





APRIL 2, 2019 AFTERNOON COURSE • 2:00 PM – 7:00 PM Coral Sea & Java Sea, Loews Royal Pacific Hotel Orlando, FL, USA

NOTE: The next four pages contain the schedule for the afternoon course. **The identical course will be offered in the afternoon from 8am–1pm.** The detailed schedule for the afternoon course is available on the ISHLT Academy website.

SCIENTIFIC PROGRAM CHAIRS

CHAIR: Andreas Zuckermann, MD, Medical University of Vienna, Vienna, Austria CO-CHAIR: Lynn Punnoose, MD, Vanderbilt University, Nashville, TN, USA

CASE MODERATORS

Patricia Chang, MD, MHS, University of North Carolina, Chapel Hill, NC, USA
Hannah Copeland, MD, University of Mississippi Medical Center, Jackson, MS, USA
Heather Ross, MD, MHSc, FRCP (C), FACC, University of Toronto, Toronto, ON, Canada
Luciano Potena, MD, PhD, University of Bologna, Bologna, Italy

CASE DISCUSSANTS

Marta Farrero Torres, MD, PhD, Hospital Clinic de Barcelona, Barcelona, Spain Luke Burchill, MBBS, PhD, FRACP, Oregon Health and Science University, Portland, Oregon, USA Maria Crespo Leiro, MD, Hospital Universitario a Coruna, La Coruna, Spain Steven Tsui, MD, FRCS, Papworth Hospital NHS Trust, Cambridge, UK

COURSE SUMMARY

The HFTX Master Class is designed for clinicians with higher levels of expertise in advanced heart failure and transplantation (completed the core curriculum course on HFTX and/or primary practice in advanced heart failure management (\geq 5 years)). The course format is intended to generate highly interactive discussion among experienced users of these technologies, in order to tackle the most complex nuances of managing these complex patients. Rather than didactic lectures, this course will employ the concept of "convergent discussion" composed of small groups. Faculty moderators and case discussants will engage the audience by focusing on areas with gaps in knowledge and absence of consensus in the field. The case-based format will allow moderators and discussants to use real-world complex situations in order to lead the group through active audience participation towards specific answers designed to address the practice gaps and learning objectives.

Practice Gaps

- 1. Transplant clinicians lack the immunology expertise required to effectively integrate the results of HLA antibody testing into patient management.
- 2. The diagnostic and therapeutic approaches to cardiac allograft rejection are evolving, and transplant clinicians face difficulties in incorporating newer diagnostic modalities such as MRI, molecular diagnostics, and newer immunosuppressive agents into current algorithms.
- Specific approaches to optimize the matching of donor hearts to the most appropriate recipients are not well delineated for clinicians.
- 4. With the availability of multiple combinations of immunosuppressive agents, some transplant clinicians lack the expertise required to select the most effective agents for different subgroups of patients and to individualize immunosuppression to prevent or minimize long-term complications.

Target Audience

This course has been developed for cardiologists, cardiothoracic surgeons, nurses, advanced practice providers, and allied health professionals with at least 5 years of experience in the field of heart transplantation/advanced heart failure or who have attended a prior ISHLT core competency course in advanced heart failure and cardiac transplant medicine. While all members are invited to enroll, Master Classes are primarily designed to be of benefit for health care and allied professionals who are beyond the training stages of their careers. This may be professionals who are seeking additional proficiencies, who wish to understand current areas of controversy, or who desire an update on the current advanced topics of the field. The information presented is intended to provide insights beyond core competencies established in the specialty.

Learning Objectives

After completion of this Class, participants will have improved competence and professional performance in their ability to:

- 1. Identify the risk of HLA sensitization on cardiac rejection and outcomes, management strategies for sensitized patients pre-transplant and approach to heart transplant recipients with antibody-mediated rejection.
- 2. Understand perioperative strategies for (a) assessing extended-criteria (marginal) heart donors and optimizing outcomes after transplantation and (b) identifying type and severity of primary graft dysfunction (PGD), including donor, procedural and recipient risk factors for PGD; signs of PGD during reperfusion and challenges with weaning off cardiopulmonary bypass.

3. Evaluate the candidacy of adults with congenital heart disease for heart transplant, incorporating prognostic testing, and relative contraindications to transplant in this high-risk population. Develop insights into mechanisms of late graft dysfunction, including (a) role of CAV and rejection, (b) diagnostic strategies including IVUS, OCT and MRI, and (c) treatment strategies including modification in immunosuppression and decision for re-transplant.

Accreditation Statement

The International Society for Heart and Lung Transplantation (ISHLT) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Credit Designation Statement

ISHLT designates this live activity for a maximum of 4.25 AMA PRA Category 1 Credits.[™] Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ANCC, ABTC, and ACPE Credit

Credit for the above designations will be applied for as appropriate.

Disclosure

Current guidelines state that participants in CME activities must be made aware of any affiliation or financial interest that may affect the program content or a speaker's presentation. Planners, Faculty and Chairs participating in this meeting are required to disclose to the program audience any real or apparent conflict(s) of interest related to the content of their presentations or service as Chair/Planner. Please refer to the Participant Notification document for a list of all disclosures. Additionally, all speakers have been asked to verbally disclose at the start of their presentation if a product they are discussing is not labeled for the use under discussion or is still investigational.

