveland, OH

Current Controversies in Lung Transplant Candidate Selection

Greg W. Richardson, RN, Barnes-Jewish Hospital, St. Louis, MO

Challenges in the Management of the Pediatric and Adolescent Population

Caron L. Burch, RN, UCLA Medical Center, Los Angeles, CA

12:15 pm - 1:45 pm

Mid-Day Workshop 2: Alternatives to Lung Transplantation (Jefferson)

Moderators: Thomas K. Waddell, MD, PhD and Alec Patterson, MD

Pulmonary Thromboendarterectomy

Michael S. Mulligan, MD, University of Washington School of Medicine, Seattle, WA

Lung Volume Reduction Surgery: Indications and Outcomes

Walter Weder, MD, University Hospital, Zurich, Switzerland

Endobronchial Lung Volume Reduction

Gregory I. Snell, FRACP, MBBS, Alfred Hospital, Prahan, Australia

Endobronchial Bypass Procedures for Emphysema

Joel D. Cooper, MD, Washington University School of Medicine, St. Louis, MO

The Artificial Lung as an Alternative or Bridge to Transplant

Ronald B. Hirschl, MD, University of Michigan, Ann Arbor, MI

12:15 pm - 1:45 pm

Mid-Day Workshop 3: Tolerance: An Update (International Ballroom East)

Moderators: Joren C. Madsen, MD, DPhil and Thomas D. Wekerle, MD

Review of Experimental Tolerance Protocols

Thomas D. Wekerle, MD, University of Vienna, Vienna, Austria

Review of Clinical Protocols

Bartley P. Griffith, MD, University of Maryland, Baltimore, MD

Is Tolerance Ready for the Clinic?: The NIH Workshop

Joren C. Madsen, MD, DPhil, Massachusetts General Hospital, Boston, MA

12:15 pm - 1:45 pm

Mid-Day Workshop 4: Cardiovascular Risk Factors Post Heart Transplant: Do they Matter and Can They be Treated?

(International Ballroom West)

Supported by an educational grant from Fujisawa

Moderator: Jon Kobashigawa, MD

Lipids

Jon Kobashigawa, MD, University of Southern California at Los Angeles, Los Angeles, CA

Hypertension

Susan C. Brozena, MD, University of Pennsylvania, North Wales, PA

Immunosuppression Medicines

Stuart D. Russell, MD, Duke University, Durham, NC

Diabetes

Hannah A. Valantine, MD, Stanford University, Stanford, CA

12:15 pm-1:45 pm

Mini Oral Poster Presentation Session 1 (Georgetown)

Moderators: Mehmet C. Oz, MD and Thomas Spray, MD

12:15 pm (18) The Impact of Donor Organisms on Post-Transplant Infection

J.V. Conte,¹ M.C. Borja,¹ S.H. Allan,¹ S.C. Yang,¹ J.B. Orens,² ¹Surgery, Johns Hopkins Medical Institutions, Baltimore, MD; ²Medicine, Johns Hopkins Medical Institutions, Baltimore, MD

12:21 pm (19) Donor Myocardial Protection Using Secondary Blood Cardioplegia During Heart Transplantation: Prospective Randomized Study in 100 Patients

S. Cerny,¹ P. Pavel,¹ J. Pirk,¹ I. Hola,¹ A. Brezina,¹ J. Sedlacek,¹ F. Straka,¹ M. Hegarova,² I. Malek,² 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

12:27 pm (20) Brief Hypoxia Conditions Monocytes to Protect Reperfused Cardiocytes Against Cell Death via the CD11b Receptor

M.L. Da Costa,¹ Z. Yao,² B.C. McPherson,³ D.V. Jayakar,¹ V. Jeevanandam,¹ ¹Section of Cardiac & Thoracic Surgery, University of Chicago, Chicago, IL; ²Department of Anesthesiology, University of North Carolina, Chapel Hill, NC; ³Department of Anesthesiology, University of Chicago, Chicago, IL

12:33 pm (21) Effects of FR167653, a P38 Mitogen-Activated Protein Kinase Inhibitor, as an Additive to Euro-Collins Solution on Reperfusion Injury in Canine Lung Transplantation

N. Hashimoto,¹ I. Takeyoshi,¹ D. Yoshinari,¹ H. Tsutsumi,¹ M. Tokumine,¹ Y. Sunose,¹ O. Totsuka,¹ S. Ohwada,¹ K. Matsumoto,² Y. Morishita,¹ ¹Second Department of Surgery, Gunma University School of Medicine, Maebashi, Japan; ²Department of Pathology, Nippon Medical School, Kawasaki, Japan

12:39 pm (22) Donor-Transmitted Coronary Atherosclerosis

O. Grauhan, J. Pazurek, H. Lehmkuhl, M. Hummel, M. Pasic, Y.-G. Weng, R. Hetzer, German Heart Institute Berlin, Berlin, Germany

12:45 pm (23) Linear and Somatic Growth Following Pediatric Heart Transplantation

J. Ibrahim, C.E. Canter, R.E. Chinnock, J.K. Kirklin, D.C. Naftel, S. Basile, L. West, for the Pediatric Heart Transplant Study Group (PHTS), University of Alabama at Birmingham, Birmingham, AL

12:51 pm (24) C2 Blood Levels in Pediatric Heart Transplanted Patients

R. Fiocchi, A. Gamba, L. Iamele, P. Ferrazzi, Cardiovascular Department, Ospedali Riuniti di Bergamo, Bergamo, Italy

12:57 pm (25) Fifty Percent Decrease in Calcineurin Inhibitors Dosage

Associated With Introduction of Mycophenolate Mofetil, Results in Improved Renal Function in Pediatric Heart Transplant Recipients; J.J. Le Bidois, P. Niaudet, D. Tamisier, P.R. Vouhe, D. Sidi, Pediatric Cardiology, Hopital Necker Enfants Malades, Paris, France

1:03 pm (26) Increased Myocardial Performance Index by Echocardiography Correlates With Biopsy-Proven Rejection in Pediatric Heart Transplant Recipients

G.T. Leonard, F.J. Fricker, D. Pruett, K.O. Schowengerdt, Pediatrics (Cardiology), University of Florida, Gainesville, FL

1:09 pm (27) **Management of Post-Transplant Coronary Artery Disease (PTCAD) Using Intravascular Ultrasound (IVUS) Improves Outcome in Pediatric Heart Transplant (htx) Recipients**

M.A. Kuhn, A. Hashmi, D.D. Deming, C.E. Cephus, S.R. Robie, R.E. Chinnock, R.L. Larsen, Pediatrics, Loma Linda University Children's Hospital and Medical Center, Loma Linda, CA

1:15 pm (28) **Anthracycline Cardiomyopathy and Pediatric Heart Transplantation**

K.M. Ward,¹ C.E. Canter,² S.A. Webber,³ C. Chin,⁴ E. Pahl,¹ ¹Pediatrics, Northwestern Medical School, Chicago, IL; ²Pediatrics, Washington University, St. Louis, MO; ³Pediatrics, University of Pittsburgh, Pittsburgh, PA; ⁴Pediatrics, Stanford University, Palo Alto, CA

1:21 pm (29) **Gene Transfer in Human Pulmonary Arteries Using Adenoviral Vectors: Increasing Expression and Activity of Potassium Channels**

S. Wang, E. Michelakis, J. Dyck, A. Nsair, X.-C. Wu, R. Moudgil, K. Hashimoto, S.L. Archer, Cardiac Surgery/Cardiology, University of Alberta, Edmonton, Alberta, Canada

1:27 pm (30) **Increased Prevalence of Antiphospholipid Antibodies in Primary and Secondary Pulmonary and Arterial Hypertension**

D.J. Ross, A. Ardehali, H. Laks, K. Hariharan, R.S. Strieter, P. Clements, Pulmonary Hypertension Program, UCLA School of Medicine, Los Angeles, CA

1:33 pm (31) **Effects of Inhaled Iloprost in Severe Pulmonary Arterial Hypertension (PAH) of Varied Etiology**

A. Keogh, Y. Ten, K. Eugene, Heart and Lung Transplant Unit, St Vincent's Hospital, Sydney, Australia

1:39 pm (32) **Transition From Intravenous Epoprostenol to Subcutaneous Treprostinil in Pulmonary Arterial Hypertension**

J.-L. Vachiery,¹ N. Hill,² D. Zwicke,³ R. Barst,⁴ S. Blackburn,⁵ R. Naeije,¹ ¹Cardiology, Erasme Hospital, Brussels, Belgium; ²Rhode Island Hospital, Providence, RI; ³St Luke Medical Center, Milwaukee, WI; ⁴Columbia Presbyterian Medical Center, New York, NY; ⁵United Therapeutics Corporation, Research Triangle Park, NC

2:00 pm - 3:30 pm

CONCURRENT SESSION 4

Immunosuppression 1: Pharmacologic Flea Market (International Ballroom Center)

Moderators: Andreas O. Zuckermann, MD and David O. Taylor, MD

2:00 pm (38) **Impact of Everolimus on Allograft Vasculopathy: The SDZ RAD/Heart Intravascular Ultrasound Study**

E.M. Tuzcu,¹ P. Schoenhagen,¹ R.C. Starling,¹ R.E. Hobbs,¹ R. Dorent,² L. Pulpon,³ S. Simonsen,⁴ D.O. Taylor,¹ J. Hill,⁵ J. Kobashigawa,⁶ K.H. Abeywickrama,⁷ J. Popovich,¹ W. Magyar,¹ T.D. Crowe,¹ S.E. Nissen,¹ ¹Cardiovascular Medicine, The Cleveland Clinic Foundation, Cleveland, OH; ²Service Chirurgie Thoracique & Cardiovasculaire, Hopital Pitie Salpetriere, Paris, France; ³Clinica Puerta de Hierro, Madrid, Spain; ⁴Rikshospitalet, Oslo, Norway; ⁵Cardiovascular Center, Shands Hospital, Gainesville, FL; ⁶University Cardiovascular Medical Group, University of California at Los Angeles, Los Angeles, CA; ⁷Novartis Pharma AG, Basel, Switzerland

2:15 pm (33) **Prospective, Randomized Trial Comparing Induction Therapy With Daclizumab or Rabbit Antithymocyte Globuline Versus no Induction After Lung Transplantation**

W. Klepetko, P. Jaksch, A.A. Kocher, P. Neuhauser, J. Severyn, G. Dekan, T. Birsan, W. Wisser, Cardiothoracic Surgery, University of Vienna, Vienna, Austria

2:30 pm (34) **Anti-CD25 Antibody (Basiliximab) Therapy Decreases Early Graft Rejection and Improves the Outcome Following Pulmonary Transplantation**

S. Fischer,¹ M. Strueber,¹ J. Niedermeyer,² A.R. Simon,¹ M. Anssar,¹ A. Haverich,¹ ¹Hannover Lung Transplant Program, Division of Cardiothoracic and Vascular Surgery, Hannover Medical School, Hannover, Germany; ²Department of Respiratory Medicine, Hannover Medical School, Hannover, Germany

2:45 pm (35) **A Comparative Analysis of Basiliximab (Simulect®) and Antithymocyte Globulin (Atgam®) for Induction Immunosuppression in Clinical Lung Transplantation**

K.C. Stewart,¹ T.J. Guthrie,¹ G. Richardson,¹ B.F. Meyers,¹ J.P. Lynch,² G.A. Patterson,¹ E.P. Trulock,² ¹Division of Cardiothoracic Surgery; ²Division of Pulmonary and Critical Care Medicine, Washington University, St. Louis, MO

3:00 pm (36) **Results of a 1 Year Randomized Open-Label Multi-Centre Study of RAD Versus Antilymphocyte Globulin (ALG) and Azathioprine (AZA) in Lung Transplant (LT) Recipients With Bronchiolitis Obliterans Syndrome (BOS)**

G.I. Snell,¹ A. Frost,² A. Glanville,³ M.I. Hertz,⁴ V.G. Valentine,⁵ J. Murphy,⁶ R. Wong,⁶ ¹Lung Transplantation Service, The Alfred Hospital, Prahran, Australia; ²Baylor College of Medicine, Houston, TX; ³Cardiopulmonary Transplant Unit, St Vincent's Hospital, Sydney, Australia; ⁴Pulmonary/Critical Care Medicine, University of Minnesota, Minneapolis, MN; ⁵Alton Ochsner Medical Foundation, New Orleans, LA; ⁶Novartis Pharmaceuticals, Summit, NJ

3:15 pm (37) **Tacrolimus Excels Cyclosporine A in Prevention of Cardiac Allograft Vasculopathy - A Prospective IVUS, Angiography and Doppler Study;** J. Koglin,¹ M. Muscholl,¹ P. Petrakopoulou,¹ J. Groetzner,² M. Weis,¹ B. Meiser,² W. von Scheidt,¹ ¹Medizinische Klinik I, Klinikum Grosshadern, University of Munich, Munich, Germany; ²Herzchirurgische Klinik, Klinikum Grosshadern, University of Munich, Munich, Germany

2:00 pm - 3:30 pm

CONCURRENT SESSION 5

Clinical Heart Failure 1: Strategies to Optimize Heart Transplant Selection (International Ballroom East)

Moderators: Guillermo Torre-Amione, MD, PhD and Edoardo G. Gronda, MD

2:00 pm (39) **Timing of Transplantation in Heart Failure Patients on Beta-Blockers**

L.R. Peterson,¹ K.B. Schechtman,² G.A. Ewald,¹ E.M. Geltman,¹ B. Barzilai,¹ J.G. Rogers,¹ ¹Internal Medicine, Washington University, St. Louis, MO; ²Biostatistics, Washington University, St. Louis, MO

2:15 pm (40) **Improved Outcomes in Patients Awaiting Heart Transplantation: Making the Case That Status 2 Patients Should not Undergo Transplantation**

C.W. Yancy,¹ P. Kaiser,² J.M. DiMaio,³ M.H. Drazner,¹ D. Dries,¹ D.M. Meyer,³ W.S. Ring,³ ¹Department of Internal Medicine/Cardiology, University of Texas Southwestern Medical Center, Dallas, TX; ²St. Paul University Hospital, Dallas, TX; ³Department of Thoracic Surgery, University of Texas Southwestern Medical Center, Dallas, TX

2:30 pm (41) **B-Type Natriuretic Peptide Predicts Sudden Death In Patients With Chronic Heart Failure - A Selection Mode For Icd Implantation?**

R. Berger, M. Huelsmann, K. Strecker, A. Bojic, R. Pacher, B. Stanek, Department of Cardiology, University of Vienna, Vienna, Austria

2:45 pm (42) **Prolonged Continuous Outpatient Parenteral Inotropic Support in Heart Transplant Candidates With Reversible Pulmonary Hypertension**

G.K. Karavolias, S.N. Adamopoulos, A.N. Manginas, C.G. Zamanika, D.A. Chilidou, S.C. Apostolopoulou, S.A. Rammos, D.V. Cokkinos, D.T. Kremastinos, P.A. Alivizatos, Cardiology and Cardiothoracic Transplantation, Onassis Cardiac Surgery Center, Athens, Greece

3:00 pm (43) **Pharmacologic Testing of the Reversibility of an Increased Pulmonary Vascular Resistance (PVR) With Prostaglandin E1 (PGE1) Before Heart Transplantation (HTx): Final Results of the Multicenter PROPHET Study; Prophet-Study Group, Working Group on Thoracic Organ Transplantation of the German Society of Cardiology**

M. Trautnitz,¹ S. Galiano,¹ W. Scheidt,² ¹Med. Klinik I, Klinikum Grosshadern, Ludwig-Maximilians-Universität, München, Germany; ²I. Med. Klinik, Zentralklinikum Augsburg, Augsburg, Germany

3:15 pm (44) **Risk Factors for Sudden Unexpected Death Among Stable Congestive Heart Failure Patients**

J.T. Heywood,¹ W.A. Elatre,¹ K. Lindsted,² B.L. Huiskes,¹ S. Fabbri,¹ D.C. Choo,¹ ¹Cardiology, Loma Linda University, Loma Linda, CA; ²Epidemiology, Loma Linda University, Loma Linda, CA

2:00 pm - 3:30 pm

CONCURRENT SESSION 6

Basic Science and Immunobiology 1: Chronic Rejection (International Ballroom West)

Moderators: Joren C. Madsen, MD, DPhil and Thalachallour Mohanakumar, PhD

2:00 pm (45) **Functional Inhibition of IL-4 is Required to Prevent the Development of Transplant Arteriosclerosis in MHC-Class I Mismatched Aortic Allografts Following CD40-CD154 Costimulation Blockade**

S.M. Ensminger,¹ B.M. Spriewald,¹ U. Steger,² A. van Maurik,² P.J. Morris,² K.J. Wood,² ¹Department of Cardiac Surgery and Medicine III, Friedrich-Alexander University Erlangen-Nürnberg, Erlangen, Germany; ²Nuffield Department of Surgery, John Radcliffe Hospital, University of Oxford, Oxford, United Kingdom

2:15 pm (46) **Involvement of IL-15 in Indirect Presentation: Implications for Chronic Rejection**

P. Batten,¹ A.M. McCormack,¹ J.A. Gracie,² M.H. Yacoub,¹ M.L. Rose,¹ ¹National Heart and Lung Institute at Harefield Hospital, Imperial College School of Science, Technology and Medicine, Harefield, Middlesex, United Kingdom; ²Centre for Rheumatic Diseases, University of Glasgow, Glasgow, United Kingdom

2:30 pm (47) **Adenoviral Upregulation of Bcl-2 Decreases Oxidative Stress and Graft Coronary Artery Disease in Rat Heart Transplants**

D.N. Miniati, M.A. Lijkwan, S. Murata, J. Martens, C.T. Coleman, G. Hoyt, R.C. Robbins, Cardiothoracic Surgery, Stanford University, Stanford, CA

2:45 pm (48) **The Role of Indirect Allorecognition in Pathogenesis of Obliterative Bronchiolitis Following Lung Transplantation**

R.E. Stanford, A.T. Linke, S.A. Ahmed, M.E. Hodson, N.R. Banner, M.L. Rose, National Heart and Lung Institute, Imperial College, Harefield Hospital, Harefield, Middlesex, United Kingdom

3:00 pm (49) **Vascular Endothelial Cell Apoptosis Induced by Non-MHC Alloantibodies: An Important Injury Mechanism in the Development of Chronic Graft Rejection**

G.D. Wu, Y.-S. Jin, M.L. Barr, V.A. Starnes, D.V. Cramer, Cardiothoracic Surgery, Keck School of Medicine, USC, Los Angeles, CA

3:15 pm (50) **Intragraft Fibroblasts are Activated and Recruited From the Recipients in Cardiac Allografts Developing Chronic Rejection**

G.D. Wu, Y.-S. Jin, M.L. Barr, V.A. Sterns, D.V. Cramer, Cardiothoracic Surgery, Keck School of Medicine, USC, Los Angeles, CA

3:30 pm - 4:00 pm

Coffee Break (Exhibit Hall)

3:30 pm - 6:30 pm

Exhibits Open (Exhibit Hall)

4:00 pm - 5:30 pm

CONCURRENT SESSION 7

Clinical Heart Transplantation 2: Allograft Vasculopathy (International Ballroom Center)

Moderators: Joerg Koglin, MD and W. Steves Ring, MD

4:00 pm (51) **Alterations in the Fibrinolytic Cascade: Implications for Allograft Coronary Disease**

R.L. Benza, J.P. Barchue, A.L. de Oliveira, M.A. Talmage, M.A. Cavender, L.T. Weiss, J.K. Kirklin, R.C. Bourge, B.K. Rayburn, B.A. Foley, Cardiac Transplantation, University of Alabama at Birmingham, Birmingham, AL

4:15 pm (52) **Peritransplant Myocardial Ischemic Injury is Associated With Upregulation of Vitronectin Receptor, Matrix Metalloproteinase Induction, and Subsequent Development of Coronary Vasculopathy**

M.H. Yamani, E.M. Tuzcu, R.C. Starling, N.B. Ratliff, Y. Yu, V. Geoffrey, K. Powell, C.S. Masri, P.M. McCarthy, J.B. Young, Cleveland Clinic Foundation, Cleveland, OH

4:30 pm (53) **Reliability of a new Non-Invasive Strategy for Cardiac Allograft Vasculopathy Surveillance and Timing of Cardiac Catheterizations**

M. Dandel, F. Knollmann, E. Wellnhofer, M. Hummel, J. Mueller, R. Ewert, R. Hetzer, Cardiothoracic and Vascular Surgery, Deutsches Herzzentrum Berlin, Berlin, Germany

4:45 pm (54) **Effect of Methylenetetrahydrofolate Reductase 677CT Polymorphism Before and After Heart Transplantation: Does the Bad Guy Become Good?**

L. Potena,¹ F. Grigioni,¹ M. Viggiani,² G. Magnani,¹ S. Sorbello,¹ S. Carigi,¹ M.G. Poci,¹ V. Mantovani,² C. Magelli,¹ A. Branzi,¹
¹Institute of Cardiology, University of Bologna, Bologna, Italy; ²Laboratory of Clinical Genetics, Hospital S.Orsola-Malpighi, Bologna, Italy

5:00 pm (55) **Palliation of Allograft Vasculopathy With Transluminal Angioplasty - A Decade of Experience**

R.L. Benza, R.N. Brown, J.K. Kirklin, M. Hubbard, G.J. Zoghbi, D.C. McGiffin, R.C. Bourge, B.K. Rayburn, B.A. Foley, University of Alabama at Birmingham, Birmingham, AL

5:15 pm (56) **Tumor Necrosis Factor Gene Polymorphisms are Associated With Coronary Artery Vasculopathy in Heart Transplant Recipients**

L. Ternstrom,¹ A. Ricksten,² H. Schersten,¹ A. Jeppsson,¹ F. Nilsson,¹ ¹Department of Cardiothoracic Surgery and Transplantation, Sahlgrenska University Hospital, Gothenburg, Sweden; ²Department of Clinical Chemistry, Sahlgrenska University Hospital, Gothenburg, Sweden

