



**CORE COMPETENCIES IN
MECHANICAL CIRCULATORY SUPPORT**

Tuesday, April 4, 2017

8:00 AM – 5:30 PM

Manchester Grand Hyatt Hotel, San Diego, California, USA

GRAND HALL B

ISHLT ACADEMY
CORE COMPETENCIES IN MECHANICAL CIRCULATORY SUPPORT

Tuesday, April 4, 2017

Scientific Program Committee

Chair: Jennifer Cowger, MD, MS, St. Vincent Heart Center of Indiana, Indianapolis, Indiana, USA
Co-Chair: Palak Shah, MD, MS, Inova Heart and Vascular Institute, Falls Church, Virginia, USA
Co-Chair: Diyar Saeed, MD, Heinrich-Heine University, Dusseldorf, Germany

Educational Goals

The educational goals of this activity are to provide a concise review of clinical knowledge and essential professional skills to facilitate best practice of surgical and medical aspects involved in the care of patients during assessment as candidates and as recipients of mechanical circulatory support.

Target Audience

While all members are invited to enroll, this course is primarily designed to be of benefit for clinicians and allied professionals who are in the early stages of their careers or who are in training and/or are part of a new program or desire an update on the current state of the field. The information presented covers core competencies and is intended to provide a strong foundation of the overarching principles of mechanical support, rather than as a detailed update for those who are already proficient experts in the field.

Learning Objectives

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

1. Explain how to risk stratify patient with advanced heart failure in order to assess MCS surgical risk and optimally time mechanical circulatory support (MCS) implantation.
2. Discuss the medical and social factors which impact patient outcomes during short- and long-term MCS.
3. Recognize the various types of MCS support available for patients with advanced single or biventricular heart failure and the technological differences that may impact pump selection and patient/device management.
4. Identify MCS implantation techniques and patient/pump management during the index admission intensive care unit and inpatient general care periods.
5. Describe how to manage patients and the MCS during outpatient long-term support with an understanding of interventions that can reduce patient- and device-related adverse events during MCS.
6. Diagnose and manage common clinical dilemmas and adverse encountered after MCS.

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 8.00 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ANCC Credit

AMEDCO is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

This course is co-provided by AMEDCO and ISHLT. Maximum of 8.00 contact hours.

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. These disclosures will be distributed at the meeting. 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 SCHEDULE

7:00 AM – 8:00 AM

REGISTRATION & MORNING COFFEE

8:00 AM – 8:05 AM

WELCOME AND OVERVIEW

Jennifer Cowger, MD, MS, St. Vincent Heart Center of Indiana, Indianapolis, IN, USA

8:05 AM - 9:15 AM

SESSION 1 – REVIEW OF THE CURRENT STATE OF MCS

Chair: Diyar Saeed, MD

8:05 AM *MCS Technology 101*

Scott Silvestry, MD, Florida Transplant Institute, Orlando, FL, USA

Review of current technologies available, pump behaviors with different loading conditions, and the TAH.

8:25 AM *BTT and DT Outcomes*

Lynne Warner Stevenson, MD, Brigham & Women's Hospital, Boston, MA, USA

Review state of outcomes and adverse events with current technologies

8:40 AM *Short-term Support and Shock*

Jonathan Haft, MD, University of Michigan, Ann Arbor, MI, USA

Overview of percutaneous technologies, biventricular support considerations, and ECMO.

9:00 AM Q&A with Panel

9:15 AM – 10:30 AM

SESSION 2 – PATIENT SELECTION

Chair: Scott Silvestry, MD

9:15 AM *When Should Patients be Referred: Warning Signs*

Douglas Horstmanshoff, MD, Integris Baptist Medical Center, Oklahoma City, OK, USA

Risk factors which presage patient decline (renal function, intolerance of medications, hospitalizations, etc, helping to risk stratify patients based on HF severity and MCS operative risk.

9:35 AM *Assessing and Optimizing RV Function Preoperatively*

Jerry Estep, MD, The Methodist Hospital, Houston, TX, USA

Impact of RV failure, pre-operative assessment and management of the RV including imaging and risk prediction. Cases included.

9:55 AM *Quality of Life After VAD and the Impact of Frailty and Social Behaviors on VAD Success*

Kathleen Grady, PhD, APN, FAAN, Northwestern Memorial Hospital, Chicago, IL, USA

Other factors that can have a significant impact on success after VAD and some screening tools available for risk assessment.

