



PVRI 2025 Rio Annual Congress

29 January - 1 February 2025

Embracing Heterogeneity

Windsor Convention & Expo Centre, R. Martinho de Mesquita, 129 - Barra da Tijuca Rio de Janeiro - RJ, 20031-204

Programme overview

Pre-congress satellite meetings, Windsor Oceanico, 2nd Floor

Wednesday, 29 January

- 08:00-16:00 Innovative Drug Development Initiative (IDDI) Meeting, [Oceania IX](#)
- 08:00-16:00 Infection in Pulmonary Vascular Disease (iPVD) Consortium Meeting, [Oceania X](#)
- 08:00-12:00 Paediatric Task Force Meeting, [Oceania II](#)
- 12:30-18:00 PAH-ICON: International Consortium for Genetic Studies in PAH Meeting, [Oceania II](#)
- 13:30-17:15 Imaging Task Force, [Bora Bora I](#)
- 16:00-18:00 High Altitude Task Force Meeting, [Oceania X](#)
- 16:00-18:00 PVRI Board Meeting, [Bora Bora IV](#)

Functions and meetings

Thursday, 30 January

- 11:05-13:00 Career Catalyst Luncheon (bookable), [Windsor Barra, Alhambra & El Pardo, 2nd Floor](#)
- 18:00-20:00 Welcome Drinks Reception (open to all), [Windsor Barra, Alhambra & El Pardo, 2nd Floor](#)

Friday, 31 January

- 11:10-13:00 Women in PH Luncheon (bookable), [Windsor Barra, Alhambra & El Pardo, 2nd Floor](#)
- 19:00-23:59 Gala Dinner & Awards Presentation (bookable), [Windsor Barra, Louvre, Ground Floor](#)

Saturday, 1 February

- 11:00-12:00 Hot topics from PVRI GoDeep (bookable), [TBC](#)
- TBC Pulmonary Circulation Journal Meeting (closed meeting), [TBC](#)

Main scientific programme, Windsor Oceanico, Asia, 3rd Floor

Thursday, 30 January: Heterogeneity in the presentation of PH

- 08:00-11:05 Session 1: Establishing the framework for the classification and diagnosis of PH worldwide
- 11:05-13:00 Buffet lunch
- 13:00-16:00 Session 2: Risk stratification and treatment in the new era of PH therapeutics
- 16:00-18:00 Poster presentations

Friday, 31 January: Heterogeneity in the pathobiology of PH

- 08:00-11:10 Session 3: Vascular heterogeneity in chronic lung disease
- 11:10-13:00 Buffet lunch
- 13:00-16:30 Session 4: Heterogeneity in PH associated with heart disease
- 16:30-18:00 Poster presentations

Saturday, 1 February: Learning from heterogeneity to improve outcomes in PH

- 08:00-11:00 Session 5: The individual exposome and its contribution to PH heterogeneity
- 11:00-12:45 Buffet lunch
- 12:45-13:45 Session 6: Quantifying therapeutic responses
- 14:15-16:15 Session 7: Leveraging disease heterogeneity in clinical trial design

High-Altitude Task Force

Wednesday

29 January

Windsor Oceanico,
Oceania X, 2nd Floor

Challenges to the pulmonary circulation & beyond at high altitude

Moderators: Aasta Mishra, Silvia Ulrich

Each talk includes 10 minutes of discussion time

- 16:00-16:30 Birth at high altitude – immediate challenges & life-long consequences
Alexandra Heath
- 16:30-17:00 The role of the endothelium in acute & chronic pulmonary vascular adaptation to hypoxia
Wolfgang Kübler
- 17:00-17:30 Patients diagnosed with pulmonary vascular disease (PAH/CTEPH) at high altitude
Silvia Ulrich
- 17:30-18:00 Lowlanders with COPD going to altitude – implication for the right heart & the pulmonary vasculature
Mona Lichtblau
- 18:00-18:30 High Altitude Task Force meeting