4:00 PM - 5:30 PM

CONCURRENT SESSION 8

Lung/Heart-Lung Transplantation 1: Chronic Rejection/BOS: Towards a Better Understanding (International Ballroom East)

Moderators: Edward R. Garrity, Jr., MD and Gregory I. Snell, FRCS, MBBS

4:00 pm (57) **Development of De Novo Antibodies to Donor Human Leukocyte Antigens is Highly Associated With Bronchiolitis Obliterans Syndrome in Lung Transplant Recipients**

S.M. Palmer, R.D. Davis, D. Hadjiliadis, R.H. Messier, M.P. Steele, C.M. Lawrence, J.B. Rea, D.N. Howell, N.L. Reinsmoen, Lung Transplant Program, Duke University, Durham, NC

4:15 pm (58) **Increased BAL Human β -Defensin-2 Bronchiolitis Obliterans Syndrome After Lung Transplantation**

D.J. Ross, A.M. Cole, A. Park, D. Yoshioka, R.S. Strieter, J. Belperio, B. Kubak, H. Laks, A. Ardehali, T. Ganz, Pulmonary Hypertension Program, UCLA School of Medicine, Los Angeles, CA

4:30 pm (59) **BOS 0-p After Lung Transplantation: Does Exhaled Nitric Oxide Discriminate Between Stabilization of the Pulmonary Function or Further Chronic Rejection?**

G.M. Verleden,¹ L. Dupont,¹ D. Van Raemdonck,² M. Mallet,¹ M. Delcroix,¹ J. Vanhaecke,³ ¹Department of Pulmonary Diseases, University Hospital Gasthuisberg, Leuven, Belgium; ²Department of Thoracic Surgery, University Hospital Gasthuisberg, Leuven, Belgium; ³Department of Cardiology, University Hospital Gasthuisberg, Leuven, Belgium

4:45 pm (60) **Retrospective Validation of BOS-p as a Predictor of BOS in Single Lung Transplant Recipients**

S.D. Nathan,¹ J. Wolhrab,¹ S.D. Barnett,² ¹Inova Transplant Center, Inova Fairfax Hospital, Falls Church, VA; ²Inova Heart Center, Inova Fairfax Hospital, Falls Church, VA

5:00 pm (61) **Twenty Years of Combined Heart-Lung Transplantation at Stanford University**

P. Demers, R.C. Robbins, R. Doyle, J. Theodore, B.A. Reitz, Cardiothoracic Surgery, Stanford University Medical Center, Stanford, CA

5:15 pm (62) **Impact of Lung Transplant Operation on Bronchiolitis Obliterans Syndrome (BOS) in Patients With Chronic Obstructive Pulmonary Disease (COPD)**

D. Hadjiliadis,¹ C. Cecilia,¹ R.H. Messier,² G. Carlos,¹ M.P. Steele,² S.G. Lianne,¹ R.D. Davis,² W.K. Tom,¹ M. Hutcheon,¹ S.M. Palmer,² S. Keshavjee,¹ ¹Toronto Lung Transplant Program, University of Toronto, Toronto, Ontario, Canada; ²Duke Lung Transplant Program, Duke University, Durham, NC

4:00 pm - 5:30 pm

CONCURRENT SESSION 9

Basic Science and Immunobiology 2: Tolerance and T-Cell Regulation (International Ballroom West)

Moderators: Bruce R. Rosengard, MD and Thomas D. Wekerle, MD

4:00 pm (63) **Prolongation of Heart Allograft Survival by Modulating of Tissue-Specific Response Requires Low Frequency of Alloreactive T Cells**

E.V. Fedoseyeva,¹ B.M.W. Illigens,¹ H.K. Rolls,¹ K. Kishimoto,² M.H. Sayegh,² G. Benichou,¹ ¹Schepens Eye Research Institute/Harvard Medical School, Boston, MA; ²Brigham and Women Hospital/Harvard Medical School, Boston, MA

4:15 pm (64) **Regulatory Cells in the Maintenance Phase of Tolerance in Miniature Swine: Coculture Cell Mediated Lympholysis Assay as Approach for a Tolerance Assay**

A. Wu, J.D. Mezrich, D.R. Johnston, L.M. Monajati, D.W. Mathes, C. Baron, K. Yamada, J.C. Madsen, D.H. Sachs, Transplantation Biology Research Center, Massachusetts General Hospital, Harvard Medical School, Boston, MA

4:30 pm (65) **Innate Immune Mechanisms as Part of the Alloimmune Response After Cardiac Transplantation; H. Methe,**

E. Zimmer,¹ B. Meiser,² J. Koglin,¹ ¹Medizinische Klinik I, Klinikum Grosshadern, University of Munich, Munich, Germany; ²Herzchirurgische Klinik, Klinikum Grosshadern, University of Munich, Munich, Germany

4:45 pm (66) **The Role of the Thymus in the Maintenance Phase of Tolerance in Miniature Swine**

J.D. Mezrich,¹ K. Yamada,¹ L.C. Benjamin,¹ J.A. Sachs,¹ J.A. Kesselheim,¹ D.R. Johnston,¹ R.S. Lee,¹ S.L. Houser,¹ H.C. Amoah,¹ L.G. Ledgerwood,¹ J.S. Allan,¹ D.H. Sachs,¹ J.C. Madsen,^{1,2} ¹Transplantation Biology Research Center, Department of Surgery, Massachusetts General Hospital, Boston, MA; ²Division of Cardiac Surgery, Massachusetts General Hospital, Boston, MA

5:00 pm (67) **Combined Bone Marrow and Lung Transplantation Over Major Histocompatibility Barriers in Miniature Swine**

G. Warnecke,¹ M. Strueber,¹ S.P. Sommer,¹ M. Avsar,¹ M. Morancho,¹ J. Niedermeyer,² J.M. Hohlfeld,² A.R. Simon,¹ J.H. Karstens,³ A. Haverich,¹ ¹Thoracic and Cardiovascular Surgery, Hannover Medical School, Hannover, Germany; ²Respiratory Medicine, Hannover Medical School, Hannover, Germany; ³Radiation Oncology, Hannover Medical School, Hannover, Germany

5:15 pm (68) **Passenger Leukocytes From Transplanted Hearts Produce Complement**

Z. Qian, J. Layton, J. Liu, B.A. Wasowska, W.M. Baldwin, III, Pathology, The Johns Hopkins University School of Medicine, Baltimore, MD

5:30 pm - 6:30 pm

Heart Failure and Transplant Medicine Scientific Council Meeting (International Ballroom East)

Pediatric Transplantation Scientific Council Meeting (International Ballroom West)

5:30 pm - 6:30 pm

GENERAL POSTER SESSION 1/Wine and Cheese Reception (Exhibit Hall)

(69) Quality of Life in Female Heart Transplant Candidates and Recipients

L.S. Evangelista,¹ K. Dracup,² L.V. Doering,¹ J. Kobashigawa,³ M. Hamilton,³ G. Fonarow,³ ¹School of Nursing, University of California at Los Angeles, Los Angeles, CA; ²School of Nursing, University of California at San Francisco, San Francisco, CA; ³School of Medicine, University of California at Los Angeles, Los Angeles, CA

(70) Post Lung Transplant (LTx) Changes in Mean Blood Pressure (BP) and BP Load: A Longitudinal Pilot Study
D.M. Lanuza, G.A. Farcas, C.A. Lefaiver, Medical-Surgical Nursing, Loyola University Chicago, Chicago, IL

(71) Quality of Life After Lung Transplantation: A Cross-Sectional Study
B. Smeritschnig, P. Jaksch, A. Kocher, P. Neuhauser, W. Wisser, W. Klepetko, Department of Cardiothoracic Surgery, General Hospital Vienna, Vienna, Austria

(72) Long-Term Mental Health Burden of Family Caregiving to Heart Transplant Recipients
M.A. Dew,¹ R.L. Kormos,² A.F. DiMartini,¹ L.H. Roth,¹ B.P. Griffith,² ¹Psychiatry, University of Pittsburgh School of Medicine, Pittsburgh, PA; ²Surgery, University of Pittsburgh School of Medicine, Pittsburgh, PA

(73) Differences in Quality of Life Between 1 and 3 Years After Heart Transplantation
K.L. Grady,¹ A. Jalowiec,² C. White-Williams,³ ¹Medicine/Cardiology, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL; ²Niehoff School of Nursing, Loyola University, Chicago, IL; ³Nursing, University of Alabama, Birmingham, AL

(74) Smoking After Heart Transplantation
C.S. Stille,^{4,1} M.A. Dew,^{1,2,3} R.L. Kormos,⁶ A.F. DiMartini,¹ G.E. Switzer,^{5,1} J.M. Goycoolea,¹ B.P. Griffith,⁶ ¹Psychiatry, University of Pittsburgh School of Medicine and Medical Center, Pittsburgh, PA; ²Psychology, University of Pittsburgh, Pittsburgh, PA; ³Epidemiology, University of Pittsburgh, Pittsburgh, PA; ⁴School of Nursing, University of Pittsburgh, Pittsburgh, PA; ⁵Medicine, University of Pittsburgh School of Medicine and Medical Center, Pittsburgh, PA; ⁶Surgery (Cardiothoracic Transplant Program), University of Pittsburgh Medical Center, Pittsburgh, PA

(75) Orthotopic Transplantation for Dextrocardia and Complex Congenital Heart Disease
J. Odum, J. Alejos, A. Alikhani, C. Burch, H. Laks, Surgery, University of California at Los Angeles, Los Angeles, CA

(76) Bronchial Anastomosis Complications: Comparison Between Pediatric Living Donor Double Lobar Lung Transplant and Cadaveric Double Lung Recipients
J. Markley, W.J. Wells, M.V. Horn, V.A. Starnes, M.S. Woo, Cardiothoracic Surgery, Childrens Hospital Los Angeles, Los Angeles, CA

(77) Pulmonary Venous Doppler Patterns in Pediatric Cadaveric and Living-Donor Lung Transplantation
A.M. Sharkey, M.C. Johnson, R. Hirsch, C.B. Huddleston, E.N. Mendeloff, ¹Division of Pediatric Cardiology, Washington University, St Louis, MO; ²Pediatric Cardiothoracic Surgery, Washington University, St Louis, MO

(78) Non-Invasive Detection of Coronary Artery Disease by Dobutamine Stress Echocardiography in Children After Heart Transplantation
S. Di Filippo, M. Raboisson, F. Sassolas, A. Bozio, Pediatric Cardiology, Hôpital Cardiologique Louis Pradel, Lyon, France

(79) Severe Obliterative Bronchiolitis is Associated With Transplant Coronary Artery Disease in Pediatric Heart-Lung Recipients
P.D. Wearden,¹ S.A. Webber,² S.K. Gandhi,¹ G.J. Boyle,² Y.M. Law,² S. Miller,² P. Dickman,³ R.D. Siewers,¹ F.A. Pigula,¹ ¹Cardiothoracic Surgery; ²Cardiology; ³Pathology, Children's Hospital of Pittsburgh, Pittsburgh, PA

(80) Thymoglobuline® Use in Pediatric Heart Transplantation
F. Parisi, H. Danesi, C. Squitieri, L. Di Chiara, R.M. Di Donato, DMCCP - Transplant Unit, Bambino Gesù Pediatric Hospital, Rome, Italy

(81) Myocardial Wall Doppler Imaging
R.J. Boucek, Jr.,¹ M.M. Boucek,² A. Asante-Korang,¹ M. Fickey,¹ ¹Pediatric Cardiology, University of South Florida, St. Petersburg, FL; ²Pediatrics, University of Colorado, Denver, CO

(82) Reaudit of the Accuracy of Referral and Histopathological Explant Diagnoses in Lung Transplantation. Have We Improved?
S. Stewart, R. Brais, K. McNeil, J. Wallwork, Papworth Hospital, Cambridge, United Kingdom

(83) Tacrolimus and Sirolimus: A New Therapeutic Approach for Immunosuppression After Heart Transplantation
B.M. Meiser,¹ J. Groetzner,¹ M. Müller,¹ J. Koglin,² H. Stempfle,³ M. Vogeser,⁴ B. Reichart,¹ ¹Cardiac Surgery, University of Munich/ Grosshadern Medical Center, Munich, Germany; ²Internal Medicine I, University of Munich/ Grosshadern Medical Center, Munich, Germany; ³Internal Medicine, University of Munich/ Downtown Medical Center, Munich, Germany; ⁴Clinical Chemistry, University of Munich/ Grosshadern Medical Center, Munich, Germany

(84) C4 Levels of Tacrolimus Correlate Best With Area Under the Curve in Pancreatic Insufficient Cystic Fibrosis Patients

S.H. Soubra, D. Vernarske, R. Bag, A.E. Frost, Pulmonary and Critical Care, Baylor College of Medicine and The Methodist Hospital, Houston, TX

(85) C2 Cyclosporine Levels Correlates Best With Area Under the Curve in Pancreatic Insufficient Cystic Fibrosis Patients

S.H. Soubra, D. Vernarske, R. Bag, A.E. Frost, Pulmonary and Critical Care, Baylor College of Medicine and The Methodist Hospital, Houston, TX

(86) Prevention of Accelerated Rejection in Chronically Sensitized Rats by Use of Either Cyclophosphamide or Mycophenolate Mofetil Therapy

N. Ma,¹ M. Szabolcs,² S. Itescu,¹ N.M. Edwards,¹ ¹Departments of Surgery and ²Pathology, Columbia University, New York, NY

(87) Tolerance to Pulmonary Allografts Over Major Histocompatibility Barriers in Miniature Swine After Low-Dose Irradiation

M. Strueber,¹ G. Warnecke,¹ S.P. Sommer,¹ M. Morancho,¹ M. Avsar,¹ J. Niedermeyer,² J.M. Hohlfeld,² A.R. Simon,¹ J.H. Karstens,³ A. Haverich,¹ ¹Thoracic and Cardiovascular Surgery, Hannover Medical School, Hannover, Germany; ²Respiratory Medicine, Hannover Medical School, Hannover, Germany; ³Radiation Oncology, Hannover Medical School, Hannover, Germany

(88) Post-Transplant Changes In Exhaled Nitric Oxide (eNO) of Pulmonary Transplant Recipients and the Influence of Mycophenolate (MMF)

T. Small,¹ A. De Soyza,¹ P. Corris,² ¹Respiratory Medicine, Freeman Hospital, Newcastle Upon Tyne, United Kingdom; ²Cardiopulmonary Transplantation, Freeman Hospital, Newcastle Upon Tyne, United Kingdom

(89) Comparison of Cyclosporin Pharmacokinetics and Dose Monitoring After Lung Transplantation for Cystic Fibrosis and for Other Conditions

I. Vervier,¹ C. Knoop,¹ P. Thiry,² M. De Backer,³ J.M. Kovarik,⁴ M. Estenne,¹ ¹Chest Medicine, Erasme University Hospital, Brussels, Belgium; ²Department of Clinical Chemistry, Erasme University Hospital, Brussels, Belgium; ³Medical Department, Novartis Pharma Belgium, Brussels, Belgium; ⁴Department of Clinical Pharmacology, Novartis Pharma Switzerland, Basel, Switzerland

(90) Monitoring of CyA C2 Levels is Predictive for AUC in Lung Transplant Recipients

P. Jaksch, A. Kocher, P. Neuhauser, K. Sarahrudi, J. Seweryn, W. Wisser, W. Klepetko, Department of Cardio-Thoracic Surgery, University Hospital, Vienna, Austria

(91) Left Ventricular Systolic Function Early After Heart Transplantation is a Predictor of Subsequent Transplant Related Coronary Artery Disease

I.A. Bolad,¹ D. Robinson,² A. Khaghani,¹ N.R. Banner,¹ ¹Transplant Unit, Harefield Hospital, Harefield, Middlesex, United Kingdom; ²School of Mathematical Sciences, University of Sussex, Brighton, Sussex, United Kingdom

(92) Factors Associated With Long-Term Survival After Heart Transplantation in the Cyclosporine Era

N. Shiba, M.C.Y. Chan, B.W. Kwok, R.C. Robbins, H.A. Valentine, S.A. Hunt, Cardiovascular Medicine, Stanford University, Stanford, CA

(93) Incidence of Non-Cellular Acute Rejection in Heart Transplant Recipients

J.P. Naour, K. Malinowska, B.A. Pisani, J.C. Mendez, R.C. Lichtenberg, J.A. Robinson, M.J. Stout, B.K. Foy, M. Bakhos, G.M. Mullen, Advanced Heart Failure/Heart Transplant Program, Loyola University Health System, Maywood, IL

(94) Regression of Donor-Transmitted Atherosclerosis. Evidence From Serial Intravascular Ultrasound Imaging

S.A. Haji, M.H. Yamani, R.C. Starling, P. Schoenhagen, S.R. Kapadia, T.D. Crowe, J.B. Young, E.M. Tuzcu, Cardiology, Cleveland Clinic Foundation, Cleveland, OH

(95) Mild Cardiac Allograft Coronary Disease Does not Change the Prognosis of Patients After Heart Transplantation

B. Cantin, S.Z. Gao, B.W.K. Kwok, J.S. Schroeder, M.C.Y. Chan, H.A. Valentine, S.A. Hunt, Division of Cardiovascular Medicine, Stanford University School of Medicine, Stanford, CA

(96) Does Late Switch to Mycophenolate Mofetil Affect Development of Transplant Coronary Artery Disease?

S.-Z. Gao, B.W.K. Kwok, B. Cantin, H.A. Valentine, S.A. Hunt, M.G. Perloth, J.S. Schroeder, Stanford University, Palo Alto, CA

(97) Survivors More Than 10 Years After Heart Transplantation in the Cyclosporine Era

N. Shiba, M.C.Y. Chan, B.W. Kwok, R.C. Robbins, H.A. Valentine, S.A. Hunt, Cardiovascular Medicine, Stanford University, Stanford, CA

(98) B-Type Natriuretic Peptide and Peak Aerobic Capacity: Insights Into Allograft Determinants of Exercise Limitations Following Heart Transplantation

M.R. Mehra, P.A. Uber, M.H. Park, R.L. Scott, Cardiomyopathy and Heart Transplantation Center, Ochsner Clinic Foundation, New Orleans, LA

(99) Clinical Application of Monitoring Mycophenolic Acid (MPA) Concentration in Heart Transplant Recipients - Preliminary Report

M. Zakliczynski, M. Szewczyk, M. Zembala, Department of Cardiac Surgery and Transplantation, Silesian Centre for Heart Disease, Zabrze, Poland

(100) Simvastatin Treatment in Heart Transplant Recipients Decreases Myocardial Tumor Necrosis Factor α Content; S.J. Stetson,¹ J.A. Farmer,¹ S.C. McRee,¹ K.A. Becker,¹ M.M. Koerner,¹ G.P. Noon,² G. Torre-Amione,¹ ¹Medicine Cardiology, Baylor College of Medicine, Houston, TX; ²Surgery Transplant Division, Baylor College of Medicine, Houston, TX

(101) Tricuspid Valve Annuloplasty Significantly Reduces Early Tricuspid Regurgitation After Biatrial Heart Transplantation

A.M. Borkon, N.E. Brown, G.F. Muehlebach, M.E. Gorton, R.S. Stuart, Cardiovascular Surgery, MidAmerica Heart Institute, Kansas City, MO

(102) Hyperimmune IVIG may be Advantageous in Comparison to Intravenous Ganciclovir as a Preemptive Antiviral Therapy in CMV-Positive Heart Transplant Recipients

C.D. Thomas, R. Radovancevic, E.L. Ford, B. Radovancevic, O.H. Frazier, Transplant Service, Texas Heart Institute, Houston, TX

(103) Shrinkage of Allograft Arteries Occurs Frequently After Transplantation and is Accompanied With Plaque Shrinkage

S.A. Haji, M.H. Yamani, R.C. Starling, P. Schoenhagen, T.D. Crowe, J.B. Young, E.M. Tuzcu, Cardiology, Cleveland Clinic Foundation, Cleveland, OH

(104) Hyperhomocysteinemia is Associated With Increased Mean Platelet Volume: Insights Into Platelet Interactions in Heart Transplantation

M.R. Mehra, P.A. Uber, R.L. Scott, M.H. Park, R.V. Milani, Cardiomyopathy and Heart Transplantation Center, Ochsner Clinic Foundation, New Orleans, LA

(105) The Impact of Bridging With Ventricular Assist Device on Rejection After Orthotopic Heart Transplantation: Is There a Relationship?

S.V. Pamboukian, E. Hung, M. McLeod, E. Winkel, W. Kao, M.R. Costanzo, A. Heroux, Heart Failure and Cardiac Transplant Program, Rush Presbyterian St. Luke's Medical Center, Chicago, IL

(106) Early Atrial and Ventricular Arrhythmias Following Ventricular Assist Device Implantation Predict a Poor Prognosis

M. Bedi, R.L. Kormos, E. Sorenson, S. Winowich, S. Murali, Cardiovascular Institute, University of Pittsburgh, Pittsburgh, PA

(107) Brain Natriuretic Peptide: A Marker for Rejection Monitoring After Heart Transplantation

H.B. Hangler,¹ H. Antretter,¹ E. Ruttman,¹ M. Riha,¹ A. Lercher,² G. Laufer,¹ ¹Cardiac Surgery, University Hospital, Innsbruck, Austria; ²Medical Biochemistry, Leopold-Franzens-University, Innsbruck, Austria

(108) Heterotopic Heart Transplantation: An Attractive Option in 2002

D.S. Esmore, F.L. Rosenfeldt, J.A. Mack, M. Richardson, P. Bergin, A. Griffiths, Heart and Lung Replacement Services, The Alfred Hospital, Prahran, Australia

(109) Low Affinity FC Receptor (CD32) Mediated Platelet Aggregation/Activation in Vitro by Antithymocytoglobuline: A Possible Explanation for Induction Therapy Mediated Platelet Depletion In Vivo

H.J. Ankersmit,¹ I. Volf,² G. Roth,¹ B. Moser,¹ A. Zuckermann,¹ A. Kocher,¹ B. Schlechta,¹ M. Haisjackl,³ G. Wieselthaler,¹ M. Grimm,¹ G. Boltz-Nitulescu,⁶ E. Wolner,¹ ¹Department of Cardiothoracic Surgery, Vienna General Hospital, Vienna, Austria; ²Institute of Physiology, University Vienna, Vienna, Austria; ³Department of Anesthesia, Vienna General Hospital, Vienna, Austria; ⁴Institutet of Pathophysiology, University Vienna, Vienna, Austria

(110) Contribution of Impaired Left Ventricular Function to Exercise Intolerance in Heart Transplant Recipients

M. Dandel, R. Ewert, M. Hummel, R. Meyer, J. Mueller, R. Hetzer, Cardiothoracic and Vascular Surgery, Deutsches Herzzentrum Berlin, Berlin, Germany

(111) End-Stage Renal Failure and Kidney Transplantation in Heart Transplant Recipients

M.C.Y. Chan, B. Cantin, H.A. Valantine, S.A. Hunt, Division of Cardiovascular Medicine, Stanford University School of Medicine, Stanford, CA

(112) Do Heart Transplant Recipients That Avoid Blood Transfusion Fare Better?

