

TH



# WORLD SYMPOSIUM ON PULMONARY HYPERTENSION



Nice

February 27-28 / March 1, 2013



Cover:

**LA DANSE**

*Henri Matisse, 1909*

Museum of Modern Art, New York City

## Introduction

Traditionally the PH World Symposia, started in Geneva in 1973 and held every 5 years after the Evian edition in 1998 (Venice 2003, Dana Point 2008), have marked the progresses in pulmonary hypertension science and have paved the way for further advancements. The symposia proceedings constitute relevant publications which are among the more cited in this scientific area.

Each new edition of the WSPH has been bigger than the previous one testifying the growing interest of the stakeholders on this medical condition.

The structure of the 5<sup>th</sup> WSPH consists in 12 sessions where world specialists in the field, divided in 12 Task Forces, present the results of their studies of the last two years regarding some topic items concerning 12 different fields:

- 1. Pathology & Pathobiology**
- 2. Genetics & Genomic**
- 3. Definitions & Classifications (and particularities of different PAH subgroups)**
- 4. Pathophysiology (focusing on exercise and RV)**
- 5. Epidemiology & Registries**
- 6. Diagnosis & Prognosis**
- 7. Therapy - Standard of Care**
- 8. Therapy - Goals**
- 9. New Trials Design & New Therapies**
- 10. CTEPH**
- 11. PH due to Left Heart Diseases and Chronic Lung Diseases**
- 12. Pediatric PH**

*The objectives of the Symposium are:*

- Review of the major advances in pulmonary vascular science in the past 5 years
- Elaboration of the available evidence in different basic and clinical areas by experts of the Task Forces
- Identification of relevant basic and clinical questions to be answered by the Task Forces
- Evaluation of the gaps of evidence in different areas and proposals for future collaborative research programs
- Elaboration of documents by the Task Forces, summarizing the results of pre-symposium meetings (previous 18-24 months)
- Discussion of the Task Forces documents at the symposium sessions with worldwide experts and with other stakeholders
- Final drafting of peer reviewed papers to be included in a medical journal supplement to facilitate the implementation of the 5<sup>th</sup> WSPH conclusions

Our aim is that this symposium will foster constructive scientific interactions and collaborations in the very unique scenario of the bay of Nice!

# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Patronages

**Pulmonary Circulation  
and Right Ventricular  
Function**

ESC Working Group



**EUROPEAN  
SOCIETY OF  
CARDIOLOGY®**



**ERS**

**EUROPEAN  
RESPIRATORY  
SOCIETY**



**ASSOCIATION FOR EUROPEAN PAEDIATRIC  
AND CONGENITAL CARDIOLOGY**



**PHA EUROPE**

EUROPEAN PULMONARY HYPERTENSION ASSOCIATION



**Pulmonary Hypertension Association**  
Empowered by hope

# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

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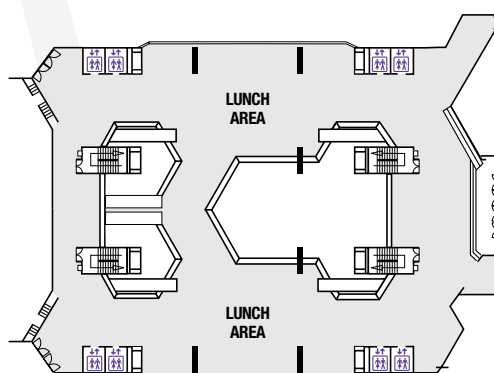
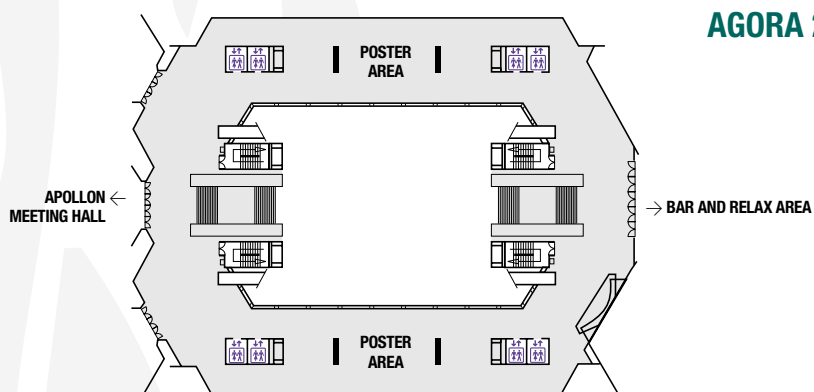
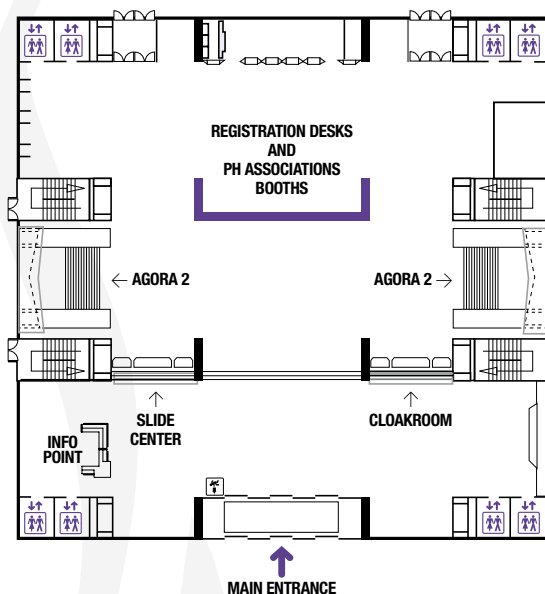
# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

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# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Map of the Acropolis CONGRESS CENTER





# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Symposium timetable

time	Wednesday, February 27	Thursday, February 28	Friday, March 1
<b>08.45-09.00</b> Apollon Hall	<b>Introduction</b> <i>G. Simonneau</i>		
<b>09.00-10.30</b> Apollon Hall	<b>TF 1. Pathology and Pathobiology</b>	<b>TF 5. Epidemiology and Registries</b>	<b>TF 9. New Trials Design and New Therapies</b>
<b>10.30-11.00</b> Agora 2	coffee break	coffee break	coffee break
<b>11.00-12.30</b> Apollon Hall	<b>TF 2. Genetics and Genomic</b>	<b>TF 6. Diagnosis and Prognosis</b>	<b>TF 10. CTEPH</b>
<b>12.30-14.00</b> Agora 2 and 3	<i>Lunch and posters</i>	<i>Lunch and posters</i>	<i>Lunch and posters</i>
<b>14.00-15.30</b> Apollon Hall	<b>TF 3. Definitions and Classifications and Particularities of Different PAH Subgroups</b>	<b>TF 7. Therapy - Standard of Care</b>	<b>TF 11. PH due to Left Heart Diseases and Chronic Lung Diseases</b>
<b>15.30-16.00</b> Agora 2	coffee break	coffee break	coffee break
<b>16.00-17.30</b> Apollon Hall	<b>TF 4. Pathophysiology (focusing on exercise and RV)</b>	<b>TF 8. Therapy - Goals</b>	<b>TF 12. Pediatric PH</b>
<b>17.30-18.00</b> Apollon Hall	<b>Young Investigator Awards</b>		<b>Final remarks and next steps</b> <i>N. Galiè</i>
<b>18.00-18.30</b> Agora 2	<b>Welcome Cocktail</b>		

TF = Task Force



# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## SCIENTIFIC PROGRAM



# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Scientific Program

### APOLLON HALL

08.45-09.00

#### Introduction

Gérald Simonneau *Paris FRANCE*

09.00-10.30

#### Task Force 1. **Pathology & Pathobiology**

Chairman: Rubin M. Tuder *Denver CO USA*

Co-Chairman: Nicholas Morrell *Cambridge UK*

Stephen L. Archer *Chicago IL USA*

Peter Dorfmueller *Paris FRANCE*

Serpil C. Erzurum *Cleveland OH USA*

Christophe Guignabert *Paris FRANCE*

Evangelos Michelakis *Edmonton CANADA*

Marlene Rabinovitch *Stanford CA USA*

Ralph T. Schermuly *Giessen GERMANY*

Kurt R. Stenmark *Denver CO USA*

- A. **Does the pulmonary venous system play an important role in PAH and to what extent are PAH and PVOD part of the same spectrum of disease?**
- B. **Are there distinct pathways in vascular cells in mild vs. severe pulmonary hypertension?**
- C. **Cell proliferative changes in PAH distal pulmonary arteries: differences and similarities with traditional neoplastic disease**
- D. **The role of inflammation in the initiation and progression of different PAH types**

### AGORA 2

10.30-11.00

coffee break

Wednesday, February 27

# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Scientific Program

### APOLLON HALL

11.00-12.30

#### Task Force 2. **Genetics and Genomic**

Chairman: John Newman *Nashville TN USA*

Co-Chairman: Richard C. Trembath *London UK*

Micheala Aldred *Cleveland OH USA*

Wendy K. Chung *New York NY USA*

C. Gregory Elliott *Murray UT USA*

Marc W. Geraci *Denver CO USA*

Ekkehard Grünig *Heidelberg GERMANY*

Marc Humbert *Paris FRANCE*

James E. Loyd *Nashville TN USA*

Rajiv D. Machado *London UK*

Florent Soubrier *Paris FRANCE*

- A. What are the ethical issues that need discussion and implementation in PH?**
- B. What are the signaling consequences of impaired BMPR2 gene function?**
- C. What application of genetic advances, such as miRNA, epigenetics for treatment and prevention of heritable PAH?**
- D. What are the co-factors that cause expression of disease in heritable PH, and what other genes may cause heritable PH?**

### AGORA 2 AND AGORA 3

12.30-14.00

**Lunch and posters**

Wednesday, February 27

# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Scientific Program

### APOLLON HALL

14.00-15.30

#### Task Force 3. **Definitions and Classifications and Particularities of Different PAH Subgroups**

Chairman: Gérald Simonneau *Paris FRANCE*

Co-Chairman: Rogerio Souza *Sao Paulo BRAZIL*

Ian T.K. Adatia *Edmonton CANADA*

David S. Celermajer *Sydney AUSTRALIA*

Christopher P. Denton *London UK*

Michael A. Gatzoulis *London UK*

Ardeschir H. Ghofrani *Giessen GERMANY*

Miguel Angel Gómez Sánchez *Madrid SPAIN*

Raman Krishna Kumar *Cochin Kerala INDIA*

Michael Landzberg *Boston MA USA*

Roberto Machado *Chicago IL USA*

Horst Olschewski *Graz AUSTRIA*

Ivan Robbins *Nashville TN USA*

- A. **Should we include rest PVR in the definition of PH and how do we define and handle “borderline” PH? Should PVR and/or PAP on exercise be reintroduced in the definition?**
- B. **PAH associated with CHD in adults**
- C. **Are there novel drugs and toxins inducing PAH?**
- D. **Which changes in group 5? New subgroups identified or previous one to shift to another PH group. Should we maintain sickle cell disease-associated PH in group 1?**

### AGORA 2

15.30-16.00

coffee break

Wednesday, February 27

# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Scientific Program

### APOLLON HALL

16.00-17.30

#### Task Force 4. **Pathophysiology (focusing on exercise and RV)**

Chairman: Anton Vonk Noordegraaf *Amsterdam THE NETHERLANDS*

Co-Chairman: Paul M. Hassoun *Baltimore MD USA*

Kelly M. Chin *Dallas TX USA*

Paul R. Forfia *Philadelphia PA USA*

François Haddad *Stanford CA USA*

Steven M. Kawut *Philadelphia PA USA*

Joost Lumens *Maastricht THE NETHERLANDS*

Robert Naeije *Brussels BELGIUM*

John Newman *Nashville TN USA*

Ronald J. Oudiz *Los Angeles CA USA*

Steeve Provencher *Chemin Sainte-Foy CANADA*

Adam Torbicki *Otwock POLAND*

Norbert Voelkel *Richmond VA USA*

- A. How to best assess RV contractility and function?**
- B. What are the underlying molecular mechanisms and metabolic characteristics of the failing RV in PAH?**
- C. What is the definition and relevance of exercise-induced PH?**
- D. What are the most relevant surrogate biomarkers of RV-PA function and their role in diagnosis and prognosis of PH?**

17.30-18.00

#### Young Investigator Awards

### AGORA 2

18.00-18.30

#### welcome cocktail

Wednesday, February 27



# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Scientific Program

### APOLLON HALL

09.00-10.30

#### Task Force 5. **Epidemiology and Registries**

Chairman: Marc Humbert *Paris FRANCE*

Co-Chairman: Michael D. McGoon *Rochester MN USA*

Raymond L. Benza *Pittsburgh PA USA*

Maria del Pilar Escribano Subias *Madrid SPAIN*

Xin Jiang *Shanghai CHINA*

David P. Miller *San Francisco CA USA*

Andrew Peacock *Glasgow UK*

Joanna Pepke-Zaba *Cambridge UK*

Tomas Pulido *Mexico City MEXICO*

Stuart Rich *Chicago IL USA*

Stephan H. Rosenkranz *Cologne GERMANY*

Samy Suissa *Montreal CANADA*

- A. Are PAH phenotypes changing in the modern management era?**
- B. Biases on survival analysis from registries**
- C. Is PAH survival improving in the modern management era?**
- D. Guidelines for registries implementation**

### AGORA 2

10.30-11.00

**coffee break**

Thursday, February 28

## Scientific Program

### APOLLON HALL

11.00-12.30

#### Task Force 6. **Diagnosis and Prognosis**

Chairman: David B. Badesch *Denver CO USA*

Co-Chairman: Marius Hoeper *Hannover GERMANY*

Herman Jan Bogaard *Amsterdam THE NETHERLANDS*

Robin A. Condliffe *Sheffield UK*

Robert P. Frantz *Rochester MN USA*

Dinesh Khanna *Ann Arbor MI USA*

Marcin Kurzyna *Otwock POLAND*

David Langleben *Montreal CANADA*

Alessandra Manes *Bologna ITALY*

Toru Satoh *Tokyo JAPAN*

Fernando Torres *Dallas TX USA*

Martin R. Wilkins *London UK*

- A. **Should we include rest PVR in the definition of PH and how do we define and handle “borderline” PH?**
- B. **What should be the upper limit of the PCWP, and what are the roles of fluid challenge and exercise hemodynamics in the identification of HFpEF patients?**
- C. **How do we diagnose PAH in its early stages (including screening programs for high-risk populations)?**
- D. **Which are most useful clinically - prognostic factors measured at baseline or prognostic factors that change with therapy?**

### AGORA 2 AND AGORA 3

12.30-14.00

**Lunch and posters**

Thursday, February 28

# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Scientific Program

### APOLLON HALL

14.00-15.30

#### Task Force 7. **Therapy - Standard of Care**

Chairman: Nazzareno Galiè *Bologna ITALY*

Co-Chairman: Anne M. Keogh *Sydney AUSTRALIA*

Paul A. Corris *Newcastle Upon Tyne UK*

Adaani Frost *Houston TX USA*

Reda E. Girgis *Grand Rapids MD USA*

John Granton *Toronto CANADA*

Zhi Cheng Jing *Shanghai CHINA*

Walter Klepetko *Vienna AUSTRIA*

Michael D. McGoon *Rochester MN USA*

Vallerie V. McLaughlin *Ann Arbor MI USA*

Ioana R. Preston *Boston MA USA*

Lewis J. Rubin *San Diego La Jolla CA USA*

Julio Sandoval *Mexico City MEXICO*

Werner Seeger *Giessen GERMANY*

- A. **Do we have additional information on the role of rehabilitation in PAH patients?**
- B. **Should first-line combination therapy be the gold standard of severe WHO FC IV PAH (and what about other FC)?**
- C. **How can we modify the current treatment algorithm including the new approved drugs?**
- D. **Should we adapt the treatment algorithm to the different PAH types and to different countries (country organization)?**

### AGORA 2

15.30-16.00

coffee break

Thursday, February 28

# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Scientific Program

### APOLLON HALL

16.00-17.30

#### Task Force 8. **Therapy – Goals**

Chairman: Vallerie V. McLaughlin *Ann Arbor MI USA*

Co-Chairman: Olivier Sitbon *Paris FRANCE*

Sean Patrick Gaine *Dublin IRELAND*

Luke S. Howard *London UK*

Hanno H. Leuchte *Munich GERMANY*

Michael A. Mathier *Pittsburg PA USA*

Sanjay Mehta *London Ontario CANADA*

Massimiliano Palazzini *Bologna ITALY*

Myung H. Park *Baltimore MD USA*

Victor F. Tapson *Durham NC USA*

- A. Are baseline and/or follow up prognostic predictors appropriate as treatment goals?**
- B. Is WHO FC III an unacceptable status in treated PAH patients?**
- C. Are treatment goals different in different PAH subgroups?**
- D. Any novel treatment goal from new technologies (CMR, biochemical markers, etc)?**

Thursday, February 28

## Scientific Program

Friday, March 1

### APOLLON HALL

09.00-10.30

#### Task Force 9. **New Trials Design and New Therapies**

Chairman: Ardeschir H. Ghofrani *Giessen GERMANY*

Co-Chairman: Lewis J. Rubin *San Diego La Jolla CA USA*

Robyn J. Barst *New York NY USA*

Todd M. Bull *Denver CO USA*

Amany N. El-Gazayerly *The Hague THE NETHERLANDS*

Tom Fleming *Seattle WA USA*

Mardi I. Gomberg-Maitland *Chicago IL USA*

Friedrich Grimminger *Giessen GERMANY*

Maurizio Rainisio *Sanremo ITALY*

Rajeev Sagar *Los Angeles CA USA*

Duncan J. Stewart *Ottawa CANADA*

Norman Stockbridge *Silver Spring MD USA*

Carlo Ventura *Bologna ITALY*

- A. **Any residual role of short-term trials using 6MWT as primary end-point for the approval of new PAH medications? Are there alternatives to traditional clinical worsening end-points in case current trials demonstrate feasibility issues?**
- B. **Which is the best approach to compare sequential combination therapy with upfront combination therapy in PAH patients?**
- C. **In which type of PAH patients is the benefit/risk ratio of tyrosine kinase inhibitors acceptable in PAH? What about additional new compounds?**
- D. **Which are the new promising targets for PAH treatment (including genes and regenerative approaches)?**

### AGORA 2

10.30-11.00

coffee break

# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Scientific Program

### APOLLON HALL

11.00-12.30

#### Task Force 10. **CTEPH**

Chairman: Nick H. Kim *San Diego La Jolla CA USA*

Co-Chairman: Eckhard Mayer *Bad Nauheim GERMANY*

Richard Channick *Boston MA USA*

Philippe Darteville *Paris FRANCE*

Marion Delcroix *Leuven BELGIUM*

Pavel Jansa *Prague CZECH REPUBLIC*

David P. Jenkins *Cambridge UK*

Irene Lang *Vienna AUSTRIA*

Michael M. Madani *San Diego La Jolla CA USA*

Hitoshi Ogino *Tokyo JAPAN*

Vittorio Pengo *Padua ITALY*

- A. **Is pulmonary angiography still the gold standard for evaluating operability? What is the role of lung perfusion scan?**
- B. **What advancements or changes have been made in the surgical treatment of CTEPH? Is there a role for pulmonary angioplasty?**
- C. **What are the biological/pathological rationale and clinical evidence for medical treatment of CTEPH? Should approach to treatment factor in whether the patient is operable, deemed inoperable, or has persistent PH following endarterectomy?**
- D. **How do we define successful treatment outcome in CTEPH?**

### AGORA 2 AND AGORA 3

12.30-14.00

**Lunch and posters**

Friday, March 7

## Scientific Program

### APOLLON HALL

14.00-15.30

#### Task Force 11. **PH due to Left Heart Diseases and Chronic Lung Diseases**

Chairman: Werner Seeger *Giessen GERMANY*

Co-Chairman: Jean-Luc Vachiéry *Brussels BELGIUM*

Yochai Adir *Haifa ISRAEL*

Joan Albert Barberà *Barcelona SPAIN*

Hunter Champion *Pittsburgh PA USA*

John Gerard Coghlan *London UK*

Vincent Cottin *Lyon FRANCE*

Teresa De Marco *San Francisco CA USA*

Nazzareno Galiè *Bologna ITALY*

Stefano Ghio *Pavia ITALY*

Simon Gibbs *London UK*

Fernando J. Martinez *Ann Arbor MI USA*

Marc J. Semigran *Boston MA USA*

Gérald Simonneau *Paris FRANCE*

Athol U. Wells *London UK*

- A. **How to define out of proportion PH in left heart disease (TPG vs diastolic gradient; resting and exercise conditions)?**
- B. **How to define out of proportion PH in COPD and ILD patients (including PFT and HRCT scan; resting and exercise conditions)?**
- C. **Evidence for appropriate benefit to risk ratio of PAH approved drugs in patients with PH due to left heart or chronic lung disease?**
- D. **Any specific targets for PH therapy in left heart or chronic lung diseases?**

### AGORA 2

15.30-16.00

coffee break

Friday, March 1

# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Scientific Program

### APOLLON HALL

16.00-17.30

#### Task Force 12. **Pediatric PH**

Chairman: Dunbar D. Ivy *Denver CO USA*

Co-Chairman: Maurice Beghetti *Geneva SWITZERLAND*

Steven Abman *Denver CO USA*

Robyn J. Barst *New York NY USA*

Rolf M.F. Berger *Groningen THE NETHERLANDS*

Damien Bonnet *Paris FRANCE*

Tom Fleming *Seattle WA USA*

Sheila Glennis Haworth Busk *London UK*

Usha Raj *Chicago IL USA*

Erika Rosenzweig *New York NY USA*

Ingram Schulze-Neick *London UK*

Robin H. Steinhorn *Chicago IL USA*

- A. **Do we need specific definitions for PH, its classification and what is an acute response with acute vasodilator testing with pediatric patients, and is this the same regardless of the age of the child?**
- B. **Are the prognostic parameters developed for adults valid also in pediatric patients?**
- C. **Are treatment goals and end-points for clinical trials similar in adults and pediatric patients?**
- D. **Are specific diagnostic and treatment algorithms required in pediatric patients?**