Paediatric & Congenital Heart Disease Task Force

Moderators: Maria Jesus del Cerro, Steve Abman, Shahin Moledina

Opportunities for Paediatric Task Force involvement in PVRI activities

- 08:00-08:08 PVRI GoDeep
TBC
- 08:08-08:15 PVRI Pulmonary Hypertension Global Patient Survey (PH GPS)
Shahin Moledina
- 08:15-08:23 Innovative Drug Development Initiative
Steven Abman
- 08:23-08:30 Discussion: Opportunities & proposal for Task Force lead initiatives
All

World Symposium recommendations & changes

- 08:30-08:40 Comments on the World Symposium – lights and shadows
Maria Jesus del Cerro
- 08:40-09:00 Main changes & rationale
TBC
- 09:00-09:30 Discussion
All

Collaboration between registries

- 09:30-10:00 Collaboration between registries: Let's make it real
Maria Jesus del Cerro
- 09:30-10:00 Discussion
All

10:00-10:15 Refreshment break

Persistent pulmonary hypertension of the newborn

- 10:15-10:25 Let's talk about PPHN
Steven Abman
- 10:25-11:00 Defining the disease, clinical phenotypes, global differences & next steps -
All

Experiences & initiatives from the Task Force

- 11:00-11:30 I have a clinical case I want to discuss...
All
- 11:30-12:00 I have a research project I want to share...
All

Wednesday
29 January

Windsor Oceanico,
Oceania II, 2nd Floor



SESSION 1: Establishing the framework for the classification & diagnosis of PH worldwide

Moderators: Katarina Zeder, Lindsay Forbes, Sonja Bartolome

- 08:00-08:05 PVRI President's welcome
Anna Hemnes
- 08:05-08:20 PH care in Brazil
Rogerio Souza
- 08:20-08:35 Classification & diagnosis of PH: Updates from the 7th WSPH
Gabor Kovacs
- 08:35-08:50 Omics-based & data-driven approaches to early disease diagnosis
Catherine Simpson
- 08:50-08:57 **Basic/translational abstract**
Speaker TBC
- 08:57-09:12 CIPHER & CIPHER-MRI studies for early diagnosis of PH
Ioana Preston
- 09:12-09:27 Advanced medical imaging & AI in PH diagnosis & classification
Andy Swift

09:27-09:57 **Refreshment break**

Moderators: Tatiana Kudryashova, Gustavo Heresi, Tim Lahm

- 09:57-10:12 Cardiopulmonary exercise testing in the diagnosis & phenotyping of PH patients
Khodr Tello
- 10:12-10:27 Classification & diagnosis of pediatric PH: Updates from the 7th WSPH
Dunbar Ivy
- 10:27-10:35 **Basic/translational abstract**
Speaker TBC
- 10:35-10:50 CTEPH & CTED approach to early diagnosis & treatment
Mark Toshner
- 10:50-11:05 How pre-clinical models can be used to improve clinical phenotyping & early diagnosis
Vineet Agrawal

11:05-13:00 **Lunch break, Barra Restaurant**

11:05-13:00 **Career Catalyst Luncheon**

SESSION 2: Risk stratification & treatment in the new era of PH therapeutics

Moderators: Pilar Escribano Subias, Sue Gue, Sandeep Sahay

- 13:00-13:15 Developments in risk stratification scores in PH
Valentina Mercurio
- 13:15-13:30 RV phenotyping in PH risk stratification & treatment
Tim Lahm
- 13:30-13:37 **Basic/translational abstract**
Speaker TBC
- 13:37-13:52 The impact of novel therapeutics on the treatment algorithm of PH
Sandeep Sahay
- 13:52-14:07 Surgical Interventions, mechanical support, & transplant in end-stage PH
Nayeli Zayas