SCIENTIFIC PROGRAM

2:00 PM - 2:10 PM

WELCOME AND OVERVIEW Andreas Zuckermann, MD, Medical University of Vienna, Vienna, Austria Lynn Punnoose, MD, Vanderbilt University, Nashville, TN, USA

2:10 PM - 3:10 PM

SMALL GROUP INTERACTIVE DISCUSSION A: Sensitization and Antibody Mediated Rejection (AMR)

MODERATOR:

Patricia Chang, MD, MHS

2:10 PM CASE SCENARIO A1: Sensitized LVAD Patient with Chronic Infection

Patricia Chang, MD, MHS, University of North Carolina, Chapel Hill, NC, USA

Teaching/Discussion Points

- 1. Thresholds for initiating desensitization strategies.
- 2. Desensitization treatments pre-transplant and perioperatively.
- 3. Special considerations for the sensitized LVAD patient.
- 4. Management of the sensitized LVAD patient with chronic infection.

2:40 PM CASE SCENARIO A2: Asymptomatic AMR Management

Maria G. Crespo-Leiro, MD, Hospital University A Coruna, La Coruna, Spain

Teaching/Discussion Points

- 1. Defining clinical vs subclinical AMR.
- 2. Asymptomatic AMR management: Evaluation vs Treatment.
- 3. Treatment options for Asymptomatic AMR: risk vs benefit.

3:15 PM - 4:15 PM

SMALL GROUP INTERACTIVE DISCUSSION B: Donor Selection and Primary Graft Dysfunction

MODERATOR:

Hannah Copeland, MD

3:15 PM CASE SCENARIO B1: Approach to the Extended Criteria (Marginal) Donor

Hannah Copeland, MD, University of Mississippi Medical Center, Jackson, MS, USA

Teaching/Discussion Points

- 1. Identify donor and graft characteristics concerning for poor post-transplant outcomes.
- 2. Review geographic differences in donor populations, selection and effects on outcomes.
- 3. Use of donor risk scores to improve decision making and post-transplant outcomes.
- 4. Review the approach to and outcomes of donation after cardiac death.

3:45 PM CASE SCENARIO B2: Identification and Diagnosis of Primary Graft Dysfunction

Steven Tsui, MD, FRCS, Papworth Hospital NHS Trust, Cambridge, UK

Teaching/Discussion Points

- 1. Identify risk factors associated with PGD development.
- 2. Review types and severity of PGD, including clinical signs of graft dysfunction in the OR.
- 3. Review strategies for (a) weaning off cardiopulmonary bypass and decision for ECMO and other short term MCS in setting of PGD (b) management and weaning of short term MCS support during recovery.
- 4. Identify potential criteria for when to list a patient for acute re-transplant.

4:15 PM - 4:45 PM

COFFEE BREAK

4:45 PM - 5:45 PM

SMALL GROUP INTERACTIVE DISCUSSION C: Recipient Selection (Congenital Heart Disease)

MODERATOR:

Heather Ross, MD, MHSc, FRCP (C), FACC

4:45 PM *CASE SCENARIO C1: Timing of Transplantation in Adult Congenital Heart Disease* **Heather Ross, MD, MHSc, FRCP (C), FACC,** University of Toronto, Toronto, ON, Canada

Teaching/Discussion Points

- 1. Prognosis in ACHD.
- 2. Indications for heart transplant in ACHD.
- 3. Changing the strategy in the presence of pulmonary hypertension.
- 4. Contraindications for transplant in ACHD.

5:15 PM CASE SCENARIO C2: Transplant as a Strategy for the Failing Fontan Patient Luke Burchill, MBBS, FRACP, Oregon Health and

Science University, Portland, Oregon, USA

Teaching/Discussion Points

- 1. When to consider referral for transplant for the struggling Fontan patient.
- 2. Interpreting hemodynamics (including hepatic venous pressure gradient) for risk stratification.
- 3. Pathophysiology and diagnosis of hepatic disease in the Fontan patient.
- 4. How to assess transplant risk and outcomes in the Fontan patient.

5:50 PM - 6:50 PM

SMALL GROUP INTERACTIVE DISCUSSION D: Long Term Challenges in Transplant (Late Graft Dysfunction, Cancer)

MODERATOR:

Luciano Potena, MD, PhD

5:50 PM CASE SCENARIO D1: Late Graft Dysfunction

Marta Farrero Torres, MD, PhD, Hospital Clinic de Barcelona, Barcelona, Spain Luciano Potena, MD, PhD, University of Bologna, Bologna, Italy

Teaching/Discussion Points

- 1. Define and identify late graft dysfunction.
- 2. Discuss possible causes: CAV, rejection, hypertensive heart disease late hypertrophy.
- 3. Propose a diagnostic algorithm, ruling out most common causes by invasive/non-invasive techniques (echo, MRI, biopsy, right heart cath, left heart cath- IVUS. OCT, FFR).
- 4. Preventive strategies: consider role of donor management and graft dysfunction in setting of brain death, approach to graft preservation, immunosuppressive drugs.
- 5. Treatment: Discuss medical management of graft dysfunction and review criteria and timing for re-transplant versus palliation.

6:20 PM CASE SCENARIO D2: Malignancy in the Heart Transplant Patient

Marta Farrero Torres, MD, PhD, Hospital Clinic de Barcelona, Barcelona, Spain Luciano Potena, MD, PhD, University of Bologna,

Bologna, Italy

Teaching/Discussion Points

- 1. Epidemiological overview of the most common malignancies after heart transplantation.
- 2. Risk factors for malignancy: age, viral infections, environmental exposure.
- 3. Screening recommendations: who, how, when.
- 4. Prevention.
- 5. Management of immunosuppression in the transplanted patient undergoing cancer treatment.
- 6. Cardio oncology: specificities in the transplant population.

6:50 PM – 7:00 PM CLOSING REMARKS/EVALUATION

Andreas Zuckermann, MD, Medical University of Vienna, Vienna, Austria Lynn Punnoose, MD, Vanderbilt University, Nashville, TN, USA

1:00 PM Adjourn