T.T. Hamilton, J.A. Quin, L.M. Huber, D.M. Meyer, M.A. Wait, J.M. DiMaio, W.S. Ring, M.E. Jessen, Cardiovascular and Thoracic Surgery, University of Texas Southwestern Medical Center, Dallas, TX

(113) Conversion of Cyclosporine to Tacrolimus in Heart Transplant Patients: A Single Center Experience

M.C.Y. Chan, B.W. Kwok, B. Cantin, N. Shiba, G. Vilela, H.A. Valantine, S.A. Hunt, Division of Cardiovascular Medicine, Stanford University, Stanford, CA

(114) Prognosis of Patients With Significant Angiographically Diagnosed Cardiac Allograft Coronary Disease

B. Cantin, S.Z. Gao, B.W.K. Kwok, J.S. Schroeder, M.C.Y. Chan, H.A. Valantine, S.A. Hunt, Division of Cardiovascular Medicine, Stanford University School of Medicine, Stanford, CA

(115) Does Epicardial Coronary Disease Predict Tissue Myocardial Perfusion in Heart Transplantation?

Microcirculatory Insights

S.P. Potluri, M.R. Mehra, P.A. Uber, M.H. Park, R.L. Scott, Cardiomyopathy and Heart Transplantation Center, Ochsner Clinic Foundation, New Orleans, LA

(116) Hemodynamics and Peak Oxygen Uptake in Bicaval Versus Standard Orthotopic Heart Transplantation - A Five Year Follow-Up

P.J. Mather,¹ S. Rubin,¹ J.W. Wald,¹ S. Furakawa,² ¹Cardiology, Temple University School of Medicine, Philadelphia, PA; ²Cardiothoracic Surgery, Temple University School of Medicine, Philadelphia, PA

(117) Preservation of Left and Right Atrial Function With the Bicaval Technique in Heart Transplantation

A.M. Maceira, J. Barba, J. Cosin-Sales, A. Macias, A. Berenguel, J. Herreros, G. Rabago, Department of Cardiology and Cardiovascular Surgery, Clinica Universitaria de Navarra, Pamplona, Spain

(118) Platelet Activation in Heart Transplant Recipients

A. Hognestad,¹ A. Michelsen,² F. Brosstad,² J.K. Damås,¹ C. Guevara,¹ S. Simonsen,¹ J.K. Kjekshus,¹ P. Aukrust,³ A.K. Andreassen,¹ ¹Department of Cardiology, Rikshospitalet, Oslo, Norway; ²Research Institute of Internal Medicine, Rikshospitalet, Oslo, Norway; ³Institute of Immunology and Infectious Diseases, Rikshospitalet, Oslo, Norway

(119) Simultaneous Multiple Organ Cardiac Transplantation is a Successful Treatment for Chronic Multiorgan Failure

A.S. Anderson,¹ D. Jayakar,² C. Murks,¹ M. Millis,³ A. Baker,⁴ V. Jeevanandam,² ¹Section of Cardiology, University of Chicago Hospitals, Chicago, IL; ²Section of Cardiothoracic Surgery, University of Chicago Hospitals, Chicago, IL; ³Section of Transplant Surgery, University of Chicago Hospitals, Chicago, IL; ⁴Section of Gastroenterology, Northwestern University Medical Center, Chicago, IL

(120) Tacrolimus as Primary Immunosuppressant in Simultaneous Heart and Kidney Transplanted Patients Leads to Excellent Clinical Outcome

J. Groetzner, B. Meiser, J. Schirmer, F. Kur, M. Muller, F. Reisch, P. Uberfuhr, W. Land, B. Reichart, Klinikum Grosshadern, University Hospital, Munich, Germany

(121) Sirolimus and Tacrolimus in Clinical Heart Transplantation

X.S. Qi,¹ P.C. Lee,¹ R. Kaplon,¹ S. Mallon,² A.F. Loo,¹ K. Katariya,¹ E.J. Bauerlein,² S.M. Pham,¹ ¹Surgery, University of Miami, Miami, FL; ²Medicine, University of Miami, Miami, FL

(122) Loss of Coronary Lumen Diameter Early After Heart Transplantation is Greatest in the Larger Epicardial Vessels

I.A. Bolad,¹ D. Robinson,² N.R. Banner,¹ ¹Transplant Unit, Harefield Hospital, Harefield, Middlesex, United Kingdom; ²School of Mathematical Sciences, University of Sussex, Brighton, Sussex, United Kingdom

(123) Regular Use of Margarine Containing Stanol Esters Reduces Total and LDL Cholesterol After Cardiac Transplantation and Allows Reduction of Statins

A. Vorlat, V. Conraads, C. Vrints, Cardiology, University Hospital of Antwerp, Edegem, Belgium

(124) Stenosis of Caval Connections in Orthotopic Heart Transplantation: An Underestimated Complication?

M. Vanderheyden, W. Tack, F. Wellens, M. Goethals, J. Bartunek, H. Vandekerckhove, R. De Geest, I. Degrieck, F. Van Praet, H. Vanermen, Heart Failure and Transplant Program, Onze Lieve Vrouw Clinic, Aalst, Belgium

(125) The Positive B-Cell Crossmatch: Are all Crossmatches Created Equal?

B.K. Rayburn, J.K. Kirklin, R.N. Brown, J.F. George, J.M. Thomas, R.W. Senkbeil, A.L. Lobashevsky, D.C. McGiffin, R.C. Bourge, R.L. Benza, B.A. Foley, Transplantation, University of Alabama at Birmingham, Birmingham, AL

(126) Are Non-Brain-Stem-Dead Cardiac Donors Acceptable Donors?

H. Luckraz, J. Parameshwar, K. McNeil, S. Tsui, J. Dunning, J. Wallwork, S. Large, Papworth Hospital, Cambridge, United Kingdom

(127) Amiodarone Therapy Before Heart Transplantation as a Predictor of Thyroid Dysfunction After Heart Transplantation

R.N. Siccama,¹ A.H.M.M. Balk,² W. de Herder,¹ R. van Domburg,² P. Vantrimpont,² T. van Gelder,¹ ¹Internal Medicine, University Hospital, Rotterdam, Netherlands; ²Cardiology, University Hospital, Rotterdam, Netherlands

(128) Interleukin-2-Blockade Compared to Anti-Thymocytoglobuline in the Prevention of Acute Rejection in Human Heart Transplantation

J. Carlsen,¹ M. Johansen,¹ S. Boesgaard,¹ S.A. Mortensen,¹ C.B. Andersen,² H.C. Arendrup,³ J. Aldershvile,¹ ¹Department of Medicine B, Division of Cardiology; ²Department of Diagnostic Pathology; ³Department of Cardiothoracic Surgery, Rigshospitalet, Copenhagen, Denmark

(129) Ventricular Arrhythmias During Ventricular Assist Device Support

M.S. Bedi, R.L. Kormos, E. Sorenson, S. Winowich, E. Stanford, L. Carozza, S. Murali, Cardiovascular Institute, University of Pittsburgh, Pittsburgh, PA

(130) Kidney Transplantation Following Heart Transplantation: Effects on Cardiac Events

R.S. Poston, K.R. McCurry, R.L. Kormos, B.P. Griffith, Division of Cardiothoracic Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA

(131) Monitoring of Cyclosporine 2-Hr Post-Dose and Trough Levels in Heart Transplantation

D.H. Delgado, V. Rao, R.J. Cusimano, C.M. Feindel, C. O Grady, M.J. Hamel, E. Young, C. McCurdy, H.J. Ross, Heart Transplant Program, Toronto General Hospital, Toronto, ON, Canada

(132) Metabolic and Cardiac Endurance Exercise Response in Heart Transplant Recipients is not Influenced by Denervation

U. Tegtbur,¹ K. Pethig,² H. Machold,¹ A. Haverich,² M. Busse,³ ¹Sportsmedicine, Medical School, Hannover, Germany; ²Thoracic Surgery, Medical School, Hannover, Germany; ³Institute of Sportsmedicine, University of Leipzig, Leipzig, Germany

(133) The Effect of Different Forms of Diabetes Mellitus on Clinical Outcomes After Cardiac Transplantation

S. Azmoon, D. Beltramo, H.J. Eisen, Advanced Heart Failure and Transplant Center, Temple University School of Medicine, Philadelphia, PA

(134) Combined Endurance/Resistance Training Reduces Plasma TNF-Alpha Receptor Levels in Patients With Chronic Heart Failure and Coronary Artery Disease

V.M. Conraads,¹ P. Beckers,¹ J.M. Bosmans,¹ L.S. De Clerck,² W.J. Stevens,² C.J. Vrints,¹ D.L. Brutsaert,¹ ¹Cardiology, University Hospital Antwerp, Edegem, Belgium; ²Immunology, University Hospital Antwerp, Edegem, Belgium

(135) Effects of Oxygen Therapy and Nasal CPAP on Body Oxygen Stores in Patients With Cheyne-Stokes Respiration and Congestive Heart Failure

S.L. Krachman, W. Chatila, J.G. Crocetti, G.E. DAlonzo, H.J. Eisen, Medicine, Temple University School of Medicine, Philadelphia, PA

6:30 pm - 7:30 pm

Poster Display Session 1 Tear-Down (Exhibit Hall)

7:30 pm - 10:00 pm

PRESIDENT'S GALA RECEPTION (Crystal Ballroom/International Ballroom Center)

Featuring The Marginal Donors and The Capitol Steps

Friday, April 12, 2002

6:00 am – 6:00 pm

Speaker Ready Room (Bancroft)

6:30 am - 5:00 am

Registration Desk Open (Concourse)

6:30 am - 8:00 am

Morning Coffee/Continental Breakfast (Exhibit Hall)

6:30 am - 8:30 am

Exhibits Open (Exhibit Hall)

6:30 am - 10:00 am

Poster Display Session 2 Set-Up (Exhibit Hall)

6:45 am - 7:45 am

Sunrise Symposium 1: VADs to Recovery (International Ballroom West)

Moderators: Leslie W. Miller, MD and Matthias Loebe, MD, PhD

Physiologic/Cellular Evidence of Recovery

Christine S. Moravec, PhD, Cleveland Clinic Foundation, Cleveland, OH

Hemodynamic Evidence of Recovery

Simon Maybaum, MD, Columbia Presbyterian Medical Center, New York, NY

Recovery Protocols in USA

Guillermo Torre-Amione, MD, PhD, Baylor College of Medicine, Houston, TX

Recovery Protocols in Europe

Aly El-Banayosy, MD, Herzzentrum NRW, Bad Oeynhausen, Germany

Commentary

Leslie W. Miller, MD, University of Minnesota, Minneapolis, MN

6:45 am - 7:45 am

Sunrise Symposium 2: Management of Medical Complications (International Ballroom Center)

Stacy F. Davis, MD, Vanderbilt University, Nashville, TN

Allan R. Glanville, MD, FRACP, St. Vincent's Hospital, Sydney, Australia

6:45 am - 7:45 am

Sunrise Symposium 3: Pulmonary Venous Disease in Children (Jefferson)

Moderators: Marlyn S. Woo, MD and Robert E. Shaddy, MD

Alveolar Capillary Dysplasia

Ian Adatia, MD, Hospital for Sick Children, Toronto, Ontario, Canada

Pulmonary Veno-Occlusive Disease

Nancy D. Bridges, MD, Mount Sinai Medical Center, New York, NY

Pulmonary Venous Stenosis: Congenital and Acquired

Thomas Spray, MD, Children's Hospital of Philadelphia, Philadelphia, PA

6:45 am - 7:45 am

Sunrise Symposium 4: Sensational Successes and Fantastic Failures in Heart Transplantation (International Ballroom East)

Moderators: Robert S.D. Higgins, MD and David C. McGiffin, MD

Francis D. Pagani, MD, PhD, University of Michigan Hospital, Ann Arbor, MI

Vigneshwar Kasirajan, MD, Medical College of Virginia Hospital, Richmond, VA

Barry K. Rayburn, MD, University of Alabama at Birmingham, Birmingham, AL

Edward Kasper, MD, Johns Hopkins Hospital, Baltimore, MD

6:45 am - 7:45 am

Sunrise Symposium 5: Sensational Successes and Fantastic Failures in Lung Transplantation (Georgetown)

John Dark, MB, FRCS, Freeman Hospital, Newcastle Upon Tyne, United Kingdom

Walter Klepetko, MD, University of Vienna, Vienna, Austria

8:00 am - 9:00 am

PLENARY SESSION (International Ballroom Center)

Moderators: Leslie W. Miller, MD and William A. Baumgartner, MD

8:00 am **Presidential Address**

James B. Young, MD, ISHLT President, Cleveland Clinic Foundation, Cleveland, OH

Featured Abstracts

8:30 am (136) **Elevated Toll Like Receptor 4 in the Myocardium of Patients Requiring Left Ventricular Assist Devices (LVADs)**

E.J. Birks, L.E. Felkin, P.D. Tansley, P.B. Burton, N.R. Banner, P.J. Barton, M.H. Yacoub, Cardiothoracic Surgery, Royal Brompton and Harefield Hospital, Harefield, Middlesex, United Kingdom

8:45 am (137) **Preliminary Experience With the Lionheart Left Ventricular Assist Device in End-Stage Heart Failure Patients Ineligible for Heart Transplantation**

A. El-Banavosy, L. Arusoglu, M. Morshuis, L. Kizner, G. Tenderich, R. Koerfer, Cardiac Surgery, Heart Center NRW, Bad Oeynhausen, Germany

9:00 am-10:00 am

PLENARY SESSION INVITED LECTURE FORUM (International Ballroom Center)

Mechanical Circulatory Support Devices for Heart Failure

Moderators: Leslie W. Miller, MD and William A. Baumgartner, MD

Do They Work?

Eric A. Rose, MD, Columbia Presbyterian Medical Center, New York, NY

Do We Need Them?

Michael B. Fowler, MD, Stanford University Medical Center, Stanford, CA

Can We Afford Them?

Bruce McManus, MD, PhD, St. Paul's Hospital, Vancouver, Canada

Panel Discussion

10:00 am - 10:30 am

Coffee Break (Exhibit Hall)

10:00 am - 2:00 pm

Exhibits Open (Exhibit Hall)

10:30 am - Noon

CONCURRENT SESSION 10

Mechanical Circulatory Support 1: Clinical Development (International Ballroom Center)

Moderators: Clifford H. Van Meter, Jr., MD and Matthias Loebe, MD, PhD

10:30 am (138) **Long-Term Support of 9 Patients With the DeBakey VAD™ for More Than 200 Days**

M.J. Wilhelm,¹ C. Schmid,¹ T.D.T. Tjan,¹ A. Rhode,¹ T. Kaan,¹ E. Berendes,² J. Stypmann,³ D. Morley,⁴ G.P. Noon,⁵ M.E. DeBakey,⁵ H.H. Scheld,¹ D. Hammel,¹ ¹Department of Cardiothoracic Surgery, University of Muenster, Muenster, Germany; ²Department of Anesthesiology and Operative Intensive Care Medicine, University of Muenster, Muenster, Germany; ³Department of Cardiology, University of Muenster, Muenster, Germany; ⁴MicroMed Technology, Inc., Houston, TX; ⁵Department of Surgery, Baylor College of Medicine, Houston, TX

10:45 am (139) **A Permanent Implantable IABP to Treat Heart Failure: Initial Human Experience**

V. Jeevanandam,¹ D.V. Jayakar,¹ A.S. Anderson,¹ S. Martin,¹ J. Mueller,¹ W. Piccione,² L.W. Stephenson,³ J. Hsu,⁴ P.S. Freed,⁴ A. Kantrowitz,⁴ ¹Department of Surgery, University of Chicago, Chicago, IL; ²Department of Surgery, Rush-Presbyterian Medical Center, Chicago, IL; ³Department of Surgery, Wayne State University, Detroit, MI; ⁴L.VAD Technology, Detroit, MI

11:00 am (140) **Heartmate LVAD Inflow Valve Dysfunction**

J.W. Long, A.J. Powers, R. Khodaverdian, K.E. Nelson, Utah Artificial Heart Program, LDS Hospital, Salt Lake City, UT

11:15 am (141) **Ventricular Assist Device Therapy for Acute Myocardial Infarction Complicated by Cardiogenic Shock**

G. Al-Dossari,¹ S. Ormaza,¹ K. Savik,¹ R.M. Bolman,¹ L.W. Miller,² S.J. Park,¹ ¹Surgery, University of Minnesota, Minneapolis, MN; ²Medicine, University of Minnesota, Minneapolis, MN

11:30 am (142) **Fifteen Years Single Center Experience With the Total Artificial Heart Jarvik-7: A Bridge to the New Era of Electrical Total Artificial Heart**

P. Leprince, A. Pavie, N. Bonnet, P. Léger, I. Gandjbakhch, Cardio-Thoracic Surgery, Groupe Hospitalier Pitié-Salpêtrière, Paris, France

11:45 am (143) **Recent Improvements in Outcome With the Novacor Left Ventricular Assist Device**

J.T. Strauch, D. Spielvogel, P.L. Haldenwang, D. Baran, A. Gass, S.L. Lansman, Department of Cardiothoracic Surgery, The Mount Sinai Hospital, New York, NY

10:30 am - Noon

CONCURRENT SESSION 11

Lung/Heart-Lung Transplantation 2: Difficulties in Clinical Management (International Ballroom East)

Moderators: Duane Davis, MD and Ramona L. Doyle, MD

10:30 am (144) **Outcome of Minimal Acute Rejection (Grade A1) in Lung Transplant Recipients: The Need for Careful Observation**

P.M. Hopkins, C.L. Aboyoun, P.N. Chhajed, M.L. Plit, S.P. Rainer, M.A. Malouf, A.R. Glanville, The Lung Transplant Unit, St. Vincent's Hospital, Sydney, Australia

10:45 am (145) **Lymphocytic Bronchiolitis on Transbronchial Lung Biopsy in Lung Transplant Recipients - The Persisting Nemesis**

C.L. Aboyoun, P.M.A. Hopkins, P.N. Chhajed, M.L. Plit, S.P. Rainer, M.A. Malouf, A.R. Glanville, The Lung Transplant Unit, St. Vincent's Hospital, Sydney, Australia

11:00 am (146) **Early Colonization With Pseudomonas in Cystic Fibrosis (CF) Lung Transplant Recipients is Associated With Poor Long-Term Survival**

M.P. Steele, R.D. Davis, R.H. Messier, R. Pietrobon, B.D. Alexander, J.B. Rea, K.G. Setliff, S.M. Palmer, Duke University Medical Center, Durham, NC

11:15 am (147) **Anti-Reflux Surgery Improves Pulmonary Function in Lung Transplant Patients**

C.L. Lau, S.M. Palmer, D. Hadjiliadis, T.N. Pappas, W.S. Eubanks, R.D. Davis, Duke Lung Transplant Program, Duke University Medical Center, Durham, NC

11:30 am (148) **Pre-Transplant PRA in Lung Transplant Recipients is Associated With Significantly Worse Post-Transplant Survival in a Multicenter Study**

D. Hadjiliadis,¹ G. Carlos,¹ C. Chapparo,¹ N.L. Reinsmoen,² L.G. Singer,¹ M.P. Steele,³ T.K. Waddell,¹ R.D. Davis,⁴ M. Hutcheon,¹ S.M. Palmer,³ S. Kashavjee,¹ ¹Toronto Lung Transplant Program, University of Toronto, Toronto, Ontario, Canada; ²Pathology, Duke University, Durham, NC; ³Pulmonary/Critical Care, Duke University, Durham, NC; ⁴Thoracic Surgery, Duke University, Durham, NC

11:45 am (149) **Outcome Following Simultaneous and Sequential Lung-Liver Transplantation: Analysis fo the ISHLT/UNOS Joint Thoracic Registry**

S. Fischer,¹ L.E. Bennett,² M. Strueber,¹ T.K. Waddell,³ J. Niedermeier,¹ S. Keshavjee,³ A. Haverich,¹ ¹Hannover Thoracic Organ Transplant Program, Hannover Medical School, Hannover, Germany; ²UNOS, Richmond, VA; ³Toronto Lung Transplant Program, Toronto General Hospital, Toronto, Ontario, Canada

10:30 am - Noon

CONCURRENT SESSION 12

Nursing, Social Science, and Healthcare Economics (International Ballroom West)

Moderators: Katherine Hoercher, RN and Jan Manzetti, RN, PhD

10:30 am (150) **An Internet-Based Intervention to Improve Mental Health and Medical Compliance in Heart Transplant Recipients**