17.30-18.00

#### **Final remarks and next steps**

Nazzareno Galiè *Bologna ITALY*

Friday, March 7



5<sup>th</sup> WORLD SYMPOSIUM ON  
PULMONARY HYPERTENSION

ABSTRACTS  
PRESENTATION



## Poster Sessions

### YOUNG INVESTIGATOR AWARDS

These posters will be exposed for the whole duration of the Symposium:  
February 27, 28 and March 1

## BASIC SCIENCE

### REGRESSION OF PULMONARY VASCULOPATHY AFTER SURGICAL TREATMENT FOR CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION IN PIGLETS

Boulate David<sup>[1]</sup>, Guihaire Julien<sup>[1]</sup>, Mercier Olaf<sup>[2]</sup>, Dorfmueller Peter<sup>[3]</sup>, Decante Benoit<sup>[1]</sup>, Eddahibi Saadia<sup>[1]</sup>, Darteville Philippe<sup>[4]</sup>, Fadel Elie<sup>[2]</sup>

<sup>[1]</sup>Laboratoire de recherche chirurgicale, INSERM U999 ~ Centre Chirurgical Marie Lannelongue ~ France, <sup>[2]</sup>Laboratoire de recherche chirurgicale, INSERM U999, service de chirurgie thoracique, vasculaire et de transplantation pulmonaire et cardio-pulmonaire ~ Centre Chirurgical Marie Lannelongue ~ France, <sup>[3]</sup>Service d'anatomopathologie, INSERM U999 ~ Centre Chirurgical Marie Lannelongue ~ France, <sup>[4]</sup>Service de chirurgie thoracique, vasculaire et de transplantation pulmonaire et cardio-pulmonaire ~ Le Plessis-Robinson ~ France

### CHARACTERIZATION OF HISTONE DEACETYLASES IN PULMONARY ARTERIAL HYPERTENSION

Chelladurai Prakash<sup>[1]</sup>, Basineni Sobha<sup>[1]</sup>, Schmoranzler Mario<sup>[1]</sup>, Dabral Swati<sup>[1]</sup>, Bauer Uta-Maria<sup>[3]</sup>, Seeger Werner<sup>[2]</sup>, Pullamsetti Soni Savai<sup>[1]</sup>

<sup>[1]</sup>Max-Planck-Institute for Heart and Lung Research ~ Bad Nauheim ~ Germany, <sup>[2]</sup>University of Giessen and Marburg Lung Center ~ Giessen ~ Germany, <sup>[3]</sup>Institute of Molecular Biology and Tumor Research ~ Marburg ~ Germany

### PULMONARY LYMPHOID NEOGENESIS, A NEW FEATURE OF IDIOPATHIC PULMONARY ARTERIAL HYPERTENSION?

Perros Frédéric<sup>[1]</sup>, Dorfmueller Peter<sup>[1]</sup>, Montani David<sup>[1]</sup>, Girerd Barbara<sup>[1]</sup>, Mercier Olaf<sup>[1]</sup>, Mussot Sacha<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>, Cohen-Kaminsky Sylvia<sup>[1]</sup>

<sup>[1]</sup>Université Paris-Sud; Labex LERMIT; AP-HP; DHU TORINO; Hôpital Bicêtre; INSERM U999; Centre Chirurgical Marie Lannelongue ~ Le Plessis-Robinson ~ France

### ROLE OF MICRORNA 17/92 CLUSTER AND MICRORNA 21 IN THE PATHOGENESIS OF PULMONARY HYPERTENSION – NOVEL THERAPEUTIC TARGETS

Pullamsetti Soni Savai<sup>[1]</sup>, Döbele Carmen<sup>[2]</sup>, Fischer Ariane<sup>[2]</sup>, Savai Rajkumar<sup>[1]</sup>, Kojonazarov Bakytbek<sup>[3]</sup>, Dahal Bhola Kumar<sup>[3]</sup>, Ghofrani Hossein Ardeschir<sup>[3]</sup>, Weissmann Norbert<sup>[3]</sup>, Grimminger Friedrich<sup>[3]</sup>, Bonauer Angelika<sup>[2]</sup>, Seeger Werner<sup>[3]</sup>, Zeiher Andreas M.<sup>[2]</sup>, Dimmeler Stefanie<sup>[2]</sup>, Schermuly Ralph Theo<sup>[3]</sup>

<sup>[1]</sup>Max-Planck-Institute for Heart and Lung Research ~ Bad Nauheim ~ Germany, <sup>[2]</sup>Department of Medicine III, Division of Cardiology, Goethe University ~ Frankfurt ~ Germany, <sup>[3]</sup>University of Giessen and Marburg Lung Center ~ Giessen ~ Germany

### CD74-DEPENDENT INTERLEUKIN-6 AND MONOCYTE CHEMOATTRACTANT PROTEIN-1 SECRETION BY PULMONARY ENDOTHELIAL CELLS IN IDIOPATHIC PULMONARY HYPERTENSION

Tu Ly<sup>[1]</sup>, Huertas Alice<sup>[1]</sup>, Ricard Nicolas<sup>[1]</sup>, Phan Carole<sup>[1]</sup>, Seferian Andrei<sup>[2]</sup>, Le Hires Morane<sup>[1]</sup>, Fadel Elie<sup>[1]</sup>, Girerd Barbara<sup>[1]</sup>, Montani David<sup>[2]</sup>, Darteville Philippe<sup>[1]</sup>, Simonneau Gérald<sup>[2]</sup>, Humbert Marc<sup>[2]</sup>, Guignabert Christophe<sup>[1]</sup>

<sup>[1]</sup>INSERM U999, LabEx LERMIT, DHU TORINO, Centre Chirurgical Marie Lannelongue, Université Paris-Sud ~ Paris ~ France, <sup>[2]</sup>CHU Bicêtre Service de Pneumologie et Réanimation Respiratoire, Inserm U999, DHU TORINO, Centre Chirurgical Marie Lannelongue, Université Paris-Sud ~ Paris ~ France

## Poster Sessions

### CLINICAL SCIENCE

Young Investigator Awards

#### **GENETIC COUNSELING IN PULMONARY ARTERIAL HYPERTENSION: 10 YEARS OF EXPERIENCE FROM THE FRENCH REFERRAL CENTRE**

Girerd Barbara<sup>[2]</sup>, Montani David<sup>[2]</sup>, Eyries Mélanie<sup>[1]</sup>, Yaici Azzedine<sup>[2]</sup>, Coulet Florence<sup>[1]</sup>, Jais Xavier<sup>[2]</sup>, Savale Laurent<sup>[2]</sup>, Sitbon Olivier<sup>[2]</sup>, Soubrier Florent<sup>[1]</sup>, Simonneau Gérard<sup>[2]</sup>, Humbert Marc<sup>[2]</sup>

<sup>[1]</sup>Univ Pierre et Marie Curie-Paris 6, Laboratoire d'Oncogénétique et Angiogénétique Moléculaire, UMRS 956 INSERM, Groupe Hospitalier Pitié-Salpêtrière. ~ Paris ~ France, <sup>[2]</sup>Univ Paris Sud, Centre National de Référence de l'Hypertension Pulmonaire Sévère, Service de Pneumologie et Réanimation Respiratoire, Hôpital de Bicêtre, DHU thorax Innovation, AP-HP, INSERM U999 ~ Le Kremlin Bicêtre ~ France

#### **ANALYSIS OF SMALL ARTERIES AND FIBROTIC AREAS OF RIGHT VENTRICLE FROM AUTOPSY SPECIMENS OF PULMONARY ARTERIAL HYPERTENSION PATIENTS**

Iwasa Toru<sup>[1]</sup>, Yamada Osamu<sup>[1]</sup>, Ishibashi-Ueda Hatsue<sup>[1]</sup>

<sup>[1]</sup>National Cerebral and Cardiovascular Center ~ Suita ~ Japan

#### **PULMONARY ARTERIAL HYPERTENSION: TEMPORAL CHANGES IN PATIENT CHARACTERISTICS, MANAGEMENT STRATEGIES AND OUTCOMES**

Larsen Carolyn<sup>[1]</sup>, Le Rachel<sup>[1]</sup>, Fenstad Eric<sup>[1]</sup>, McGoon Michael<sup>[1]</sup>, Frantz Robert<sup>[1]</sup>, Kane Garvan<sup>[1]</sup>

<sup>[1]</sup>Mayo Clinic ~ Rochester ~ United States

#### **DOES VENTILATORY RESPONSE TO EXERCISE DIFFER BETWEEN PATIENTS WITH PULMONARY VENO-OCCLUSIVE DISEASE (PVOD) AND THOSE WITH IDIOPATHIC PULMONARY ARTERIAL HYPERTENSION (IPAH)?**

Laveneziana Pierantonio<sup>[1]</sup>, Garcia Gilles<sup>[1]</sup>, Dorfmueller Peter<sup>[2]</sup>, Girerd Barbara<sup>[3]</sup>, Similowski Thomas<sup>[4]</sup>, Sitbon Olivier<sup>[3]</sup>, Simonneau Gérard<sup>[3]</sup>, Humbert Marc<sup>[3]</sup>, Montani David<sup>[3]</sup>

<sup>[1]</sup>Centre de Référence de l'Hypertension Pulmonaire Sévère, Service d'Explorations Fonctionnelles Respiratoires, INSERM U999 "HTAP : Physiopathologie et innovation thérapeutique" Hôpital Universitaire de Bicêtre (AP-HP), Université Paris-Sud 11, Le Kremlin-B, <sup>[2]</sup>Univ Paris-Sud, Faculté de médecine, Le Kremlin-Bicêtre; INSERM U999, Centre Chirurgical Marie Lannelongue, Le Plessis-Robinson ~ Le Plessis-Robinson ~ France, <sup>[3]</sup>Centre de Référence de l'Hypertension Pulmonaire Sévère, Service de Pneumologie et Soins Intensifs Thoraciques, INSERM U999 "HTAP : Physiopathologie et innovation thérapeutique" Hôpital Universitaire de Bicêtre (AP-HP), Université Paris-Sud 11, Le Kremlin, <sup>[4]</sup>Univ Paris 06, Equipe de Recherche ER 10 UPMC, Laboratoire de Physio-Pathologie Respiratoire, Faculté de Médecine Pierre et Marie Curie (site Pitié-Salpêtrière); Assistance Publique-Hôpitaux de Paris, Groupe Hospitalier Pitié-Salpêtrière ~ France

#### **A RANDOMIZED OPEN LABEL STUDY COMPARING FIRST-LINE TREATMENT WITH BOSENTAN OR SILDENAFIL IN PULMONARY ARTERIAL HYPERTENSION (PAH): LONG-TERM RESULTS**

Mazzanti Gaia<sup>[1]</sup>, Albin Alessandra<sup>[1]</sup>, Terzi Francesca<sup>[1]</sup>, Palazzini Massimiliano<sup>[1]</sup>, Bachetti Cristina<sup>[1]</sup>, Conficoni Elisa<sup>[1]</sup>, Rizzo Nicole<sup>[1]</sup>, Dardi Fabio<sup>[1]</sup>, Rinaldi Andrea<sup>[1]</sup>, Gotti Enrico<sup>[1]</sup>, Monti Enrico<sup>[1]</sup>, Manes Alessandra<sup>[1]</sup>, Galie Nazzareno<sup>[1]</sup>

<sup>[1]</sup>Institute of Cardiology, University of Bologna ~ Italy

#### **LONG TERM RESPONSE TO CALCIUM CHANNEL BLOCKERS IN BMPR2 MUTATION CARRIERS: DIFFERENT PHENOTYPES FOR A SAME GENOTYPE**

Montani David<sup>[1]</sup>, Girerd Barbara<sup>[1]</sup>, Soubrier Florent<sup>[2]</sup>, Sitbon Olivier<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>, Simonneau Gérard<sup>[1]</sup>

<sup>[1]</sup>Université Paris-Sud, Centre National de Référence de l'Hypertension Pulmonaire Sévère, Service de Pneumologie et Réanimation Respiratoire, Hôpital de Bicêtre, DHU Thorax Innovation, AP-HP, INSERM U999 ~ Le Kremlin Bicêtre ~ France, <sup>[2]</sup>Université Pierre et Marie Curie-Paris 6, Laboratoire d'Oncogénétique et Angiogénétique Moléculaire, UMRS 956 INSERM, Groupe Hospitalier Pitié-Salpêtrière ~ Paris ~ France

#### **END-EXPIRATORY PULMONARY CAPILLARY WEDGE PRESSURE $\leq$ 15MMHG IS A RELIABLE INDICATOR OF A NORMAL LEFT VENTRICULAR FILLING PRESSURE IN A HIGH PRETEST PROBABILITY PULMONARY ARTERIAL HYPERTENSION POPULATION**

Oliveira Rudolf<sup>[1]</sup>, Vieira Machado Ferreira Eloara<sup>[1]</sup>, Ramos Roberta<sup>[1]</sup>, Messina Carolina<sup>[1]</sup>, Silva Celia<sup>[1]</sup>, Arakaki Jaquelina<sup>[1]</sup>

<sup>[1]</sup>Federal University of São Paulo - UNIFESP ~ São Paulo ~ Brazil

## Poster Sessions

### UPDATE IN PULMONARY HYPERTENSION CASES RELATED TO BENFLUOREX EXPOSURE IN FRANCE

Savale Laurent<sup>[1]</sup>, Chaumais Marie Camille<sup>[1]</sup>, Cottin Vincent<sup>[2]</sup>, Bergot Emmanuelle<sup>[3]</sup>, Frachon Irène<sup>[4]</sup>, Prevot Grégoire<sup>[5]</sup>, Pison Christophe<sup>[6]</sup>, Dromer Claire<sup>[7]</sup>, Poubeau Patrice<sup>[8]</sup>, Lamblin Nicolas<sup>[9]</sup>, Habib Gilbert<sup>[10]</sup>, Reynaud-Gaubert Martine<sup>[10]</sup>, Bourdin Arnaud<sup>[11]</sup>, Sanchez Olivier<sup>[12]</sup>, Jaïs Xavier<sup>[1]</sup>, Sitbon Olivier<sup>[1]</sup>, Montani David<sup>[1]</sup>, Simonneau Gérard<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>

<sup>[1]</sup>CHU Bicêtre, Université Paris-Sud ~ Le Kremlin Bicêtre ~ France, <sup>[2]</sup>CHU Lyon ~ France, <sup>[3]</sup>CHU Caen ~ France, <sup>[4]</sup>CHU Brest ~ France, <sup>[5]</sup>CHU Toulouse ~ France, <sup>[6]</sup>CHU Grenoble ~ France, <sup>[7]</sup>CHU Bordeaux ~ France, <sup>[8]</sup>GH de la Reunion ~ Saint Pierre ~ France, <sup>[9]</sup>CHU Lille ~ France, <sup>[10]</sup>CHU Marseille ~ France, <sup>[11]</sup>CHU Montpellier ~ France, <sup>[12]</sup>Hôpital Européen Georges Pompidou ~ Paris ~ France

### GENOTYPE TO PHENOTYPE CORRELATIONS IN HERITABLE PULMONARY ARTERIAL HYPERTENSION

Terzi Francesca<sup>[1]</sup>, Palazzini Massimiliano<sup>[1]</sup>, Bachetti Cristina<sup>[1]</sup>, Conficoni Elisa<sup>[1]</sup>, Rizzo Nicole<sup>[1]</sup>, Dardi Fabio<sup>[1]</sup>, Rinaldi Andrea<sup>[1]</sup>, Gotti Enrico<sup>[1]</sup>, Mazzanti Gaia<sup>[1]</sup>, Albini Alessandra<sup>[1]</sup>, Monti Enrico<sup>[1]</sup>, Manes Alessandra<sup>[1]</sup>, Galiè Nazzeno<sup>[1]</sup>

<sup>[1]</sup>Institute of Cardiology, University of Bologna ~ Italy

### RIGHT VENTRICULO-ARTERIAL COUPLING IN THE ADAPTED AND FAILING RIGHT VENTRICLE IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION

Trip Pia<sup>[1]</sup>, Raamsteeboers Aniek Jm<sup>[1]</sup>, Kind Taco<sup>[1]</sup>, Westerhof Nico<sup>[2]</sup>, De Man Frances S<sup>[2]</sup>, Vonk Noordegraaf Anton<sup>[1]</sup>

<sup>[1]</sup>Department of Pulmonary Medicine, Institute for Cardiovascular Research, VU University Medical Center ~ Amsterdam ~ Netherlands, <sup>[2]</sup>Department of Pulmonary Medicine and Physiology, Institute for Cardiovascular Research, VU University Medical Center ~ Amsterdam ~ Netherlands

## Poster Sessions

WEDNESDAY, FEBRUARY 27

### PATHOLOGY AND PATHOBIOLOGY

#### **TOMOGRAPHIC RADIONUCLIDE VENTRICULOGRAPHY IN THE ASSESSMENT OF NONSELECTIVE ENDOTHELIN RECEPTOR ANTAGONIST BOSENTAN INFLUENCE ON RIGHT VENTRICLE PERFORMANCE IN PATIENTS WITH IDIOPATHIC PULMONARY ARTERIAL HYPERTENSION**

Arkhipova Olga<sup>[1]</sup>, Martynyuk Tamila<sup>[1]</sup>, Samoilenko Ludmila<sup>[1]</sup>, Sergienko Vladimir<sup>[1]</sup>, Chazova Irina<sup>[1]</sup>

<sup>[1]</sup>Russian Cardiology Research-and-Production Complex ~ Moscow ~ Russian Federation

#### **PULMONARY ARTERY – THE HISTO-PATHOLOGY IN INTERSTITIAL LUNG DISEASE**

Balasubramanian Vijay<sup>[1]</sup>, Nicola Catalin<sup>[1]</sup>, Heragu Naveen<sup>[2]</sup>, Sidhu Baljinder<sup>[3]</sup>, Harding Clarke<sup>[1]</sup>

<sup>[1]</sup>University of California San Francisco ~ Fresno ~ USA, <sup>[2]</sup>Clovis North High School ~ Fresno ~ USA, <sup>[3]</sup>University of California ~ Davis ~ USA

#### **ROLE FOR MIR-204 IN PULMONARY ARTERIAL HYPERTENSION**

Bonnet Sébastien<sup>[1]</sup>

<sup>[1]</sup>Pulmonary hypertension research group ~ Quebec ~ Canada

#### **DIFFERENTIAL EXPRESSION OF HEPATOCYTE GROWTH FACTOR (HGF) IN PATIENTS WITH SYSTEMIC SCLEROSIS-ASSOCIATED PULMONARY ARTERIAL HYPERTENSION**

Chung Lorinda<sup>[1]</sup>, Cramb Catriona<sup>[1]</sup>, Robinson William<sup>[1]</sup>, Steen Virginia<sup>[2]</sup>, Zamanian Roham<sup>[1]</sup>

<sup>[1]</sup>Stanford University ~ Stanford ~ USA, <sup>[2]</sup>Georgetown University ~ Washington DC ~ USA

#### **INHIBITION OF CCL2/MCP-1 BY THE SPIEGELMER MNOX-E36 AMELIORATES EXPERIMENTAL PULMONARY HYPERTENSION**

Dahal Bhola Kumar<sup>[1]</sup>, Kosanovic Djuro<sup>[1]</sup>, Vroom Christina<sup>[1]</sup>, Biniek Ewa<sup>[1]</sup>, Ghofrani Hossein Ardeschir<sup>[1]</sup>, Weissmann Norbert<sup>[1]</sup>, Seeger Werner<sup>[1]</sup>, Grimminger Friedrich<sup>[1]</sup>, Klussmann Sven<sup>[2]</sup>, Eulberg Dirk<sup>[2]</sup>, Schermuly Ralph Theo<sup>[1]</sup>

<sup>[1]</sup>University of Giessen Lung Centre (UGLC), ~ Giessen ~ Germany, <sup>[2]</sup>NOXXON Pharma AG ~ Berlin ~ Germany

#### **MITOCHONDRIAL DYSFUNCTION MEDIATES SUSCEPTIBILITY OF RATS WITH LOW INTRINSIC AEROBIC CAPACITY TO HYPOXIA-INDUCED PULMONARY HYPERTENSION**

Duggan Nicholas<sup>[1]</sup>, Ciuculan Loredana<sup>[1]</sup>, Burton Victoria J<sup>[1]</sup>, Bonneau Olivier<sup>[1]</sup>, Rowlands David<sup>[1]</sup>, Koch Lauren<sup>[2]</sup>, Britton Steve<sup>[2]</sup>, Jarai Gabor<sup>[1]</sup>, Thomas Matthew<sup>[1]</sup>

<sup>[1]</sup>Respiratory Disease Area, Novartis Institutes for Biomedical Research, Wimblehurst Road, Horsham, West Sussex, UK <sup>[2]</sup>Department of Physical Medicine and Rehabilitation, University of Michigan, Ann Arbor, USA

#### **NMDA-TYPE GLUTAMATE RECEPTORS ARE INVOLVED IN PULMONARY HYPERTENSION, CONTRIBUTING TO INFLAMMATION AND ENDOTHELIAL CELL DYSFUNCTION**

Dumas Sébastien J<sup>[1]</sup>, Perros Frédéric<sup>[2]</sup>, Rücker-Martin Catherine<sup>[2]</sup>, Tu Ly<sup>[2]</sup>, Guignabert Christophe<sup>[2]</sup>, Gouadon Elodie<sup>[2]</sup>, Dorfmueller Peter<sup>[2]</sup>, Humbert Marc<sup>[3]</sup>, Cohen-Kaminsky Sylvia<sup>[2]</sup>

