

ISHLT ACADEMY
CORE COMPETENCIES IN HEART FAILURE AND CARDIAC TRANSPLANTATION
26 APRIL, 2022 | JOHN B. HYNES CONVENTION CENTER, BOSTON, MA, USA

Academy Chairs:

Chair: Anique Ducharme, MD, MSC. Montréal Heart Institute, Montréal, Canada

Co-Chair: Alejandro M. Bertolotti, MD. Hospital Universitario Fundacion Favaloro, Buenos Aires, Argentina

Co-Chair: Yael Peled, MD. Sheba Medical Center, Tel Aviv, Israel

Faculty:

Jacinthe Boulet, MD CM, FRCPC. Harvard Medical School, Boston, MA, USA

Jerry Estep, MD. Cleveland Clinic, Cleveland, OH, USA

Mónica Gilbert, MD. Clinica Guayaquil, Guayas, Ecuador

Eileen Hsich, MD, Cleveland Clinic, Cleveland, OH, USA

Michelle Kittleson, MD, PhD. Cedars Sinai Heart Institute, Los Angeles, CA, USA

Ivan Knezevic, MD, PhD. University Medical Centre Ljubljana, Ljubljana, Slovenia

Jon Kobashigawa, MD. Cedars Sinai Heart Institute, Los Angeles, CA, USA

Marco Masetti, MD, PhD. University of Bologna, Bologna, Italy

Sonia Mirabet Perez, MD. Hospital Sant Pau, Barcelona, Spain

Eyal Nachum, MD. Sheba Medical Center, Tel Aviv, Israel

Diyar Saeed, MD, PhD. Leipzig Heart Center, Leipzig, Germany

Maxime Tremblay-Gravel, MD, MSc. Montréal Heart Institute, Montréal, Canada

Lori West, MD, DPhil. Alberta Transplant Institute, Edmonton, AB, Canada

Target Audience

This course is primarily designed to be of benefit for health care professionals who are in the early stages of their careers or who are in training, or who are part of a new program, or who desire an update on the current state of the field and deepen their knowledge, skills and abilities according to the highest quality standards.

Educational Goals

This course is designed to meeting the practitioner's education need for a targeted review of clinical knowledge and essential professional skills to facilitate best practice of surgical and medical aspects involved in the care of patients with heart failure, cardiac transplantation, and mechanical circulatory support devices.

Learning Objectives

At the conclusion of this meeting, participants will have improved competence and professional performance in their ability to:

1. Discuss the general concepts, definitions and management principles of patients with heart failure.
2. Apply the general concepts, indications, contraindications and management principles of patients who are evaluated for and receive cardiac transplant.
3. Recall the general concepts, indications, contraindications and management principles of patients who are evaluated for and receive mechanical circulatory support devices.

CME Information

Physicians

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 7.00 *AMA PRA Category 1 Credits*[™].

Physicians should claim only the credit commensurate with the extent of their participation in the activity.



JOINTLY ACCREDITED PROVIDER
INTERPROFESSIONAL CONTINUING EDUCATION

Nurses and Pharmacists

In support of improving patient care, this activity has been planned and implemented by Amedco LLC and International Society for Heart & Lung Transplantation. Amedco LLC is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Nurses (ANCC) Credit Designation Statement – Amedco LLC designates this activity for a maximum of 7.00 ANCC contact hours.

Pharmacists (ACPE) Credit Designation Statement – Amedco LLC designates this activity for a maximum of 7.00 knowledge-based CPE contact hours.

NOTE to Pharmacists: The only official Statement of Credit is the one you pull from CPE Monitor. You must request your certificate within 30 days of your participation in the activity to meet the deadline for submission to CPE Monitor.

SCIENTIFIC PROGRAM

7:55-8:00 AM (5 mins)

WELCOME AND COURSE OVERVIEW

Academy Chairs

8:00 AM – 9:00 AM (60 mins)

SESSION 1: HEART FAILURE: OVERVIEW AND EVALUATION

Moderated by Anique Ducharme, MD, MSC

8:00-8:03 AM (2-3 mins)

Case Presentation

Jacinthe Boulet, MD CM, FRCPC. Harvard Medical School, Boston, MA, USA

8:03-8:15 AM (12 mins)

Heart Failure: General Overview and Concepts

Sonia Mirabet Perez, MD. Hospital Sant Pau, Barcelona, Spain

Teaching/Discussion Points

1. Scope of the problem
2. Pathophysiology
3. Causes of heart failure
4. Multidisciplinary Team Approach, Patient partnership

8:15-8:30 AM (15 mins)