M.A. Dew,¹ R.L. Kormos,² J.M. Goycoolea,³ A. Lee,² R. Zomak,² B.P. Griffith,² ¹Psychiatry, Psychology and Epidemiology, University of Pittsburgh School of Medicine, Pittsburgh, PA; ²Surgery, University of Pittsburgh School of Medicine, Pittsburgh, PA; ³Psychiatry, University of Pittsburgh School of Medicine, Pittsburgh, PA

10:45 am (151) **Prevalence and Correlates of Depression After Heart Transplantation: A Prospective, Long-Term Study (> 5 Years Post-HTx)**

F. Dobbels,¹ S. De Geest,^{1,2} J. Van Cleemput,¹ W. Droogne,¹ J. Vanhaecke,¹ ¹Department of Cardiology, University of Leuven, Leuven, Belgium; ²Institute of Nursing Science, University of Basel, Basel, Switzerland

11:00 am (152) **Psychosocial Factors, Physical Symptoms and Physical Function After Lung Transplantation**

A.J. DeVito Dabbs,¹ M.A. Dew,² C.S. Stille,¹ J.D. Manzetti,³ T.A. Zullo,¹ ¹Nursing, University of Pittsburgh, Pittsburgh, PA; ²Psychiatry, Psychology, Epidemiology, University of Pittsburgh, Pittsburgh, PA; ³Cardiothoracic Transplantation, University of Pittsburgh, Pittsburgh, PA

11:15 am (153) **Anxiety Level Alterations and Interventions While Awaiting Cardiac Transplant in a Hospital Intermediate Care Setting**

N.M. Albert, D.M. Schmuhl, K. Kendall, J.P. Hammel, L.J. Kelly, D.M. Herron, Kaufman Center for Heart Failure, The Cleveland Clinic Foundation, Cleveland, OH

11:30 am **(154) Lifestyle and Health Status Differ as a Function of Time in Long-Term Cardiac Transplant Recipients**
J.J. Salyer,¹ M.P. Flattery,² M.C. Maltby,³ P.L. Joyner,⁴ R.K. Elswick,¹ Adult Health Nursing, School of Nursing, Virginia Commonwealth University, Richmond, VA; ²Department of Nursing, Medical College of Virginia Hospitals/Virginia Commonwealth University Health Systems, Richmond, VA; ³Department of Social Work, Medical College of Virginia Hospitals/Virginia Commonwealth University Health Systems, Richmond, VA; ⁴Department of Nursing, Veterans Administration Medical Center, Richmond, VA; ⁵Department of Biostatistics, School of Medicine, Virginia Commonwealth University, Richmond, VA

11:45 am **(155) The Occurrence of Depression in Paediatric Patients Before and One Year After Heart or Heart-Lung Transplantation (Tx)**
J. Wray, R. Radley-Smith, Royal Brompton and Harefield NHS Trust, Harefield Hospital, Harefield, Middlesex, United Kingdom

Noon – 12:45 pm
Box Lunch Pick-Up

12:15 pm - 1:45 pm
Mid-Day Workshop 5: Heart Failure in Children (International Ballroom Center)
Moderators: Robert D. Ross, MD and David N. Rosenthal, MD

Management of the Ambulatory Patient with Heart Failure
Robert E. Shaddy, MD, Primary Children's Medical Center, Salt Lake City, UT and Robert D. Ross, MD, Children's Hospital of Michigan, Detroit, MI
Management of the Critically Ill Patient
Timothy M. Hoffman, MD, Columbus Children's Hospital, Columbus, OH
Management of the Patient with Heart Failure in the Single Ventricle; Maryanne R. Kichuk-Christant, MD, Cleveland Clinic Foundation, Cleveland, OH

12:15 pm - 1:45 pm
Mid-Day Workshop 6: Surgical Alternatives to Heart Transplantation (Jefferson)
Moderators: Clifford H. Van Meter, Jr., MD and Wolfgang Harringer, MD

Batista Procedure: Lessons Learned and Future Implications
Randall C. Starling, MD, Cleveland Clinic Foundation, Cleveland, OH
Ischemic Heart Disease: Surgical Strategies
Friedhelm Beyersdorf, MD, Albert-Ludwigs University, Freiburg, Germany
Mitral Valve Repair
Steven F. Bolling, MD, University of Michigan Hospital, Ann Arbor, MI
Ventricular Reshaping
Hermann Reichenspurner, MD, PhD, University Hospital Eppendorf, Hamburg, Germany
Ischemic Heart Disease: Patient Selection
Mariell Jessup, MD, Hospital of the University of Pennsylvania, Philadelphia, PA

12:15 pm - 1:45 pm
Mid-Day Workshop 7: Core Curriculum: Immunology for Dilettantes (International Ballroom East)
Moderators: James F. George, PhD and George Tellides, MD

Overview
James S. Allan, MD, Massachusetts General Hospital, Boston, MA
Initiation of Response
James F. George, PhD, University of Alabama at Birmingham, Birmingham, AL
Effector Mechanisms
George Tellides, MD, Yale University School of Medicine, New Haven, CT
Immunosuppression
Randall E. Morris, MD, Stanford University School of Medicine, Stanford, CA

12:15 pm - 1:45 pm
Mid-Day Workshop 8: Management of the High Immunologic Risk Patient (International Ballroom West)
Supported by an educational grant from Fujisawa Healthcare, Inc.
Moderator: Leslie W. Miller, MD

The Management of the Pre-Transplant Patient with High PRA's, Jon Kobashigawa, MD, University of California at Los Angeles, Los Angeles, CA

The Role of Rapamycin in the Sensitized Patient, Howard J. Eisen, MD, Temple University School of Medicine, Philadelphia, PA

12:15 pm - 1:45 pm

Mini Oral Poster Presentation Session 2 (Georgetown)

Moderators: Axel Haverich, MD and Joseph G. Rogers, MD

12:15 pm (156) The Decreasing Incidence of Cardiac Allograft Rejection and its Impact on Clinical Trials

S. Subherwal,¹ M.L. Espejo,¹ M.C. Fishbein,³ J. Patel,¹ H. Laks,² J.A. Kobashigawa,¹ ¹Medicine, UCLA, Los Angeles, CA; ²Surgery, UCLA, Los Angeles, CA; ³Pathology, UCLA, Los Angeles, CA

12:21 pm (157) Does CMV Status Influence Acute and Chronic Rejection in Heart Transplantation During the Ganciclovir Prophylaxis Era?

H. Luckraz,¹ J. Parameshwar,¹ T. Wreghitt,² J. Wallwork,¹ S. Large,¹ ¹Transplant Unit, Papworth Hospital, Cambridge, United Kingdom; ²Public Health Laboratory Service, Addenbrooke's Hospital, Cambridge, United Kingdom

12:27 pm (158) Diagnostic Efficiency and Reliability of a Combined Electrophysiological and Echocardiographical Non-Invasive Rejection Monitoring Strategy During the First Post-Transplant Year

M. Dandel, J. Mueller, M. Hummel, R. Meyer, R. Hetzer, Cardiothoracic and Vascular Surgery, Deutsches Herzzentrum Berlin, Berlin, Germany

12:33 pm (159) Changes in Coronary Endothelial Function Predict Progression of Allograft Vasculopathy Late After Heart Transplantation

S.M. Hollenberg, D. Bromet, A. Satran, L.W. Klein, M.R. Costanzo, J.E. Parrillo, Section of Cardiology, Rush Medical College, Chicago, IL

12:39 pm (160) Heart Transplantation in Patients With Diabetes Mellitus in the Current Era

B. Patel, D. Marelli, J. Patel, F.-C. Tsai, J. Moriguchi, G. Fonarow, M. Hamilton, A. Ardehali, F. Esmailian, M. Plunkett, A. Hage, J. Kobashigawa, H. Laks, Heart Transplant Program, UCLA School of Medicine, Los Angeles, CA

12:45 pm (161) Tissue Factor Expression is Increased in Cardiac Transplant Recipients Who Develop Cardiac Transplant Arteriopathy

M.H. Yen,¹ G. Pilkington,¹ N.B. Ratliff,¹ P.M. McCarthy,² J.B. Young,¹ R.C. Starling,¹ G.M. Chisolm,³ M.S. Penn,¹ ¹Cardiology, The Cleveland Clinic Foundation, Cleveland, OH; ²Cardiothoracic Surgery, The Cleveland Clinic Foundation, Cleveland, OH; ³Cell Biology, The Cleveland Clinic Foundation, Cleveland, OH

12:51 pm (162) Plasma C-Reactive Protein as a Marker of Coronary Artery Disease in Follow-Up of Heart Transplant Recipients

A. Hognestad,¹ K. Endresen,¹ R. Wergeland,² O. Stokke,² S. Simonsen,¹ A.K. Andreassen,¹ ¹Department of Cardiology, Rikshospitalet, Oslo, Norway; ²Department of Clinical Chemistry, Rikshospitalet, Oslo, Norway

12:57 pm (163) Effect of Sympathetic Reinnervation (RI) on Cardiac Performance After Transplantation (HTx)- Behavior of Left Ventricular Function (LVEF) Post Exercise

P. Ueberfuhr,¹ F. Bengel,² N. Schiepel,² S. Nekolla,² M. Schwaiger,² B. Reichart,¹ ¹Herzchirurgische Klinik, Klinikum Grosshadern, Muenchen, Germany; ²Nuklearmedizinische Klinik, Technische Universitaet Muenchen, Muenchen, Germany

1:03 pm (164) Preemptive Antiviral Therapy is Highly Efficient in Preventing Cytomegalovirus (CMV) Disease in CMV-Positive Heart Transplant Recipients

B. Radovancevic, C.D. Thomas, R. Radovancevic, E.L. Ford, O.H. Frazier, Transplant Service, Texas Heart Institute, Houston, TX

1:09 pm (165) Bridging With Prostaglandin E1 to High-Dose Beta-Blocker Therapy in Patients With Decompensated, Advanced, Chronic Heart Failure

R. Berger, M. Huelsmann, A. Bojic, B. Stanek, R. Pacher, University of Vienna, Vienna, Austria

1:15 pm (166) Orthotopic Cardiac Transplantation After Failing Fontan Procedure

A. Gamba, C. Mammana, R. Fiocchi, L. Iamele, B. Carrara, P. Ferrazzi, Cardiovascular Department, Ospedali Riuniti di Bergamo, Bergamo, Italy

1:21 pm (167) Heart Transplant and LVAD Charges are Similar

P.L. DiGiorgi, E.H. Burton, M.C. Oz, Surgery, Columbia University, New York, NY

1:27 pm (168) The New Impella Intracardiac Microaxial Pump for Treatment of Right Heart Failure After Orthotopic Heart Transplantation

J. Martin,¹ C. Yerebakan,¹ C. Benk,¹ M. Krause,¹ G. Derjung,² F. Beyersdorf,¹ ¹Department of Cardiovascular Surgery, Albert-Ludwigs-University, Freiburg, Germany; ²Impella Kardiatechnik AG, Aachen, Germany

1:33 pm (169) **The Permanent Jarvik 2000 - A New Therapeutic Option for Cardiac Amyloidosis**

J. Martin, P. Dern, M. Siegenthaler, O. Friesewinkel, S. Sorg, F. Beyersdorf, Cardiovascular Surgery, Albert-Ludwigs-University, Freiburg, Germany

2:00 pm - 3:30 pm

CONCURRENT SESSION 13

Mechanical Circulatory Support 2: Biological and Physiological Assessment (International Ballroom Center)

Moderators: Aly El-Banayosy, MD and William L. Holman, MD

2:00 pm (170) **Detecting Myocardial Recovery While on VAD Support: Comparing Quantitative Echocardiography With Exercise Physiology Testing**

D.A. Severyn,¹ R.L. Kormos,¹ R.D. Schaub,¹ S. Winowich,¹ S. Murali,² J. Gorcsan III,² ¹Artificial Heart, Cardiothoracic Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA; ²Cardiology, University of Pittsburgh Medical Center, Pittsburgh, PA

2:15 pm (171) **Mechanical Unloading Increases Myofilament Calcium Sensitivity in Cardiac Myocytes**

W.E. Sweet,¹ Q.W. Zhang,² R.L. Fairchild,² C.S. Moravec,¹ ¹Center for Anesthesiology Research; ²Department of Immunology, The Cleveland Clinic Foundation, Cleveland, OH

2:30 pm (172) **Transitory Immunologic Response After Implantation of DeBakey VAD Continuous-Axial-Flow-Pump**

H.J. Ankersmit,¹ G. Wieselthaler,¹ B. Moser,¹ G. Roth,¹ A. Zuckermann,¹ G. Boltz-Nitulescu,² E. Wolner,¹ ¹Department of Cardiothoracic Surgery, Vienna General Hospital, Vienna, Austria; ²Institute of Pathophysiology, University Vienna, Vienna, Austria

2:45 pm (173) **The Role of Matrix Metalloproteinase 1 (MMP-1) and Tissue Inhibitor of Metalloproteinase 1 (TIMP-1) in Rapidly Deteriorating Heart Failure in Humans**

E.J. Birks, L.E. Felkin, P.D. Tansley, N. Latif, M.U. Koban, P.J. Barton, M.H. Yacoub, Cardiothoracic Surgery, Royal Brompton and Harefield Hospital, Harefield, Middlesex, United Kingdom

3:00 pm (174) **The Effect of Left Ventricular Mechanical Support on Apoptosis and its Regulators in Patients With End-Stage Heart Failure**

N. De Jonge,¹ D. Van Wichen,² J. Lahpor,³ F. Gmelig-Meyling,⁴ R. De Weger,² ¹Cardiology, Heart Lung Center Utrecht, Utrecht, Netherlands; ²Pathology, University Medical Center Utrecht, Utrecht, Netherlands; ³Cardiothoracic Surgery, Heart Lung Center Utrecht, Utrecht, Netherlands; ⁴Immunology, University Medical Center Utrecht, Utrecht, Netherlands

3:15 pm (175) **Degree of Fibrosis and Hypertrophy Predicts Myocardial Improvement in VAD Supported Patients**

B.A. Bruckner,¹ S. Stetson,¹ P. Razeghi,² L. Thompson,¹ M. Loebe,¹ J. Lafuente,¹ G.P. Noon,¹ H. Taegtmeier,² O.H. Frazier,² K. Youker,¹ ¹ME DeBakey Department of Surgery, Baylor College of Medicine, Houston, TX; ²Texas Heart Institute, University of Texas, Houston, TX

2:00 pm - 3:30 pm

CONCURRENT SESSION 14

Clinical Heart Transplantation 3 (International Ballroom East)

Moderators: Anne Keogh, MD, MBBS and Ileanna L. Pina, MD

2:00 pm (176) **Thirty Year Experience With Non-Lymphoma Cancer Post Heart and Heart-Lung Transplantation at Stanford**

S.-Z. Gao, M.G. Perlroth, J.S. Schroeder, J.G. Montoya, J.L. Miller, S. DiMiceli, B. Brown, P.E. Oyer, Cardiovascular Medicine, Stanford University, Stanford, CA

2:15 pm (177) **Pre-Operative Pulmonary Vascular Hemodynamics: Relation to Serial Clinical and Hemodynamic Outcomes up to 1 Year Post Cardiac Transplantation**

M. Rockx, P.W. Pflugfelder, W.J. Kostuk, ¹Division of Cardiology, LHSC University Campus, London, Ontario, Canada; ²Division of Cardiology, LHSC University Campus, London, Ontario, Canada; ³Division of Cardiology, LHSC University Campus, London, Ontario, Canada

2:30 pm (178) **Pulmonary Hypertension Before Heart Transplantation is Associated With Early Post-Transplant Pulmonary Hypertension but not With Mortality**

P.P. Chang,¹ J.C. Longenecker,² N. Wang,² J.V. Conte,³ K.L. Baughman,¹ J.M. Hare,¹ E.K. Kasper,¹ ¹Cardiology, Johns Hopkins University, Baltimore, MD; ²General Internal Medicine, Johns Hopkins University, Baltimore, MD; ³Cardiac Surgery, Johns Hopkins University, Baltimore, MD

2:45 pm (179) **Improved Survival Induced by Long Term Statin Therapy Following Cardiac Transplantation Correlates With Lipid Lowering Effect**

B. Orourke, M. Barbir, N. Banner, M. Yacoub, Cardiology and Transplant Medicine, Royal Brompton and Harefield NHS Trust, London, United Kingdom

3:00 pm (180) Renin-Angiotensin-Aldosterone-System Directed Antihypertensive Therapy Achieves Lower B-Type Natriuretic Peptide Levels Compared With Calcium Channel Blockade in Heart Transplantation

M.H. Park, P.A. Uber, R.L. Scott, L.E. Bourgeois, M.R. Mehra, Ochsner Clinic Foundation, New Orleans, LA

3:15 pm (181) Tacrolimus/Mycophenolate Mofetil vs Cyclosporine/Mycophenolate Mofetil: Impact on Infections Following Cardiac Transplantation

J. Groetzner, B. Meiser, J. Schirmer, S. Schenk, M. Muller, F. Reisch, M. Oberhoffer, F. Kur, P. Überfuhr, B. Reichart, Klinikum Grosshadern, University Hospital, Munich, Germany

2:00 pm - 3:30 pm

CONCURRENT SESSION 15

Xenotransplantation (International Ballroom West)

Moderators: Michael Schmoeckel, MD and Richard N. Pierson, III, MD

2:00 pm (182) Development of a Novel Preclinical Pig-to-Non-Human Primate Model of Xenogeneic Orthotopic Lung Transplantation

A.R. Simon,¹ S. Fischer,¹ R. Tessmann,¹ C. Schroeder,¹ U. Martin,¹ M. Chikobava,² C. Templin,¹ G. Laaf,¹ K. Wiebe,¹ G. Steinhoff,¹ B. Lapin,² A. Haverich,¹ ¹Division of Cardiothoracic and Vascular Surgery, Hannover Medical School, Hannover, Germany; ²Institute of Primatology, Sochi, Russian Federation

2:15 pm (183) Classical Pathway Complement Inhibition and Survival of h-DAF Pig Lungs Perfused With Human Blood

C. Schroeder,¹ S. Pfeiffer,¹ D.J.G. White,² A.M. Azimzadeh,¹ R.N. Pierson III,¹ ¹Cardiothoracic Surgery, Vanderbilt University, Nashville, TN; ²Novartis Pharma AG Company, Basel, Switzerland

2:30 pm (184) Rapid Decrease in Ecto-5'-Nucleotidase Activity in the Pig Heart and Endothelium in Confrontation With Human Blood

Z. Khalpey, K.K. Kalsi, Z. Kochan, B. Lama, E. Slominska, M. Forni, M. Bacci, M. Lavitrano, M.H. Yacoub, R.T. Smolenski, ¹Heart Science Centre, Imperial College at Harefield Hospital, Harefield, Middlesex, United Kingdom; ²Medical University Gdansk, Gdansk, Poland; ³Universita La Sapienza, Roma, Italy; ⁴Universita Bologna, Bologna, Italy

2:45 pm (185) Systemic Features Associated With Acute Humoral Xenograft Rejection After Pig-To-Baboon Heart Transplantation

C. Knosalla,¹ B. Gollackner,¹ K. Teranishi,¹ S. Mauyyedi,² D. Harper,³ L. Correa,³ M. Awwad,³ D. Sachs,¹ D.K.C. Cooper,¹ ¹Transplantation Biology Research Center, Massachusetts General Hospital, Boston, MA; ²Department of Pathology, Massachusetts General Hospital, Boston, MA; ³Immerge BioTherapeutics, Charlestown, MA

3:00 pm (186) Depletion of Anti-Gal Natural Antibody in Baboons by a Poly-L-Lysine Backbone With Oligosaccharides

K. Teranishi,¹ I.P.J. Alwayn,¹ L. Buhler,¹ D.H. Sachs,¹ A. Katopodis,² R. Duthaler,² H.J. Schuurman,³ M. Awwad,³ D.K.C. Cooper,¹ ¹Transplantation Biology Research Center, Massachusetts General Hospital, Boston, MA; ²Novartis Pharma AG, Basel, Switzerland; ³Immerge BioTherapeutics, Inc., Charlestown, MA

3:15 pm (187) 100 Day Cardiac Xenograft Survival in Porcine-to-Primate Model; C.G.A. McGregor,¹ R.P. Frantz,¹ L.J. Olson,¹

H.D. Tazelaar,¹ S.E. Branzoli,¹ M.M. Ugurlu,¹ S.S. Teotia,¹ J.M. Schirmer,¹ B.S. Wiseman,² J.M. Risdahl,² G.W. Byrne,² J.S. Logan,² ¹Transplant Center, Mayo Clinic, Rochester, MN; ²Nextran, Princeton, NJ

3:30 pm - 4:00 pm

Coffee Break (Exhibit Hall)

3:30 pm - 6:30 pm

Exhibits Open (Exhibit Hall)

4:00 pm - 5:30 pm

CONCURRENT SESSION 16

Basic Science and Immunobiology 3: Costimulation and Cytokines (International Ballroom Center)

Moderators: George Tellides, MD and Thomas Waddell, MD, PhD

4:00 pm (188) Intracoronary Interferon- γ Accelerates Cardiac Allograft Rejection in Miniature Swine

L.C. Benjamin, J.S. Allan, J.D. Mezrich, S.L. Houser, D.R. Johnston, R.S. Lee, H.C. Amoah, L.G. Ledgerwood, D.H. Sachs, J.C. Madsen, Transplantation Biology Research Center, Department of Surgery, Massachusetts General Hospital, Boston, MA

4:15 pm (189) IL-10 Inhibits Endothelial-Induced T Cell Activation Through Effects Upon Costimulation but Independent of Antigen Presentation

T.J. Dengler, R. Klingenberg, A. Zastrow, H. König, N. Xia, M. Haass, Cardiology, University of Heidelberg, Heidelberg, Germany

4:30 pm (190) **Corticosteroids but not Cyclosporine A Inhibit Cytokine-Induced Upregulation of Inducible Costimulator Ligand (ICOS-L) on Human Endothelial Cells**