<sup>[1]</sup>Université Paris-Sud, Faculté de Médecine et de Pharmacie, INSERM UMR-S 999: Hypertension Artérielle Pulmonaire: Physiopathologie et Innovation Thérapeutique, LabEx LERMIT, DHU TORINO, Centre Chirurgical Marie Lannelongue ~ Le Plessis-Robinson ~ France, <sup>[2]</sup>Université Paris-Sud, Faculté de Médecine, INSERM UMR-S 999: Hypertension Artérielle Pulmonaire: Physiopathologie et Innovation Thérapeutique, LabEx LERMIT, DHU TORINO, Centre Chirurgical Marie Lannelongue ~ Le Plessis-Robinson ~ France, <sup>[3]</sup>Université Paris-Sud, Faculté de Médecine, INSERM UMR-S 999, LabEx LERMIT, DHU TORINO, Centre Chirurgical Marie Lannelongue, AP-HP, CNR de l'Hypertension Pulmonaire Sévère, Service de Pneumologie, Hôpital Bicêtre ~ Le Kremlin-Bicêtre ~ France

#### **ROLE OF RHO-KINASE PATHWAY IN THE PATHOGENESIS OF PULMONARY ARTERIAL HYPERTENSION**

Fukumoto Yoshihiro<sup>[1]</sup>, Shimokawa Hiroaki<sup>[1]</sup>

<sup>[1]</sup>Tohoku University Graduate School of Medicine ~ Sendai ~ Japan

## Poster Sessions

Wednesday, February 27

### **SODIUM BUTYRATE INHIBITS PDGFBB-INDUCED PROLIFERATION AND MIGRATION IN PULMONARY ARTERY SMOOTH MUSCLE CELLS OF PULMONARY HYPERTENSIVE RATS BY BLOCKING AKT ACTIVATION**

Galletti Margherita<sup>[1]</sup>, Cantoni Silvia<sup>[1]</sup>, Zambelli Filippo<sup>[1]</sup>, Tassinari Riccardo<sup>[1]</sup>, Ponti Francesca<sup>[1]</sup>, Galie Nazzareno<sup>[1]</sup>, Ventura Carlo<sup>[1]</sup>

<sup>[1]</sup>Institute of Cardiology, University of Bologna ~ Italy

### **NOX4-DEPENDENT ACTIVATION OF MTORC2-AKT IS REQUIRED FOR INCREASED PROLIFERATION AND SURVIVAL OF VASCULAR SMOOTH MUSCLE CELLS IN IDIOPATHIC PULMONARY ARTERIAL HYPERTENSION**

Goncharov Dmitry<sup>[1]</sup>, Krymskaya Vera<sup>[1]</sup>, Delisser Horace<sup>[1]</sup>, Tuder Rubin<sup>[2]</sup>, Kawut Steven<sup>[1]</sup>, Goncharova Elena<sup>[1]</sup>

<sup>[1]</sup>University of Pennsylvania ~ Philadelphia, PA ~ USA, <sup>[2]</sup>University of Colorado ~ Denver, CO ~ USA

### **THE ROLE OF THROMBOSPONDIN-1 IN PULMONARY HYPERTENSION**

Kaiser Ralf<sup>[1]</sup>, Frantz Christian<sup>[1]</sup>, Gräber Stephan<sup>[1]</sup>, Bals Robert<sup>[1]</sup>, Wilkens Heinrike<sup>[1]</sup>

<sup>[1]</sup>University of Saarland ~ Homburg/Saar ~ Germany

### **THE PPAR-BETA AGONIST GW0742 HAS DIRECT PROTECTIVE EFFECTS ON RIGHT HEART HYPERTROPHY**

Kojonazarov Baktybek<sup>[1]</sup>, Luitel Himal<sup>[1]</sup>, Sydykov Akylbek<sup>[1]</sup>, Dahal Bhola Kumar<sup>[1]</sup>, Paul-Clark Mark<sup>[2]</sup>, Bonvini Sara<sup>[2]</sup>, Reed Anna<sup>[2]</sup>, Mitchell Jane A.<sup>[2]</sup>, Schermuly Ralph Theo<sup>[1]</sup>

<sup>[1]</sup>Universities of Giessen and Marburg Lung Center, German Center for Lung Research ~ Giessen ~ Germany, <sup>[2]</sup>National Heart and Lung Institute, Imperial College ~ London ~ United Kingdom

### **DIFFERENTIAL EFFECTS OF 17BETA-ESTRADIOL (E2) ON FUNCTIONAL ENDPOINTS AND LUNG AND RV CELLULAR SURVIVAL SIGNALING IN SU5416/HYPOXIA (SUHX)-INDUCED PULMONARY HYPERTENSION**

Lahm Tim<sup>[1]</sup>, Brown Jordan<sup>[1]</sup>, Albrecht Marjorie<sup>[1]</sup>, Fisher Amanda<sup>[1]</sup>, Cucci Anthony<sup>[1]</sup>, Cook Todd<sup>[1]</sup>, Van Demark Mary<sup>[1]</sup>, Johnstone Brian<sup>[1]</sup>, Presson Robert<sup>[1]</sup>, Brown Mary Beth<sup>[1]</sup>, Petrache Irina<sup>[1]</sup>

<sup>[1]</sup>Indiana University ~ Indianapolis ~ USA

### **PROTEOMIC ANALYSIS IDENTIFIES TRANSLATIONALLY CONTROLLED TUMOR PROTEIN (TCTP) AS A POTENTIAL NOVEL MEDIATOR OF OCCLUSIVE VASCULAR REMODELING IN PULMONARY ARTERIAL HYPERTENSION**

Lavoie Jessie<sup>[1]</sup>, Ormiston Mark<sup>[2]</sup>, Perez-Iratxeta Carol<sup>[1]</sup>, Jiang Baohua<sup>[1]</sup>, Courtman David<sup>[1]</sup>, Morrell Nicholas<sup>[2]</sup>, Stewart Duncan<sup>[1]</sup>

<sup>[1]</sup>University of Ottawa, Ottawa Hospital Research Institute ~ Ottawa ~ Canada, <sup>[2]</sup>University of Cambridge School of Clinical Medicine ~ Cambridge ~ United Kingdom

### **ROLE OF MAST CELLS IN CHRONIC PRESSURE OVERLOAD INDUCED RIGHT VENTRICULAR HYPERTROPHY**

Luitel Himal<sup>[1]</sup>, Sydykov Akylbek<sup>[1]</sup>, Kojonazarov Baktybek<sup>[1]</sup>, Dahal Bhola Kumar<sup>[1]</sup>, Kosanovic Djuro<sup>[1]</sup>, Janssen Wiebke<sup>[1]</sup>, Seeger Werner<sup>[1]</sup>, Grimminger Friedrich<sup>[1]</sup>, Weissmann Norbert<sup>[1]</sup>, Ghofrani Hossein Ardeschir<sup>[1]</sup>, Schermuly Ralph Theo<sup>[1]</sup>

<sup>[1]</sup>Justus-Liebig University Giessen ~ Germany

### **RELEVANCE OF CAVEOLIN-1 EXPRESSION IN PULMONARY HYPERTENSION**

Mathew Rajamma<sup>[1]</sup>, Huang Jing<sup>[1]</sup>, Gewitz Michael<sup>[1]</sup>

<sup>[1]</sup>New York Medical College ~ Valhalla, New York ~ USA

### **NEUREGULIN ATTENUATES RIGHT VENTRICULAR AND PULMONARY ENDOTHELIAL DYSFUNCTION IN AN EXPERIMENTAL MODEL OF PULMONARY HYPERTENSION**

Mendes-Ferreira Pedro<sup>[1]</sup>, Maia-Rocha Carolina<sup>[1]</sup>, Adão Rui<sup>[1]</sup>, Cerqueira Rui<sup>[1]</sup>, Mendes Maria<sup>[1]</sup>, Lourenço André<sup>[1]</sup>, De Keulenaer Gilles<sup>[2]</sup>, Leite-Moreira Adelino<sup>[1]</sup>, Brás-Silva Carmen<sup>[1]</sup>

<sup>[1]</sup>Dept. of Physiology and Cardiothoracic Surgery, Faculty of Medicine University of Porto ~ Portugal, <sup>[2]</sup>University of Antwerp ~ Belgium

### **ROLE OF MIR-21 IN RIGHT HEART HYPERTROPHY AND FIBROSIS**

Neumann Julia<sup>[1]</sup>, Janssen Wiebke<sup>[1]</sup>, Kojonazarov Baktybek<sup>[1]</sup>, Döbele Carmen<sup>[2]</sup>, Weissmann Norbert<sup>[1]</sup>, Ghofrani Hossein Ardeschir<sup>[1]</sup>, Grimminger Friedrich<sup>[1]</sup>, Seeger Werner<sup>[1]</sup>, Dimmeler Stefanie<sup>[2]</sup>, Schermuly Ralph Theo<sup>[1]</sup>

<sup>[1]</sup>University of Giessen, Giessen Lung Centre ~ Germany, <sup>[2]</sup>Institute of Cardiovascular Research, Centre of Molecular Medicine, University of Frankfurt ~ Germany

# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Poster Sessions

Wednesday, February 27

### **NATIONAL BIOLOGICAL SAMPLE AND DATA REPOSITORY FOR PULMONARY ARTERIAL HYPERTENSION**

Nichols William<sup>[1]</sup>, Brearton Melinda<sup>[1]</sup>, Lutz Katie<sup>[1]</sup>, Pauciulo Michael<sup>[1]</sup>

<sup>[1]</sup>Cincinnati Children's Hospital Medical Center ~ Cincinnati ~ USA

### **A CROSS-REGULATORY T CELL RESPONSE IN PULMONARY HYPERTENSION**

Park Sung-Hyun<sup>[1]</sup>, Chen Wen-Chi<sup>[1]</sup>, Hoffman Carol<sup>[1]</sup>, Gordon Terry<sup>[1]</sup>, Grunig Gabriele<sup>[1]</sup>

<sup>[1]</sup>New York University ~ Tuxedo ~ United States

### **MODIFICATION OF HEMODYNAMIC AND IMMUNE RESPONSES TO EXPOSURE WITH A WEAK ANTIGEN BY THE EXPRESSION OF A HYPOMORPHIC BMPR2 GENE**

Park Sung-Hyun<sup>[1]</sup>, Chen Wen-Chi<sup>[1]</sup>, Hoffman Carol<sup>[1]</sup>, Marsh Leigh M<sup>[2]</sup>, West James<sup>[3]</sup>, Grunig Gabriele<sup>[1]</sup>

<sup>[1]</sup>New York University ~ Tuxedo ~ United States, <sup>[2]</sup>Ludwig Boltzmann Institute for Lung Vascular Research ~ Graz ~ Austria, <sup>[3]</sup>Vanderbilt University ~ Nashville ~ United States

### **LUNG AND CIRCULATING T AND B CELL REPERTOIRE-BASED IMMUNE SIGNATURES IN PAH**

Perros Frédéric<sup>[1]</sup>, Montani David<sup>[1]</sup>, Girerd Barbara<sup>[1]</sup>, Seferian Andrei<sup>[1]</sup>, Dorfmueller Peter<sup>[1]</sup>, Klingel-Schmitt Isabelle<sup>[1]</sup>, Courtier Anais<sup>[2]</sup>, Filipe-Santos Orchidée<sup>[2]</sup>, Parmentier Gilles<sup>[2]</sup>, Perez Solene<sup>[2]</sup>, Simonneau Gérald<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>, Cohen-Kaminsky Sylvia<sup>[1]</sup>

<sup>[1]</sup>INSERM UMR S-999, Université Paris-Sud, Labex LERMIT; AP-HP, Centre National de Référence de l'Hypertension Pulmonaire Sévère, DHU TORINO; Hôpital Bicêtre; Centre Chirurgical Marie Lannelongue ~ Le Plessis Robinson ~ France, <sup>[2]</sup>ImmunID Technologies, Research and Development, ~ Grenoble ~ France

### **CYTOTOXIC CELLS AND GRANULYSIN IN PULMONARY ARTERIAL HYPERTENSION AND VENOCCLUSIVE DISEASE**

Perros Frédéric<sup>[1]</sup>, Cohen-Kaminsky Sylvia<sup>[1]</sup>, Gambaryan Natalia<sup>[1]</sup>, Girerd Barbara<sup>[1]</sup>, Raymond Nicolas<sup>[1]</sup>, Klingel-Schmitt Isabelle<sup>[1]</sup>, Huertas Alice<sup>[1]</sup>, Mercier Olaf<sup>[1]</sup>, Fadel Elie<sup>[1]</sup>, Simonneau Gérald<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>, Dorfmueller Peter<sup>[1]</sup>, Montani David<sup>[1]</sup>

<sup>[1]</sup>Université Paris-Sud; Labex LERMIT; AP-HP; DHU TORINO; Hôpital Bicêtre; INSERM U999; Centre Chirurgical Marie Lannelongue ~ Le Plessis-Robinson ~ France

### **HARVEST OF PRIMARY PULMONARY ARTERY ENDOTHELIAL CELLS DURING ROUTINE RIGHT HEART CATHETERIZATION**

Pollett Jonathan<sup>[1]</sup>, Murali Srinivas<sup>[1]</sup>, Benza Raymond<sup>[1]</sup>, Pappas Orestis<sup>[1]</sup>, Passineau Michael<sup>[1]</sup>

<sup>[1]</sup>West Penn Allegheny Health System ~ Pittsburgh ~ United States

### **ALTERATIONS IN PERIPHERAL SKELETAL MUSCLE MICROCIRCULATION THROUGH MICRO RNA DOWNREGULATION CONTRIBUTING TO EXERCISE INTOLERANCE IN PULMONARY ARTERIAL HYPERTENSION**

Potus François<sup>[1]</sup>, Malenfant Simon<sup>[1]</sup>, Breuils-Bonnet Sandra<sup>[1]</sup>, Bonnet Sébastien<sup>[1]</sup>, Provencher Steeve<sup>[1]</sup>

<sup>[1]</sup>Université Laval ~ Québec ~ Canada

### **IMMUNE/INFLAMMATORY CELLS – PRESENCE AND CONTRIBUTION TO THE PATHOLOGY OF IDIOPATHIC PULMONARY ARTERIAL HYPERTENSION**

Pullamsetti Soni Savai<sup>[1]</sup>, Savai Rajkumar<sup>[1]</sup>, Voswinckel Robert<sup>[2]</sup>, Fink Ludger<sup>[2]</sup>, Scheed Axel<sup>[3]</sup>, Ritter Christin<sup>[2]</sup>, Dahal Bhola Kumar<sup>[2]</sup>, Ghofrani Hossein Ardeschir<sup>[2]</sup>, Weissmann Norbert<sup>[2]</sup>, Klepetko Walter<sup>[3]</sup>, Seeger Werner<sup>[2]</sup>, Grimminger Friedrich<sup>[2]</sup>, Schermuly Ralph Theo<sup>[2]</sup>

<sup>[1]</sup>Max Planck Institute for Heart and Lung Research ~ Bad Nauheim ~ Germany, <sup>[2]</sup>University of Giessen and Marburg Lung Center ~ Giessen ~ Germany, <sup>[3]</sup>University Hospital Vienna ~ Austria

### **MATRIX METALLOPROTEINASES IN IDIOPATHIC, ANOREXIGEN AND HEREDITARY PULMONARY ARTERIAL HYPERTENSION**

Safdar Zeenat<sup>[1]</sup>

<sup>[1]</sup>Baylor College of Medicine ~ Houston ~ USA

### **DEFINING THE ROLE OF VASOACTIVE INTESTINAL PEPTIDE (VIP) IN THE PULMONARY CIRCULATION**

Said Sami<sup>[1]</sup>

<sup>[1]</sup>SUNY Stony Brook, NY ~ Stony Brook ~ United States



## Poster Sessions

Wednesday, February 27

### **INHIBITION OF CA<sup>2+</sup>/CALMODULIN-DEPENDENT PHOSPHODIESTERASE1A ATTENUATES PRESSURE OVERLOAD-INDUCED RIGHT VENTRICULAR REMODELING AND DYSFUNCTION IN TWO RAT MODELS**

Tian Xia<sup>[1]</sup>, Pullamsetti Soni Savai<sup>[2]</sup>, Kojonazarov Baktybek<sup>[1]</sup>, Sydykov Akylbek<sup>[1]</sup>, Butrous Ghazwan<sup>[3]</sup>, Ghofrani Hossein Ardeschir<sup>[1]</sup>, Weissmann Norbert<sup>[1]</sup>, Grimminger Friedrich<sup>[1]</sup>, Seeger Werner<sup>[1]</sup>, Schlüter Klaus-Dieter<sup>[4]</sup>, Schermuly Ralph Theo<sup>[1]</sup>

<sup>[1]</sup>Universities of Giessen and Marburg Lung Center ~ Giessen ~ Germany, <sup>[2]</sup>Max Planck Institute for Heart and Lung Research ~ Bad Nauheim ~ Germany, <sup>[3]</sup>University of Kent ~ United Kingdom, <sup>[4]</sup>Institute of Physiology, Justus Liebig University ~ Giessen ~ Germany

### **WNT-SIGNALING PATHWAY IN RIGHT VENTRICULAR HYPERTROPHY**

Tretyn Alexandra<sup>[1]</sup>, Schlüter Klaus-Dieter<sup>[2]</sup>, Janssen Wiebke<sup>[3]</sup>, Ghofrani Hossein Ardeschir<sup>[3]</sup>, Grimminger Friedrich<sup>[3]</sup>, Seeger Werner<sup>[3]</sup>, Schermuly Ralph Theo<sup>[3]</sup>, Pullamsetti Soni Savai<sup>[1]</sup>

<sup>[1]</sup>Max Planck Institute for Heart and Lung Research ~ Bad Nauheim ~ Germany, <sup>[2]</sup>Physiology Institute, Justus Liebig University ~ Giessen ~ Germany, <sup>[3]</sup>Universities of Giessen and Marburg Lung Center ~ Giessen ~ Germany

### **A CRITICAL ROLE FOR P130CAS IN THE PROGRESSION OF PULMONARY HYPERTENSION IN HUMANS AND RODENTS**

Tu Ly<sup>[1]</sup>, De Man Frances S<sup>[2]</sup>, Girerd Barbara<sup>[1]</sup>, Huertas Alice<sup>[1]</sup>, Chaumais Marie Camille<sup>[1]</sup>, Lecerf Florence<sup>[1]</sup>, François Charlene<sup>[1]</sup>, Perros Frédéric<sup>[1]</sup>, Dorfmueller Peter<sup>[1]</sup>, Fadel Elie<sup>[1]</sup>, Montani David<sup>[3]</sup>, Eddahibi Saadia<sup>[1]</sup>, Humbert Marc<sup>[3]</sup>, Guignabert Christophe<sup>[1]</sup>

<sup>[1]</sup>INSERM U999, LabEx LERMIT, DHU TORINO, Centre Chirurgical Marie Lannelongue, Université Paris-Sud ~ Paris ~ France, <sup>[2]</sup>VU Univ Medical Center ~ Amsterdam ~ Netherlands, <sup>[3]</sup>CHU Bicêtre Service de Pneumologie et Réanimation Respiratoire, Inserm U999, DHU TORINO, Centre Chirurgical Marie Lannelongue, Université Paris-Sud ~ Paris ~ France

## GENETICS AND GENOMIC

### **SERIAL GENE EXPRESSION ANALYSIS IN PERIPHERAL BLOOD MONONUCLEAR CELLS OF PATIENTS WITH IDIOPATHIC AND HERITABLE PULMONARY ARTERIAL HYPERTENSION**

Cantoni Silvia<sup>[1]</sup>, Tassinari Riccardo<sup>[1]</sup>, Galletti Margherita<sup>[1]</sup>, Guffanti Alessandro<sup>[2]</sup>, Brini Elena<sup>[2]</sup>, Zambelli Filippo<sup>[1]</sup>, Mazzanti Gaia<sup>[1]</sup>, Albini Alessandra<sup>[1]</sup>, Palazzini Massimiliano<sup>[1]</sup>, Manes Alessandra<sup>[1]</sup>, Ventura Carlo<sup>[1]</sup>, Galie Nazzareno<sup>[1]</sup>

<sup>[1]</sup>Institute of Cardiology, University of Bologna ~ Italy, <sup>[2]</sup>Genomnia S.r.l. - Milan ~ Italy

### **GENE EXPRESSION PATTERNS MAY DIFFERENTIATE VASODILATOR-RESPONSIVE PULMONARY ARTERIAL HYPERTENSION FROM NON-RESPONSIVE PULMONARY ARTERIAL HYPERTENSION**

Hemnes Anna<sup>[1]</sup>, Trammell Aaron<sup>[1]</sup>, Newman John<sup>[1]</sup>, Robbins Ivan<sup>[1]</sup>, Penner Niki<sup>[1]</sup>, Fox Kelly<sup>[1]</sup>, Wheeler Lisa<sup>[1]</sup>, Austin Eric D<sup>[1]</sup>, Archer Stephen<sup>[2]</sup>, Rich Stuart<sup>[2]</sup>, West James<sup>[1]</sup>

<sup>[1]</sup>Vanderbilt University ~ Nashville ~ United States, <sup>[2]</sup>University of Chicago ~ United States

### **REGULATORY T LYMPHOCYTES DYSFUNCTION IS NOT LEPTIN-DEPENDANT IN HERITABLE PAH IN CONTRAST TO IDIOPATHIC PAH**

Huertas Alice<sup>[1]</sup>, Tu Ly<sup>[1]</sup>, Girerd Barbara<sup>[1]</sup>, Montani David<sup>[1]</sup>, Cohen-Kaminsky Sylvia<sup>[1]</sup>, Guignabert Christophe<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>

<sup>[1]</sup>INSERM U999 ~ Le Plessis-Robinson ~ France

### **A GENOME WIDE DNA MICROSATELLITE ASSOCIATION STUDY AND ASSOCIATION OF TIMP3 GENE POLYMORPHISM IN JAPANESE PATIENTS WITH HIGH ALTITUDE PULMONARY EDEMA**

Kobayashi Nobumitsu<sup>[1]</sup>, Hanaoka Masayuki<sup>[1]</sup>, Ota Masao<sup>[1]</sup>, Kinota Fumiya<sup>[1]</sup>, Droma Yunden<sup>[1]</sup>, Ito Michiko<sup>[1]</sup>, Yasuo Masanori<sup>[1]</sup>, Katsuyama Yoshihiko<sup>[2]</sup>, Asamura Hideki<sup>[1]</sup>, Kubo Keishi<sup>[1]</sup>

