

Monday, April 28th

MINI ORAL SESSION 04: CLAD Biomarkers

Moderator: Heather Mannem (University of Virginia, Charlottesville, VA, USA)

Session Date/Time: Monday, April 28, 2025 4:30 PM – 5:30 PM ET

Session Description: *This session will explore mechanisms and novel approaches in lung transplantation, focusing on chronic allograft dysfunction (CLAD), biomarkers for CLAD and other signals that may predate its onset. Topics include Aregs' role in airway inflammation, MPA metabolic polymorphisms, SRC Homology and Collagen inhibition for pulmonary fibrosis, and cell-free DNA biomarkers to assess allograft injury and racial disparities. We will also discuss molecular rejection, autoantibodies linked to CLAD, and the role of immature neutrophils in PGD, offering insights into clinical and molecular factors influencing transplant outcomes.*

Abstract Title: *Assessing Molecular Rejection with Cell Type Deconvolution in Lung Allograft Transbronchial Biopsies*

Presentation Time: Monday, April 28, 2025 4:54 PM – 4:58 PM ET

Location: Ballroom C

Authors: P. T. Gauthier, M. Mackova, R. Hachem, J. Havlin, A. Hirji, P. Jaksch, S. Juvet, S. Keshavjee, W. Klepetko, D. Kreisel, B. Kubisa, D. Levine, R. Lischke, M. Piotrowska, J. Simonek, G. Snell, I. Timofte, J. Weinkauff, G. Westall, A. Zajacova, K. Halloran, P. Halloran.

Presenter: Patrick T Gauthier

Tuesday, April 29th

ORAL SESSION 23: CLAD Diagnostics: A Home Run at Fenway Park

Moderator: Eric Epailly (University Hospital, Strasbourg, France.)

Session Date/Time: Tuesday, April 29, 2025 10:00 AM – 11:15 AM ET

Session Description: *This session will highlight novel biomarkers and risk factors for chronic lung allograft dysfunction (CLAD), exploring innovative methods for assessing lung allograft rejection such as donor T cell dynamics and deconvolution of intragraft cellular composition, validation of bronchoalveolar fluid bile acid as risk factor for CLAD, and early post-transplant host-derived cell-free DNA for mortality risk. The session will cover non-invasive molecular imaging for CLAD detection, and the link between reduced Club Cell Secretory Protein and proinflammatory profiles in bronchoalveolar lavage fluid.*

Abstract Title: *Assessing Molecular Rejection with Cell Type Deconvolution in Lung Allograft Mucosal Biopsies*

Presentation Time: Tuesday, April 29, 2025 10:24 AM – 10:32 AM ET

Location: Ballroom A

Authors: P. T. Gauthier, M. Mackova, R. Hachem, J. Havlin, A. Hirji, P. Jaksch, S. Juvet, S. Keshavjee, W. Klepetko, D. Kreisel, B. Kubisa, D. Levine, R. Lischke, M. Piotrowska, J. Simonek, G. Snell, I. Timofte, J. Weinkauff, G. Westall, A. Zajacova, K. Halloran, P. Halloran.

Presenter: Patrick T Gauthier

ORAL SESSION 28: When It Comes to the Heart, Tissue is the Issue

Moderator: Eric Epailly (University Hospital, Strasbourg, France.)

Session Date/Time: Tuesday, April 29, 2025 10:00 AM – 11:15 AM ET

Session Description: *Traditional evaluation of the endomyocardial biopsy includes histopathology and immunologic staining. In this session, novel techniques assessing intragraft transcripts at a tissue and single-cell level will provide new information as we seek a gold standard definition of allograft rejection in heart transplantation.*

Abstract Title: *Assessing molecular rejection with cell type deconvolution in heart allograft endomyocardial biopsies*

Presentation Time: Tuesday, April 29, 2025 11:00 AM – 11:08 AM ET

Location: Room 312

Authors: P. T. Gauthier, M. Mackova, A. Aliabadi-Zuckermann, M. Barner, M. Cadeiras, M. Crespo-Leiro, E. Despasquale, M. Deng, R. Moayedifar, S. Hall, A. Jamil, D. H. Kim, J. Kobashigawa, P. MacDonald, V. Melenovsky, J. Patel, L. Potena, K. Shah, J. Stehlik, A. Zuckermann, P. Halloran.