R. Klingenberg, U. Heidl, W. Nottmeyer, N. Xia, T.J. Dengler, Cardiology/Transplant Research, University Hospital Heidelberg, Heidelberg, Germany

4:45 pm (191) **Anti-CD25 Therapy Blocks Both the Donor-Specific Th1 and Th2 Cytokine Production After Clinical Heart Transplantation**

N.M. van Besouw,¹ A.H.M.M. Balk,² W. Mol,¹ T. van Gelder,¹ C.C. Baan,¹ W. Weimar,¹ ¹Internal Medicine; ²Cardiology, University Hospital Rotterdam-Dijkzigt, Rotterdam, Netherlands

5:00 pm (192) **Anti-CD40L With ATG Decreases Vimentin Antibodies After Monkey Cardiac Transplantation**

A.M. Azimzadeh,¹ S. Pfeiffer,¹ G.L. Zorn III,¹ A.J. Danskine,² J.D. Smith,² M.L. Rose,² R.N. Pierson III,¹ ¹CT Surgery, VUMC, Nashville, TN; ²Imperial College, Harefield Hospital, London, United Kingdom

5:15 pm (193) **Dual Upregulation Of Surface Fas and Mitochondrial Bax Promotes Alloreactive T Cell Apoptosis in Interleukin-10 Gene Targeting of Cardiac Allografts**

T.C. Tung, K. Oshima, H. Laks, G. Cui, L. Sen, Cardiothoracic Surgery, UCLA School of Medicine, Los Angeles, CA

4:00 pm - 5:30 pm

CONCURRENT SESSION 17

Alternatives to Transplantation: Non-Transplant Strategies (International Ballroom East)

Moderators: Hermann Reichenspurner, MD, PhD and Wolfgang Harringer, MD

4:00 pm (194) **5 Year Results After Partial Left Ventriculectomy in a European Heart Failure Population**

W. Konertz,¹ H. Hotz,¹ D. Kivelitz,² M. Zytowski,¹ ¹Cardiovascular Surgery, Charité Berlin, Berlin, Germany; ²Radiologie, Charité Berlin, Berlin, Germany

4:15 pm (195) **Cardiac Resynchronization Therapy Markedly Reduces the Need for Heart Transplantation**

J.M. Greenberg, A.R. Leon, D.B. DeLurgio, J.J. Langberg, B.J. Hott, W.M. Book, A.L. Smith, Department of Cardiology, Emory University, Atlanta, GA

4:30 pm (196) **Resynchronisation Therapy in Patients With LBBB and End Stage Heart Failure: Real Alternative or Bridging to Cardiac Transplantation?**

G. Tenderich, B. Schulze, B. Hansky, K. Minami, R. Koerfer, Thoracic and Cardiovascular Surgery, Heart Center NRW, University Bochum, Bad Oeynhausen, Germany

4:45 pm (197) **Left Ventricular Reshaping by Cardioclast Device Enhances Contractility and Improves Systolic Function in Dilated Cardiomyopathy**

A. Kashem,¹ S. Hassan,¹ W.P. Santamore,¹ D.L. Crabbe,¹ K.B. Margulies,¹ D.B. Melvin,² B. Goldman,¹ ¹Cardiology, Temple University, Philadelphia, PA; ²Surgery, University of Cincinnati, Cincinnati, OH

5:00 pm (198) **The Acorn Cardiac Support Device (CD) Randomized Trial: Perioperative Results and Early Follow-Up in 26 Patients - A Single Center Experience**

J.F. Gummert, A. Rahmel, J. Schneider, T. Bossert, R. Krakor, F.W. Mohr, Department of Cardiac Surgery, Heart Center Leipzig, Leipzig, Germany

5:15 pm (199) **Bronchoscopic Lung Volume Reduction (BLVR) Using Bronchial Prostheses: A Pilot Safety and Efficacy Study**

G.I. Snell,¹ L. Holsworth,¹ S. Fowler,¹ J.A. Smith,² A. Silvers,³ T.J. Williams,¹ ¹Respiratory Medicine, Alfred Hospital, Prahran, Australia; ²Cardiothoracic Surgery, Alfred Hospital, Prahran, Australia; ³Anaesthesia, Alfred Hospital, Prahran, Australia

4:00 pm - 5:30 pm

CONCURRENT SESSION 18

Pediatrics 1: Before Transplant: Patient Selection and Management (International Ballroom West)

Moderators: Nancy D. Bridges, MD and Pedro Del Nido, MD

4:00 pm (200) **Pediatric Primary Pulmonary Hypertension: Should Patients be Listed for Lung Transplant?**

J.R. Szmuszkowicz, M.V. Horn, E.F. MacLaughlin, V.A. Starnes, M.S. Woo, Cardiothoracic Transplant Team, Childrens Hospital Los Angeles, Los Angeles, CA

4:15 pm (201) **Who Should be Transplanted With HLHs? Few Patient Related Factors Alter Outcome Following Stage I Reconstruction**

G. Wernovsky,¹ N.D. Bridges,¹ T.L. Spray,² ¹Pediatric Cardiology, Children's Hospital of Philadelphia, Philadelphia, PA; ²Cardiothoracic Surgery, Children's Hospital of Philadelphia, Philadelphia, PA

4:30 pm (202) **Heart Failure Symptoms Vary With Age in Pediatric Patients**

D.N. Rosenthal,¹ L. Addonizio,² C. Chin,¹ J. Lamour,² R. Perez,² D. Hsu,² D. Bernstein,¹ ¹Pediatrics, Stanford University, Stanford, CA; ²Pediatrics, Columbia University, New York, NY

4:45 pm (203) **Use Of ECLS as a Bridge to Pediatric Cardiac Transplantation**

R.J. Gajarski,¹ R.S. Mosca,² R.G. Ohye,¹ E.L. Bove,¹ D.C. Crowley,¹ F.W. Moler,¹ J.R. Custer,¹ A. Valentini,¹ T.J. Kulik,¹ ¹Congenital Heart Center, University of Michigan, C.S. Mott Children's Hospital, Ann Arbor, MI; ²Cardiothoracic Surgery, Babies and Children's Hospital of New York, New York, NY

5:00 pm (204) **Pediatric Arterio-Venous Extracorporeal Membrane Oxygenation (ECMO) as a Bridge to Cardiac Transplantation**

W.P. Fiser,^{1,2} J.J. Drummond-Webb,^{1,2} R.J. Gunselman,¹ L.L. Baker,¹ C.W. Chipman,¹ E.A. Frazier,³ A.T. Yetman,³ ¹Pediatric and Congenital Cardiac Surgery, Arkansas Children's Hospital, Little Rock, AR; ²Surgery, Division of Cardiothoracic Surgery, University of Arkansas for Medical Sciences, Little Rock, AR; ³Pediatric Cardiology, Arkansas Children's Hospital, Little Rock, AR

5:15 pm (205) **Ventricular Assist Device Support in Pediatric Patients as a Bridge to Heart Transplantation**

S.K. Gandhi,¹ F.A. Pigula,¹ S.A. Webber,² S. Winowich,³ R.D. Siewers,¹ R.L. Kormos,³ ¹Division of Cardiothoracic Surgery, Children's Hospital of Pittsburgh, Pittsburgh, PA; ²Division of Cardiology, Children's Hospital of Pittsburgh, Pittsburgh, PA; ³Division of Cardiothoracic Surgery, University of Pittsburgh, Pittsburgh, PA

5:30 pm - 6:30 pm

Pathology and Basic Science Scientific Council Meeting (Lincoln)

Pulmonary Hypertension Scientific Council Meeting (Georgetown)

Transplant Registry Meeting (Jefferson)

5:30 PM - 6:30 PM

GENERAL POSTER SESSION 2/Wine and Cheese Reception (Exhibit Hall)

(206) **IL-10 Gene Expression and Cardiac Allograft Survival With or Without Treatment of Monoclonal Antibodies, CsA, Donor-Specific Transfusion After Rat Heart Transplantation**

Y. Huang,¹ J. Xia,² C. Yang,² S. Ye,² Y. Ye,¹ ¹Nazih Zuhdi Transplant Institute, Integris Baptist Medical Center, Oklahoma City, OK; ²Department of Cardiac Surgery, The Institute of Cardiovascular Diseases of Tongji Medical College, Huazhong University of Science and Technology, Wuhan City, China

(207) **Accelerated Cardiac Allograft Rejection With Apoptosis and Complement Deposition in Fc Receptor Null Mice**

B.A. Wasowska, Z. Qian, S. Rahimi, K. Fox-Talbot, W.M. Baldwin, Pathology, Johns Hopkins Medical Institutes, Baltimore, MD

(208) **MHC Class I Expression in Allogeneic Fetal Liver Cells is not Required for Neonatal Induction of Non-Specific Cardiac Allograft Acceptance**

L.J. West, K. Tao, L. Mai, Cardiology/Immunology, Hospital for Sick Children/University of Toronto, Toronto, Ontario, Canada

(209) **Interactions Between Hypoxia Inducible Factor (HIF)-1 α , Heme Oxygenase (HO)-1, and TGF- β in Clinical Heart Transplantation**

C.C. Baan,¹ A.H. Balk,² C.T. Holweg,¹ T. van Gelder,¹ P.J. Vantrimpont,² L.P. Maat,² W. Weimar,¹ ¹Internal Medicine; ²Thorax Center, University Hospital Rotterdam, Rotterdam, Netherlands

(210) **Cyclosporin Induced Endothelial Dysfunction: Effects of the Nitric Oxide Cofactor, Tetrahydrobiopterin**

S. Miriuka,¹ V. Rao,¹ R.D. Weisel,¹ S.-H. Li,¹ T.J. Anderson,² A. Maitland,² P.W.M. Fedak,¹ R. Li,¹ S. Verma,¹ ¹Cardiovascular Surgery, Toronto General Hospital, Toronto, Ontario, Canada; ²Cardiology, University of Calgary, Calgary, Alberta, Canada

(211) **Alloantigen Recognition in the Mouse Heterotopic Model of OB**

W. Chalermkulrat,¹ I.P. Neuringer,¹ J.P. Ting,² N.J. Felix,² S.H. Randell,¹ V.K. Hathwar,¹ R.M. Aris,¹ ¹Division of Pulmonary Medicine, University of North Carolina, Chapel Hill, NC; ²Department of Microbiology and Immunology, University of North Carolina, Chapel Hill, NC

(212) **Endoscopic Delivery of Adenoviral-Mediated Human Interleukin-10 Gene to the Donor Improves Post Transplant Lung Function in a Large Animal Model**

S.C. Martins, M. de Perrot, Y. Imai, A. Chaparro, S. Sakiyama, M. Quadri, L. Segall, T.K. Waddell, M. Liu, S. Keshavjee, Thoracic Surgery Research Laboratory, Toronto General Research Institute, University of Toronto, Toronto, Ontario, Canada

(213) **Cardiac Allograft Vasculopathy (CAV) Develops in Tolerant or Immunodeficient Murine and Swine Recipients**

H.S. Rose,^{1,2} C.M. Chase,¹ R.B. Colvin,³ J.C. Madsen,^{1,2} P.S. Russell,¹ ¹Department of Surgery, Massachusetts General Hospital, Boston, MA; ²Transplant Biology Research Center, Massachusetts General Hospital, Boston, MA; ³Department of Pathology, Massachusetts General Hospital, Boston, MA

(214) Recipients of MHC Class I Disparate Lung Grafts Develop T Cell Reactivity to Donor MHC Class I Alloptides in an Orthotopic Swine Model

J.S. Allan,^{1,2,3} R.S. Lee,^{2,3} L.C. Benjamin,^{2,3} J.D. Mezrich,^{2,3} J.C. Wain,^{1,2,3} D.R. Johnston,^{2,3} S.L. Houser,^{2,3} H.C. Amoah,^{2,3} L.G. Ledgerwood,^{2,3} J.C. Madsen,^{2,3} ¹Division of Thoracic Surgery, Massachusetts General Hospital, Boston, MA; ²Transplantation Biology Research Center, Harvard Medical School, Boston, MA

(215) Endothelial MHC-I-Peptides Specificity in IFN-Gamma Induced Cytoprotection Against Natural Killing

A.A. Kavokin, O. Ayalon, N. Marshall, E. Pamer, P. Cresswell, J. Bender, Yale University School of Medicine, New Haven, CT

(216) Upregulation of BCL-2 Ameriorates Ischemia Reperfusion Injury in Murine Cardiac Grafts

S. Murata, D.N. Miniati, M.A. Lijkwan, M.H. Kown, M.L. Koransky, R.C. Robbins, Department of Cardiothoracic Surgery, Stanford University, Stanford, CA

(217) Iloprost Ameliorates Ischemia-Reperfusion Injury by Reduction of Endothelin-1 Release

M. Kawashima,^{1&4} T. Nakamura,⁴ S. Schneider,² B. Vollmar,³ H.F. Lausberg,¹ M. Bauer,² M.D. Menger,³ H.J. Schafers,¹ ¹Department. of Thoracic and Cardiovascular Surgery; ²Anesthesiology and Critical Care Medicine; ³Institute for Clinical and Experimental Surgery, University of Saarland, Homburg, Saarland, Germany; ⁴Thoracic Surgery, Kyoto University, Kyoto, Japan

(218) Phospholipase A2 Inhibitor Attenuates Nox Production and Myocardial Damage in the Cardiac Allograft

E.L. Kukuliy,¹ R. John,¹ M.J. Szabolcs,¹ N. Ma,¹ M. Schuster,¹ P.J. Cannon,¹ D.P. Fairlie,² N.M. Edwards,¹ ¹Cardiothoracic Surgery, Columbia University College of Physicians and Surgeons, New York, NY; ²Institute for Molecular Bioscience, University of Queensland, Brisbane, Australia

(219) C-Reactive Protein Increases Complement Mediated Ischemia-Reperfusion Injury in Heart Transplants

S. Cao, J. Liu, S. Rahimi, W.M. Baldwin, Pathology, Johns Hopkins University School of Medicine, Baltimore, MD

(220) Nonspecific Airway Inflammation Promotes Obliterative Bronchiolitis in Rat Orthotopic Lung Allografts

S. Nakashima, W.M. Baldwin III, Pathology, The Johns Hopkins University School of Medicine, Baltimore, MD

(221) Allograft Inflammatory Factor-1 (AIF-1) Expression Correlates With Cardiac Rejection and Development of Cardiac Allograft Vasculopathy

M.V. Autieri, S.E. Kelemen, B.A. Thomas, B.I. Goldman, H.J. Eisen, ¹Physiology, Temple University School of Medicine, Philadelphia, PA; ²Cardiology, Temple University School of Medicine, Philadelphia, PA; ³Pathology, Temple University School of Medicine, Philadelphia, PA

(222) Upregulation of Heme Oxygenase-1 During the Development of Accelerated Graft Vascular Disease After Clinical Heart Transplantation

C.T.J. Holweg,¹ A.H.M.M. Balk,² J. Snaathorst,¹ H.G.M. Niesters,³ A.P.W.M. Maat,⁴ T. van Gelder,¹ W. Weimar,¹ C.C. Baan,¹ ¹Internal Medicine; ²Cardiology; ³Diagnostic Institute of Molecular Biology; ⁴Thoracic Surgery, University Hospital Rotterdam, Rotterdam, Netherlands

(223) The Critical Role of Reactive Nitrogen Species in Lung Ischemia Reperfusion Injury

B.V. Naidu,¹ B. Krishnadasan,¹ C. Fraga,¹ R. Thomas,¹ A.L. Salzman,² C. Szabo,² E.D. Verrier,¹ M.S. Mulligan,¹ ¹Cardiothoracic Surgery, University of Washington, Seattle, WA; ²Inotek Corporation, Beverly, MA

(224) CMV Infected Endothelial Cells Stimulate Blood Mononuclear Cells to Release β 2 Microglobulin-Free HLA

L.D. DeVito-Haynes,¹ W.J. Waldman,² Y. Bushkin,³ R.B. Love,¹ W.J. Burlingham,¹ ¹Surgery, University of Wisconsin, Madison, WI; ²Pathology, Ohio State University College of Medicine and Public Health, Columbus, OH; ³Public Health Research Institute, New York, NY

(225) Interferon-Gamma Knockout Fails to Confer Protection Against Obliteration in Heterotopic Murine Tracheal Allografts

H.F. Batiarel,¹ S. Batiarel,² R.N. Mitchell,² S.J. Swanson,¹ ¹Surgery, Brigham and Women's Hospital, Boston, MA; ²Pathology, Brigham and Women's Hospital, Boston, MA

(226) Nitric Oxide Substitution During Ischemia/Reperfusion Improves Hemodynamic and Metabolic Outcome of Explanted Rabbit Hearts After Long-Term Ischemia

S. Semsroth,¹ M. Franz,¹ B. Fellner,¹ K. Trescher,¹ H. Gasser,¹ S. Hallstroem,¹ E. Wollner,² B.K. Podesser,² ¹Ludwig Boltzmann Institute for Cardiac Surgery Research, AKH-Wien, University of Vienna, Vienna, Austria; ²Department of Cardiac Surgery, AKH-Wien, University of Vienna, Vienna, Austria

(227) Release of Myocardial Proteins Into the Circulation From the Damaged Heart - A Potential Marker of Acute Rejection

S.D. Borozdenkova, J.A. Westbrook, I.J. Bolad, N.R. Banner, M.J. Dunn, M.M. Burke, M.L. Rose, National Heart and Lung Institute, Imperial College, Harefield Hospital, Harefield, Middlesex, United Kingdom

(228) Successful Use of Ocean Pout Thermal Hysteresis Protein (Antifreeze Protein III) in Cryopreservation of Transplanted Mammalian Heart at Subzero Temperature

G. Amir,¹ B. Rubinsky,² A.K. Smolinsky,¹ J. Lavee,¹ ¹Heart Transplantation Unit, Department of Cardiac Surgery, Sheba Medical Center, Tel Hashomer, Israel; ²Biomedical Engineering Laboratory, Department of Mechanical Engineering, University of California, Berkeley, CA

(229) Ventilation With Nitric Oxide During Perfusion Improves Post-Transplantation Function of the Non-Heart-Beating Donor Lung

J.D. Aitchison,¹ H.E. Orr,² P.A. Flecknell,² J.A. Kirby,³ J.H. Dark,¹ ¹Cardiopulmonary Transplantation, Freeman Hospital, Newcastle upon Tyne, United Kingdom; ²Comparative Biology Centre, University of Newcastle upon Tyne, Newcastle upon Tyne, United Kingdom; ³Department of Surgery, University of Newcastle upon Tyne, Newcastle upon Tyne, United Kingdom

(230) Donor Brain Death Intensifies the Recipient Inflammatory Response in Chronic Rat Cardiac Allograft Rejection

M.J. Wilhelm,^{1,2} J. Pratschke,¹ F. Beato,¹ M. Taal,¹ C. Schmid,² H.H. Scheld,² W.W. Hancock,³ N.L. Tilney,¹ ¹Surgical Research Laboratory, Harvard Medical School, Boston, MA; ²Department of Cardiothoracic Surgery, University of Muenster, Muenster, Germany; ³Millennium Pharmaceuticals, Inc., Cambridge, MA

(231) Forty-Hour Heart Preservation by Intermittent Perfusion

C. Zhang,¹ S.D. Kennedy,² W.H. Risher,¹ X. Chen,³ K.Q. Schwarz,³ G.L. Hicks,¹ G. Fahy,⁴ T. Wang,¹ ¹Division of Cardiothoracic Surgery, Department of Surgery, University of Rochester, Rochester, NY; ²Department of Biochemistry and Biophysics, University of Rochester, Rochester, NY; ³Cardiology Unit, Department of Medicine, University of Rochester, Rochester, NY; ⁴21st Century Medicine, Rancho Cucamonga, CA

(232) The Effect of Short-Term Coronary Perfusion Using a Perfusion Apparatus on Canine Heart Transplantation From Non-Heart-Beating Donors

N. Koike,¹ I. Takeyoshi,¹ S. Ohki,¹ H. Tsutsumi,¹ K. Matsumoto,² Y. Morishita,¹ ¹Second Department of Surgery, Gunma University School of Medicine, Maebashi, Gunma, Japan; ²Department of Pathology, Nippon Medical School Second Hospital, Kawasaki, Kanagawa, Japan

(233) Retrospective Application of a Score of Lung Donor Quality

H.M. Whitford, B. Levey, T. Kotsimbos, A. Griffiths, K. Waters, W. Moule, T.J. Williams, G.I. Snell, Lung Transplant Service, Alfred Hospital, Melbourne, Australia

(234) Medical and Psychological Follow-Up of Living Lobar Transplant Donors

L.M. Prager,¹ D.H. Roberts,² J.C. Wain,² L.C. Ginns,² ¹Psychiatry, Massachusetts General Hospital, Boston, MA; ²Lung Transplant Program, Massachusetts General Hospital, Boston, MA

(235) Preservation of the Lung With LPD Solution - One Year of Follow-Up

M. Strueber,¹ A.U. Kuensebeck,¹ J. Niedermeyer,² M. Wilhelm,¹ M. Anssar,¹ A.R. Simon,¹ W. Harringer,¹ G. Warnecke,¹ A. Haverich,¹ ¹Thoracic and Cardiovascular Surgery, Hannover Medical School, Hannover, Germany; ²Respiratory Medicine, Hannover Medical School, Hannover, Germany

(236) Influence of Brain Death on Survival After Heart Transplantation - Time is of the Essence

B. Cantin,¹ B.W.K. Kwok,¹ M.C.Y. Chan,¹ H.A. Valantine,¹ R.C. Robbins,² S.A. Hunt,¹ ¹Cardiovascular Medicine, Stanford University School of Medicine, Stanford, CA; ²Cardiothoracic Surgery, Stanford University School of Medicine, Stanford, CA

(237) Arginine Polymers Enhance Coronary Flow and Reduce Oxidative Stress Following Cardiac Transplantation in Rats