<sup>[1]</sup>Shinshu University School of Medicine ~ Matsumoto ~ Japan, <sup>[2]</sup>Shinshu University Hospital ~ Matsumoto ~ Japan

## Poster Sessions

Wednesday, February 27

### **TGFβ RECEPTOR GENE VARIANTS IN SYSTEMIC SCLEROSIS RELATED PULMONARY ARTERIAL HYPERTENSION: RESULTS FROM A MULTICENTER EUSTAR STUDY OF EUROPEAN CAUCASIAN PATIENTS**

Koumakis Eugénie<sup>[1]</sup>, Wipff Julien<sup>[2]</sup>, Matsucci-Cerinic Marco<sup>[4]</sup>, Riemekasten Gabriella<sup>[3]</sup>, Airo Paolo<sup>[5]</sup>, Cusi Daniele<sup>[6]</sup>, Wichmann H Erich<sup>[7]</sup>, Müller-Ladner Ulf<sup>[10]</sup>, Vlachoyiannopoulos Panayotis<sup>[8]</sup>, Chiocchia Gilles<sup>[9]</sup>, Allanore Yannick<sup>[1]</sup>

<sup>[1]</sup>Rheumatology A Department, Cochin Hospital, INSERM U1016, Institut Cochin, Sorbonne Paris Cité ~ Paris ~ France, <sup>[2]</sup>Rheumatology A department, Cochin Hospital ~ Paris ~ France, <sup>[3]</sup>Department of Rheumatology and Clinical Immunology, Charité University Hospital ~ Berlin ~ Germany, <sup>[4]</sup>Department of Biomedicine & Division of Rheumatology AOUC, Department of Rheumatology AVC, Department of Medicine & Denoth centre, University of Florence ~ Florence ~ Italy, <sup>[5]</sup>Rheumatology and Clinical Immunology, Spedali Civili ~ Brescia ~ Italy, <sup>[6]</sup>Department of Medicine, Surgery and Dentistry San Paolo & Genomics and Bioinformatics Platform, Fondazione Filarete, University of Milano ~ Milan ~ Italy, <sup>[7]</sup>Institute of Epidemiology I, Helmholtz Zentrum München - German Research Center for Environmental Health, Neuherberg, Germany; Institute of Medical Informatics, Biometry and Epidemiology, Chair of Epidemiology, Ludwig-Maximilians-Universität, Munich, Germ, <sup>[8]</sup>Department of Pathophysiology, Medical School, University of Athens ~ Athens ~ Greece, <sup>[9]</sup>Paris Descartes University, INSERM U1016, Institut Cochin, Sorbonne Paris Cité ~ Paris ~ France, <sup>[10]</sup>Department of Rheumatology and Clinical Immunology Kerckhoff-Klinik, Bad Nauheim ~ Bad Nauheim ~ Germany

### **15-YEARS CLINICAL FOLLOW UP AND NEW GENETIC FINDINGS IN A LARGE FAMILY WITH HEREDITARY PULMONARY ARTERIAL HYPERTENSION**

Pfarr Nicole<sup>[1]</sup>, Fischer Christine<sup>[1]</sup>, Hinderhofer Katrin<sup>[1]</sup>, Nagel Christian<sup>[2]</sup>, Ehlfen Nicola<sup>[2]</sup>, Grünig Ekkehard<sup>[2]</sup>

<sup>[1]</sup>Institute of Human Genetics, University of Heidelberg ~ Germany, <sup>[2]</sup>Centre for Pulmonary Hypertension, Thorax clinic ~ Heidelberg ~ Germany

### **PATHWAY ANALYSIS OF THE GENE EXPRESSION IN LUNGS OF PULMONARY HYPERTENSION USING WEB-OPENED MICROARRAY DATA**

Sakai Satoshi<sup>[1]</sup>, Maruyama Hidekazu<sup>[1]</sup>, Kimura Taizo<sup>[1]</sup>, Miyauchi Takashi<sup>[1]</sup>, Homma Satoshi<sup>[1]</sup>, Aonuma Kazutaka<sup>[1]</sup>

<sup>[1]</sup>University of Tsukuba ~ Japan

### **GENOME-WIDE ASSOCIATION ANALYSIS IDENTIFIES A SUSCEPTIBILITY LOCUS FOR PULMONARY ARTERIAL HYPERTENSION**

Soubrier Florent<sup>[1]</sup>, Germain Marine<sup>[2]</sup>, Eyries Mélanie<sup>[1]</sup>, Montani David<sup>[3]</sup>, Poirier Odette<sup>[4]</sup>, Girerd Barbara<sup>[3]</sup>, Dorfmueller Peter<sup>[5]</sup>, Coulet Florence<sup>[6]</sup>, Nadaud Sophie<sup>[4]</sup>, Maugeen Svetlana<sup>[4]</sup>, Guignabert Christophe<sup>[7]</sup>, Carpentier Wassila<sup>[8]</sup>, Vonk Noordegraaf Anton<sup>[9]</sup>, Levy Marilyne<sup>[10]</sup>, Chaouat Ari<sup>[11]</sup>, Lambert Jean-Charles<sup>[12]</sup>, Bertrand Marion<sup>[13]</sup>, Dupuy Anne-Marie<sup>[14]</sup>, Letenneur Luc<sup>[15]</sup>, Lathrop Mark<sup>[16]</sup>, Amouyel Philippe<sup>[12]</sup>, De Ravel Thomy JL<sup>[17]</sup>, Delcroix Marion<sup>[18]</sup>, Austin Eric D<sup>[19]</sup>, Robbins Ivan<sup>[20]</sup>, Hemnes Anna<sup>[20]</sup>, Loyd James E<sup>[20]</sup>, Rosenzweig Erika<sup>[21]</sup>, Barst Robyn J<sup>[21]</sup>, Chung Wendy<sup>[21]</sup>, Simonneau Gérald<sup>[3]</sup>, Tréguouët David Alexandre<sup>[2]</sup>, Humbert Marc<sup>[3]</sup>

<sup>[1]</sup>Genetics Department, Pitié-Salpêtrière Hospital, Assistance Publique-Hôpitaux de Paris; INSERM UMR\_S956, University Pierre&Marie Curie; ICAN Institute for Cardiometabolism and Nutrition ~ Paris ~ France, <sup>[2]</sup>INSERM UMR\_S937, University Pierre&Marie Curie; ICAN Institute for Cardiometabolism and Nutrition ~ Paris ~ France, <sup>[3]</sup>Service de Pneumologie et Réanimation Respiratoire, Centre National de Référence de l'Hypertension Pulmonaire Sévère, Hôpital Bicêtre ~ Le Kremlin-Bicêtre ~ France, <sup>[4]</sup>INSERM UMR\_S956, University Pierre&Marie Curie; ICAN Institute for Cardiometabolism and Nutrition ~ Paris ~ France, <sup>[5]</sup>Service d'Anatomie et de Cytologie Pathologiques, Hôpital Marie Lannelongue ~ Paris ~ France, <sup>[6]</sup>Genetics Department, Pitié Salpêtrière Hospital ~ Paris ~ France, <sup>[7]</sup>INSERM UMR\_S999, University Paris-Sud; Labex LERMIT ~ Le Plessis-Robinson ~ France, <sup>[8]</sup>Post-Genomic Platform P3S, University Pierre&Marie Curie ~ Paris ~ France, <sup>[9]</sup>Department of Pulmonary Diseases, VU University Medical Center ~ Amsterdam ~ Netherlands, <sup>[10]</sup>Cardiac Surgery Department, Hôpital Necker-Enfants malades, University Paris-Descartes ~ Paris ~ France, <sup>[11]</sup>Respiratory Disease Department, Hôpital de Brabois ~ Vandoeuvre-les-Nancy ~ France, <sup>[12]</sup>INSERM UMR\_S744, Institut Pasteur de Lille, University Lille-Nord de France ~ Lille ~ France, <sup>[13]</sup>INSERM UMR\_S 708, University Pierre&Marie Curie ~ Paris ~ France, <sup>[14]</sup>INSERM UMR\_S888, Univeristé de Montpellier ~ France, <sup>[15]</sup>INSERM U897, Université de Bordeaux, ISPED ~ Bordeaux ~ France, <sup>[16]</sup>Commissariat à l'Energie Atomique, Institut de Génétique, Centre National de Génotypage ~ Evry ~ France, <sup>[17]</sup>Centre for Human Genetics, University Hospitals of Leuven ~ Belgium, <sup>[18]</sup>Department of Pneumology, University Hospital of Leuven ~ Belgium, <sup>[19]</sup>Division of Allergy, Immunology and Pulmonary Medicine, Vanderbilt University Medical Center ~ Nashville ~ United States, <sup>[20]</sup>Division of Allergy, Pulmonary and Critical Care. Department of Medicine, Vanderbilt University School of Medicine ~ Nashville ~ United States, <sup>[21]</sup>Department of Pediatrics, Columbia University Medical Center ~ New York ~ United States

## Poster Sessions

### DEFINITIONS AND CLASSIFICATIONS AND PARTICULARITIES OF DIFFERENT PAH SUBGROUPS

#### **METHAMPHETAMINE USE IS COMMON AMONG PATIENTS WITH OTHERWISE IDIOPATHIC PULMONARY HYPERTENSION**

Barnett Christopher<sup>[1]</sup>, Wiley Brandon<sup>[2]</sup>, Kobashigawa Erin<sup>[1]</sup>, Oveson Lynn<sup>[1]</sup>, Tarango Nimaljeet<sup>[1]</sup>, De Marco Teresa<sup>[1]</sup>, McGlothlin Dana<sup>[1]</sup>

<sup>[1]</sup>University of California San Francisco ~ United States, <sup>[2]</sup>Mount Sinai Hospital ~ New York ~ United States

#### **THE USE OF SEROTONINERGIC ANTIDEPRESSANTS AND THE RISK OF PULMONARY ARTERIAL HYPERTENSION**

Fox Benjamin<sup>[1]</sup>, Azoulay Laurent<sup>[1]</sup>, Dell'Aniello Sophie<sup>[1]</sup>, Lapi Francesco<sup>[1]</sup>, Langleben David<sup>[1]</sup>, Suissa Samy<sup>[1]</sup>

<sup>[1]</sup>McGill University ~ Montreal ~ Canada

#### **NOVEL INSIGHTS INTO THE MECHANISMS BEHIND INTERFERON INDUCED PULMONARY HYPERTENSION; RELEVANCE OF ET-1 AND IP10**

George Peter M<sup>[1]</sup>, Dorfmueller Peter<sup>[1]</sup>, Kirkby Nicholas S<sup>[1]</sup>, Galloway-Phillipps Neil<sup>[1]</sup>, Veselkov Kirill A<sup>[1]</sup>, Southwood Mark<sup>[1]</sup>, Wort Stephen J<sup>[1]</sup>, Alazawi William<sup>[1]</sup>, Foster Graham R<sup>[1]</sup>, Holmes Alan M<sup>[1]</sup>, Schreiber Benjamin E<sup>[1]</sup>, Coghlan John Gerard<sup>[1]</sup>, Morrell Nicholas W<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>, Mitchell Jane A<sup>[1]</sup>

<sup>[1]</sup>Cardiothoracic Pharmacology, National Heart and Lung Institute, Imperial College London ~ UK

#### **A NEW DEFINITION OF PULMONARY HYPERTENSION AT EXERCISE**

Hervé Philippe<sup>[1]</sup>, Savale Laurent<sup>[1]</sup>, Artaud-Macari Elise<sup>[1]</sup>, Günther Sven<sup>[1]</sup>, Montani David<sup>[1]</sup>, Chemla Denis<sup>[1]</sup>, Sitbon Olivier<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>, Simonneau Gérard<sup>[1]</sup>

<sup>[1]</sup>INSERM U 999, Pulmonary Vascular Disease National Reference Center, Pneumology Department, Bicêtre Hospital, University of Paris South ~ Le Kremlin Bicêtre ~ France

#### **ELECTROCARDIOGRAM COULD HELP DISTINGUISH PULMONARY ARTERIAL HYPERTENSION FROM PULMONARY HYPERTENSION DUE TO DIASTOLIC HEART FAILURE**

Luknár Milan<sup>[1]</sup>, Lesný Peter<sup>[1]</sup>, Varga Ivan<sup>[1]</sup>, Solík Peter<sup>[1]</sup>, Goncalvesová Eva<sup>[1]</sup>

<sup>[1]</sup>National Cardiovascular Institute ~ Bratislava ~ Slovakia

#### **POST CAPILLARY PULMONARY HYPERTENSION: NONINVASIVE DIAGNOSIS BY THORACIC ECG-SYNCHRONIZED CT**

Sauvage Nancy<sup>[1]</sup>, Reymond Emilie<sup>[1]</sup>, Prieur Marion<sup>[1]</sup>, Jankowski Adrien<sup>[1]</sup>, Pison Christophe<sup>[1]</sup>, Bouvaist Hélène<sup>[1]</sup>, Ferretti Gilbert<sup>[1]</sup>

<sup>[1]</sup>Expert Centre for PH, Université J. Fourier ~ Grenoble ~ France

#### **PULMONARY ARTERIAL HYPERTENSION IN PATIENTS TREATED WITH INTERFERON**

Savale Laurent<sup>[1]</sup>, Günther Sven<sup>[1]</sup>, Chaumais Marie Camille<sup>[2]</sup>, Sattler Caroline<sup>[1]</sup>, Artaud-Macari Elise<sup>[1]</sup>, Perrin Swanny<sup>[2]</sup>, Jais Xavier<sup>[1]</sup>, Montani David<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>, Simonneau Gérard<sup>[1]</sup>, Sitbon Olivier<sup>[1]</sup>

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## Poster Sessions

Wednesday, February 27

### PATHOPHYSIOLOGY (FOCUSING ON EXERCISE AND RV)

#### **EVALUATION OF PULMONARY VASCULAR RESISTANCE DURING EXERCISE IN PATIENTS WITH PULMONARY HYPERTENSION**

Almeida Ana<sup>[1]</sup>, Lopes Liliana<sup>[1]</sup>, Loureiro Maria<sup>[1]</sup>, Cotrim Carlos<sup>[1]</sup>, Marques Jorge<sup>[1]</sup>, Repolho Debora<sup>[1]</sup>, Pereira Hélder<sup>[1]</sup>

<sup>[1]</sup>Hospital Garcia de Orta ~ Almada ~ Portugal

#### **ECHOCARDIOGRAPHIC ASSESSMENT OF RIGHT VENTRICULAR CONTRACTILE RESERVE IN PATIENTS WITH PULMONARY HYPERTENSION**

Almeida Ana<sup>[1]</sup>, Lopes Liliana<sup>[1]</sup>, Loureiro Maria<sup>[1]</sup>, Cotrim Carlos<sup>[1]</sup>, Cruz Inês<sup>[1]</sup>, Stuart Bruno<sup>[1]</sup>, Caldeira Daniel<sup>[1]</sup>, Pereira Hélder<sup>[1]</sup>

<sup>[1]</sup>Hospital Garcia de Orta ~ Almada ~ Portugal

#### **AN IMPROVED FORMULA FOR ESTIMATING RIGHT VENTRICULAR STROKE WORK IN PULMONARY HYPERTENSION**

Chemla Denis<sup>[1]</sup>, Castelain Vincent<sup>[1]</sup>, Kaixian Zhu<sup>[1]</sup>, Papelier Yves<sup>[1]</sup>, Creuze Nicolas<sup>[1]</sup>, Hoette Susana<sup>[1]</sup>, Parent Florence<sup>[1]</sup>, Simonneau Gérald<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>, Hervé Philippe<sup>[1]</sup>

<sup>[1]</sup>Université Paris Sud-Faculté de Médecine ~ Kremlin Bicetre ~ France

#### **THE COMPONENTS OF PULMONARY ARTERY PRESSURE ARE MATHEMATICALLY RELATED THROUGH A GEOMETRIC PROGRESSION IN PULMONARY HYPERTENSION**

Chemla Denis<sup>[1]</sup>, Castelain Vincent<sup>[1]</sup>, Simonneau Gérald<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>, Hervé Philippe<sup>[1]</sup>

<sup>[1]</sup>Université Paris Sud, Faculté de Médecine ~ Kremlin Bicetre ~ France

#### **PROGNOSTIC VALUE OF RIGHT VENTRICULAR EJECTION FRACTION USING CONVENTIONAL PLANAR EQUILIBRIUM RADIONUCLIDE ANGIOGRAPHY IN PULMONARY ARTERIAL HYPERTENSION**

Cottin Vincent<sup>[1]</sup>, Courand Pierre-Yves<sup>[1]</sup>, Khouatra Chahéra<sup>[1]</sup>, Pina-Jomir Géraldine<sup>[1]</sup>, Scheiber Christian<sup>[1]</sup>, Traclet Julie<sup>[1]</sup>, Dib Alfred<sup>[1]</sup>, Blanchet Anne-Sophie<sup>[1]</sup>, Derumeaux Geneviève<sup>[1]</sup>, Glerant Jean-Charles<sup>[1]</sup>, Turquier Ségolène<sup>[1]</sup>, Humbert Marc<sup>[2]</sup>, Simonneau Gérald<sup>[2]</sup>, Cordier Jean-François<sup>[1]</sup>

<sup>[1]</sup>University of Lyon ~ France, <sup>[2]</sup>University of Paris ~ France

#### **ROLE OF NOTCH SIGNALING IN PULMONARY HYPERTENSION**

Dabral Swati<sup>[1]</sup>, Pullamsetti Soni Savai<sup>[1]</sup>, Lang Michaela<sup>[2]</sup>, Ghofrani Hossein Ardeschir<sup>[2]</sup>, Weissmann Norbert<sup>[2]</sup>, Grimminger Friedrich<sup>[2]</sup>, Seeger Werner<sup>[2]</sup>, Schermuly Ralph Theo<sup>[2]</sup>

<sup>[1]</sup>Max-Planck-Institute for Heart and Lung Research ~ Bad Nauheim ~ Germany, <sup>[2]</sup>University of Giessen and Marburg Lung Center ~ Giessen ~ Germany

#### **PROGNOSTIC UTILITY OF RIGHT VENTRICULAR SYSTOLIC STRAIN MEASUREMENT BY SPECKLE-TRACKING ECHOCARDIOGRAPHY FOR THE EVALUATION OF PULMONARY HYPERTENSION**

Fine Nowell<sup>[1]</sup>, Chen Libo<sup>[1]</sup>, Frantz Robert<sup>[1]</sup>, Pellikka Patricia<sup>[1]</sup>, Kane Garvan<sup>[1]</sup>

<sup>[1]</sup>Mayo Clinic ~ Rochester ~ USA

#### **ASSESSMENT AND PROGNOSTIC RELEVANCE OF RIGHT VENTRICULAR CONTRACTILE RESERVE IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION**

Grünig Ekkehard<sup>[1]</sup>, Tiede Henning<sup>[2]</sup>, Enyimayew Esi Otuwa<sup>[1]</sup>, Ehlken Nicola<sup>[1]</sup>, Seyfarth Hans-Jürgen<sup>[3]</sup>, Bossone Eduardo<sup>[4]</sup>, D'Andrea Antonello<sup>[5]</sup>, Naeije Robert<sup>[6]</sup>, Olschewski Horst<sup>[7]</sup>, Nagel Christian<sup>[1]</sup>, Halank Michael<sup>[8]</sup>, Fischer Christine<sup>[1]</sup>

<sup>[1]</sup>University of Heidelberg ~ Germany, <sup>[2]</sup>University of Giessen ~ Germany, <sup>[3]</sup>University of Leipzig ~ Germany, <sup>[4]</sup>University of Salerno ~ Italy, <sup>[5]</sup>Second University of Naples ~ Italy, <sup>[6]</sup>University of Brussels ~ Belgium, <sup>[7]</sup>University of Graz ~ Austria, <sup>[8]</sup>University of Dresden ~ Germany

## Poster Sessions

### **EFFECT OF EXERCISE ON PULMONARY HEMODYNAMICS IN BREATHLESS PATIENTS WITH OR WITHOUT PULMONARY HYPERTENSION**

Imran Muhammad<sup>[1]</sup>, Keogh Anne M<sup>[1]</sup>, Kotlyar Eugene<sup>[1]</sup>, Corrigan Carolyn<sup>[1]</sup>, Prichard Rose<sup>[1]</sup>, Hayward Christopher<sup>[1]</sup>, Macdonald Peter<sup>[1]</sup>

<sup>[1]</sup>St. Vincent's Hospital ~ Sydney ~ Australia

### **AIRWAY MUCOSAL BLOOD FLOW IN PULMONARY ARTERIAL HYPERTENSION**

Karlócai Kristóf<sup>[1]</sup>, Csósza Györgyi<sup>[1]</sup>, Kis Adrián<sup>[1]</sup>, Tóth Laura Andrea<sup>[1]</sup>, Losonczy Györgyi<sup>[1]</sup>, Mendes Eliana S<sup>[2]</sup>, Wanner Adam<sup>[2]</sup>, Horváth Gábor<sup>[1]</sup>

<sup>[1]</sup>Semmelweis University ~ Budapest ~ Hungary, <sup>[2]</sup>Division of Pulmonary, Critical Care and Sleep Medicine, University of Miami ~ United States

### **ECHOCARDIOGRAPHY IN EARLY DETECTION OF RIGHT HEART DYSFUNCTION IN DIFFERENT LOADING CONDITIONS**

Kovacevic-Preradovic Tamara<sup>[5]</sup>, Vujisic-Tesic Bosiljka<sup>[1]</sup>, Lovric Milica<sup>[2]</sup>, Preradovic Milan<sup>[3]</sup>, Jakovljevic Biljana<sup>[4]</sup>, Trninic Dijana<sup>[5]</sup>, Kozic Marijo<sup>[5]</sup>, Janjic Zoran<sup>[5]</sup>, Srdic Svetozar<sup>[5]</sup>