Evaluation of Patients with Heart Failure

Michelle Kittleson, MD, PhD. Cedars Sinai Heart Institute, Los Angeles, CA, USA

Teaching/Discussion Points

1. Signs and symptoms
2. Biomarkers
3. Screening guidelines
4. Risk stratification
5. Indicators for advance therapy referral

8:30-8:45 AM (15 mins)

Heart Failure Tests

Marco Masetti, MD, PhD. University of Bologna, Bologna, Italy

Teaching/Discussion Points

1. Role of right heart catheterization and hemodynamic monitoring
2. Cardiopulmonary exercise testing interpretation
3. When to perform endomyocardial biopsy
4. Ischemia evaluation
5. Added benefits of MRI
6. Genetics?

8:45-9:00 AM (15 mins)

Q&A with Panel

9:00-10:15 AM (75 mins)

SESSION 2: MANAGEMENT OF PATIENTS WITH ADVANCED HEART FAILURE and SHOCK

Moderated by Alejandro M. Bertolotti, MD

9:00-9:03 AM (2-3 mins)

Case Presentation

Jacinthe Boulet, MD CM, FRCPC. Harvard Medical School, Boston, MA, USA

9:03-9:18 AM (15 mins)

Non-Pharmacologic and Pharmacologic Management

Michelle Kittleson, MD, PhD. Cedars Sinai Heart Institute, Los Angeles, CA, USA

Teaching/Discussion Points

1. Sodium and fluid management
2. Risk factor modification (obesity, inactivity, sleep apnea, HTN, DM, smoking)
3. Guideline recommendations
4. Update on novel therapeutic approaches
5. Palliative care Home inotropes

9:18-9:30 AM (12 mins)

Principles for Arrhythmia Management and Electrical Devices

Eileen Hsich, MD, Cleveland Clinic, Cleveland, OH, USA

Teaching/Discussion Points

1. Atrial fibrillation management
2. Ventricular arrhythmias
3. Implantable cardioverter-defibrillator
4. Cardiac resynchronization therapy

9:30-9:45 AM (15 mins)

Surgical/interventional Management of Heart Failure

Ivan Knezevic, MD, PhD. University Medical Centre Ljubljana, Ljubljana, Slovenia

Teaching/Discussion Points

1. The concept of Heart Team
2. Coronary Disease: High risk PCI vs. surgical revascularization
3. Valve Disease: Surgical options
4. Transcatheter Edge to Edge Repair and other percutaneous devices for Valves Disease Management

9:45-10:00 AM (15 mins)

Cardiogenic Shock

Jerry Estep, MD. Cleveland Clinic, Cleveland, OH, USA

Teaching/Discussion Points

1. Recognition of shock
2. SCAI classification and outcomes
3. Short term options for mechanical circulatory support (algorithm: intra-aortic balloon pump, ECMO, percutaneous mechanical circulatory support)

10:00-10:15 AM (15 mins)

Q&A with Panel

10:15-10:45 AM (30 mins)

COFFEE BREAK

10:45 AM – 12:00 PM (75 mins)

SESSION 3: CARDIAC TRANSPLANTATION AND ALTERNATIVES

Moderated by Yael Peled, MD

10:45-10:48 AM (2-3 mins)

Case Presentation

Eyal Nachum, MD. Sheba Medical Center, Tel Aviv, Israel

10:48-11:05 AM (17 mins)

Consideration for Advanced Heart Failure Therapies

Marco Masetti, MD, PhD. University of Bologna, Bologna, Italy

Teaching/Discussion Points

1. Timing of referral
2. Special considerations (including Group O, large body habitus)
3. Volume and center's experience

11:05-11:20 AM (15 mins)

Pulmonary Hypertension: Pulmonary Arterial Hypertension in Heart Failure

Maxime Tremblay-Gravel, MD, MSc. Montréal Heart Institute, Montréal, Canada

Teaching/Discussion Points

1. Definition
2. WHO classification
3. Etiologies
4. Medical therapies
5. Procedures and Monitoring

11:20-11:45 AM (25 mins)

Evaluation of the Transplant Candidate

Anique Ducharme, MD, MSc. Montréal Heart Institute, Montréal, Canada

Teaching/Discussion Points

1. Multidisciplinary approach of heart transplant candidates
2. Indications for transplant
3. Contraindications for transplant
4. Evaluation process (Guidance for screening grids and serial pre-transplant evaluation)
5. RHC interpretation
6. Substance abuse, tobacco use, and cannabis

11:45 AM – 12:00 PM (15 mins)

Q&A with Panel

12:00-1:00 PM (60 mins)

LUNCH BREAK (a box lunch is included in the registration fee)