M.H. Kown,¹ M.A. Lijkwan,¹ C.L. Jahncke,¹ S. Murata,¹ J.B. Rothbard,² R.C. Robbins,¹ ¹Cardiothoracic Surgery, Stanford University, Stanford, CA; ²Cellgate Corporation, Sunnyvale, CA

(238) Use of Donor Hearts With Coronary Artery Disease

H. Laks, D. Marelli, S. Bresson, J. Bresson, A. Ardehali, F. Esmailian, M. Plunkett, J. Moriguchi, J. Kobashigawa, Division of Cardiothoracic Surgery, University of California at Los Angeles, Los Angeles, California

(239) Results of a Prospective Study Using High-Frequency Chest Wall Oscillation for Organ Donors

W.D. Babcock,¹ R.L. Menza,¹ S. Riznyk,² P. Prince,² T.J. Kern,³ ¹California Transplant Donor Network, Oakland, CA; ²Pacific Northwest Transplant Bank, Portland, OR; ³Golden State Donor Services, Sacramento, CA

(240) Nitric Oxide-Superoxide Interaction After Ischemia-Reperfusion in Long-Term Heart Preservation

S. Morita, Y. Tanoue, Y. Ochiai, N. Haraguchi, M. Masuda, H. Yasui, Cardiovascular Surgery, Kyushu University, Fukuoka, Japan

(241) Vasopressor Dose Predicts Intrinsic Right Ventricular Dysfunction in the Human Donor

D.K. Satchithananda,¹ S.C. Stoica,¹ P.A. White,¹ L. Sharples,¹ M. Petrou,¹ P.M. Schofield,¹ J. Wallwork,¹ J. Parameshwar,¹ A. Redington,² S.R. Large,¹ ¹Transplant Unit, Papworth Hospital, Cambridge, United Kingdom; ²Great Ormond Street Hospital, London, United Kingdom

(242) Phrenic Nerve Dysfunction After Heart-Lung and Lung Transplantation

P.G. Ferdinande,¹ F. Bruyninckx,² D. Van Raemdonck,³ W. Daenen,⁴ G.M. Verleden,⁵ the Leuven Transplant Group, ¹Intensive Care Department; ²Physical Medicine and Revalidation; ³Thoracic Surgery; ⁴Cardiac Surgery; ⁵Pneumology, University Hospital Gasthuisberg, Leuven, Belgium

(243) Reduced Size Lung Transplantation - Technique and Results

M. Strueber,¹ J. Niedermeyer,² M. Anssar,¹ W. Harringer,¹ A.R. Simon,¹ G. Warnecke,¹ A. Haverich,¹ ¹Thoracic and Cardiovascular Surgery, Hannover Medical School, Hannover, Germany; ²Respiratory Medicine, Hannover Medical School, Hannover, Germany

(244) Bilateral Sequential Lung Transplantation Without Sternal Division

F. Venuta, E.A. Rendina, T. De Giacomo, M. Moretti, E. Mercadante, F. Francioni, F. Pugliese, G.F. Coloni, Thoracic Surgery - Policlinico Umberto I, University of Rome "La Sapienza", Rome, Italy

(245) Impact of Recipient Age and Procedure Type on Survival Following Lung Transplantation for Interstitial Pulmonary Fibrosis

D.M. Meyer,¹ L.E. Bennett,² F. Torres,³ M.E. Jessen,¹ R.J. Novick,⁴ ¹Cardiovascular and Thoracic Surgery, University of Texas Southwestern Medical Center, Dallas, TX; ²United Network for Organ Sharing, Richmond, VA; ³St. Paul Medical Center, Dallas, TX; ⁴London Health Sciences Center, London, Ontario, Canada

(246) Clinical Utility of Cyclosporin C2 Monitoring After Lung Transplantation (LTx)

A.R. Glanville, P.M. Hopkins, C.L. Aboyou, P.N. Chhajed, M.L. Plit, M.A. Malouf, The Lung Transplant Unit, St Vincent's Hospital, Sydney, Australia

(247) The Importance of Area Under the Curve Monitoring of Cyclosporin in Patients With Cystic Fibrosis After Lung Transplantation

J.M. Morton,¹ L.M. Kear,¹ S. Williamson,¹ D. Davis,² J.M. Potter,² ¹Queensland Lung Transplant Unit, The Prince Charles Hospital, Brisbane, Australia; ²Queensland Health Pathology Service, The Prince Charles Hospital, Brisbane, Australia

(248) Trough Levels Are Inadequate for Monitoring Tacrolimus Pharmacokinetics in Lung Transplantation

J.M. Morton,¹ L.M. Kear,¹ S. Williamson,¹ J.M. Potter,² ¹Queensland Lung Transplant Unit, The Prince Charles Hospital, Brisbane, Australia; ²Queensland Health Pathology Service, The Prince Charles Hospital, Brisbane, Australia

(249) Effects of the IL-2 Receptor Blocker Basiliximab on Lung Transplant Recipients

K.M. Chan,¹ P.C. Patel,¹ L.L. Allenspach,¹ C.H. Stone,² J. Edgar,¹ K.M. Rampp,¹ A.F. Bernabei,³ ¹Division of Pulmonary and Critical Care Medicine, Henry Ford Health Systems, Detroit, MI; ²Department of Pathology, Henry Ford Health Systems, Detroit, MI; ³Division of Cardiothoracic Surgery, Henry Ford Health Systems, Detroit, MI

(250) Successful Withdrawal of Steroids in Stable Lung Transplant Recipients

D. Reams, D. Hadjiliadis, R.D. Davis, S.M. Palmer, Lung Transplant Program, Duke University Medical Center, Durham, NC

(251) WITHDRAWN

(252) Clinical Relevance of HLA Class I and Class II Antibodies Detected by Elisa in Lung Transplantation

A. Girmita,¹ M.R. Awad,¹ K. McCurry,² K. Spichty,¹ G. Burckart,² R. Duquesnoy,¹ A. Iacono,³ W. Grgurich,³ J. Dauber,³ B. Griffith,² A. Zeevi,¹ ¹Department of Pathology; ²Department of Surgery; ³Department of Medicine, University of Pittsburgh, Pittsburgh, PA

(253) Necrotising Bronchiolitis: First Report of a Distinct Entity After Lung Transplantation

M.A. Malouf, P.M. Hopkins, P.N. Chhajed, M.L. Plit, S.P. Rainer, A.R. Glanville, The Lung Transplant Unit, St. Vincents Hospital, Sydney, Australia

(254) A Glimpse Into the Eyes of Lung Allograft Recipients

V.G. Valentine, M.D. Conway, L.T. Young, D.M. Fuchs, G.S. Dhillon, D.E. Taylor, Lung Transplantation, Ochsner Clinic Foundation, New Orleans, LA

(255) Inflammatory Markers in Exhaled Breath Condensate (BC) and Bronchoalveolar Lavage (BAL) in Patients After Lung Transplantation (LTx)

M. Hofer, T. Rechsteiner, R. Naef, R. Speich, A. Boehler, Division of Pulmonary Medicine, University Hospital, Zurich, Switzerland

(256) Pretransplant Mechanical Ventilation Does Not Impair Lung Transplant Outcome in Patients With Cystic Fibrosis

K.C. Meyer, R.R. Bartz, G.E. Levenson, L.R. Will, D.L. Welter, R.B. Love, University of Wisconsin Medical School, Madison, WI

(257) Lung Transplantation and Quality of Life: A Prospective Study

J.R. Rodrigue,¹ W.F. Kanasky, Jr.,¹ M.A. Baz,² ¹Department of Clinical and Health Psychology, University of Florida Health Science Center, Gainesville, FL; ²Division of Pulmonary and Critical Care Medicine, University of Florida Health Science Center, Gainesville, FL

(258) One Year Analysis of CMV-PCR Surveillance Data in Lung Transplant Recipients

A. Krause,¹ J.S. Harwood,¹ A.W. Berrington,¹ P.A. Corris,² J.H. Dark,² A.J.L. Turner,³ E.K. Gould,¹ ¹Department of Medical Microbiology, Freeman Hospital, Newcastle upon Tyne, United Kingdom; ²Cardiothoracic Centre for Transplantation, Freeman Hospital, Newcastle upon Tyne, United Kingdom; ³Department of Virology, PHLS, Newcastle General Hospital, Newcastle upon Tyne, United Kingdom

(259) Improvement in Bilateral Lung Transplant (BLT) 1 Year Survival is not Matched by Improved Single Lung Transplant (SLT) Survival: A Parallel Cohort Analysis From a Single Institution

H.M. Whitford, B.J. Levvey, T.J. Williams, T.C. Kotsimbos, G.I. Snell, Lung Transplant Service, Alfred Hospital, Prahran, Australia

(260) Pre-Transplant Reversible Pulmonary Hypertension Predicts a Higher Risk for Mortality Post-Transplant

M.A. Stankewicz, J. Butler, J. Wu, D.B. Chomsky, J.R. Wilson, S.F. Davis, D.C. Drinkwater, Cardiology Division and Department of Cardiothoracic Surgery, Vanderbilt University, Nashville, TN

(261) Attenuation of Hypoxic Pulmonary Hypertension in Rats by the HMG-CoA Reductase Inhibitor

Simvastatin; R.E. Girgis,¹ D. Li,² R.M. Tuder,³ R.A. Johns,² J.G.N. Garcia,¹ ¹Pulmonary and Critical Care Medicine, Johns Hopkins University, Baltimore, MD; ²Anesthesiology, Johns Hopkins University, Baltimore, MD; ³Pathology, Johns Hopkins University, Baltimore, MD

(262) Pulmonary Arterial Hypertension [PAH] is Associated With Increased Capillary Blood Proangiogenic C-X-C Chemokines

D.J. Ross, P. Clements, A. Ardehali, H. Laks, M.D. Burdick, K. Hariharan, R.S. Strieter, Pulmonary Hypertension Program, UCLA School of Medicine, Los Angeles, CA

(263) Postoperative RV Failure in LVAD Recipients Assumed to be Low Risk

R.S. Poston, L.J. Carozza, E.A. Stanford, K.R. McCurry, R.L. Kormos, Department of Surgery, University of Pittsburgh, Pittsburgh, PA

(264) Plasmapheresis and Intravenous Cytogam for Successful Transplantation of Sensitized Patients With Left Ventricular Assist Devices

G. Bhat,^{1/2} D. Pidwell,² S. Etoch,^{1/2} R. Dowling,^{1/2} ¹University of Louisville, Louisville, KY; ²Jewish Hospital, Louisville, KY

(265) Enhanced Immunoglobulin Expression After Prolonged Mechanical Support With Left Ventricular Assist Devices in Myocardial Samples From Patients With Severe Congestive Heart Failure: A Possible Indicator of Augmented Humoral Responsiveness

H.J. Eisen,¹ D. Bednarik,² K.B. Margulies,¹ ¹Advanced Heart Failure and Transplant Center, Temple University School of Medicine, Philadelphia, PA; ²Gene Logic, Inc., Gaithersburg, MD

(266) Evidence of Decreasing LV Size and Volume After Cardiac Support Device (CSD) Implantation

W. Konertz,¹ S. Dushe,¹ C. Enzweiler,² B. Hamm,² ¹Cardiovascular Surgery, Charité Berlin, Berlin, Germany; ²Radiologie, Charité Berlin, Berlin, Germany

(267) Assessment of Left Ventricular Assist Device Inflow Valve Insufficiency by Echocardiography

J.M. Gibbons, M.L. Yeager, X.F. Xu, J.D. Thomas, R.A. Grimm, ¹Cardiology, The Cleveland Clinic Foundation, Cleveland, OH; ²Cardiothoracic Surgery, The Cleveland Clinic Foundation, Cleveland, OH

(268) Ultrastructural Analysis of Myocardial Samples of Patients Suffering From Endstage Heart Failure and Supported by Ventricular Assist Devices

H. Milting,¹ A. El Banayosy,¹ M. Jacob,² A. Kassner,¹ H.-G. Mannherz,² H. Meyer,³ R. Koerfer,¹ ¹Klinik fuer Thorax- und Kardiovaskularchirurgie, Forschungslabor, Ruhr-Universitaet Bochum, Herz- und Diabeteszentrum NRW, Bad Oeynhausen, Germany; ²Institut fuer Anatomie, Ruhr-Universitaet, Bochum, Germany; ³Proteinstrukturlabor, Ruhr-Universitaet, Bochum, Germany

(269) Flow Differences Between Ascending and Descending LVAD Outflow

P.L. DiGiorgi, D.L. Smith, A.D. Can, M.C. Oz, Surgery, Columbia University, New York, NY

(270) Using Non-Invasive Quantitative Echocardiography During Weaning Trials to Assess Left Ventricular Recovery on Mechanical Assist Devices

R.L. Kormos,¹ D.A. Severyn,¹ S. Winowich,¹ R.D. Schaub,¹ E. Stanford,¹ L. Carozza,¹ J. Gorcsan III,² ¹Artificial Heart Program, Cardiothoracic Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA; ²School of Medicine, Cardiovascular Institute, University of Pittsburgh Medical Center, Pittsburgh, PA

(271) Cardiac Resynchronization Therapy (CRT) as a Supplemental Treatment in Patients With Advanced Congestive Heart Failure (CHF) and Interventricular Conduction Delay (IVCD). Clinical Results and Patients Selection

F. Oliva, M. Frigerio, M. Lunati, F.M. Turazza, M. Paolucci, A. Garascia, G. Foti, B. Mietner, G. Distefano, E. Vitali, A. De Gasperis Cardiac Department, Niguarda-Ca Granda Hospital, Milan, Italy

(272) Dynamic Aortomyoplasty in Treatment of End-Stage Heart Failure

J.C. Trainini, E.I. Cabrera Fischer, J.L. Barisani, A.I. Christen, J. Mouras, J. de Paz, M. Quintana, J. Binstein, ¹Cardiac Surgery, Presidente Peron Hospital, Buenos Aires, Argentina; ²Favaloro University, Fundacion Favaloro, Buenos Aires, Argentina

(273) Parenteral Home Inotrope as Destination Therapy in Patients Denied Heart Transplantation

J. Jara, J. Jimenez, L. Feinberg, R. Sequeira, J. Bauerlein, B. Bednar, S. Mallon, Cardiology, Section Heart Failure and Transplantation, University of Miami Jackson Memorial Medical Center, Miami, FL

(274) Chronic Therapy With the Acorn Cardiac Support Device in Dogs With Heart Failure Affords Adequate Response to Increased Demands on the Left Ventricle

H.N. Sabbah, G. Suzuki, H. Morita, P.A. Chaudhry, T. Mishima, Medicine, Henry Ford Health System, Detroit, MI

6:30 pm – 11:00 pm

Poster Teardown (Exhibit Hall)

6:30 pm – 11:00 pm

Exhibit Hall Teardown (Exhibit Hall)

Saturday April 13, 2002

6:00 am – 6:00 pm

Speaker Ready Room (Bancroft)

6:30 am – 11:00 am

Registration Desk Open (Concourse)

6:30 am - 8:00 am

Morning Coffee/Continental Breakfast (Concourse)

6:45 am - 7:45 am

Sunrise Symposium 6: Non-Heart Beating Donors (Georgetown)

Moderators: Shaf Keshavjee, MD and Edward R. Garrity, Jr., MD

Non-Heart Beating Donor Lungs: Basic Science to Clinical Application

Stig Steen, MD, University Hospital of Lund, Lund, Sweden

Experimental Non-Heart Beating Donor Lungs

Thomas M. Egan, MD, University of North Carolina, Chapel Hill, NC

6:45 am - 7:45 am

Sunrise Symposium 7: Medical Management of Infectious Complications Post Transplantation (Jefferson)

J. Stephen Dummer, MD, Vanderbilt University, Brentwood, TN

Emily A. Blumberg, MD, University of Pennsylvania, Philadelphia, PA

6:45 am - 7:45 am

Sunrise Symposium 8: Interventional Therapy for Advanced Heart Failure (Lincoln)

Moderators: Donna M. Mancini, MD and Frank W. Smart, MD

IV Inotropes

Guillermo Torre-Amione, MD, Baylor College of Medicine, Houston, TX

Biventricular Pacing

William T. Abraham, MD, University of Cincinnati College of Medicine, Cincinnati, OH

AICD

Mandeep R. Mehra, MD, Ochsner Medical Institutions, New Orleans, LA

6:45 am - 7:45 am

Sunrise Symposium 9: More VADs Gone Bad (International Ballroom East)

Jack G. Copeland, MD, University of Arizona Health Science Center, Tucson, AZ

George Wiesenthaler, MD, University of Vienna, Vienna, Austria

6:45 am - 7:45 am

Sunrise Symposium 10: Sensational Successes and Fantastic Failures in Pediatric Transplantation (International Ballroom West)

Moderators: Linda J. Addonizio, MD and Francesco Parisi, MD

Marc M. Boucek, MD, University of Colorado/Children's Hospital, Denver, CO

Roland Hetzer, MD, German Heart Institute, Berlin, Germany

6:45 am - 7:45 am

Sunrise Symposium 11: Immunosuppression Panel: Challenges in Clinical Thoracic Transplantation (International Ballroom Center)

Moderators: Andreas O. Zuckerman, MD and David O. Taylor, MD

Hermann Reichenspurner, MD, PhD, University Hospital Eppendorf, Hamburg, Germany

John V. Conte, MD, Johns Hopkins Hospital, Baltimore, MD

Keith McNeil, FRACP, Prince Charles Hospital, Brisbane, Australia

Scott Palmer, MD, Duke University, Durham, NC

8:00 am - 9:00 am

PLENARY SESSION (International Ballroom Center)

Moderators: Sharon Hunt, MD and Eric A. Rose, MD

Featured Abstracts

9:00 am (275) **Are There Predictors of Death at the Time of Listing for Lung Transplant?**

T.M. Egan, L.E. Bennett, E.R. Garrity, F.L. Grover, S. Ring, R.C. Robbins, E.P. Trulock, D.E. Wood, ¹Surgery, University of North Carolina, NC; ²UNOS, Richmond, VA; ³Medicine, Loyola University, Chicago, IL; ⁴Surgery, University of Colorado, Denver, CO; ⁵Surgery, University of Texas Southwestern Medical Center, Dallas, TX; ⁶Surgery, Stanford University, Palo Alto, CA; ⁷Medicine, Washington University, St. Louis, MO; ⁸Surgery, University of Washington, Seattle, WA

9:15 am (276) **Effect of Lung Transplantation on Quality-Adjusted Survival in Emphysema**

L.G. Singer,^{1,3} M.K. Gould,^{3,4} D.V. Glidden,² J. Theodore,³ ¹Respiratory Medicine, University Health Network, University of Toronto, Toronto, Ontario, Canada; ²Biostatistics, University of California, San Francisco, San Francisco, CA; ³Pulmonary and Critical Care Medicine, Stanford University School of Medicine, Stanford, CA; ⁴VA Palo Alto Health Care System, Palo Alto, CA

9:30 am (277) **Micro Vascular Changes in Small Airways Predispose to Obliterative Bronchiolitis After Lung Transplantation**

H. Luckraz, M. Goddard, K. McNeil, C. Atkinson, S. Stewart, J. Wallwork, Transplant Unit and Pathology Department, Papworth Hospital, Cambridge, United Kingdom

9:45 am (278) **The Effects of Rapamycin and Cyclosporin A on Tolerance Induction Through Bone Marrow Transplantation With Costimulation Blockade**

P. Blaha,¹ C. Kiss,¹ F. Langer,¹ E. Selzer,¹ H. Bergmeister,¹ J. Kurtz,² E. Roth,¹ F. Muehlbacher,¹ M. Sykes,² T. Wekerle,¹ ¹Vienna General Hospital, Vienna, Austria; ²Massachusetts General Hospital, Boston, MA

9:00 am – 10:00 am

PLENARY SESSION INVITED LECTURE FORUM (International Ballroom Center)

Cell Transplantation and Tissue Engineering

Moderators: Sharon Hunt, MD and Eric Rose, MD

Remodeling, Rewiring and Rebuilding: Ventricular Surgery, Cell Transplant and Gene Therapy

Patrick M. McCarthy, MD, Cleveland Clinic Foundation, Cleveland, OH

The Scientific Basis for Therapeutic Myoblast Transplantation

Doris A. Taylor, MD, Duke University Medical Center, Durham, NC

Stem Cell Therapy

Irving L. Weissman, MD, Stanford University School of Medicine, Stanford, CA

Tissue Engineering of Cardiovascular Structures

John E. Mayer, Jr., MD, Children's Hospital, Boston, MA

Panel Discussion

10:00 am - 10:30 am

Coffee Break (Concourse)

10:30 am - Noon

CONCURRENT SESSION 19

Immunosuppression 2: Bizarre Biological Bazaar (International Ballroom Center)

Moderators: Randall E. Morris, MD and Bruno M. Meiser, MD

10:30 am (279) **Interleukin-10 Gene Therapy Decreases Activated CD8 Cells Producing Perforin in Early Phase After Allograft Transplantation**

K. Oshima, G. Cui, T. Tung, H. Laks, L. Sen, UCLA School of Medicine, Los Angeles, CA

10:45 am (280) **Sirolimus (Rapamycin) Monotherapy Prevents Graft Vascular Disease in Non-Human Primates**

C. Dambrin,¹ J. Klupp,¹ T. Birsan,¹ J. Luna,² T. Suzuki,² T. Lam,¹ P. Staher,² B. Hausen,¹ L. Hook,¹ U. Christians,³ P. Fitzgerald,² G. Berry,⁴ R. Morris,¹ ¹Cardiothoracic Surgery, Stanford University, Stanford, CA; ²Cardiovascular Medicine, Stanford University, Stanford, CA; ³Biopharmaceutical Sciences, University of California, San Francisco, CA; ⁴Pathology, Stanford University, Stanford, CA

11:00 am (281) **Reduction of iNOS and eNOS Under MMF Therapy = Reduction of Transplant Vasculopathy?**

M.H.C. Richter, Experimental Heart Transplant Group, University of Frankfurt, Frankfurt, Germany