<sup>[1]</sup>University of Belgrade ~ Serbia, <sup>[2]</sup>General Hospital Bijeljina ~ Bosnia and Herzegovina, <sup>[3]</sup>Clinic Medicolaser ~ Banja Luka ~ Bosnia and Herzegovina, <sup>[4]</sup>International Dialysis Center ~ Banja Luka ~ Bosnia and Herzegovina, <sup>[5]</sup>Clinic of cardiovascular diseases, Clinical Center ~ Banja Luka ~ Bosnia and Herzegovina

### **TRANSVERSE DISPLACEMENT: A NOVEL ECHOCARDIOGRAPHIC PARAMETER DESCRIBING RIGHT VENTRICULAR FUNCTION IN PULMONARY HYPERTENSION**

Kovács Attila<sup>[1]</sup>, Peluso Diletta<sup>[2]</sup>, Muraru Denisa<sup>[2]</sup>, Perazzolo Marra Martina<sup>[2]</sup>, Badano Luigi P<sup>[2]</sup>, Dal Bianco Lucia<sup>[2]</sup>, Segafredo Beatrice<sup>[2]</sup>, Iliceto Sabino<sup>[2]</sup>

<sup>[1]</sup>Heart Center, Semmelweis University ~ Budapest ~ Hungary, <sup>[2]</sup>Department of Cardiac, Thoracic and Vascular Sciences, University of Padua ~ Italy

### **CHARACTERIZATION OF A NOVEL PARAMETER OF RIGHT VENTRICULAR FUNCTION BY SPECKLE TRACKING ECHOCARDIOGRAPHY IN HEALTHY SUBJECTS**

Kovács Attila<sup>[2]</sup>, Peluso Diletta<sup>[1]</sup>, Muraru Denisa<sup>[1]</sup>, Ermacora Davide<sup>[1]</sup>, Badano Luigi P<sup>[1]</sup>, Dal Bianco Lucia<sup>[1]</sup>, Zoppellaro Giacomo<sup>[1]</sup>, Iliceto Sabino<sup>[1]</sup>

<sup>[1]</sup>Department of Cardiac, Thoracic and Vascular Sciences, University of Padua ~ Italy, <sup>[2]</sup>Heart Center, Semmelweis University ~ Budapest ~ Hungary

### **INSPIRATORY MUSCLE DYSFUNCTION DURING EXERCISE IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION**

Laveneziana Pierantonio<sup>[3]</sup>, Garcia Gilles<sup>[1]</sup>, Joureau Barbara<sup>[2]</sup>, Jaïs Xavier<sup>[4]</sup>, Montani David<sup>[4]</sup>, Sitbon Olivier<sup>[4]</sup>, Simonneau Gérald<sup>[4]</sup>, Similowski Thomas<sup>[5]</sup>, Humbert Marc<sup>[4]</sup>

<sup>[1]</sup>Centre de Référence de l'Hypertension Pulmonaire Sévère, Service d'Explorations Fonctionnelles Respiratoires, INSERM U999 "HTAP : Physiopathologie et innovation thérapeutique" Hôpital Universitaire de Bicêtre (AP-HP), Université Paris-Sud 11 ~ Le Kremlin-, <sup>[2]</sup>Univ Paris 06, Equipe de Recherche ER 10 UPMC, Laboratoire de Physio-Pathologie Respiratoire, Faculté de Médecine Pierre et Marie Curie (site Pitié-Salpêtrière) ~ Paris ~ France, <sup>[3]</sup>Centre de Référence de l'Hypertension Pulmonaire Sévère, Service d'Explorations Fonctionnelles Respiratoires, INSERM U999 "HTAP : Physiopathologie et innovation thérapeutique" Hôpital Universitaire de Bicêtre (AP-HP), Université Paris-Sud 11, Le Kremlin-B, <sup>[4]</sup>Centre de Référence de l'Hypertension Pulmonaire Sévère, Service de Pneumologie et Soins Intensifs Thoraciques, INSERM U999 "HTAP : Physiopathologie et innovation thérapeutique" Hôpital Universitaire de Bicêtre (AP-HP), Université Paris-Sud 11, Le Kremlin, <sup>[5]</sup>Univ Paris 06, Equipe de Recherche ER 10 UPMC, Laboratoire de Physio-Pathologie Respiratoire, Faculté de Médecine Pierre et Marie Curie (site Pitié-Salpêtrière) and Assistance Publique-Hôpitaux de Paris, Groupe Hospitalier Pitié-Salpêtrière

### **CIRCADAPT: A COMPREHENSIVE IN SILICO SIMULATION TOOL FOR RESEARCH AND EDUCATION IN PULMONARY HYPERTENSION-RELATED CARDIAC PATHOPHYSIOLOGY**

Lumens Joost<sup>[1]</sup>, Reesink Koen D<sup>[1]</sup>, Koeken Yvette<sup>[1]</sup>, Brunner-La Rocca Hans-Peter<sup>[1]</sup>, Van Paassen Pieter<sup>[1]</sup>, Arts Theo<sup>[1]</sup>, Delhaas Tammo<sup>[1]</sup>

<sup>[1]</sup>Maastricht University Medical Center, Cardiovascular Research Institute Maastricht (CARIM) ~ Maastricht ~ Netherlands

### **PREDICTORS OF EXERCISE ABNORMALITIES IN PATIENTS REFERRED FOR PULMONARY HYPERTENSION EVALUATION: COMPARISON OF EXERCISE ECHOCARDIOGRAPHY WITH RIGHT HEART CATHETERIZATION**

Misra Deepika<sup>[1]</sup>, Gujja Karthik<sup>[1]</sup>, Sulica Roxana<sup>[1]</sup>

<sup>[1]</sup>Beth Israel Medical Center ~ New York ~ United States

## Poster Sessions

Wednesday, February 27

### **BREATHING EFFICIENCY MEASURED DURING SIX MINUTE WALK TEST PREDICTS DISEASE SEVERITY IN PULMONARY ARTERIAL HYPERTENSION**

Morris Norman<sup>[1]</sup>, Seale Helen<sup>[2]</sup>, Harris Julie<sup>[2]</sup>, Hall Kathleen<sup>[2]</sup>, Kermeen Fiona<sup>[2]</sup>

<sup>[1]</sup>Griffith University ~ Gold Coast ~ Australia, <sup>[2]</sup>Queensland Lung Transplant Service, The Prince Charles Hospital ~ Brisbane ~ Australia

### **THE ADDITION OF CARDIOPULMONARY MEASUREMENTS TO A SIX MINUTE WALK TEST DIFFERENTIATES PULMONARY ARTERIAL HYPERTENSION PATIENTS ON MONO VS DUAL VS TRIPLE THERAPY**

Morris Norman<sup>[1]</sup>, Seale Helen<sup>[2]</sup>, Harris Julie<sup>[2]</sup>, Hall Kathleen<sup>[2]</sup>, Kermeen Fiona<sup>[2]</sup>

<sup>[1]</sup>Griffith University ~ Gold Coast ~ Australia, <sup>[2]</sup>Queensland Lung Transplant Service, The Prince Charles Hospital ~ Brisbane ~ Australia

### **REFERENCE VALUES FOR RIGHT VENTRICULAR GEOMETRY AND FUNCTION BY THREE-DIMENSIONAL ECHOCARDIOGRAPHY: A MULTI-CENTER STUDY OF 533 HEALTHY VOLUNTEERS**

Muraru Denisa<sup>[1]</sup>, Gripari Paola<sup>[2]</sup>, Esposito Roberta<sup>[3]</sup>, Ermacora Davide<sup>[1]</sup>, Tamborini Gloria<sup>[2]</sup>, Galderisi Maurizio<sup>[3]</sup>, Santoro Ciro<sup>[3]</sup>, Maffessanti Francesco<sup>[2]</sup>, Pepi Mauro<sup>[2]</sup>, Badano Luigi P<sup>[1]</sup>

<sup>[1]</sup>University of Padua ~ Italy, <sup>[2]</sup>Cardiology Center Monzino (IRCCS) ~ Milan ~ Italy, <sup>[3]</sup>Dpt of Clinical Medicine, University of Naples Federico II ~ Naples ~ Italy

### **SUBMAXIMAL EXERCISE TESTING FOR PULMONARY ARTERIAL HYPERTENSION: UTILIZATION OF NEW TECHNOLOGY**

Neal Jennifer<sup>[1]</sup>, Lee Augustine<sup>[1]</sup>, Burger Charles<sup>[1]</sup>

<sup>[1]</sup>Mayo Clinic ~ Jacksonville, Florida ~ USA

### **IMPAIRMENT OF RIGHT ATRIAL MECHANICS AND FUNCTION IN PULMONARY HYPERTENSION PATIENTS ASSESSED BY 2D-SPECKLE TRACKING AND THREE-DIMENSIONAL ECHOCARDIOGRAPHY**

Peluso Diletta<sup>[1]</sup>, Kovács Attila<sup>[2]</sup>, Dal Bianco Lucia<sup>[1]</sup>, Muraru Denisa<sup>[1]</sup>, Perazzolo Marra Martina<sup>[1]</sup>, Sarais Cristiano<sup>[1]</sup>, Badano Luigi P<sup>[1]</sup>, Iliceto Sabino<sup>[1]</sup>

<sup>[1]</sup>Department of Cardiac, Thoracic and Vascular Sciences. University of Padua ~ Italy, <sup>[2]</sup>Heart Center, Semmelweis University ~ Budapest ~ Hungary

### **CHARACTERIZATION OF RIGHT ATRIAL MECHANICS BY 2D-SPECKLE TRACKING ECHOCARDIOGRAPHY IN HEALTHY SUBJECTS**

Peluso Diletta<sup>[1]</sup>, Kovács Attila<sup>[2]</sup>, Dal Bianco Lucia<sup>[1]</sup>, Muraru Denisa<sup>[1]</sup>, Cucchini Umberto<sup>[1]</sup>, Badano Luigi P<sup>[1]</sup>, Iliceto Sabino<sup>[1]</sup>

<sup>[1]</sup>Department of Cardiac, Thoracic and Vascular Sciences. University of Padua ~ Italy, <sup>[2]</sup>Heart Center, Semmelweis University ~ Budapest ~ Hungary

### **RA VOLUMES AND PHASIC FUNCTION BY 3-DIMENSIONAL ECHOCARDIOGRAPHY IN HEALTHY SUBJECTS**

Peluso Diletta<sup>[2]</sup>, Kovács Attila<sup>[1]</sup>, Dal Bianco Lucia<sup>[2]</sup>, Muraru Denisa<sup>[2]</sup>, Padayattil Seena<sup>[2]</sup>, Badano Luigi P<sup>[2]</sup>, Iliceto Sabino<sup>[2]</sup>

<sup>[1]</sup>Heart Center, Semmelweis University ~ Budapest ~ Hungary, <sup>[2]</sup>Department of Cardiac, Thoracic and Vascular Sciences. University of Padua ~ Italy

### **RIGHT VENTRICULAR FUNCTION ANALYSIS IMPROVE PERFORMANCE OF ECHOCARDIOGRAPHY TO SCREEN PULMONARY HYPERTENSION**

Potton Leila<sup>[1]</sup>, Bouvaist Hélène<sup>[1]</sup>, Saunier Carole<sup>[1]</sup>, Saint Raymond Christel<sup>[1]</sup>, Jondot Marie<sup>[1]</sup>, Vanzetto Gerald<sup>[1]</sup>, Pison Christophe<sup>[1]</sup>

<sup>[1]</sup>University of Grenoble ~ France

### **RIGHT VENTRICULAR DIASTOLIC STIFFNESS IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION**

Rain Silvia<sup>[1]</sup>, Van Der Velden Jolanda<sup>[1]</sup>, Ottenheijm Coen<sup>[1]</sup>, Handoko M. Louis<sup>[1]</sup>, Granzier Henk<sup>[2]</sup>, Westerhof Nico<sup>[1]</sup>, Dos Remedios Cris<sup>[3]</sup>, Humbert Marc<sup>[4]</sup>, Dorfmueller Peter<sup>[4]</sup>, Guignabert Christophe<sup>[4]</sup>, Vonk Noordegraaf Anton<sup>[1]</sup>, De Man Frances S<sup>[1]</sup>

<sup>[1]</sup>VU University Medical Center ~ Amsterdam ~ Netherlands, <sup>[2]</sup>University of Arizona ~ Tucson ~ USA, <sup>[3]</sup>University of Sydney ~ Australia, <sup>[4]</sup>Inserm U999 ~ Le Plessis Robinson ~ France

### **ROCKING RIGHT VENTRICLE**

Seaton David<sup>[2]</sup>, Shearer Belinda<sup>[2]</sup>, Aldridge Kam<sup>[2]</sup>, Kermeen Fiona<sup>[1]</sup>

<sup>[1]</sup>Queensland Lung Transplant Service, The Prince Charles Hospital ~ Brisbane ~ Australia, <sup>[2]</sup>Queensland Nuclear Imaging, The Prince Charles Campus ~ Brisbane ~ Australia

## Poster Sessions

Wednesday, February 27

### **AN ECHOCARDIOGRAPHIC SNAPSHOT OF RIGHT VENTRICULAR DYSFUNCTION**

Seaton David<sup>[2]</sup>, Shearer Belinda<sup>[2]</sup>, Aldridge Kam<sup>[2]</sup>, Kermeen Fiona<sup>[1]</sup>

<sup>[1]</sup>Queensland Lung Transplant Service, The Prince Charles Hospital ~ Brisbane ~ Australia, <sup>[2]</sup>Queensland Nuclear Imaging, The Prince Charles Campus ~ Brisbane ~ Australia

### **RIGHT VENTRICULAR STRAIN IN THE ROCKING RIGHT VENTRICLE**

Seaton David<sup>[1]</sup>, Shearer Belinda<sup>[1]</sup>, Aldridge Kam<sup>[1]</sup>, Kermeen Fiona<sup>[2]</sup>, Chan Jonathan<sup>[3]</sup>, Yamada Akira<sup>[3]</sup>

<sup>[1]</sup>Queensland Nuclear Imaging, The Prince Charles Campus ~ Brisbane ~ Australia, <sup>[2]</sup>Queensland Lung Transplant Service, The Prince Charles Hospital ~ Brisbane ~ Australia, <sup>[3]</sup>Cardiology Department, The Prince Charles Hospital ~ Brisbane ~ Australia

### **SKELETAL MUSCLE DYSFUNCTION IN IDIOPATHIC PULMONARY ARTERIAL HYPERTENSION**

Shadly Ahmed Samar<sup>[1]</sup>, Granton John<sup>[1]</sup>, Batt Jane<sup>[1]</sup>

<sup>[1]</sup>University of Toronto ~ Canada

### **GENETIC VARIATION IN SEX HORMONE PATHWAYS AND THEIR RELATIONSHIP TO RIGHT VENTRICULAR FUNCTION: THE MESA-RIGHT VENTRICLE STUDY**

Ventetuolo Corey<sup>[1]</sup>, Mitra Nandita<sup>[2]</sup>, He Jiwei<sup>[2]</sup>, Wan Fei<sup>[2]</sup>, Barr R. Graham<sup>[3]</sup>, Bluemke David<sup>[4]</sup>, Lima Joao<sup>[5]</sup>, Ouyang Pamela<sup>[5]</sup>, Kawut Steven<sup>[2]</sup>

<sup>[1]</sup>Brown University ~ Providence ~ United States, <sup>[2]</sup>University of Pennsylvania ~ Philadelphia ~ United States, <sup>[3]</sup>Columbia University ~ New York ~ United States, <sup>[4]</sup>National Institute of Health ~ Bethesda ~ United States, <sup>[5]</sup>Johns Hopkins ~ Baltimore ~ United States

### **FOUR-MINUTE STEP TEST: A POTENTIAL TEST FOR PAH PATIENTS?**

Vieira Machado Ferreira Eloara<sup>[1]</sup>, Melatto Thais<sup>[1]</sup>, Almeida Melline<sup>[1]</sup>, Acedo Adriano<sup>[1]</sup>, Ramos Roberta<sup>[1]</sup>, Arakaki Jaqueline<sup>[1]</sup>

<sup>[1]</sup>Federal University Of Sao Paulo ~ Brazil

### **PREDICTORS OF PULMONARY ARTERIAL HYPERTENSION CLINICAL WORSENING USING RECUMBENT EXERCISE STRESS ECHOCARDIOGRAPHY**

Wirth Joel<sup>[1]</sup>, Godara Geeta<sup>[1]</sup>, Rancourt David<sup>[1]</sup>, Hacobian Melkon<sup>[1]</sup>, Cohen Mylan<sup>[1]</sup>

<sup>[1]</sup>Tufts University School of Medicine ~ Portland, ME ~ United States

### **INAPPROPRIATE INCREASE OF PULMONARY ARTERY PRESSURE BY EXERCISE FOR THE EARLY DIAGNOSIS OF PULMONARY HYPERTENSION ASSOCIATED WITH CONNECTIVE TISSUE DISEASES**

Yamasaki Yoshioki<sup>[1]</sup>, Yamada Hidehiro<sup>[1]</sup>, Suzuki Kengo<sup>[1]</sup>, Akashi Yoshihiro<sup>[1]</sup>, Tsuchida Kosei<sup>[1]</sup>, Ozaki Shoichi<sup>[1]</sup>

<sup>[1]</sup>St. Marianna University School of Medicine ~ Kawasaki ~ Japan

### **IS PERTURBED PULSE WAVE VELOCITY IN SYSTEMIC ARTERIES PRESENT IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION?**

Yang Eric<sup>[1]</sup>, Nambi Vijay<sup>[1]</sup>, Frost Adaani E<sup>[1]</sup>

<sup>[1]</sup>Baylor College of Medicine ~ Houston ~ United States

## Poster Sessions

THURSDAY, FEBRUARY 28

### EPIDEMIOLOGY AND REGISTRIES

#### **BASELINE FUNCTIONAL, ECHOCARDIOGRAPHIC AND HEMODYNAMIC PARAMETERS OF INCIDENT PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION AT A GREEK EXPERT CENTER**

Anthi Anastasia<sup>[1]</sup>, Tsangaris Iraklis<sup>[1]</sup>, Rallidis Loukianos<sup>[2]</sup>, Pappas Athanasios<sup>[2]</sup>, Konstantonis Dimitrios<sup>[1]</sup>, Frantzeskaki Frantzeska<sup>[1]</sup>, Triantafyllidi Helen<sup>[2]</sup>, Lekakis John<sup>[2]</sup>, Armaganidis Apostolos<sup>[1]</sup>, Orfanos Stylianos E.<sup>[1]</sup>

<sup>[1]</sup>2nd Department of Critical Care, Pulmonary Hypertension Clinic, University of Athens, Medical School, Attikon General Hospital ~ Athens ~ Greece, <sup>[2]</sup>2nd Department of Cardiology, Pulmonary Hypertension Clinic, University of Athens, Medical School, Attikon General Hospital ~ Athens ~ Greece

#### **REGISTRY AND PROGNOSIS STUDY IN KOREAN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION**

Chung Namsik<sup>[1]</sup>, Jung Jin Won<sup>[2]</sup>, Park Jong Chun<sup>[3]</sup>, Chae Shung Chull<sup>[4]</sup>, Kim Kee-Sik<sup>[5]</sup>, Sohn Dae-Won<sup>[6]</sup>, Chang Kyoung-Sig<sup>[7]</sup>, Kim Dong Soo<sup>[8]</sup>, Youn Ho-Joong<sup>[9]</sup>, Park Jeong Bae<sup>[10]</sup>, Rim Se-Joong<sup>[11]</sup>, Jung Hae Ok<sup>[9]</sup>, Chung Wook-Jin<sup>[11]</sup>, Choi Eui-Young<sup>[11]</sup>, Seo Hye-Sun<sup>[12]</sup>, Cho Kyoung-Im<sup>[13]</sup>

<sup>[1]</sup>Yonsei university hospital ~ Seoul ~ Korea, Republic of, <sup>[2]</sup>Wonkwang University ~ IKSAN ~ Korea, Republic of, <sup>[3]</sup>Chonnam university hospital ~ Jeonju ~ Korea, Republic of, <sup>[4]</sup>Kyongbuk University Hospital ~ Daegu ~ Korea, Republic of, <sup>[5]</sup>Dae-gu Catholic university hospital ~ Daegu ~ Korea, Republic of, <sup>[6]</sup>Seoul national university hospital ~ Seoul ~ Korea, Republic of, <sup>[7]</sup>Chosun University Hospital ~ Kwangju ~ Korea, Republic of, <sup>[8]</sup>Inje university hospital ~ Kimhae ~ Korea, Republic of, <sup>[9]</sup>Catholic university hospital ~ Seoul ~ Korea, Republic of, <sup>[10]</sup>Myongji hospital ~ Ilsan ~ Korea, Republic of, <sup>[11]</sup>Gachon university hospital ~ Incheon ~ Korea, Republic of, <sup>[12]</sup>Soonchunhyang university hospital ~ Bucheon ~ Korea, Republic of, <sup>[13]</sup>Maryknoll hospital ~ Busan ~ Korea, Republic of

#### **PULMONARY ARTERIAL HYPERTENSION IN ARGENTINA IN HINPULSAR REGISTRY: EPIDEMIOLOGY, CLINICAL PROFILE AND MANAGEMENT**

Coronel Maria<sup>[1]</sup>, Perna Eduardo<sup>[1]</sup>, Echazarreta Diego<sup>[2]</sup>, Lema Luis<sup>[3]</sup>, Aristimuño Guillermo<sup>[1]</sup>, Garcia Brasca Daniela<sup>[3]</sup>, Botta Cristian<sup>[3]</sup>, Curro Maria<sup>[3]</sup>, Echazarreta Andres<sup>[2]</sup>, Lescano Adrian<sup>[3]</sup>

<sup>[1]</sup>Instituto de Cardiología J. F. Cabral ~ Corrientes ~ Argentina, <sup>[2]</sup>Hospital San Juan de Dios ~ La Plata ~ Argentina, <sup>[3]</sup>Heart Failure and Pulmonary Hypertension Committee ~ Argentine Federation of Cardiology ~ Argentina