Presenter: Patrick T Gauthier

ORAL SESSION 32: Antibody-Mediated and Cellular Rejection After Lung Transplantation

Moderator: Debbie Levine (Stanford University, Palo Alto, CA, USA)

Session Date/Time: Tuesday, April 29, 2025 3:00 PM – 4:15 PM ET

Session Description: *This session highlights new acute rejection mechanisms and emerging rejection diagnostic paradigms for lung transplant recipients.*

Abstract Title: *Trifecta-Lung Study: First results showing correlation between dd-cfDNA and molecular injury in transbronchial lung biopsies*

Presentation Time: Tuesday, April 29, 2025 3:48 PM – 3:56 PM ET

Location: Ballroom C

Authors: Kieran Halloran, Martina Mackova, Jeff Reeve, Patrick T Gauthier, Jan Havlin, Andrea Zajacova, Majd Alkhour, Karina Kaur, David Ross, Philip F Halloran

Presenter: Kieran Halloran

Wednesday, April 30th

ORAL SESSION 40: Molecular Madness: Making Sense of Molecular Diagnostics in Post-Heart Transplant Surveillance

Moderator: Kiran Khush (Stanford University, Palo Alto, CA, USA)

Session Date/Time: Wednesday, April 30, 2025 8:00 AM – 9:15 AM ET

Session Description: *Molecular diagnostics encompass both circulating biomarkers and tissue-based gene expression. Their use in combination provides additional insights into allograft health and inform patient management. In this session, novel data that incorporates these molecular tools with histopathology and other clinical data will be discussed.*

Abstract Title: *Trifecta-Heart Study: Correlation of dd-cfDNA with Molecular Rejection and Injury in Endomyocardial Biopsies*

Presentation Time: Wednesday, April 30, 2025 8:48 AM – 8:56 AM ET

Location: Room 311

Authors: Martina Mackova, Zachary Demko, Michael Olymbios, Patrick Campbell, Vojtech Melenovsky, Piotr Przybylowski, Agnieszka Kuczaj, Gabriel Sayer, Snehal Patel, Daniel H. Kim, Timothy Gong, Shelley Hall, Josef Stehlik and Philip Halloran

Presenter: Philip Halloran

ORAL SESSION 40: Molecular Madness: Making Sense of Molecular Diagnostics in Post-Heart Transplant Surveillance

Moderator: Kiran Khush (Stanford University, Palo Alto, CA, USA)

Session Date/Time: Wednesday, April 30, 2025 8:00 AM – 9:15 AM ET

Session Description: *Molecular diagnostics encompass both circulating biomarkers and tissue-based gene expression. Their use in combination provides additional insights into allograft health and inform patient management. In this session, novel data that incorporates these molecular tools with histopathology and other clinical data will be discussed.*

Abstract Title: *Mapping discrepancies between histology and MMDx in 1431 heart transplant biopsies*

Presentation Time: Wednesday, April 30, 2025 8:24 AM – 8:32 AM ET

Location: Room 311

Authors: Katelynn Madill-Thomsen, Arezu. Z. Aliabadi-Zuckermann, Martin Cadeiras, Marisa G. Crespo-Leiro, Eugene C. Depasquale, Mario Deng, Roxana Moayedifar, Shelley Hall, Aayla Jamil, Daniel H. Kim, Jon Kobashigawa, Peter Macdonald, Vojtech Melenovsky, Jignesh Patel, Luciano Potena, Keyur Shah, Josef Stehlik, and Andreas Zuckermann, and Philip F. Halloran

Presenter: Katelynn Madill-Thomsen