11:15 am (282) **Reduction of ICAM-1 and LFA-1 Positive Leukocytes in Myocardium and Perivascular Space of Arteries Under MMF Therapy Reduces Rat Heart Transplant Vasculopathy**

M.H.C. Richter,¹ H.R. Richter,¹ H.G. Olbrich,¹ F.W. Mohr,² ¹Experimental Heart Transplant Group, University of Frankfurt, Frankfurt, Germany; ²Heart Center Leipzig, University of Leipzig, Leipzig, Germany

11:30 am (283) **Assessment of the Pharmacodynamics (PD) of the Combination of Sirolimus (SIR) and Cyclosporine (CY)**

M.J. Barten, J.F. Gummert, M. Boeger, P. Bartsch, A. Rahmel, F.W. Mohr, Cardiac Surgery, Heart Center Leipzig, Leipzig, Germany

11:45 am (284) **Gene Gun-Mediated Genetic Modification of the Recipient Organ**

Y. Umeda,¹ H. Iwata,¹ S. Yoshikawa,¹ Y. Matsuno,¹ T. Marui,¹ Y. Iida,¹ Y. Mori,¹ J. Miyazaki,² A. Kosugi,² H. Hirose,¹ ¹First Department of Surgery, Gifu University, Gifu, Japan; ²Osaka University, Suita, Osaka, Japan

10:30 am - Noon

CONCURRENT SESSION 20

Clinical Heart Failure 2: Basic Applications to Clinical Transplantation (International Ballroom East)

Moderators: Mariell Jessup, MD and Manfred Hummel, MD, PhD

10:30 am (285) **Plasma BNP Levels are Related to Diastolic Rather Than Systolic Load in Patients With LV Dysfunction**

W. Tack,¹ M. Vanderheyden,² J. Bartunek,¹ S. Verstreken,² K. Muller,² E. Van Schuerbeeck,¹ B. De Bruyne,¹ M. Goethals,¹ ¹Cardiovascular Center, Aalst, Belgium; ²Department of Cardiology, Imelda Ziekenhuis, Bonheiden, Belgium

10:45 am (286) **Bone Loss and Prevention of Osteoporosis in Congestive Heart Failure**

H.-U. Stempfle, R. Frost, C. Sonne, K. Theisen, R. Gaertner, Department of Cardiology and Endocrinology, Medizinische Klinik Innenstadt, Munich, Germany

11:00 am (287) **The Effect of Race on β -Adrenergic Receptor Density**

M.L. Ogletree-Hughes,¹ A. Jedrzejczyk,¹ J. Young,² P.M. McCarthy,³ C.S. Moravec,¹ ¹Anesthesiology Research; ²Cardiology; ³Thoracic and Cardiovascular Surgery, The Cleveland Clinic Foundation, Cleveland, OH

11:15 am (288) **Genetic Manipulation of the Myocardial Beta Adrenergic Signaling System Improves the Susceptibility to Ischemia Reperfusion in the Failing Heart**

S. Mieno,¹ H. Horimoto,¹ Y. Sawa,² S. Sasaki,¹ ¹Department of Thoracic and Cardiovascular Surgery, Osaka Medical College, Takatsuki, Osaka, Japan; ²Division of Cardiovascular Surgery, Osaka University Graduate School of Medicine, Suita, Osaka, Japan

11:30 am (289) **The Effect of Open Label UT15 or Bosentan on Hospitalisation Days in Patients With Pulmonary Arterial Hypertension (PAH)**

A.M. Keogh, K.M. Brown, C.A. Corrigan, C. Allada, Y. Ten, St. Vincent's Hospital, Sydney, Australia

11:45 am (290) **Correlations Between Basic Fibroblast Growth Factor (BFGF), Vascular Endothelial Growth Factor (VEGF), and Clinical Features of Pulmonary Arterial Hypertension (PAH)**

J.D. Rich,¹ J. Benisty,² V.V. McLaughlin,¹ J. Folkman,² S. Rich,¹ ¹Rush Heart Institute, Rush-Presbyterian-St. Lukes Medical Center, Chicago, IL; ²Harvard Childrens Hospital, Boston, MA

10:30 am - Noon

CONCURRENT SESSION 21

Donor Management, Preservation, and Organ Distribution 2: Clinical (International Ballroom West)

Moderators: Robert S.D. Higgins, MD and Frank D. Pagani, MD

10:30 am (291) **How to Improve Prediction of Waiting List Mortality in Heart Transplant Candidates?**

J.M. Smits,¹ M.C. Deng,² J. De Meester,³ M. Hummel,⁴ F. Schoendube,⁵ H.H. Scheld,⁵ H.C. van Houwelingen,⁶ ¹Eurotransplant, Leiden, Netherlands; ²Columbia University, New York, NY; ³Onze Lieve Vrouwe Clinic, Aalst, Belgium; ⁴Berlin Heart Center, Berlin, Germany; ⁵University Hospital, University of Muenster, Muenster, Germany; ⁶LUMC

10:45 am (292) **The Urgent Heart Scheme in the UK - The First Two Years**

F.M. Seeney, R.L. Potter, Statistical Services, UK Transplant NHS, Bristol, United Kingdom

11:00 am (293) **The Seropositive Donor Heart**

M.C. Deng,¹ H. Hauff,² S. Itescu,² S. Taranto,³ B. Scully,¹ R.S. Brown,⁴ J.M.A. Smits,⁵ N.M. Edwards,² ¹Medicine, Columbia University, New York, NY; ²Surgery, Columbia University, New York, NY; ³OPTN, United Network for Organ Sharing, Richmond, VA; ⁴Center for Liver Disease and Transplantation, Columbia University, New York, NY; ⁵Eurotransplant International Foundation, Leiden, Netherlands

11:15 am (294) **Hepatitis B Core Antibody but Surface Antigen Negative Donors Represent a Viable Therapeutic Option to Increase Available Organs for Lung Transplant Recipients**

V.S. Patel,¹ S.M. Palmer,² R.H. Messier,¹ R.D. Davis,¹ ¹Cardiothoracic Surgery; ²Pulmonary Medicine, Duke University Medical Center, Durham, NC

11:30 am (295) **Diagnosis of Airway Infection in Organ Donors: Impact on Successful Lung Transplantation**
T.S. Hall,¹ W.D. Babcock,² L.L. Solinger,² M.J. McCowin,³ K.W. Hall,¹ D.M. Jablons,¹ ¹Surgery, University California, San Francisco, San Francisco, CA; ²California Transplant Donor Network, Oakland, CA; ³Radiology, University California, San Francisco, San Francisco, CA

11:45 am (296) **Long Ischaemic Time Allografts (>6hr) Further Expand the Transplant Donor Pool**
D.S. Esmore, F.L. Rosenfeldt, J.A. Mack, K.N. Waters, P. Bergin, Heart and Lung Replacement Services, The Alfred Hospital, Prahran, Australia

Noon – 12:30 pm

ANNUAL BUSINESS MEETING (Members only) (International Ballroom Center)

12:15 pm – 1:00 pm

Box Lunch Pick-Up

12:30 pm - 2:00 pm

Mini Oral Poster Presentation Session 3 (Georgetown)

Moderators: Mark L. Barr, MD and W. Steves Ring, MD

12:30 pm (297) **Lung Volume Reduction Surgery Improves Left Ventricular Diastolic Function**
K.E. Jorgensen, E. Houlitz, U.N. Westfelt, F. Nilsson, H. Schersten, S.E. Ricksten, Cardiothoracic Anaesthesia and Surgery, Sahlgrenska University Hospital, Gothenburg, Sweden

12:36 pm (298) **Engineered Heart Tissue for Replacement Therapy**

W.H. Zimmermann,¹ M. Didie,¹ G. Wasmeier,² U. Nixdorff,² W.L. Neuhuber,³ M. Weyand,⁴ T. Eschenhagen,¹ ¹Institute of Experimental and Clinical Pharmacology and Toxicology; ²Department of Cardiology; ³Institute of Anatomie; ⁴Department of Cardio-Thoracic Surgery, University of Erlangen-Nuremberg, Erlangen, Germany

12:42 pm (299) **Non-Haemopoietic Human Stem Cell Differentiates Into Cardiomyocyte Like Cells in the Internal Milieu of Myocardium**

S. Rangappa,¹ V.G. Reddy,¹ A. Bongso,² E.H. Lee,³ E. Sim,¹ ¹Cardiothoracic Surgery, National University Hospital, Singapore; ²Obstetrics and Gynecology, National University Hospital, Singapore; ³Orthopaedics Surgery, National University Hospital, Singapore

12:48 pm (300) **Autologous Skeletal Myoblast Transplantation Prevents Ventricular Dilatation in a Porcine Model of Myocardial Infarction**

J.E. Scarborough,¹ S.L. Colgrove,² M. Lowe,¹ L. Liao,² D.A. Taylor,² ¹Surgery; ²Cardiology, Duke University Medical Center, Durham, NC

12:54 pm (301) **No Evidence of BO in Miniature Swine Following Lung Transplantation Across Minor Histocompatibility Barrier**

T. Roth,¹ P. Sandera,¹ S. Hillinger,¹ M. Gugger,² D. Schmid,¹ ¹Division of General Thoracic Surgery, University Hospital Berne; ²Institute of Pathology University of Berne, Berne, Switzerland

1:00 pm (302) **Involvement of Donor T Cells in the Regulation of Ischemia-Reperfusion Injury During Lung Transplantation**

M. de Perrot,¹ K. Young,² Y. Imai,¹ S. Fischer,¹ M. Liu,¹ T.K. Waddell,¹ L. Zhang,² S. Keshavjee,¹ ¹Thoracic Surgery Research Laboratory, Toronto General Research Institute, University of Toronto, Toronto, Ontario, Canada; ²Multi Organ Transplant Program, Toronto General Research Institute, University of Toronto, Toronto, Ontario, Canada

1:06 pm (303) **The Effect of HLA-DR Matching on Acute Rejection After Heart Transplantation is Influenced by an IL-2 Gene Polymorphism**

C.T.J. Holweg,¹ A.M.A. Peeters,¹ A.H.M.M. Balk,² A.G. Uitterlinden,¹ H.G.M. Niesters,³ A.P.W.M. Maat,⁴ W. Weimar,¹ C.C. Baan,¹ ¹Internal Medicine; ²Cardiology; ³Diagnostic Institute of Molecular Biology; ⁴Thoracic Surgery, University Hospital Rotterdam-Dijkzigt, Rotterdam, Netherlands

1:12 pm (304) **Increased Expression of a Spliced Isoform of Serum Response Factor Contributes to Dys-Regulation of Myocardial Gene Expression During Heart Failure**

M.P. Gupta, F.J. Davis, M. Gupta, D. Jayakar, V. Jeevananadam, ¹Surgery (Cardiac and Thoracic), The University of Chicago, Chicago, IL

1:18 pm (305) **PECAM-1 (CD31) Expression on Donor Endothelial Cells Attenuates Transplant Arteriosclerosis in Aortic Allografts**

S.M. Ensminger,¹ B.M. Spriewald,¹ U. Steger,² G.S. Duncan,³ P.J. Morris,² T.W. Mak,³ K.J. Wood,² ¹Department of Cardiac Surgery and Medicine III, Friedrich-Alexander University Erlangen-Nürnberg, Erlangen, Germany; ²Nuffield Department of Surgery, University of Oxford, Oxford, United Kingdom; ³Amgen Institute, Ontario Cancer Institute, Toronto, Ontario, Canada

1:24 pm (306) Intragraft mRNA Expression of the Novel Cytokine IL-21 During Acute Rejection After Clinical Heart Transplantation

H.A. de Groot-Kruseman,¹ M. Klepper,¹ W.M. Mol,¹ H.G.M. Niesters,² T. van Gelder,¹ A.P.W.M. Maat,³ A. Balk,⁴ W. Weimar,¹ C. Baan,¹ ¹Internal Medicine; ²Diagnostic Institute of Molecular Biology; ³Thoracic Surgery; ⁴Cardiology, University Hospital Rotterdam, Netherlands

1:30 pm (307) A Rapid Assay to Monitor Cell-Mediated Immunity in Transplant Populations

R.J. Kowalski, D.R. Post, J.B. Woodcock, M.C. Schneider, J. Britz, Cylex, Inc., Columbia, MD

1:36 pm (308) Effect of a Novel Anti-Oxidant and Anti-Inflammatory Compound on Rodent Allograft Arteriosclerosis

S. Murata,¹ M.A. Lijkwan,¹ P. Hammainen,¹ C. Coleman,¹ C. York,¹ C.L. Sundell,² R.E. Morris,¹ R.C. Robbins,¹ ¹Stanford University, Palo Alto, CA; ²AtheroGenics, Inc.

1:42 pm (309) Inhibition of Human Lung Fibroblast Proliferation by Immunosuppressive Drugs - An In Vitro Model of the In Vivo Response?

A. Azzola,¹ M. Roth,¹ M. Tamm,¹ A. Havryk,¹ J. Black,¹ P. Johnson,¹ P. Chhajed,² M. Malouf,² A. Glanville,² ¹Pharmacology, University of Sydney, Camperdown, Australia; ²The Lung Transplant Unit, St. Vincent's Hospital, Sydney, Australia

1:48 pm (310) Effects of a Selective Nitric Oxide Synthase-2 Inhibitor in the Prevention of Acute Cardiac Allograft Rejection

N.M. Edwards,¹ N. Ma,¹ M. Szabolcs,² J. Sun,³ A. Albala,³ R.R. Sciacca,³ P.J. Cannon,³ ¹Departments of Surgery; ²Pathology; ³Medicine, Columbia University, New York, NY

1:54 pm (311) 3 Deazaadenosin Prevents Leukocyte Evasion by Suppression of Adhesion Molecule Expression During Acute Cardiac Allograft Rejection

H. Fingerhut,¹ H. Hoelschermann,¹ H. Grimm,² H.H. Tillmanns,¹ R.C. Braun-Dullaeus,¹ T.H.W. Stadlbauer,¹ ¹Medicine/Cardiology, University Hospital Giessen, Giessen, Germany; ²Surgery, University Hospital, Giessen, Germany

12:45 pm - 2:00 pm

Nursing and Social Science Scientific Council Meeting (International Ballroom West)

Mechanical Circulatory Support Scientific Council Meeting (International Ballroom Center)

Pulmonary Transplantation Scientific Council Meeting (International Ballroom East)

2:00 pm - 3:30 pm

CONCURRENT SESSION 22

Clinical Heart Transplantation 4: Rejection and Clinical Immunosuppression (International Ballroom Center)

Moderators: Robert C. Bourge, MD and Nicholas R. Banner, MD

2:00 pm (312) Steroid Withdrawal Improves Late Survival After Heart Transplantation: 10 Year Results

W.S. Ring,¹ J.M. DiMaio,¹ M.E. Jessen,¹ P.A. Kaiser,² D.M. Meyer,¹ C.L. Moncrief,² M.A. Wait,¹ T.T. Hamilton,¹ K.A. Hutcheson,¹ M. Karandikar,¹ B.J. Baldwin,² J.D. Boehrer,² V.P. Horn,² C.W. Yancy,¹ ¹Cardiothoracic Surgery and Cardiology, University of Texas Southwestern Medical Center, Dallas, TX; ²St. Paul Medical Center, Dallas, TX

2:15 pm (313) Acute Heart Transplant Rejection Associated With Late Steroid Withdrawal

R. Husa, R. Cecere, M. Cantarovich, N. Giannetti, McGill University Health Center, Royal Victoria Hospital, Montreal, Quebec, Canada

2:30 pm (314) Long-Term Follow-Up of Three Prospective Randomized Trials Comparing Different Antibody Induction Protocols

A. Zuckermann,¹ D. Dunkler,¹ M. Czerny,¹ J. Ankersmit,¹ C. Holzinger,² E. Wolner,¹ M. Grimm,¹ ¹Department of Cardiothoracic Surgery, University of Vienna, Vienna, Austria; ²Department of Cardiac Surgery, KH. St.Pölten, St. Pölten, Austria

2:45 pm (315) IL-4 Receptor α Gene Polymorphism in Heart Transplantation

F. Bijlsma,¹ M. De Snoo,¹ J. Van Kuik,¹ N. De Jonge,² M.G.J. Tilanus,¹ F.H.J. Gmelig Meyling,³ R.A. De Weger,¹ ¹Pathology, University Medical Center-Utrecht, Utrecht, Netherlands; ²Cardiology, University Medical Center-Utrecht, Utrecht, Netherlands; ³Immunology, University Medical Center-Utrecht, Utrecht, Netherlands

3:00 pm (316) Effect of TNF- α Promoter Polymorphism on Cardiac Allograft Rejection

M.S. Bedi, R. Holubkov, L. Postava, L. Shears, R.L. Kormos, M.A. Mathier, G.A. MacGowan, S. Murali, D.M. McNamara, Cardiovascular Institute, University of Pittsburgh, Pittsburgh, PA

3:15 pm (317) HLA Alloantibodies and Time of Death in Cardiac Transplantation

D.J. Cook, A.S. Abdo, J.B. Young, R.C. Starling, M. Yamani, N.G. Smedira, P.M. McCarthy, Transplant Center, The Cleveland Clinic Foundation, Cleveland, OH

2:00 pm - 3:30 pm

CONCURRENT SESSION 23

Lung/Heart-Lung Transplantation 3: Complications of Lung Transplantation (International Ballroom East)

Moderators: Lianne G. Singer, FRCPC and John V. Conte, MD

2:00 pm (318) **Postmortem Findings in Lung Transplant Recipients: Lessons Still to be Learned**

P.N. Chhajed, M.L. Plit, L. Singleton, P.M. Hopkins, S. Rainer, M.A. Malouf, A.R. Glanville, The Lung Transplant Unit, St Vincent's Hospital, Sydney, Australia

2:15 pm (319) **Impact of Human Leukocyte Antigen (HLA) Matching on Graft Survival After Lung Transplantation**

P.S. Neuhauser, A. Kocher, P. Jaksch, T. Wekerle, W. Klepetko, W. Wissner, Department of Cardiothoracic Surgery, University of Vienna, Vienna, Austria

2:30 pm (320) **Outcome of Scedosporium Infection in Lung Transplant Recipients Treated With Oral Voriconazole**

P.M.A. Hopkins, P.N. Chhajed, M.C. Plit, M.A. Malouf, A.R. Glanville, St. Vincent's Hospital, Sydney, Australia

2:45 pm (321) **Nitric Oxide Synthase Gene Expression, Enzyme Levels and Activity are not Inhibited by Inhaled Nitric Oxide in Human Lung Transplant Reperfusion Injury**

J.A. Cardella, M. Liu, J.S. Yeoh, A. Matte-Martyn, J.T. Granton, M. Meade, K. McRae, T. Waddell, S. Keshavjee, Thoracic Surgery Research Laboratory, University Health Network, University of Toronto, Toronto, Ontario, Canada

3:00 pm (322) **First Line Treatment With Monoclonal Anti-CD20 Antibody Rituximab May Induce Complete Remission in Solid Organ Transplant Recipients Suffering From Lympho-Proliferative Disease**

C. Knoop,¹ M. Estenne,¹ M. Wissing,² A. Kentos,³ M. Remmelink,⁴ ¹Chest Medicine; ²Nephrology; ³Hematology; ⁴Pathology, Erasme University Hospital, Brussels, Belgium

3:15 pm (323) **Female Sexual Health Issues After Lung Transplantation - The Importance of Screening**

M.A. Malouf, P.M. Hopkins, L.G. Singleton, P.N. Chhajed, M.L. Plit, A.R. Glanville, The Lung Transplant Unit, St. Vincent's Hospital, Sydney, Australia

2:00 pm - 3:30 pm

CONCURRENT SESSION 24

Pediatrics 2: After Transplant: Immune Suppression and Long-Term Complications (International Ballroom West)

Moderators: Elfriede Pahl Schuette, MD and F. Jay Fricker, MD

2:00 pm (324) **Pre-Transplant Elisa Analysis for Anti-HLA Antibodies May Identify a Group of Pediatric Patients at High Risk for Adverse Rejection History**

S.S. Tsao, A. Zeevi, A. Girnita, G.J. Boyle, Y.M. Law, S.A. Miller, M. Awad, S.K. Gandhi, F.A. Pigula, S.A. Webber, Pediatrics, University of Pittsburgh, Pittsburgh, PA

2:15 pm (325) **Non-Ischemic Left Ventricular Dysfunction (NILVD) After Pediatric Cardiac Transplantation: Treatment With Plasmapheresis and OKT3**

D.E. McOmber,¹ J.E. Ibrahim,¹ D. Lublin,² C. Ong,² C.B. Huddleston,¹ E.N. Mendeloff,¹ C.E. Canter,¹ ¹Pediatric Cardiology/Cardiothoracic Surgery, Washington University, St. Louis, MO; ²Pediatric Cardiology, University of Missouri Kansas City, Kansas City, MO

2:30 pm (326) **Thymoglobuline as Induction Immunotherapy in Pediatric Heart Transplantation**

S. Di Filippo,¹ P. Boissonnat,² F. Sassolas,¹ J. Ninet,² J. Robin,² G. Champsaur,² A. Bozio,¹ ¹Pediatric Cardiology, Hopital Cardiovasculaire Louis Pradel, Lyon, France; ²Cardiothoracic Surgery and Heart Transplantation, Hopital Cardiovasculaire Louis Pradel, Lyon, France

2:45 pm (327) **Lipid Profiles in Pediatric Thoracic Recipients are Determined by the Immunosuppressive Regimens**

Y.M. Law,¹ R. Yim,¹ P.K. Agatista,² G.J. Boyle,¹ S.A. Miller,¹ K. Lawrence,¹ S.A. Webber,¹ ¹Department of Pediatrics; ²Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA

3:00 pm (328) **Hyperlipidemia in Children After Cardiac Transplantation**

T.P. Singh, W.R. Morrow, D.C. Naftel, J.C. Dupuis, R. Spicer, K. Schowengerdt, W.S. Ring, for the Pediatric Heart Transplant Study Group (PHTS), University of Alabama at Birmingham, Birmingham, AL

3:15 pm (329) **Long Term Incidence of Graft Vasculopathy in Children**

D.T. Hsu, J.M. Lamour, R. Korsin, S. Mital, J. Nova, R. Rodriguez, L.J. Addonizio, Pediatrics, Columbia University, New York, NY

3:30 pm - 4:00 pm

Coffee Break (Concourse)

4:00 pm - 5:45 pm

CLOSING PLENARY SESSION (International Ballroom Center)

Moderators: Bruce R. Rosengard, MD and Stephan Schueler, MD

4:00 pm Pioneers in Transplantation Lecture Series: Vision of the Future

Bruce A. Reitz, MD, Stanford University School of Medicine, Stanford, CA

Michael E. DeBakey, MD, Baylor College of Medicine, Houston, TX

4:45 pm Debate: Alternative Lists for Transplantation are Rational and Ethical

Pro: Hillel Laks, MD, UCLA Medical Center, Los Angeles, CA

Con: Robert C. Bourge, MD, University of Alabama at Birmingham, Birmingham, AL

5:15 pm Debate: COPD Should Not be an Indication for Lung Transplantation

Pro: Ramona L. Doyle, MD, Stanford University Medical Center, Stanford, CA

Con: Keith McNeil, FRACP, Prince Charles Hospital, Brisbane, Australia

ADJOURN

5:45 pm - 10:15 pm

ISHLT Board of Directors Meeting (Conservatory)

LIST OF EXHIBITORS

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ABIOMED, INC. BOOTH #323
 22 Cherry Hill Dr, Danvers, MA 01923
 Contact: Barbara Cross
 Phone: 978-646-1727
 Fax: 978-777-1561

Abiomed, Inc. develops, manufactures and markets innovative cardiovascular products and is a leader in the research and development of advanced cardiac assist and replacement systems. Our focus is heart disease and, specifically, assisting or replacing the failing heart. Abiomed is committed to making real the day when quality life can continue after the heart fails.