#### **CHANGES IN THE PATTERNS OF REFERRAL TO PULMONARY HYPERTENSION CENTERS**

Glen Clarisse<sup>[1]</sup>, Sulica Roxana<sup>[1]</sup>

<sup>[1]</sup>Beth Israel Medical Center ~ New York ~ United States

#### **SURVIVAL IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION IN THE NORTHWEST REGISTER OF RUSSIA**

Goncharova Natalia<sup>[1]</sup>, Kazimli Aygun<sup>[1]</sup>, Najmushin Alexandr<sup>[1]</sup>, Kozlova Svetlana<sup>[1]</sup>, Moiseeva Olga<sup>[1]</sup>

<sup>[1]</sup>FGBU "Almazov Federal Center of Heart, Blood and Endocrinology" ~ Saint-Petersburg ~ Russian Federation

#### **IMPROVED SURVIVAL IN SYSTEMIC SCLEROSIS-ASSOCIATED PULMONARY ARTERIAL HYPERTENSION PATIENTS ENROLLED IN THE PULMONARY HYPERTENSION ASSESSMENT AND RECOGNITION OF OUTCOMES IN SCLERODERMA (PHAROS) REGISTRY**

Gordon Jessica<sup>[1]</sup>, Huang Wei-ti<sup>[1]</sup>, Horn Evelyn<sup>[2]</sup>, Steen Virginia<sup>[3]</sup>

<sup>[1]</sup>Hospital for Special Surgery ~ New York ~ United States, <sup>[2]</sup>Weill-Cornell Medical College ~ New York ~ USA, <sup>[3]</sup>Georgetown University Hospital ~ Washington, DC ~ USA

#### **PULMONARY HYPERTENSION ASSESSMENT AND RECOGNITION OF OUTCOMES IN SCLERODERMA (PHAROS): PREDICTIVE FACTORS IN THE DEVELOPMENT OF PULMONARY HYPERTENSION IN A HIGH RISK POPULATION WITH SYSTEMIC SCLEROSIS (SSC)**

Hsu Vivien<sup>[1]</sup>, Steen Virginia<sup>[2]</sup>

<sup>[1]</sup>Robert Wood Johnson School of Medicine ~ New Brunswick ~ United States, <sup>[2]</sup>Georgetown University ~ Washington DC ~ United States



## Poster Sessions

Thursday, February 28

### **PULMONARY HYPERTENSION ASSOCIATED WITH RHEUMATIC DISEASES: BASELINE CHARACTERISTICS FROM THE KOREAN REGISTRY**

Jeon Chan Hong<sup>[1]</sup>, Lee Shin-Seok<sup>[2]</sup>

<sup>[1]</sup>Soonchunhyang University School of Medicine ~ Bucheon ~ Korea, Republic of, <sup>[2]</sup>Department of Rheumatology, Chonnam National University Medical School and Hospital

### **PHYSICIAN MONITORING OF PULMONARY ARTERIAL HYPERTENSION SUBJECTS: RESULTS FROM A LARGE U.S. HEALTH INSURANCE CLAIMS DATABASE**

Joish Vijay<sup>[1]</sup>, Muccino David<sup>[1]</sup>, Golick Mark<sup>[1]</sup>, Minai Omar<sup>[2]</sup>

<sup>[1]</sup>Bayer HealthCare ~ Wayne ~ United States, <sup>[2]</sup>Pulmonary, Allergy and Critical Care Medicine, Cleveland Clinic ~ Cleveland ~ United States

### **ANALYSIS OF LONG-TERM SURVIVAL IN PATIENTS FOLLOWED UP IN A UNIT OF PULMONARY HYPERTENSION**

López Reyes Raquel<sup>[1]</sup>, Ballester Marta<sup>[1]</sup>, Menendez Maria Angeles<sup>[1]</sup>, Fandos Maria Jose<sup>[1]</sup>, Ansotegui Emilio<sup>[1]</sup>, Nauffal Dolores<sup>[1]</sup>

<sup>[1]</sup>University Hospital La Fe ~ Valencia ~ Spain

### **THE PULMONARY HYPERTENSION REGISTRY IN THE PHILIPPINES: RESULTS FROM THE PHILIPPINE HEART CENTER -CENTER FOR PULMONARY VASCULAR DISORDERS**

Mateo Maria Paz<sup>[1]</sup>

<sup>[1]</sup>Philippine Heart Center ~ Quezon City ~ Philippines

### **PULMONARY HYPERTENSION AND ASSOCIATIONS IN ARGENTINA: RESULTS OF HIMPULSAR REGISTRY**

Perna Eduardo<sup>[1]</sup>, Coronel Maria<sup>[1]</sup>, Echazarreta Diego<sup>[2]</sup>, Lobo Marquez Lilia<sup>[3]</sup>, Haurigot Pilar<sup>[3]</sup>, Fleitas Paez Maximiliano<sup>[3]</sup>, Toldo Cristian<sup>[3]</sup>, Ruffino Gustavo<sup>[3]</sup>, Pereiro Stella<sup>[3]</sup>, Macin Stella<sup>[1]</sup>

<sup>[1]</sup>Instituto de Cardiología J. F. Cabral ~ Corrientes ~ Argentina, <sup>[2]</sup>Hospital San Juan de Dios ~ La Plata ~ Argentina, <sup>[3]</sup>Heart Failure and Pulmonary Hypertension Committee, Argentinean Federation of Cardiology ~ Argentina

### **FUNCTIONAL CLASS AND FIRST-LINE TREATMENT OF PULMONARY ARTERIAL HYPERTENSION IN THE SPANISH REGISTRY ON PULMONARY ARTERIAL HYPERTENSION (REHAP)**

Roman Antonio<sup>[1]</sup>, Barbera Joan Albert<sup>[2]</sup>, Morales Pilar<sup>[3]</sup>, Lopez-Meseguer Manuel<sup>[1]</sup>, Elias L<sup>[4]</sup>, Molina Luis<sup>[5]</sup>, Escribano Pilar<sup>[6]</sup>

<sup>[1]</sup>Hospital Vall d'Hebron ~ Barcelona ~ Spain, <sup>[2]</sup>Hospital Clinic ~ Barcelona ~ Spain, <sup>[3]</sup>Hospital La Fe ~ Valencia ~ Spain, <sup>[4]</sup>Hospital Universitario Virgen del Rocío ~ Sevilla ~ Spain, <sup>[5]</sup>Hospital del Mar ~ Barcelona ~ Spain, <sup>[6]</sup>Hospital Universitario 12 de Octubre ~ Madrid ~ Spain

### **THE SWEDISH NATIONAL REGISTRY FOR PULMONARY ARTERIAL HYPERTENSION**

Selimovic Nedim<sup>[1]</sup>, Jansson Kjell<sup>[2]</sup>, Kornhall Björn<sup>[3]</sup>, Lövgren Ekmebag Björn<sup>[4]</sup>, Larsen Flemming<sup>[5]</sup>, Willehadson Maria<sup>[6]</sup>, Wikström Gerhard<sup>[6]</sup>, Söderberg Stefan<sup>[7]</sup>

<sup>[1]</sup>Sahlgrenska University Hospital ~ Gothenburg ~ Sweden, <sup>[2]</sup>University Hospital ~ Linköping ~ Sweden, <sup>[3]</sup>Skåne University Hospital ~ Lund ~ Sweden, <sup>[4]</sup>Norrälje Hospital ~ Stockholm ~ Sweden, <sup>[5]</sup>Karolinska University Hospital ~ Stockholm ~ Sweden, <sup>[6]</sup>Akademiska Hospital ~ Uppsala ~ Sweden, <sup>[7]</sup>Norrlands University Hospital ~ Umeå ~ Sweden

### **EPIDEMIOLOGY OF PULMONARY ARTERIAL HYPERTENSION IN LATVIA**

Skride Andris<sup>[1]</sup>, Rudzitis Ainars<sup>[2]</sup>, Akermane Renate<sup>[1]</sup>, Viksne Sigita<sup>[1]</sup>

<sup>[1]</sup>Riga Stradins University ~ Riga ~ Latvia, <sup>[2]</sup>University of Latvia ~ Riga ~ Latvia

### **PULMONARY ARTERIAL HYPERTENSION (PAH) HAS A GLOBAL IMPACT ON PATIENTS & CAREGIVERS: RESULTS FROM US POPULATION BASED QUALITATIVE INTERVIEWS AND QUANTITATIVE SURVEYS**

Studer Sean<sup>[1]</sup>, Aldrighetti Rino<sup>[2]</sup>, Chen Hubert<sup>[3]</sup>, McCollister Deborah<sup>[4]</sup>, Mullen Mary<sup>[5]</sup>, Park Myung<sup>[6]</sup>, Lombardi Sandra<sup>[7]</sup>, Fischer Aryeh<sup>[8]</sup>

<sup>[1]</sup>Newark Beth Israel Medical Center ~ Newark ~ United States, <sup>[2]</sup>PH Association-US ~ Silver Spring ~ USA, <sup>[3]</sup>University of California San Francisco ~ United States, <sup>[4]</sup>University of Colorado Denver ~ USA, <sup>[5]</sup>Boston Children's Hospital ~ Boston ~ USA, <sup>[6]</sup>University of Maryland ~ Baltimore ~ USA, <sup>[7]</sup>University of California San Diego ~ United States, <sup>[8]</sup>National Jewish Health ~ Denver ~ USA

## Poster Sessions

### DIAGNOSIS AND PROGNOSIS

Thursday, February 28

#### **CHARACTERISTICS AND OUTCOME OF PATIENTS WITH PRE-CAPILLARY PULMONARY HYPERTENSION WHO WERE DRAINED FOR TAMPONADE: A MONOCENTRIC STUDY**

Artaud-Macari Elise<sup>[1]</sup>, Montani David<sup>[1]</sup>, Mercier Olaf<sup>[2]</sup>, Persichini Romain<sup>[1]</sup>, Günther Sven<sup>[1]</sup>, Jais Xavier<sup>[1]</sup>, Parent Florence<sup>[1]</sup>, Simonneau Gérald<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>, Sitbon Olivier<sup>[1]</sup>, Savale Laurent<sup>[1]</sup>

<sup>[1]</sup>Bicêtre Hospital ~ Le Kremlin Bicêtre ~ France, <sup>[2]</sup>Marie Lannelongue Hospital ~ Le Plessis-Robinson ~ France

#### **EXPERT CONSENSUS FOR PERFORMING RIGHT HEART CATHETERIZATION IN SUSPICION OF PULMONARY ARTERIAL HYPERTENSION ASSOCIATED WITH SYSTEMIC SCLEROSIS: A DELPHI CONSENSUS STUDY WITH CLUSTER ANALYSIS FROM THE EPOSS GROUP**

Avouac Jerome<sup>[1]</sup>, Huscher Dörte<sup>[2]</sup>, Furst Daniel<sup>[3]</sup>, Opitz Christian<sup>[4]</sup>, Distler Oliver<sup>[5]</sup>, Yannick Allanore<sup>[1]</sup>

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#### **DYNAMIC CONTRAST-ENHANCED COMPUTED TOMOGRAPHY BASED DETERMINATION OF CARDIAC OUTPUT**

Bálint Zoltán<sup>[1]</sup>, Pienn Michael<sup>[1]</sup>, Kovacs Gabor<sup>[1]</sup>, Tscherner Maria<sup>[1]</sup>, Johnson Thorsten R.<sup>[2]</sup>, Kullnig Peter<sup>[3]</sup>, Stollberger Rudolf<sup>[4]</sup>, Olschewski Andrea<sup>[1]</sup>, Olschewski Horst<sup>[5]</sup>

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#### **THE SUBMAXIMAL HEART AND PULMONARY EVALUATION (SHAPE) IS A NOVEL, NONINVASIVE TEST TO IDENTIFY PULMONARY HYPERTENSION IN PATIENTS WITH SCLERODERMA**

Bernstein Elana<sup>[1]</sup>, Gordon Jessica<sup>[1]</sup>, Spiera Robert<sup>[1]</sup>, Mandl Lisa<sup>[1]</sup>, Horn Evelyn<sup>[2]</sup>

<sup>[1]</sup>Hospital for Special Surgery ~ New York ~ United States, <sup>[2]</sup>New York Presbyterian Hospital/Weill Cornell Medical College ~ New York ~ United States

#### **ECHOCARDIOGRAPHIC SPECKLE TRACKING STRAIN OF THE RIGHT VENTRICLE CAN PREDICT SUCCESS TO PULMONARY VASODILATORS THERAPY IN PAH PATIENTS**

Bouchra Lamia<sup>[1]</sup>, Molano Carlos<sup>[1]</sup>, Viacroze Catherine<sup>[1]</sup>, Cuvelier Antoine<sup>[1]</sup>, Muir Jean-François<sup>[1]</sup>

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#### **PATIENTS WITH SYSTEMIC SCLEROSIS AND EXERCISE-INDUCED INCREASE IN PULMONARY ARTERY PRESSURE: AN EARLY SIGN OF DISEASE?**

Carignola Renato<sup>[1]</sup>, Data Valeria<sup>[1]</sup>, Destefanis Paola<sup>[2]</sup>, Bianco Matteo<sup>[2]</sup>, Chirio Claudio<sup>[2]</sup>, Montabone Erika<sup>[1]</sup>, Pozzi Roberto<sup>[2]</sup>, Albera Carlo<sup>[3]</sup>

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#### **PULMONARY HYPERTENSION IN BRONCHOPULMONARY DISPLASIA: CLINICAL FINDINGS, ASSOCIATED CARDIOVASCULAR ANOMALIES AND OUTCOME**

Cerro Marín María Jesús Del<sup>[1]</sup>, Sabaté Rotés Anna<sup>[1]</sup>, Cartón Antonio<sup>[1]</sup>, Deiros Lucia<sup>[1]</sup>, Bret-Zurita Montserrat<sup>[1]</sup>, Barrio Maria Isabel<sup>[1]</sup>, Albajara Luis<sup>[1]</sup>, Menendez Juan José<sup>[1]</sup>, Gutierrez-larraya Federico<sup>[1]</sup>

<sup>[1]</sup>La Paz Children's Hospital ~ Madrid ~ Spain

#### **CARDIAC MAGNETIC RESONANCE-DERIVED RIGHT VENTRICULAR OUTFLOW TRACT SYSTOLIC FLOW ACCELERATION: A NOVEL INDEX OF RIGHT VENTRICULAR FUNCTION AND PROGNOSIS IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION**

Chang Hyuk-Jae<sup>[1]</sup>, Kang Ki-Woon<sup>[2]</sup>

<sup>[1]</sup>Yonsei Medical college ~ Seoul ~ Korea, Republic of, <sup>[2]</sup>Eulji University Hospital ~ Daejeon ~ Korea, Republic of

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### **ECHOCARDIOGRAPHIC ASSESSMENT OF PULMONARY VASCULAR RESISTANCE IN SEVERE PULMONARY HYPERTENSION**

Chang Sung-A<sup>[1]</sup>, Byeon Kyeong Min<sup>[1]</sup>, Kim Hyung Kwan<sup>[2]</sup>, Park Seung Woo<sup>[1]</sup>, Kim Duk Kyung<sup>[1]</sup>

<sup>[1]</sup>Samsung Medical Center, Sungkyunkwan University College of Medicine ~ Seoul ~ Korea, Republic of, <sup>[2]</sup>Seoul National University Hospital ~ Seoul ~ Korea, Republic of

### **RIGHT VENTRICULAR DYSFUNCTION AND PULMONARY OBSTRUCTION INDEX BY CT PULMONARY ANGIOGRAPHY AS A PREDICTOR OF PATIENT OUTCOME**

Chaosuwannakit Narumol<sup>[1]</sup>, Makarawate Pattarapong<sup>[1]</sup>

<sup>[1]</sup>Khon Kaen University ~ Khon Kaen ~ Thailand

### **PROGNOSTIC VALUE OF EXERCISE CARDIAC INDEX AND RIGHT VENTRICULO-ARTERIAL COUPLING IN IDIOPATHIC, FAMILIAL AND ANOREXIGEN-ASSOCIATED PULMONARY ARTERIAL HYPERTENSION**

Chaouat Ari<sup>[1]</sup>, Ponçot-Mongars Raphaëlle<sup>[1]</sup>, Guillaumot Anne<sup>[1]</sup>, Gomez Emmanuel<sup>[1]</sup>, Malvestio Pascale<sup>[1]</sup>, Selton-Suty Christine<sup>[2]</sup>, Regent Denis<sup>[3]</sup>, Provencher Steeve<sup>[4]</sup>, Sitbon Olivier<sup>[5]</sup>

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### **COMPARISON OF INCIDENT PATIENTS WITH PULMONARY HYPERTENSION AND RISK FACTORS FOR LEFT HEART DISEASE ACCORDING TO THEIR HAEMODYNAMIC PROFILE: A RETROSPECTIVE STUDY**

Charalampopoulos Athanasios<sup>[1]</sup>, Howard Luke<sup>[1]</sup>, Davies Rachel<sup>[1]</sup>, Gin-Sing Wendy<sup>[1]</sup>, Tzoulaki Ioanna<sup>[1]</sup>, Wilkins Martin<sup>[1]</sup>, Gibbs Simon<sup>[1]</sup>

<sup>[1]</sup>Imperial Healthcare NHS Trust-Imperial College ~ London ~ United Kingdom

### **THE PHENOTYPES OF INCIDENT PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION ACCORDING TO THE PRESENCE OF CARDIOVASCULAR RISK FACTORS: A RETROSPECTIVE STUDY**

Charalampopoulos Athanasios<sup>[1]</sup>, Howard Luke<sup>[1]</sup>, Davies Rachel<sup>[1]</sup>, Gin-Sing Wendy<sup>[1]</sup>, Tzoulaki Ioanna<sup>[1]</sup>, Wilkins Martin<sup>[1]</sup>, Gibbs Simon<sup>[1]</sup>

<sup>[1]</sup>National Pulmonary Hypertension Service, Hammersmith Hospital and Imperial College of Medicine, London ~ United Kingdom

### **THE SIGNIFICANCE OF TRICUSPID VALVE REGURGITATION IN PATIENTS DIAGNOSED WITH PULMONARY ARTERIAL HYPERTENSION**

Chen Libo<sup>[1]</sup>, Larsen Carolyn<sup>[1]</sup>, Le Rachel<sup>[1]</sup>, McGoon Michael<sup>[1]</sup>, Frantz Robert<sup>[1]</sup>, Kane Garvan<sup>[1]</sup>

<sup>[1]</sup>Mayo Clinic ~ Rochester ~ United States

### **A PROOF OF CONCEPT FOR EXHALED AIR ANALYSIS USING NANO ARTIFICIAL NOSE (NA-NOSE) IN PULMONARY ARTERIAL HYPERTENSION**

Cohen-Kaminsky Sylvia<sup>[1]</sup>, Nakhleh Morad<sup>[2]</sup>, Montani David<sup>[1]</sup>, Girerd Barbara<sup>[1]</sup>, Garcia Gilles<sup>[1]</sup>, Simonneau Gérald<sup>[1]</sup>, Haick Hossam<sup>[2]</sup>, Humbert Marc<sup>[1]</sup>

<sup>[1]</sup>INSERM UMR S-999, Université Paris-Sud, Labex LERMIT, AP-HP, Centre National de Référence de l'Hypertension Pulmonaire Sévère, DHU TORINO; Hôpital Bicêtre; Centre Chirurgical Marie Lannelongue ~ Le Plessis Robinson ~ France, <sup>[2]</sup>The Department of Chemical Engineering and Russell Berrie Nanotechnology Institute, Technion, Israël Institute of Technology ~ Haifa ~ Israel

### **MEASUREMENT OF END-TIDAL CO<sub>2</sub> PARTIAL PRESSURE DURING EXERCISE SHOWS EARLY PULMONARY ARTERIAL HYPERTENSION IN SCLERODERMA PATIENTS**

Dumitrescu Daniel<sup>[1]</sup>, Viethen Thomas<sup>[1]</sup>, Gerhardt Felix<sup>[1]</sup>, Moinszadeh Pia<sup>[2]</sup>, Hunzelmann Nicolas<sup>[2]</sup>, Rosenkranz Stephan<sup>[1]</sup>

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### COMPUTED TOMOGRAPHY IN SCHISTOSOMOTIC PULMONARY ARTERIAL HYPERTENSION

Ferreira Rita<sup>[1]</sup>, Almeida Milena<sup>[2]</sup>, Mertens Alessandra<sup>[2]</sup>, Bandeira Angela<sup>[2]</sup>, Domingues Ana Lucia<sup>[1]</sup>, Silveira Carlos<sup>[2]</sup>, Leite Luiz<sup>[1]</sup>, Pereira Clara<sup>[1]</sup>

<sup>[1]</sup>Universidade Federal de Pernambuco ~ Recife ~ Brazil, <sup>[2]</sup>Pronto Socorro Cardiológico de Pernambuco ~ Recife ~ Brazil

### WHICH PATIENT WITH UNEXPLAINED DYSPNOEA NEEDS A RIGHT HEART CATHETER?

Fowler Robin<sup>[2]</sup>, Gain Kevin<sup>[1]</sup>, Gabbay Eli<sup>[3]</sup>

<sup>[1]</sup>Royal Perth Hospital, Lung Institute of Western Australia, Curtin University, University of Western Australia ~ Perth ~ Australia, <sup>[2]</sup>Edith Cowan University, Lung Institute of Western Australia, Curtin University, Royal Perth Hospital ~ Perth ~ Australia, <sup>[3]</sup>Royal Perth Hospital, Lung Institute of Western Australia, University of Western Australia, Curtin University, Notre Dame University, Heart and Lung Transplant Foundation of Western Australia ~ Perth ~ Australia

### SCREENING OF PULMONARY HYPERTENSION BY DOPPLER ECHOCARDIOGRAPHY IN RENAL TRANSPLANT CANDIDATES

Gazzana Marcelo<sup>[1]</sup>, Ribeiro Adriana<sup>[2]</sup>, Knorst Marli<sup>[1]</sup>, Manfro Roberto<sup>[2]</sup>

<sup>[1]</sup>Pulmonology Department, Hospital de Clinicas de Porto Alegre ~ Porto Alegre ~ Brazil, <sup>[2]</sup>Nephrology Department, Hospital de Clinicas de Porto Alegre ~ Porto Alegre ~ Brazil

### END-STAGE SICKLE CELL DISEASE (SCD)-ASSOCIATED PULMONARY HYPERTENSION (PH) IS CHARACTERIZED BY ABNORMAL CELLULAR, MECHANICAL AND VASO-ACTIVE PROFILES

George Patricia<sup>[1]</sup>, Yao Mingyi<sup>[1]</sup>, Ahmad Ferhaan<sup>[1]</sup>, Sembrat John<sup>[1]</sup>, Rajkumar Revathi<sup>[1]</sup>, Novelli Enrico<sup>[1]</sup>, Stenmark Kurt<sup>[2]</sup>, Gladwin Mark<sup>[1]</sup>, Champion Hunter<sup>[1]</sup>, Isenberg Jeffrey<sup>[1]</sup>

<sup>[1]</sup>University of Pittsburgh ~ United States, <sup>[2]</sup>University of Colorado ~ Denver ~ United States

### RIGHT VENTRICULAR REMODELING IN IDIOPATHIC PULMONARY ARTERIAL HYPERTENSION ASSESSED WITH THREE-DIMENSIONAL ECHOCARDIOGRAPHY AND CARDIAC MAGNETIC RESONANCE: THE ROLE OF MASS REGRESSION AND REDUCTION OF EJECTION FRACTION AS PROGNOSTIC MARKERS?