14:07-14:37 **Refreshment break**

Moderators: Corey Ventetuolo, Athiththan Yogeswaran, Horst Olschewski

- 14:37-14:52 Approach to the treatment of Group 1 PH patients with co-morbidities
Anna Hemnes
- 14:52-15:07 Risk stratification & treatment of pediatric PH
Rolf Berger
- 15:07-15:15 **Basic/translational abstract**
Speaker TBC
- 15:15-15:30 Medical & surgical management of CTED & CTEPH
Hiromi Matsubara
- 15:30-16:00 Panel discussion: Realities & challenges of applying PH guidelines for diagnosis & treatment in LMIC
Facilitators: Vinicio de Jesus Perez, Werner Seeger, Ana Mocumbi, Gerald Maarman, Mauricio Orozco Levi

16:00-18:00 **Poster presentations**

18:00-19:30 **Drinks Reception**

**Thursday
30 January**

Windsor Oceanico,
Asia, 3rd Floor



SESSION 3: Vascular heterogeneity in chronic lung disease

Moderators: *Grazyna Kwapiszewska, Shelsey Johnson, Susan Majka*

- 08:00-08:05 Introduction
Grazyna Kwapiszewska
- 08:05-08:20 Clinical aspects of PH heterogeneity in chronic lung disease: Same as PAH or different?
Corey Ventetuolo
- 08:20-08:35 Translational investigations of PH in fibrotic lung disease models
Susan Majka
- 08:35-08:50 Translational investigations of PH in COPD disease models
Natascha Sommer
- 08:50-08:57 Abstract
Speaker TBC
- 08:57-09:05 Abstract
Speaker TBC
- 09:05-09:20 Panel discussion: Comparison of vascular changes in CLD & PAH

09:20-09:50 Refreshment break

Moderators: *David Kiely, Mona Lichtblau*

- 09:50-09:55 Introduction
David Kiely
- 09:55-10:10 Vasculature in CLD: Imaging insights
Nick Rahaghi
- 10:10-10:25 Pulmonary vascular heterogeneity: Insights from contemporary pathological approaches
Rubin Tudor
- 10:25-10:40 Vascular changes in pediatric chronic lung disease
Steven Abman
- 10:40-10:47 Abstract
Speaker TBC
- 10:47-10:55 Abstract
Speaker TBC
- 10:55-11:10 Panel discussion: Should we target vascular changes in chronic lung disease?

11:10-13:00 Lunch break, Barra Restaurant

11:10-13:00 Women in PH Luncheon, sponsored by UTC
Host: *Anna Hemnes*
Guest speakers: *Jill Maron, Karin Tran-Lundmark, Ana Olga Mocumbi*



SESSION 4: Heterogeneity in PH associated with heart disease

Moderators: *Nidhy Varghese, Baktybek Kojonazarov, Dora Haag (TBC)*

- 13:00-13:05 Introduction
Nidhy Varghese
- 13:05-13:20 How do HFrEF & HFpEF affect the pulmonary vasculature & how can we model it?
Charly Lai
- 13:20-13:35 Congenital heart disease & the pulmonary vasculature
Michael Gatzoulis (TBC)
- 13:35-13:42 Abstract
Speaker TBC
- 13:42-13:50 Abstract
Speaker TBC
- 13:50-14:05 Animal models of heart disease PH
Wolfgang Kübler
- 14:05-14:20 Effect of pre and post-tricuspid shunts on the pulmonary vasculature
Rachel Hopper

14:20-14:50 Refreshment break

Moderators: *Harm Jan Bogaard, Evan Brittain, Philipp Douschan*

- 14:50-14:55 Introduction
Harm Jan Bogaard
- 14:55-15:10 How can we study the right ventricle to develop novel therapies?
Edda Spiekerkoetter
- 15:10-15:25 Advances in imaging RV function in humans & animal models with PH
Rebecca Vanderpool
- 15:25-15:32 Abstract
Speaker TBC
- 15:32-15:40 Abstract
Speaker TBC
- 15:40-15:55 Cellular heterogeneity in RV dysfunction
Soni Savai-Pullamsetti
- 15:55-16:10 Managing RV dysfunction in resource-limited settings
Prashant Bobhate