1:00-1:45 PM (45 mins)

SESSION 4: CARDIAC TRANSPLANTATION – SPECIAL CONSIDERATIONS

Moderated by Anique Ducharme, MD, MSC

1:00-1:15 PM (15 mins)

Difficult Decision Making

Anique Ducharme, MD, MSC. Montréal Heart Institute, Montréal, Canada

Teaching/Discussion Points

1. Restrictive and infiltrative cardiomyopathies
2. Chagas Disease
3. Retransplantation
4. Considerations for multi organ transplant

1:15-1:30 PM (15 mins)

The Nightmare of Pediatric and Adult Congenital Disease

Lori West, MD, DPhil. Alberta Transplant Institute, Edmonton, AB, Canada

Teaching/Discussion Points

1. Pediatric transplantation
2. Adult congenital patient

1:30-1:45 PM (15 mins)

Q&A with Panel

1:45 PM – 3:35 PM (110 mins)

SESSION 5: GUIDING PRINCIPLES: DONOR RECIPIENT MATCH and IMMUNOLOGY 101

Moderated by Yael Peled, MD

1:45-1:48 PM (2-3 mins)

Case Presentation

Mónica Gilbert, MD. Clinica Guayaquil, Guayas, Ecuador

1:48-2:08 PM (20 mins)

Balancing the Risk

Yael Peled, MD. Sheba Medical Center, Tel Aviv, Israel

Teaching/Discussion Points

1. Donor risk factors
2. Recipient risk factors in the context of donor heart selection
3. Balancing donor and recipient risk in donor selection (Ischemic Time & Risks score)
4. Extended criteria donor hearts (including DCD donor and Ex-Vivo Perfusion)

2:08-2:25 PM (17 mins)

Heart Transplant Procedure: Pre, Intra and Postoperative Aspects of Care

Alejandro M. Bertolotti, MD. Hospital Universitario Fundacion Favaloro, Buenos Aires, Argentina

Teaching/Discussion Points

1. Patient prioritization and risk stratification
2. Technical aspects of heart transplant procedure
3. Postoperative care: common scenarios

4. Primary Graft Dysfunction: diagnosis and management

2:25-2:45 PM (20 mins)

Overview of Transplantation Immunobiology

Jon Kobashigawa, MD. Cedars Sinai Heart Institute, Los Angeles, CA, USA

Teaching/Discussion Points

1. Immunology 101
2. Immunosuppression strategies
3. Sensitized patient

2:45-3:00 PM (15 mins)

Disease Management Strategies (Rejection, Immunosuppression, Infections and Complications)

Eileen Hsich, MD, Cleveland Clinic, Cleveland, OH, USA

Teaching/Discussion Points

1. Rejection surveillance and treatment
2. Common infectious considerations
3. Common medical complications (bone disease, etc.)

3:00-3:20 PM (20 mins)

Special Consideration of Immunosuppression

Jon Kobashigawa, MD. Cedars Sinai Heart Institute, Los Angeles, CA, USA

Teaching/Discussion Points

1. Pros and Cons of Induction therapy
2. Minimizing Immunosuppression, including steroid withdrawal/avoidance

3:20-3:35 (15 mins)

Q&A with Panel

3:35-4:05 PM (30 mins)

COFFEE BREAK

4:05-5:10 PM (65 mins)

SESSION 6: MECHANICAL CIRCULATORY SUPPORT

Moderated by Alejandro M. Bertolotti, MD

4:05-4:08 PM (2-3 mins)

Case Presentation

Eyal Nachum, MD. Sheba Medical Center, Tel Aviv, Israel

4:08-4:30 PM (22 mins)

Current Devices and Outcomes

Alejandro M. Bertolotti, MD. Hospital Universitario Fundacion Favaloro, Buenos Aires, Argentina

Teaching/Discussion Points

1. History of device development (very brief)
 - a. Continuous vs Pulsatile devices
 - b. Axial vs Centrifugal flow
 - c. TAH versus BiVAD

2. Scoring systems (RV and bleeding)
3. Candidate selection

4:30-4:50 PM (20 mins)

Chronic Complications in Mechanical Circulatory Support

Diyar Saeed, MD, PhD. Leipzig Heart Center, Leipzig, Germany

Teaching/Discussion Points

1. GI bleeding
2. CVA
3. Driveline infections
4. Aortic insufficiency
5. Pump thrombosis
6. Late RV failure

4:50-5:10 PM (20 mins)

Q&A with Panel

5:10-5:15 PM (5 mins)

COURSE SUMMARY AND EVALUATION

Anique Ducharme, MD, MSC

5:15 PM

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