Grapsa Julia<sup>[1]</sup>, Cabrita Ines Zimbarra<sup>[1]</sup>, Durighel Giuliana<sup>[2]</sup>, Dawson David<sup>[1]</sup>, O'Regan Declan<sup>[2]</sup>, Howard Luke<sup>[3]</sup>, Nihoyannopoulos Petros<sup>[1]</sup>, Gibbs Simon<sup>[3]</sup>

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### IMPAIRED HEMODYNAMIC RESPONSE DURING DOBUTAMINE STRESS IS RELATED TO A LOWER CARDIOVASCULAR RESERVE IN PULMONARY ARTERIAL HYPERTENSION

Grignola Juan<sup>[4]</sup>, Aguilar Rio<sup>[1]</sup>, Roman Antonio<sup>[2]</sup>, Bouteldja Nadia<sup>[3]</sup>, Domingo Enric<sup>[3]</sup>

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### REFERENCE VALUES AND DETERMINING FACTORS OF RIGHT ATRIAL AREA IN HEALTHY ADULTS BY TWO-DIMENSIONAL ECHOCARDIOGRAPHY

Grünig Ekkehard<sup>[1]</sup>, Henn Philipp<sup>[1]</sup>, D'Andrea Antonello<sup>[2]</sup>, Claussen Martin<sup>[3]</sup>, Ehikén Nicola<sup>[1]</sup>, Maier Felicitas C<sup>[1]</sup>, Naeije Robert<sup>[5]</sup>, Nagel Christian<sup>[1]</sup>, Prange Felix<sup>[1]</sup>, Weidenhammer Johannes<sup>[1]</sup>, Fischer Christine<sup>[1]</sup>, Bossone Eduardo<sup>[4]</sup>

<sup>[1]</sup>University of Heidelberg ~ Germany, <sup>[2]</sup>Second University of Naples ~ Italy, <sup>[3]</sup>Clinic Grosshansdorf ~ Germany, <sup>[4]</sup>University of Salerno ~ Italy, <sup>[5]</sup>University of Brussels ~ Belgium

### MOLECULAR IMAGING OF THE HUMAN PULMONARY CIRCULATION USING A RADIOLABELED ADRENOMEDULLIN DERIVATIVE

Harel François<sup>[1]</sup>, Levac Xavier<sup>[1]</sup>, Nguyen Quang Trinh<sup>[1]</sup>, Letourneau Myriam<sup>[2]</sup>, Marcil Sophie<sup>[1]</sup>, Finnerty Vincent<sup>[1]</sup>, Fournier Alain<sup>[2]</sup>, Dupuis Jocelyn<sup>[1]</sup>

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### **PREDICTING CLINICAL DETERIORATION IN PATIENTS WITH IDIOPATHIC PULMONARY ARTERIAL HYPERTENSION (IPAH)**

Harrison Anne-Marie<sup>[1]</sup>, Gabbay Eli<sup>[1]</sup>, Hannon Tara<sup>[2]</sup>, Playford David<sup>[1]</sup>

<sup>[1]</sup>University of Notre Dame ~ Perth ~ Australia, <sup>[2]</sup>Respiratory West ~ Perth ~ Australia

### **CLINICAL CHARACTERIZATION AND SURVIVAL OF PATIENTS WITH BORDERLINE ELEVATION IN PULMONARY ARTERY PRESSURE**

Heresi Gustavo<sup>[1]</sup>, Minai Omar<sup>[1]</sup>, Tonelli Adriano<sup>[1]</sup>, Hammel Jeffrey<sup>[1]</sup>, Farha Samar<sup>[1]</sup>, Parambil Joseph<sup>[1]</sup>, Dweik Raed<sup>[1]</sup>

<sup>[1]</sup>Cleveland Clinic ~ Cleveland ~ United States

### **PULMONARY HYPERTENSION IN ANTISYNTHEASE SYNDROME: PREVALENCE, ETIOLOGY AND OUTCOME**

Hervier Baptiste<sup>[2]</sup>, Meyer Alain<sup>[3]</sup>, Dieval Céline<sup>[4]</sup>, Uzunhan Yurdagül<sup>[5]</sup>, Devilliers Hervé<sup>[6]</sup>, Launay David<sup>[7]</sup>, Canuet Matthieu<sup>[8]</sup>, Têtu Laurent<sup>[9]</sup>, Agard Christian<sup>[10]</sup>, Sibilia Jean<sup>[3]</sup>, Hamidou Mohamed<sup>[10]</sup>, Amoura Zahir<sup>[1]</sup>, Nunes Hilario<sup>[5]</sup>, Benveniste Olivier<sup>[1]</sup>, Montani David<sup>[11]</sup>, Hachulla Eric<sup>[7]</sup>

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### **CLINICAL CHARACTERISTICS AND PROGNOSIS OF PULMONARY ARTERIAL HYPERTENSION WITH MOTTLED LIKE PATTERN ON LUNG PERFUSION SCANS IN RECENT ERA**

Ichimura Yasunori<sup>[1]</sup>, Tanabe Nobuhiro<sup>[1]</sup>, Sugiura Toshihiko<sup>[1]</sup>, Sekine Ayumi<sup>[1]</sup>, Suda Rika<sup>[1]</sup>, Sakao Seiichiro<sup>[1]</sup>, Kasahara Yasunori<sup>[1]</sup>, Tatsumi Koichiro<sup>[1]</sup>

<sup>[1]</sup>Department of Respirology, Graduate School of Medicine, Chiba University ~ Chiba ~ Japan

### **OUTCOMES IN PULMONARY ARTERIAL HYPERTENSION ASSOCIATED WITH CONGENITAL HEART DISEASE: INSIGHTS FROM THE SPANISH REGISTRY OF PULMONARY ARTERIAL HYPERTENSION (REHAP)**

Jimenez Lopez-Guarch Carmen<sup>[1]</sup>, Oliver Jose Maria<sup>[2]</sup>, Dos Laura<sup>[3]</sup>, Segovia Javier<sup>[4]</sup>, Lazaro Maria<sup>[5]</sup>, Gallego Pastora<sup>[6]</sup>, Escribano Pilar<sup>[1]</sup>

<sup>[1]</sup>Hospital Universitario 12 de Octubre ~ Madrid ~ Spain, <sup>[2]</sup>Hospital Universitario La Paz ~ Madrid ~ Spain, <sup>[3]</sup>Hospital Universitario Vall d'Hebron ~ Barcelona ~ Spain, <sup>[4]</sup>Hospital Universitario Puerta de Hierro ~ Madrid ~ Spain, <sup>[5]</sup>Hospital Virgen de la Salud ~ Toledo ~ Spain, <sup>[6]</sup>Hospital Virgen de la Macarena ~ Sevilla ~ Spain

### **ATRIAL SEPTAL DEFECT IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION ASSOCIATED WITH CONGENITAL HEART DISEASE: CAN IT BE LONGER CONSIDERED A BENIGN ENTITY?**

Jimenez Lopez-Guarch Carmen<sup>[1]</sup>, Subirana M. Teresa<sup>[2]</sup>, Quero Maria Concepcion<sup>[3]</sup>, Almenar Luis<sup>[4]</sup>, Castillo-Palma Maria J<sup>[5]</sup>, Lara Antonio<sup>[6]</sup>, Escribano Pilar<sup>[1]</sup>

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### **PREVALENCE AND EFFECTS OF SYSTEMIC HYPERTENSION IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION**

Juvakka Oskar<sup>[1]</sup>, Bergfeldt Lennart<sup>[1]</sup>, Selimovic Nedim<sup>[1]</sup>

<sup>[1]</sup>Sahlgrenska University Hospital ~ Gothenburg ~ Sweden

### **PROGNOSTIC IMPACT OF RENAL FUNCTION IN PULMONARY HYPERTENSION**

Kaiser Ralf<sup>[1]</sup>, Seiler Sarah<sup>[1]</sup>, Bals Robert<sup>[1]</sup>, Wilkens Heinrike<sup>[1]</sup>

<sup>[1]</sup>University of Saarland ~ Homburg/Saar ~ Germany

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### **CORRELATIONS OF PULMONARY HYPERTENSION AND PULMONARY ARTERY DILATATION IN EISENMENGER SYNDROME**

Kaldararova Monika<sup>[1]</sup>, Pacak Jozef<sup>[2]</sup>, Masura Jozef<sup>[1]</sup>, Simkova Iveta<sup>[2]</sup>

<sup>[1]</sup>National Institute of Cardiovascular Diseases - Children's Cardiac Center ~ Bratislava ~ Slovakia, <sup>[2]</sup>Dept. Cardiology, Slovak Medical University and National Institute of Cardiovascular Diseases ~ Bratislava ~ Slovakia

### **HEMODYNAMIC PREDICTORS OF MORTALITY IN ADULTS WITH SICKLE CELL DISEASE**

Kato Gregory<sup>[1]</sup>, Mehari Alem<sup>[1]</sup>, Alam Shoab<sup>[1]</sup>, Tian Xin<sup>[1]</sup>, Cuttica Michael<sup>[2]</sup>, Barnett Christopher<sup>[3]</sup>, Miles George<sup>[1]</sup>, Xu Dihua<sup>[1]</sup>, Seamon Catherine<sup>[1]</sup>, Adams-Graves Patricia<sup>[4]</sup>, Castro Oswaldo<sup>[5]</sup>, Minniti Caterina<sup>[1]</sup>, Sachdev Vandana<sup>[1]</sup>, Gladwin Mark<sup>[6]</sup>, Machado Roberto<sup>[7]</sup>, Kato Gregory<sup>[1]</sup>

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### **ASSESSMENT OF PULMONARY ARTERY DISTENSIBILITY INDEX IN PULMONARY ARTERY HYPERTENSION**

Kazimiri Aygun<sup>[1]</sup>, Ryzhkov Anton<sup>[1]</sup>, Goncharova Natalia<sup>[1]</sup>, Berezina Aelita<sup>[1]</sup>, Najmushin Alexandr<sup>[1]</sup>, Moiseeva Olga<sup>[1]</sup>

<sup>[1]</sup>Almazov's Federal Heart, Blood and Endocrinology Centre ~ Saint-Petersburg ~ Russian Federation

### **EVIDENCE-BASED SCREENING ALGORITHM FOR PULMONARY ARTERIAL HYPERTENSION IN SYSTEMIC SCLEROSIS: THE DETECT STUDY**

Khanna Dinesh<sup>[1]</sup>, Denton Christopher<sup>[2]</sup>, Coghlan John Gerard<sup>[2]</sup>, Distler Oliver<sup>[3]</sup>, Grünig Ekkehard<sup>[4]</sup>, Bonderman Diana<sup>[5]</sup>, Müller-Ladner Ulf<sup>[6]</sup>, Pope Janet<sup>[7]</sup>, Vonk Madelon<sup>[8]</sup>, Doelberg Martin<sup>[9]</sup>, Chadha-Boreham Harbajan<sup>[9]</sup>, Heinzl Harald<sup>[5]</sup>, Rosenberg Daniel<sup>[9]</sup>, McLaughlin Vallerie<sup>[1]</sup>, Seibold James<sup>[10]</sup>

<sup>[1]</sup>University of Michigan ~ Ann Arbor ~ United States, <sup>[2]</sup>Royal Free Hospital ~ London ~ United Kingdom, <sup>[3]</sup>University Hospital Zurich ~ Switzerland, <sup>[4]</sup>University Hospital ~ Heidelberg ~ Germany, <sup>[5]</sup>Medical University of Vienna ~ Austria, <sup>[6]</sup>Kerckhoff Clinic ~ Bad Nauheim ~ Germany, <sup>[7]</sup>Western University of Canada, St Joseph's Health Care ~ London, Ontario ~ Canada, <sup>[8]</sup>Radboud University Medical Centre ~ Nijmegen ~ Netherlands, <sup>[9]</sup>Actelion Pharmaceuticals Ltd ~ Allschwil ~ Switzerland, <sup>[10]</sup>Scleroderma Research Consultants, LLC ~ Avon, Connecticut ~ United States

### **PARADOXICAL SEPTAL MOTION INDEX STRONGLY CORRELATES WITH INVASIVE HEMODYNAMIC PARAMETERS**

Kovács Attila<sup>[1]</sup>, Peluso Diletta<sup>[2]</sup>, Muraru Denisa<sup>[2]</sup>, Perazzolo Marra Martina<sup>[2]</sup>, Badano Luigi P<sup>[2]</sup>, Dal Bianco Lucia<sup>[2]</sup>, De Lazzari Manuel<sup>[2]</sup>, Iliceto Sabino<sup>[2]</sup>

<sup>[1]</sup>Heart Center, Semmelweis University ~ Budapest ~ Hungary, <sup>[2]</sup>Department of Cardiac, Thoracic and Vascular Sciences, University of Padua ~ Italy

### **URGENT NEED FOR STANDARDIZED ZERO REFERENCE LEVEL IN PULMONARY HYPERTENSION**

Kovacs Gabor<sup>[1]</sup>, Avian Alexander<sup>[1]</sup>, Olschewski Andrea<sup>[1]</sup>, Olschewski Horst<sup>[1]</sup>

<sup>[1]</sup>Ludwig Boltzmann Institute for Lung Vascular Research ~ Graz ~ Austria

### **LACK OF UTILITY OF AUTOANTIBODY TESTING FOR IDENTIFYING PATIENTS AT HIGH RISK OF DEVELOPING PULMONARY ARTERIAL HYPERTENSION: A RETROSPECTIVE ANALYSIS IN ROUTINE AUTOANTIBODY LABORATORY**

Kuwana Masataka<sup>[1]</sup>, Shirai Yuichiro<sup>[1]</sup>

<sup>[1]</sup>Keio University ~ Tokyo ~ Japan

### **CARDIAC INDEX BY THERMODILUTION AND FROM NON-INVASIVE PULSE PRESSURE PROFILES ANALYSIS IN PAH**

Lador Frédéric<sup>[2]</sup>, Sitbon Olivier<sup>[1]</sup>, Simonneau Gérard<sup>[1]</sup>, Hervé Philippe<sup>[3]</sup>

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### **INCREASED MAIN PULMONARY ARTERY DIAMETER ON CHEST COMPUTED TOMOGRAPHY CAN PREDICT PRESENCE OF BORDERLINE PULMONARY HYPERTENSION**

Lange Tobias J<sup>[1]</sup>, Dornia Christian<sup>[1]</sup>, Stiefel Jaroslava<sup>[1]</sup>, Pfeifer Michael<sup>[1]</sup>, Arzt Michael<sup>[1]</sup>, Hamer Okka W<sup>[1]</sup>

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## Poster Sessions

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### THE CONTRIBUTION OF RESPIRATORY MECHANICS TO DYSPNOEA DURING EXERCISE IN PULMONARY ARTERIAL HYPERTENSION

Laveneziana Pierantonio<sup>[1]</sup>, Garcia Gilles<sup>[2]</sup>, Joureau Barbara<sup>[3]</sup>, Jaïs Xavier<sup>[4]</sup>, Montani David<sup>[4]</sup>, Sitbon Olivier<sup>[4]</sup>, Simonneau Gérald<sup>[4]</sup>, Humbert Marc<sup>[4]</sup>, Similowski Thomas<sup>[5]</sup>

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### PULMONARY HYPERTENSION COMPLICATING BONE MARROW TRANSPLANTATION

Levy Marilyne<sup>[1]</sup>, Heritier Sebastien<sup>[1]</sup>, Blanche Stephane<sup>[1]</sup>, Fischer Alain<sup>[1]</sup>, Bonnet Damien<sup>[1]</sup>

<sup>[1]</sup>Université Rene Descartes ~ Paris ~ France

### PORTOPULMONARY HYPERTENSION IN PATIENTS WITH ISOLATED PORTAL VEIN DISEASE – A DISTINCT CLINICAL ENTITY?

Luknár Milan<sup>[1]</sup>, Tavacova Marcela<sup>[1]</sup>, Simkova Iveta<sup>[1]</sup>, Lesný Peter<sup>[1]</sup>, Goncalvesová Eva<sup>[1]</sup>

<sup>[1]</sup>National Cardiovascular Institute ~ Bratislava ~ Slovakia

### FIVE-YEAR OUTCOMES OF PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION: NEWLY VERSUS PREVIOUSLY DIAGNOSED PATIENTS

McGoon Michael<sup>[1]</sup>, Frost Adaani E<sup>[2]</sup>, Miller David P<sup>[3]</sup>, Barst Robyn J<sup>[4]</sup>, Elliott C Gregory<sup>[5]</sup>, Farber Harrison W<sup>[6]</sup>, Lai Ginny P<sup>[3]</sup>, Poms Abby<sup>[7]</sup>, Badesch David B<sup>[8]</sup>

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### ROLE OF CARDIAC MAGNETIC RESONANCE IN PULMONARY HYPERTENSION

Mercy Magalie<sup>[1]</sup>, Chaouat Ari<sup>[1]</sup>, Guillaumot Anne<sup>[1]</sup>, Gomez Emmanuel<sup>[1]</sup>, Marie Pierre-Yves<sup>[2]</sup>, Bonnemaïn Laurent<sup>[3]</sup>, Hutin Olivier<sup>[4]</sup>, Selton-Suty Christine<sup>[4]</sup>, Chabot François<sup>[1]</sup>

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### OCCUPATIONAL EXPOSURE: A RISK FACTOR FOR PULMONARY VENO-OCCLUSIVE DISEASE

Montani David<sup>[1]</sup>, Descatha Alexis<sup>[1]</sup>, Le Pavec Jérôme<sup>[1]</sup>, Savale Laurent<sup>[1]</sup>, Jaïs Xavier<sup>[1]</sup>, Zendah Inès<sup>[1]</sup>, Sitbon Olivier<sup>[1]</sup>, Simonneau Gérald<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>

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### ECHOCARDIOGRAPHIC PREDICTORS OF THE PROGNOSIS OF PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION: A MULTIVARIATE ANALYSIS INCLUDING HAEMODYNAMICS AND EXERCISE CAPACITY

Monti Enrico<sup>[1]</sup>, Bachetti Cristina<sup>[1]</sup>, Rinaldi Andrea<sup>[1]</sup>, Gotti Enrico<sup>[1]</sup>, Terzi Francesca<sup>[1]</sup>, Conficoni Elisa<sup>[1]</sup>, Rizzo Nicole<sup>[1]</sup>, Dardi Fabio<sup>[1]</sup>, Mazzanti Gaia<sup>[1]</sup>, Albin Alessandra<sup>[1]</sup>, Palazzini Massimiliano<sup>[1]</sup>, Manes Alessandra<sup>[1]</sup>, Galiè Nazzareno<sup>[1]</sup>

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### BASELINE HYPOXEMIA PREDICTS SURVIVAL IN PATIENTS WITH IDIOPATHIC PULMONARY ARTERIAL HYPERTENSION WITHOUT PATENT FORAMEN OVALE

Nair Arun<sup>[1]</sup>, Fuller Julia<sup>[1]</sup>, Crackett Rachel<sup>[1]</sup>, Day Margaret<sup>[1]</sup>, Lordan Jim<sup>[1]</sup>, Fisher Andrew<sup>[1]</sup>, Corris Paul<sup>[1]</sup>

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### **INCREASED TRANSPULMONARY GRADIENT IN PATIENTS WITH SICKLE CELL ASSOCIATED PULMONARY HYPERTENSION PREDICTS POOR PROGNOSIS AND IS ASSOCIATED WITH RV DYSFUNCTION BY MRI**

Nguyen Kim-Lien<sup>[1]</sup>, Alam Shoaib<sup>[1]</sup>, Tian Xin<sup>[1]</sup>, Leung Steve<sup>[1]</sup>, Seamon Catherine<sup>[1]</sup>, Minniti Caterina<sup>[1]</sup>, Machado Roberto<sup>[1]</sup>, Taylor James<sup>[1]</sup>, Sachdev Vandana<sup>[1]</sup>, Arai Andrew<sup>[1]</sup>, Kato Gregory<sup>[1]</sup>

<sup>[1]</sup>National Institutes of Health ~ Bethesda, MD ~ USA

### **PROGNOSTIC FACTOR FOR SURVIVAL IN JAPANESE PATIENTS WITH IDIOPATHIC/HERITABLE PULMONARY ARTERIAL HYPERTENSION**

Ogawa Aiko<sup>[1]</sup>, Satoh Toru<sup>[2]</sup>, Tamura Yuichi<sup>[3]</sup>, Matsubara Hiromi<sup>[1]</sup>

<sup>[1]</sup>National Hospital Organization Okayama Medical Center ~ Okayama ~ Japan, <sup>[2]</sup>Kyorin University Hospital ~ Tokyo ~ Japan, <sup>[3]</sup>Keio University School of Medicine ~ Tokyo ~ Japan