Abiomed, Inc. first cardiovascular product, the BVS® 5000 Bi-ventricular Support System, is now the most widely used advanced cardiac assist system. Abiomed is the developer of the AbioCor™, a totally implantable, battery-powered heart replacement device. Clinical trials for the AbioCor™ commenced last year.

ACORN CARDIOVASCULAR, INC. BOOTH #414
 601 Campus Drive, St. Paul, MN 55112
 Contact: Laura Von Holtum, Marketing Communications Manager
 Phone: 651-286-4800 | Fax: 651-286-4848

Acorn Cardiovascular, Inc.™, is a privately held medical device manufacturer developing novel implantable device therapies for heart failure. The company's first product, the Corcap Cardiac Support Device™, has CE mark approval in Europe and is in clinical trials in the U.S. CorCap™ is a mesh-like pouch that is placed around the heart and adjusted to fit. By supporting the

heart and reducing stress-mediated myocardial stretch, the CorCap™ is designed to stabilize or reduce heart size and improve cardiac function.

ACTELION PHARMACEUTICALS
601 Gateway Blvd., Ste. 100, South San Francisco, CA 94080
Contact: Dee Loubriel
Phone: 650-624-6900 | Fax: 650-589-1501

BOOTH#315

Actelion Pharmaceuticals US, Inc. (located in South San Francisco, CA) is the U.S. affiliate of Actelion Ltd., a biopharmaceutical company headquartered in Switzerland. Actelion is the global leader in creative science related to the endothelium—the single layer of cells lining every blood vessel. Actelion’s clinical research and drug discovery focuses on: cardiology, Pulmonology, rheumatology, oncology, malaria, and Alzheimer’s disease. Its flagship drug, Tracleer™ (bosentan) tablets, is approved for pulmonary arterial hypertension and is the first in a new class of drugs known as endothelin receptor antagonists (ERA). Actelion is also currently developing Veletri™ (tezosentan), an intravenous ERA, for acute heart failure. Actelion is quoted on the Swiss Stock Exchange (SWX New Market: ATLN)

ADVANCED RESPIRATORY
1020 West County Road F, St. Paul, MN 55126
Phone: 866-411-VEST (8378) | Fax: 651-234-1209

BOOTH #418

The Link™ airway clearance system (Advanced Respiratory) mobilizes airway mucus in organ donor patients via a technology called high-frequency chest wall oscillation (HRCWO). The method has been used for more than 14 years as a superior alternative to manual chest physiotherapy (CPT) for patients with cystic fibrosis and other secretion-related pulmonary complications.

You are invited to learn how The Link™ system may contribute to improved rates of lung procurement resulting in successful transplantation in a presentation entitled “A Prospective Study Using High-Frequency Chest Wall Oscillation for Brain Dead Organ Donors” during Poster Session 2 on Friday, April 12 from 5:30-6:30 p.m.

ARGON MEDICAL (A Division of Maxxim Medical)
1445 Flat Creek Road, Athens, TX 75751
Contact: Preston Sowers
Phone: 800-927-4669 | Fax: 903-677-9397

BOOTH #325

Argon Medical is a full line manufacturer and supplier of vascular access devices, patient monitoring products and other specialty devices such as the Jawz™ Endomyocardial Biopsy Forceps.

ARROW INTERNATIONAL
2400 Bernville Rd, Reading, PA 19605
Contact: Sue Prutzman, Exhibit Coordinator
Phone: 800-233-3187 | Fax: 610-478-3184

BOOTH #223

For tomorrow’s technology in cardiac assist, come and see Arrow’s revolutionary LionHeart™ LVAS, AutoCAT™ Intra-Aortic Balloon pump, and Ultra 8™ IAB catheter. The Arrow LionHeart™ LVAS, now in IDE clinical trial, is a ventricular assist system that is designed to be used as a destination therapy system and not for bridge to transplant. The Arrow LionHeart™ is electrically driven, totally implantable, and completely transcatheter, with no tethers. The AutoCAT™, at your command, will automatically select the proper trigger, set the correct balloon timing, and adjust the balloon volume. The Ultra 8™ catheter is the only one that fits through any 8 Fr sheath and accepts a .25” guide wire.

ATC TECHNOLOGIES, INC.
80 Cummings Park, Woburn, MA 01801
Contact: Paul Kierce
Phone: 781-939-0725 | Fax: 781-939-0726

BOOTH #

ATC Technologies, Inc. designs, manufactures, and markets medical devices and instrumentation for use in cardiology, laparoscopic and vascular surgery, gastroenterology, and plastic surgery procedures. All products are manufactured according to

ISO/EN quality requirements and standards, and a full contract manufacturing service is available for specific physician or company needs.

BIOTEST PHARMA LTD.
Landsteinerstr. 5, 63303 Dreieich, Germany
Contact: George Ebers, PhD
Phone: 49-6103-801-751 | Fax: 49-6103-801-737

BOOTH #324

Biotest Pharma is a manufacturer of pharmaceuticals derived from human plasma, in particular hyperimmunoglobulines effective in the management of viral infections such as CMV (Cytotect® Biotest) and Hepatitis B (Hepatect®). Pentaglobin®, an IgM enriched immunoglobulin preparation, has been successfully used in the treatment of septicemia. In addition to the human plasma derived pharmaceuticals Biotest provides Tecelac®, an RATG with superior biological specifications.

CARDIACASSIST, INC.
240 Alpha Drive, Pittsburgh, PA 15238
Contact: Andreas Maihoefer, Global Marketing Manager
Phone: 412-963-7770 | Fax: 412-963-0800

BOOTH #413

The TandemHeart percutaneous Ventricular Assist Device (pVAD) is a small centrifugal pump designed to offload the left ventricle and deliver circulatory support to patients in acute cardiac decompensation. Support is instituted percutaneously in either the cardiac catheterization lab or operating room. A Transseptal Cannula, inserted through the femoral vein and advanced across the inter-atrial septum into the left atrium, supplies oxygenated blood to the pVAD. The blood is then returned to one or both femoral arteries. A unique infusion system is designed to deliver heparinized infusate to the pump for anticoagulation, lubrication and to allow multi-day thrombus-free operation.

Limited by Federal (USA) law to investigational use.

CHF SOLUTIONS, INC.
3960 Broadway, New York, NY 10032
Contact: Ed Rychlick
Phone: 212-923-3602 | Fax: 212-923-4891

BOOTH #401

CHF Solutions' System 100™ is a device that allows fast, predictable and controllable removal of excess fluid in patients with volume overload.

The system uses peripheral venous access to withdraw and return blood. A disposable blood circuit filters and discards the precise amount of ultrafiltrate (plasma water) from the blood. The water removed from the blood is replaced by excess water that has accumulated in the patient's body. Thus, fluid overload and edema are alleviated.

A number of technological advances and inventions made by CHF solutions enable this treatment to be safely used in selected areas of the hospital.

CTI
6460 Harrison Avenue, Cincinnati, OH 45247
Contact: Genie Dubuk
Phone: 513-598-9290 | Fax: 513-598-3426

BOOTH #322

CTI is a healthcare service and consulting firm surrounding the fields of transplantation, immunology, end-stage disease, and infectious disease. Our primary service offerings include medical education, clinical trial management, reference lab testing, market research and industry consulting.

CYLEX, INC.
8980 Old Annapolis Road, Suite 1, Columbia, MD 21045
Contact: Joan C. Huff, Account Manager

BOOTH #320

Cylex Inc. is a life science company dedicated to the development and manufacturing of products for assessment of immunity. The Cylex™ Immune Cell Function Assay (pending FDA clearance) offers a clinically accessible methodology for cost-effective,

routine immune cell function testing in patients post transplant. The assay complements monitoring pharmacotherapy by providing a rapid, reproducible measure of cell-mediated immunity.

EASTERN MEDICAL PUBLISHERS
510 Interchange Blvd., Newark, DE 19711
Contact: Diane P. Mulhearn, Director of Sales
Phone: 302-286-6020 | Fax: 302-286-6025

BOOTH #419

Eastern Medical Publishers offers the most up-to-date Clinical Reference Publications of Books, Journals and CD-Roms published by a broad range of Medical Publishers including Marcel Dekker, Oxford University Press, Futura, Parthenon Press, McGraw-Hill, Blackwell Science, Delmar, F.A. Davis, CRC Press, Medical Economics and Boston Medical.

ELSEVIER SCIENCE
655 Avenue of the Americas, New York, NY 10010
Contact: Julian Sulmonetti
Phone: 212-989-5800 | Fax: 212-633-3990

BOOTH #424

Published by the Elsevier Science, The Journal of Heart and Lung Transplantation, the official publication of the International Society for Heart and Lung Transplantation, brings readers essential clinical information about the rapidly evolving field of intrathoracic transplantation, support, and replacement. Published monthly, The Journal of Heart and Lung Transplantation is a forum that includes basic science, heart failure, and advanced lung diseases. Visit our booth for a FREE SAMPLE COPY!

FUJISAWA HEALTHCARE, INC.
3 Parkway North, Deerfield, IL 60015
Contact: Tracy M. Orlando

BOOTH #210

Fujisawa Healthcare, Inc. will have representatives available to discuss Prograf (tacrolimus), indicated for the prophylaxis of organ rejection in patients receiving allogeneic liver and kidney transplants.

HAEMOSCOPE CORPORATION
5693 W. Howard, Niles, IL 60714
Contact: Carole Cohen
Phone: 847-588-0453 | Fax: 847-588-0455

BOOTH #425

Thrombelastograph® (TEG®) Hemostasis Analyzer: performs a global evaluation of coagulation kinetics; clot formation, strength, stability and lysis using whole blood; used to monitor hemorrhagic and thrombotic risks and to evaluate the therapies for coagulopathies pre-, peri-, and post-operatively.

ISHLT Registry/UNOS
1100 Boulders Pkwy, Suite 500, Richmond, VA 23225
Contact: Berkely Keck
Phone: 804-330-8500 | Fax: 804-327-1449

BOOTH #100

The ISHLT Transplant/Mechanical Circulatory Assist Device Database collects worldwide transplant and assist device data. Data are utilized for scientific study to increase the body of knowledge regarding thoracic transplantation and cardiac device management. This year's exhibit will feature online availability of center-specific analysis for review by ISHLT members who represent the center submitting the data. In addition, ISHLT members can view preliminary screens for the new device database and receive information on how to provide data to the transplant and device database.

LIPPINCOTT, WILLIAMS, & WILKINS
10192 Durham Ferry Pl, Mechanicsville, VA 23116
Contact: Munford Ashworth
Phone: 804-559-2184 | Fax: 804-559-2184

BOOTH #422

Medical books, journals and multimedia.

MEDICAL INSIGHT RESEARCH
c/o Putnam Associates, Inc.
25 Burlington Mall Rd, 65th Floor, Burlington, MA 01803
Contact: Curtis LeGeyt
Phone: 781-273-5480 | Fax: 781-273-5784

BOOTH #319

Medical Insight Research is a market research firm specializing in the healthcare and pharmaceutical industries. We conduct economic and market research in these areas.

MEDIMMUNE, INC.
35 W. Watkins Mill Road, Gaithersburg, MD 20878
Contact: Dan McLaughlin
Phone: 301-417-0770 | Fax: 301-527-4203

BOOTH #225

MedImmune, Inc. is a biotechnology company focused on developing and marketing products that address medical needs in areas such as infectious disease, transplantation medicine, autoimmune disorders and cancer. CytoGam® (cytomegalovirus immune globuline intravenous (Human) (CMV-IVIG) is indicated for the prophylaxis of cytomegalovirus disease associated with transplantation of kidney, lung, liver, pancreas and heart. In transplants of these organs other than kidney from CMV seropositive donors into seronegative recipients, prophylactic CMV-IGIV should be considered in combination with ganciclovir. MedImmune, Inc. is a fully integrated biotechnology company focused on developing and marketing products that address medical needs in areas such as infectious disease, transplantation medicine, autoimmune disorders and cancer. Headquartered in Gaithersburg, Maryland, MedImmune has manufacturing facilities in Frederick, Maryland and Nijmegen, The Netherlands.

MICROMED TECHNOLOGY, INC.
8965 Interchange Drive, Houston, TX 77054
Contact: Dallas Anderson, President/CEO
Phone: 713-838-9210 | Fax: 713-838-9214

BOOTH #421

MicroMed Technology, Inc. in a unique collaboration with NASA, Dr. Michael DeBakey and Dr. George Noon, has developed the MicroMed DeBakey VAD®. This miniaturized, next-generation, axial flow pump is approximately 1/10 the size of other pulsatile devices and is designed to be a lower-cost, lighter, virtually silent, less invasive alternative to VADs currently on the market. The DeBakey VAD has the CE Mark and is in Phase III trials in the United States. While the initial indication is bridge to heart transplant, MicroMed plans to seek approval for alternative to transplant in early 2002.

NOVARTIS PHARMACEUTICALS CORPORATION
One Health Plaza, East Hanover, NJ 07936
Contact: Gina Edwards
Phone: 973-781-5361 | Fax: 973-781-5488

BOOTH #219

As a leading contributor to the advancement of transplant science and medicine for almost 20 years, Novartis Pharmaceuticals Corporation continues to build upon the proven clinical success of Neoral® (cyclosporine, USP) MODIFIED, Simulect® (basiliximab) and Sandimmune® (cyclosporine, USP). Our focus is to develop meaningful therapeutic advances that improve recipient quality of life and enhance the long-term success of transplantation. In partnership with the transplant community, we have created the broadest pipeline in the field with three compounds in clinical trials and fifteen projects in pre-clinical development.

PHI ENTERPRISES, INC.
12832 Garden Grove Blvd, Suite E, Garden Grove, CA 92843
Contact: Mark Julian
Phone: 714-537-7858 | Fax: 714-567-8228

BOOTH #318

Phi Enterprises, Inc., markets high technology health care products to the professional medical industry.

ROCHE
PBC Congresses, Bldg 74/40.409, 4070 Basel, Switzerland
Contact: Nils Meyer, International Congress Manager
Phone: 41-61-688-71-26 | Fax: 41-61-688-14-09

BOOTH #307

Integral to immunosuppressive regimens for the prevention of rejection in kidney, heart and liver transplants, CellCept also improves long term graft survival and allows reduction of the efficacy limiting toxicities of other more toxic immunosuppressants in the long term.

As part of Roche's commitment to Transplantation, Roche funds the ROTRF (Roche Organ Transplant Research Foundation), an independent foundation to explore clinical and basic science in transplantation. Roche also develops valganciclovir, a new treatment for CMV, a virus that affects some transplant patients. Roche manages a large clinical research program with CellCept & Zenapax aiming to optimize long-term outcomes.

SANGSTAT MEDICAL CORPORATION
6300 Dumbarton Circle, Fremont, CA 94555
Contact: Kathie J. Ward
Phone: 510-789-4300 | Fax: 510-789-4400

BOOTH #215

SangStat is a global biotechnology company building on its foundation in transplantation to discover, develop and market high value therapeutic products in the transplantation, immunology and hematology/oncology areas. Since 1988, SangStat has been dedicated to improving the outcome of organ and bone marrow transplantation through the development and marketing of products to address all phases of transplantation in the worldwide market. SangStat Marketed Products include Gengraf®, Thymoglobuline®, Lymphoglobuline®, Celsior®.

SCANLAN INTERNATIONAL, INC.
One Scanlan Plaza, Saint Paul, MN 55107
Contact: Frank Coolong, Vice President Sales
Phone: 651-298-0997 | Fax: 651-298-0018

BOOTH #221

Highest quality surgical products designed and manufactured by the Scanlan family since 1921. Offering a wide array of Titanium Needle Holders, forceps and clamps and stainless steel instrumentation, including Micro surgical instrumentation, Heifetz™ temporary vascular occlusion clips. Scanlan offers a wide variety of custom modifications to accommodate surgeons' specific needs. Single-use products include SCANLAN® Surg-I-Loop® PLUS, single-use aorta/vein punch, Vascu-Statt® single-use bulldog clamps, as well as SURG-I-PAW® jaw covers and SOFT-GRIP™ fabric clamp covers.

SCIOS, INC.
749 N. Mary Avenue, Sunnyvale, CA 94085
Contact: Jessica Anderson
Phone: 408-616-8566 | Fax: 408-616-8315

BOOTH #417

Scios, Inc. is a biopharmaceutical company developing novel drugs for the potential treatment of cardiovascular and inflammatory diseases. We are distinguished by our disease-based technology platform which integrates expertise in protein biology with computational and medicinal chemistry to identify novel targets and rationally design small-molecule compounds.

Scios has received approval from the U.S. Food and Drug Administration to market Natrecor® (nesiritide) for the treatment of patients with acutely decompensated congestive heart failure who have shortness of breath at rest or minimal activity. Natrecor is the first of a new class of drugs, human B-type natriuretic peptides, to be made available as a therapeutic in the United States.

THORATEC CORPORATION
6035 Stoneridge Drive, Pleasanton, CA 94588
Contact: Brad Goskowicz, Vice President, Sales and Marketing
Phone: 925-847-8600 | Fax: 925-847-8574

BOOTH #216

Thoratec Corporation is engaged in the research, development, manufacturing and marketing of medical devices for circulatory support and vascular graft applications. Thoratec offers both implantable and paracorporeal ventricular assist devices with the HeartMate® LVAS and Thoratec® VAD System. The Thoratec® VAD System is the only ventricular assist device that is approved for use both as a bridge to transplant and for recovery from open-heart surgery. With over, 3,100 implants in 22 countries, the HeartMate LVAS is the world leader in implantable ventricular circulatory support, providing a low incidence of thromboembolism (3-6%) without the need for systemic anticoagulation.

VITROLIFE

BOOTH #407

Mölnålsvägen 30, 412 63 Göteborg, Sweden
Contact: Beatrice Mikaelsson
Phone: 46-31-721-80-00 | Fax: 46-31-721-80-95

Vitrolife develops specialized medias and devices for preparation and cultivation of cells, tissues and organs. The products of Vitrolife Transplantation Systems are clinically proven solutions supporting thoracic and cardiovascular surgery. Vitrolife's Perfadex® products are optimized for preservation of lungs for transplantation and vascular grafts for coronary by-pass surgery.

W.B. SAUNDERS/MOSBY

BOOTH #420

6009 Honnicut Dr., Centreville, VA 20121
Contact: Greg Weyman
Phone: 703-830-0202 | Fax: 703-830-4151

Medical books and periodicals.

W.L. GORE & ASSOCIATES, INC.

BOOTH #321

3750 West Kiltie Lane, Flagstaff, AZ 86001
Contact: William Montgomery
Phone: 928-779-2771 | Fax: 928-779-1456

W.L. Gore & Associates, Inc. is the worldwide leader in expanded polytetrafluorethylene (ePTFE) technology. The Medical Division of Gore specializes in the design and manufacture of innovative medical devices for use in vascular, interventional, cardiac, general, orthopedic, neurological, dental, and plastic surgery.

WORLDHEART CORPORATION

BOOTH #314

1 Laser Street, Ottawa, Ontario K2E 7V1, Canada
Contact: Jennifer Poulsen
Phone: 613-226-4278 | Fax: 613-723-8522

WorldHeart Corporation, a global medical device company based in Ottawa, Ontario and Oakland, California, is currently focused on the development and commercialization of pulsatile ventricular assist devices. Its well-established Novacor® LVAS has been implanted in more than 1300 patients, primarily as a bridge-to-transplantation. WorldHeart's next generation technology, HeartSaverVAD™, is a fully implantable assist device intended for long-term support of patients with heart failure.

FUTURE ISHLT MEETINGS

SEPTEMBER 16-17, 2002

FALL EDUCATION MEETING

Towards Optimizing Donor Heart Quality

Cambridge, United Kingdom

APRIL 9-12, 2003

ISHLT 23RD ANNUAL MEETING AND SCIENTIFIC SESSIONS

Vienna, Austria

APRIL 21-24, 2004

ISHLT 24TH ANNUAL MEETING AND SCIENTIFIC SESSIONS

San Francisco, California