10:15 AM Q&A with Panel

10:30 AM – 10:45 AM

COFFEE BREAK

10:45 AM – NOON

SESSION 3 – SURGICAL CONSIDERATIONS

Chair: Vivek Rao, MD, PhD

10:45 AM *Key Surgical Aspects of Implantation*

Nader Moazami, MD, Cleveland Clinic, Cleveland, OH, USA

Overview of the most crucial surgical considerations: inflow cannula/pump placement, driveline, etc.

11:05 AM *How Much Else is Too Much?*

Daniel Zimpfer, MD, Medical University of Vienna, Vienna, Austria

Concomitant operative procedures: TV, Aortic valve, prior Dor, congenitals

11:25 AM *Tailoring Pumps to Patients*

Diyar Saeed, MD, Heinrich-Heine University, Dusseldorf, Germany

Case based discussion of considerations for pump-patient matching

11:45 AM Q&A with Panel

NOON – 1:00 PM

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

1:00 PM – 2:15 PM

SESSION 4 – POSTOPERATIVE CARE

Chair: Andreas Zuckerman, MD

1:00 PM *Managing the RV Postop*

Christopher Salerno, MD, St Vincent Heart Center of Indiana, Indianapolis, Indiana, USA

Considerations for impact of LVAD pump speed on RV function and use of inotropes, pulmonary vasodilators, and temporary RV support postoperatively

1:20 PM *Anticoagulation and Antiplatelet Therapy*

Vivek Rao, MD, PhD, Toronto General Hospital, Toronto, ON, Canada

Current MCS recommendation on when to start anticoagulation, antiplatelet therapy regimens, as well as data on platelet function testing and heparin level monitoring.

1:40 PM *Pump Speed Optimization: The Role of Imaging and Hemodynamics*

Jerry Estep, MD, Houston Methodist DeBakey Heart & Vascular Center, Houston, TX, USA

Overview of how to meld imaging and hemodynamics to optimize pump settings

2:00 PM Q&A with Panel

2:15-3:15 PM

SESSION 5 – TRANSITION TO HOME

Chair: Nir Uriel, MD

2:15 PM *VAD Education: Patient/Caregiver Assessments and Strategies for Successful VAD Self-Care*

Thomas Schlöglhofer, BSc, Medical University of Vienna, Vienna, Austria

Approaches to education of the patient and caregiver prior to discharge, and strategies for educating the local medical community

2:30 PM Starting New: How to Start and Succeed in MCS

Michael Dickinson, MD, Spectrum Health, Grand Rapids, MI, USA
Challenges to starting a VAD program and key elements of success.

2:45 PM Optimal Outpatient Management of VAD Recipients

Jennifer Cowger, MD, MS, St. Vincent Heart Center of Indiana, Indianapolis, IN, USA
Lab, blood pressure and echo monitoring of VAD patients in the outpatient setting.

3:00 PM Q&A with Panel

**3:15 PM - 3:30 PM
COFFEE BREAK**

3:30 PM - 5:20 PM

SESSION 6 – LONG TERM MANAGEMENT OF PATIENTS AND COMPLICATIONS

Chair: Nader Moazami, MD

3:30 PM LVAD Infections: Prevention, Diagnosis, and Management

Paolo A Grossi, MD, PhD, University of Insubria, Varese, Italy
VAD infections, radiology studies important for diagnosis, and therapeutic recommendations

3:50 PM Stroke: Risk Factors for Hemorrhagic and Embolic CNS Complications and Management Strategies

Samer Najjar MD, MedStar Washington Hospital Center, Washington, DC, USA
Discuss diagnosis, risk factors, and management strategies for CNS events in MCS patients.

4:10 PM Pump Thrombosis: Diagnostic Strategies and Management Algorithms

Palak Shah, MD, MS, Inova Heart and Vascular Institute, Falls Church, VA, USA
Frequency, diagnosis, and management strategies for suspected pump thrombosis.

4:30 PM Aortic Insufficiency in LVAD Recipients: Incidence, Screening, and Management

Jennifer Cowger, MD, MS, St Vincent Heart Center of Indiana, Indianapolis, IN, USA
Cumulative incidence, clinical consequences, and management of AI after LVAD.

4:50 PM GI Bleeding

Anna Meyer, MD, Leipzig University Heart Center, Leipzig, Germany
Frequency, diagnosis and management of GI bleeding after LVAD therapy, including new data on octreotide

5:10 PM Q&A with Panel

5:20 PM SUMMARY

Palak Shah, MD, MS, Inova Heart and Vascular Institute, Falls Church, VA, USA

5:30 PM ADJORN