16:10-16:30 Panel discussion

16:30-18:00 Poster presentations

19:00-23:59 Gala Dinner & Award Presentations

**Friday
31 January**
Windsor Oceanico,
Asia, 3rd Floor



SESSION 5: The individual exposome & its contribution to PH heterogeneity

Moderators: Lan Zhao, Navneet Dhillon, Harry Karmouty Quintana

- 08:00-08:15 Drug exposures and PH
Vinicio de Jesus Perez
- 08:15-08:30 Infectious exposures & pulmonary vascular disease
Rudolf Oliveira
- 08:30-08:45 High altitude exposure and PH
Silvia Ulrich
- 08:45-09:00 Early life exposures and pulmonary vascular disease
Kara Goss
- 09:00-09:15 The Microbiome in PH
Sasha Prisco

09:15-09:45 Refreshment break

Moderators: Flavia Navarro, Luke Howard, Nicolas Kolaitis (TBC)

- 09:45-10:00 Less considered exposures that contribute to PH
Stephen Chan
- 10:00-10:15 Real world activity and exercise perception in PH patients - MyHeart Counts
Niamh Errington
- 10:15-10:30 Insights from All of Us/EHR
Evan Brittain
- 10:30-10:37 Abstract
Speaker TBC
- 10:38-10:45 Abstract
Speaker TBC
- 10:45-11:00 Exposome as a modifiable factor for PH management
Bradley Maron

11:00-12:45 Lunch break, Barra Restaurant

Hot topics from PVRI GoDeep

Chairs: Martin Wilkins, Paul Hassoun, Werner Seeger

- Overview of the GoDeep meta-registry
Werner Seeger
- Risk scores beyond group 1 PH – baseline and follow-up
Athiththan Yogeswaran
- Survival outcomes and Impact of targeted PAH therapy in PoPH
Arun Jose
- PAH-targeted therapies in group 3 PH – PDE5 inhibitor therapy associated with improved survival
Khodr Tello
- Male survival disadvantage in PH: independent of etiology, age, disease severity, comorbidities and treatment, but race-dependent
Evan Brittain

SESSION 6: Quantifying therapeutic responses

Moderators: Patricia Thistlethwaite, Andy Sweatt, Steeve Provencher

- 12:45-13:00 How should we define disease modification?
Roham Zamanian
- 13:00-13:15 Developing imaging surrogates of vascular histology to quantify reverse remodeling
Karin Tran Lundmark
- 13:15-13:23 Abstract - Digital endpoints & monitoring
Speaker TBC
- 13:23-13:30 Abstract - Molecular classification
Speaker TBC

13:30-13:45 **A joint talk with PVRI and PHA USA**
Patient reported outcomes
Frances Varian



13:45-14:15 Refreshment break

SESSION 7: Leveraging disease heterogeneity in clinical trial design

Moderators: TBC, Jane Leopold, Navneet Singh

- 14:15-14:30 What is a platform trial?
Charlotte Summers
- 14:30-14:45 Global perspective & digital trials
Caio Tavares
- 14:45-15:00 Update in pediatric clinical trials
Maria Jesus del Cerro

Dragon's Den / Shark Tank

Dragons/Sharks: Sonja Bartolome, Ardeshir Ghofrani, Charlotte Summers

- 15:00-15:05 Dragon Den introduction
Martin Wilkins
- 15:05-15:20 PHoenix trial (Rationalising current treatments using implanted devices)
Alex Rothman
- 15:20-15:35 Stratosphere Bayesian trial for BMPR2 mutation carriers
Sofia Villar
- 15:35-15:50 CRAVE: Canadian Right ventricular AdaptiVE platform trial
Jason Weatherald
- 15:50-16:00 Summary
Martin Wilkins

- 16:00-16:15 Building and testing a personal digital twin for PH
Steve Niederer