### **THE PREVALENCE OF PULMONARY HYPERTENSION AMONG PATIENTS EVALUATED BY ECHO IS RELATED TO STRUCTURAL HEART DISEASE**

Perna Eduardo<sup>[1]</sup>, Coronel Maria<sup>[1]</sup>, Cimbaro Canella Juan<sup>[1]</sup>, Acevedo Pablo<sup>[1]</sup>, Aristimuño Guillermo<sup>[1]</sup>, Burgos Carlos<sup>[1]</sup>, Parras Jorge<sup>[1]</sup>, Obregon Ricardo<sup>[1]</sup>, Garcia Walter<sup>[1]</sup>, Garcia Edgar<sup>[1]</sup>

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### **SCHISTOSOMIASIS-ASSOCIATED PULMONARY ARTERIAL HYPERTENSION. SURVIVAL IN ENDEMIC AREA IN BRAZIL**

Piscoya Carlos<sup>[2]</sup>, Mendes Adriano<sup>[2]</sup>, Cartaxo Tereza<sup>[3]</sup>, Oliveira Sheilla<sup>[1]</sup>, Valle Neto Leônidas<sup>[3]</sup>, Sobral Dario<sup>[2]</sup>

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### **WHICH MECHANISMS AND BIOMARKERS CAN PREDICT FUNCTIONAL CAPACITY ON PULMONARY ARTERIAL HYPERTENSION?**

Plácido Rui<sup>[1]</sup>, Silva Marques João<sup>[1]</sup>, Robalo Martins Susana<sup>[1]</sup>, Jorge Cláudia<sup>[1]</sup>, Calisto Carina<sup>[1]</sup>, Gonçalves Susana<sup>[1]</sup>, Ribeiro Sónia<sup>[1]</sup>, Almeida Ana<sup>[1]</sup>, Nunes Diogo António<sup>[1]</sup>

<sup>[1]</sup>Hospital de Santa Maria ~ Lisboa ~ Portugal

### **NEW AND OLD BIOMARKERS FOR PROGNOSIS STRATIFICATION IN PULMONARY ARTERIAL HYPERTENSION**

Plácido Rui<sup>[1]</sup>, Silva Marques João<sup>[1]</sup>, R. Martins Susana<sup>[1]</sup>, Jorge Cláudia<sup>[1]</sup>, Calisto Carina<sup>[1]</sup>, Gonçalves Susana<sup>[1]</sup>, Ribeiro Sónia<sup>[1]</sup>, Almeida Ana<sup>[1]</sup>, Nunes Diogo António<sup>[1]</sup>

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### **LIPOPROTEIN-ASSOCIATED PHOSPHOLIPASE A2 AND CHOLESTEROL CAN PREDICT SURVIVAL IN PULMONARY ARTERIAL HYPERTENSION AND CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION**

Quarck Rozenn<sup>[1]</sup>, Durand Hervé<sup>[2]</sup>, Ninio Ewa<sup>[2]</sup>, Delcroix Marion<sup>[1]</sup>

<sup>[1]</sup>Katholieke Universiteit Leuven ~ Belgium, <sup>[2]</sup>INSERM UMRS937-Faculté de Médecine Pierre et Marie Curie ~ Paris ~ France

### **HYPOCAPNIA A INDEPENDENT MARKER OF MORTALITY IN PULMONARY ARTERIAL HYPERTENSION PATIENTS**

Ramos Roberta<sup>[1]</sup>, Vieira Machado Ferreira Eloara<sup>[1]</sup>, Valois Fabricio<sup>[1]</sup>, Silva Celia<sup>[1]</sup>, Nery Luiz<sup>[1]</sup>, Arakaki Jaqueline<sup>[1]</sup>

<sup>[1]</sup>Federal University of São Paulo - UNIFESP ~ São Paulo ~ Brazil

### **CHARACTERISTICS AND SURVIVAL OF PATIENTS WITH HEMOPTYSIS IN PULMONARY ARTERIAL HYPERTENSION**

Seferian Andrei<sup>[1]</sup>, Savale Laurent<sup>[1]</sup>, Montani David<sup>[1]</sup>, Girerd Barbara<sup>[1]</sup>, Günther Sven<sup>[1]</sup>, Artaud-Macari Elise<sup>[1]</sup>, Parent Florence<sup>[1]</sup>, Sitbon Olivier<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>, Simonneau Gérard<sup>[1]</sup>, Jaïs Xavier<sup>[1]</sup>

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### **MIXED VENOUS OXYGEN TENSION AFFECTS THE PROGNOSIS ON PULMONARY HYPERTENSION EVEN IN RECENT ERA**

Sekine Ayumi<sup>[1]</sup>, Tanabe Nobuhiro<sup>[1]</sup>, Suda Rika<sup>[1]</sup>, Nishimura Rintaro<sup>[1]</sup>, Jujo Takayuki<sup>[1]</sup>, Sugiura Toshihiko<sup>[1]</sup>, Sakao Seiichiro<sup>[1]</sup>, Kasahara Yasunori<sup>[1]</sup>, Tatsumi Koichiro<sup>[1]</sup>

<sup>[1]</sup>Department of Respirology, Graduate School of Medicine, Chiba University ~ Chiba ~ Japan

### **LEFT VENTRICULAR EJECTION TIME AS A PROGNOSTIC FACTOR IN ACUTE HEART FAILURE FROM PULMONARY HYPERTENSION: A NON INVASIVE ARTERIAL TONOMOMETRY STUDY**

Sztrymf Benjamin<sup>[2]</sup>, Günther Sven<sup>[3]</sup>, Savale Laurent<sup>[3]</sup>, Jais Xavier<sup>[3]</sup>, Sitbon Olivier<sup>[3]</sup>, Simonneau Gérald<sup>[3]</sup>, Humbert Marc<sup>[3]</sup>, Chemla Denis<sup>[1]</sup>

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### **SAFETY AND EFFICACY OF ACTIVE VIDEO GAMES-BASED EXERCISE TRAINING IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION**

Tamura Yuichi<sup>[1]</sup>, Ono Tomohiko<sup>[1]</sup>, Takei Makoto<sup>[1]</sup>, Yamamoto Tsunehisa<sup>[1]</sup>, Kawakami Takashi<sup>[1]</sup>, Kataoka Masaharu<sup>[1]</sup>, Sano Motoaki<sup>[1]</sup>, Satoh Toru<sup>[2]</sup>, Fukuda Keiichi<sup>[1]</sup>

<sup>[1]</sup>Keio University ~ Tokyo ~ Japan, <sup>[2]</sup>Kyorin University ~ Tokyo ~ Japan

### **RISK FACTORS FOR HEMOPTYSIS IN PULMONARY HYPERTENSION**

Tio Darryl<sup>[1]</sup>, Leter Edward<sup>[1]</sup>, Boerigter Bart<sup>[1]</sup>, Boonstra Anco<sup>[1]</sup>, Vonk Noordegraaf Anton<sup>[1]</sup>, Bogaard Herman Jan<sup>[1]</sup>

<sup>[1]</sup>Vrije Universiteit Amsterdam ~ Netherlands

### **EXERCISE VENTILATORY INEFFICIENCY AS AN INDEPENDENT PREDICTOR OF MORTALITY IN PATIENTS WITH PAH**

Vieira Machado Ferreira Eloara<sup>[1]</sup>, Ramos Roberta<sup>[1]</sup>, Valois Fabricio<sup>[1]</sup>, Figueiredo Priscila<sup>[1]</sup>, Arakaki Jaquelina<sup>[1]</sup>, Neder J Alberto<sup>[1]</sup>

<sup>[1]</sup>Federal University of São Paulo - UNIFESP ~ São Paulo ~ Brazil

### **SAFETY OF CARDIAC CATHETERIZATION AT A CENTER SPECIALIZED IN THE CARE OF PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION**

Zuckerman Warren<sup>[1]</sup>, Turner Mariel E<sup>[1]</sup>, Kerstein Jason<sup>[1]</sup>, Torres Alejandro<sup>[1]</sup>, Vincent Julie A<sup>[1]</sup>, Krishnan Usha<sup>[1]</sup>, Kerstein Diane<sup>[1]</sup>, Rosenzweig Erika<sup>[1]</sup>

<sup>[1]</sup>Columbia University Medical Center ~ New York ~ USA

## THERAPY – STANDARD OF CARE

### **A RANDOMIZED OPEN LABEL STUDY COMPARING FIRST-LINE TREATMENT WITH BOSENTAN OR SILDENAFIL IN PULMONARY ARTERIAL HYPERTENSION (PAH): SHORT-TERM RESULTS**

Albini Alessandra<sup>[1]</sup>, Mazzanti Gaia<sup>[1]</sup>, Bachetti Cristina<sup>[1]</sup>, Terzi Francesca<sup>[1]</sup>, Palazzini Massimiliano<sup>[1]</sup>, Rizzo Nicole<sup>[1]</sup>, Dardi Fabio<sup>[1]</sup>, Rinaldi Andrea<sup>[1]</sup>, Gotti Enrico<sup>[1]</sup>, Monti Enrico<sup>[1]</sup>, Manes Alessandra<sup>[1]</sup>, Galiè Nazzareno<sup>[1]</sup>

<sup>[1]</sup>Institute of Cardiology, University of Bologna ~ Italy

### **INFLUENCE OF PROSTACYCLIN THERAPY ON SURVIVAL IN PORTOPULMONARY HYPERTENSION: A TRANSPLANT CENTER'S ANSWER TO REVEAL REGISTRY DATA**

Awdish Rana<sup>[1]</sup>, Cajigas Hector<sup>[1]</sup>

<sup>[1]</sup>Henry Ford Hospital ~ Detroit ~ United States

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### **EFFICACY OF EXERCISE TRAINING IN PULMONARY ARTERIAL HYPERTENSION ASSOCIATED WITH CONGENITAL HEART DISEASE**

Becker-Gruenig Tabea<sup>[1]</sup>, Ehlken Nicola<sup>[1]</sup>, Klose Hans<sup>[2]</sup>, Lichtblau Mona<sup>[1]</sup>, Nagel Christian<sup>[1]</sup>, Fischer Christine<sup>[4]</sup>, Gorenflo Matthias<sup>[3]</sup>, Tiede Henning<sup>[5]</sup>, Schranz Dietmar<sup>[6]</sup>, Hager Alfred<sup>[7]</sup>, Kaemmerer Harald<sup>[7]</sup>, Miera Oliver<sup>[8]</sup>, Speich Rudolf<sup>[9]</sup>, Ulrich Silvia<sup>[9]</sup>, Uiker Soeren<sup>[10]</sup>, Grünig Ekkehard<sup>[1]</sup>

<sup>[1]</sup>Centre for Pulmonary Hypertension at Thoraxklinik ~ Heidelberg ~ Germany, <sup>[2]</sup>Department of Pneumology, Universität Hamburg-Eppendorf ~ Hamburg ~ Germany, <sup>[3]</sup>Department of Pediatric Cardiology, Universität Heidelberg ~ Germany, <sup>[4]</sup>Institute of Human Genetics, Universität Heidelberg ~ Germany, <sup>[5]</sup>Department of Pneumology, Universität Giessen ~ Germany, <sup>[6]</sup>Pediatric Cardiology, Universität Giessen ~ Germany, <sup>[7]</sup>Department of Pediatric Cardiology and Congenital Heart Disease, Deutsches Herzzentrum München, Technische Universität München ~ Germany, <sup>[8]</sup>Clinic for Congenital Heart Disease / Pediatric Cardiology, Deutsches Herzzentrum Berlin ~ Germany, <sup>[9]</sup>Centre for Pulmonary Hypertension, Universitätsspital Zürich ~ Switzerland, <sup>[10]</sup>Rehabilitationsklinik Königstuhl Heidelberg ~ Germany

### **AMBRISENTAN FOR PULMONARY ARTERIAL HYPERTENSION. RESULTS IN A COHORT OF SPANISH PATIENTS**

Castillo-Palma María J<sup>[1]</sup>, González-Pulido Cristina<sup>[1]</sup>, Porras-Antras Isabel<sup>[1]</sup>, González-León Rocío<sup>[1]</sup>, López-Haldón José<sup>[2]</sup>, Hinojosa-Perez Rafael<sup>[3]</sup>, Ocaña-Medina Celia<sup>[1]</sup>, García-Hernández Francisco J<sup>[1]</sup>

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### **ORAL MONOTHERAPY IN PATIENTS WITH PORTO-PULMONARY HYPERTENSION**

Conficoni Elisa<sup>[1]</sup>, Dardi Fabio<sup>[1]</sup>, Palazzini Massimiliano<sup>[1]</sup>, Bachetti Cristina<sup>[1]</sup>, Terzi Francesca<sup>[1]</sup>, Rizzo Nicole<sup>[1]</sup>, Rinaldi Andrea<sup>[1]</sup>, Gotti Enrico<sup>[1]</sup>, Mazzanti Gaia<sup>[1]</sup>, Albini Alessandra<sup>[1]</sup>, Monti Enrico<sup>[1]</sup>, Manes Alessandra<sup>[1]</sup>, Galiè Nazzareno<sup>[1]</sup>

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### **EFFICACY AND SAFETY OF UP-FRONT COMBINATION THERAPY**

Dardi Fabio<sup>[1]</sup>, Bachetti Cristina<sup>[1]</sup>, Terzi Francesca<sup>[1]</sup>, Rizzo Nicole<sup>[1]</sup>, Conficoni Elisa<sup>[1]</sup>, Rinaldi Andrea<sup>[1]</sup>, Gotti Enrico<sup>[1]</sup>, Mazzanti Gaia<sup>[1]</sup>, Palazzini Massimiliano<sup>[1]</sup>, Albini Alessandra<sup>[1]</sup>, Monti Enrico<sup>[1]</sup>, Manes Alessandra<sup>[1]</sup>, Galiè Nazzareno<sup>[1]</sup>

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### **ANTI-INFLAMMATORY EFFECTS OF EPOPROSTENOL IN RIGHT VENTRICULAR FAILURE ON ACUTE PULMONARY HYPERTENSION**

Dewachter Céline<sup>[1]</sup>, Vercruyssen Marie<sup>[1]</sup>, Rondelet Benoit<sup>[1]</sup>, Schraufnagel Dean<sup>[1]</sup>, Brimiouille Serge<sup>[1]</sup>, Kerbaul François<sup>[1]</sup>, Dewachter Laurence<sup>[1]</sup>, Naeije Robert<sup>[1]</sup>

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### **COST-EFFECTIVENESS ANALYSIS OF REHABILITATION WITH EXERCISE AND RESPIRATORY THERAPY IN PULMONARY HYPERTENSION**

Ehlken Nicola<sup>[1]</sup>, Verduyn Cora<sup>[2]</sup>, Tiede Henning<sup>[3]</sup>, Staehler Gerd<sup>[4]</sup>, Olschewski Horst<sup>[5]</sup>, Opitz Christian<sup>[6]</sup>, Klose Hans<sup>[7]</sup>, Wilkens Heinrike<sup>[8]</sup>, Rosenkranz Stephan<sup>[9]</sup>, Halank Michael<sup>[10]</sup>, Grünig Ekkehard<sup>[1]</sup>

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### **IMPACT OF PULMONARY ARTERIAL HYPERTENSION (PAH) ON THE LIVES OF PATIENTS AND CARERS**

Ferrari Pisana<sup>[1]</sup>, Armstrong Iain<sup>[2]</sup>, Aldrighetti Rino<sup>[3]</sup>, Howard Luke<sup>[4]</sup>, Ryfthenius Henrik<sup>[5]</sup>, Fischer Aryeh<sup>[6]</sup>, Lombardi Sandra<sup>[7]</sup>, Studer Sean<sup>[8]</sup>, Guillevin Loic<sup>[9]</sup>

<sup>[1]</sup>PHA Europe ~ Vienna ~ Austria, <sup>[2]</sup>PHA United Kingdom ~ Rotherham ~ United Kingdom, <sup>[3]</sup>PHA United States ~ Silver Spring ~ USA, <sup>[4]</sup>Imperial College ~ London ~ United Kingdom, <sup>[5]</sup>Karolinska University ~ Solna ~ Sweden, <sup>[6]</sup>National Jewish Health ~ Denver ~ USA, <sup>[7]</sup>UCSD Medical Center ~ San Diego ~ USA, <sup>[8]</sup>Beth Israel Medical Center ~ Newark ~ USA, <sup>[9]</sup>Cochin Hospital ~ Paris ~ France

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### HEMODYNAMIC ASSESSMENT OF PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION (PAH) IN THE PHASE III PATENT-1 STUDY

Galiè Nazzareno<sup>[1]</sup>, Grimminger Friedrich<sup>[2]</sup>, Grünig Ekkehard<sup>[3]</sup>, Humbert Marc<sup>[4]</sup>, Jing Zhi-Cheng<sup>[5]</sup>, Keogh Anne M.<sup>[6]</sup>, Langleben David<sup>[7]</sup>, Rubin Lewis<sup>[8]</sup>, Ochan Kilama Michael<sup>[9]</sup>, Fritsch Arno<sup>[10]</sup>, Neuser Dieter<sup>[10]</sup>, Ghofrani Hossein Ardeschir<sup>[2]</sup>

<sup>[1]</sup>Institute of Cardiology, University of Bologna ~ Italy, <sup>[2]</sup>Department of Internal Medicine, University Hospital Giessen and Marburg ~ Giessen ~ Germany, <sup>[3]</sup>Centre for Pulmonary Hypertension at Thoraxclinic Heidelberg, University Hospital Heidelberg ~ Germany, <sup>[4]</sup>Université Paris-Sud, APHP, Hôpital Bicêtre, Service de Pneumologie ~ Le Kremlin-Bicêtre ~ France, <sup>[5]</sup>Department of Cardio-Pulmonary Circulation, Shanghai Pulmonary Hospital, Tongji University School of Medicine ~ Shanghai ~ China, <sup>[6]</sup>St Vincent's Hospital ~ Sydney ~ Australia, <sup>[7]</sup>Center for Pulmonary Vascular Disease, Lady Davis Institute for Medical Research, Jewish General Hospital, McGill University ~ Montreal ~ Canada, <sup>[8]</sup>University of California, San Diego ~ La Jolla ~ United States, <sup>[9]</sup>Global Clinical Development Bayer HealthCare AG ~ Milan ~ Italy, <sup>[10]</sup>Global Clinical Development Bayer HealthCare AG ~ Wuppertal ~ Germany

### BOSENTAN FOR PULMONARY ARTERIAL HYPERTENSION. RESULTS IN A COHORT OF SPANISH PATIENTS

García-Hernández Francisco J<sup>[1]</sup>, Montero-Mateos Enrique<sup>[1]</sup>, León-Guisado Antonia<sup>[1]</sup>, González-León Rocío<sup>[1]</sup>, Herruzo-Avilés Angel<sup>[2]</sup>, López-Pardo Francisco<sup>[3]</sup>, Ocaña-Medina Celia<sup>[1]</sup>, Castillo-Palma María J<sup>[1]</sup>

<sup>[1]</sup>Investigation Group CTS-279 Collagenosis. Department of Internal Medicine. Hospital Virgen del Rocío. ~ Sevilla ~ Spain, <sup>[2]</sup>Department of Critical Care. University Hospital Virgen del Rocío ~ Sevilla ~ Spain, <sup>[3]</sup>Department of Cardiology. University Hospital Virgen del Rocío ~ Sevilla ~ Spain

### PROPEL – PROSPECTIVE REGISTRY OF PARENTERAL PROSTANOIDS

Jansa Pavel<sup>[1]</sup>, Kandrnl Vit<sup>[2]</sup>, Votavova Regina<sup>[1]</sup>, Mangold Andreas<sup>[3]</sup>, Al-hiti Hikmet<sup>[4]</sup>, Goncalvesova Eva<sup>[5]</sup>, Studencan Martin<sup>[6]</sup>, Podracky Juraj<sup>[6]</sup>, Simkova Iveta<sup>[7]</sup>, Mizia-Stec Katarzyna<sup>[8]</sup>, Kozieradzka Anna<sup>[9]</sup>, Nowacka Magdalena<sup>[10]</sup>, Jarkovsky Jiri<sup>[2]</sup>, Dusek Ladislav<sup>[2]</sup>, Lang Irene<sup>[3]</sup>

<sup>[1]</sup>General University Hospital ~ Prague ~ Czech Republic, <sup>[2]</sup>Institute of Biostatistics and Analyses ~ Brno ~ Czech Republic, <sup>[3]</sup>Medical University of Vienna ~ Austria, <sup>[4]</sup>Institute of Clinical and Experimental Medicine ~ Prague ~ Czech Republic, <sup>[5]</sup>The National Institute of Cardiovascular Diseases ~ Bratislava ~ Slovakia, <sup>[6]</sup>East Slovak Institute of Cardiovascular Disease ~ Kosice ~ Slovakia, <sup>[7]</sup>Medical Faculty of Slovak Medical University ~ Bratislava ~ Slovakia, <sup>[8]</sup>II Department of Cardiology GCM ~ Katowice ~ Poland, <sup>[9]</sup>Medic University of Bialystok – Department of Cardiology ~ Bialystok ~ Poland, <sup>[10]</sup>Cardiovascular Diseases Department J.P.II ~ Krakow ~ Poland

### LUNG AND HEART-LUNG TRANSPLANTATION FOR SYSTEMIC SCLEROSIS PATIENTS

Launay David<sup>[1]</sup>, Savale Laurent<sup>[2]</sup>, Berezne Alice<sup>[3]</sup>, Mercier Olaf<sup>[4]</sup>, Mouthon Luc<sup>[3]</sup>, Hachulla Eric<sup>[1]</sup>, Fadel Elie<sup>[4]</sup>, Le Pavec Jérôme<sup>[4]</sup>, Sitbon Olivier<sup>[2]</sup>, Dartevelle Philippe<sup>[4]</sup>, Guillevin Loic<sup>[3]</sup>, Simonneau Gérard<sup>[2]</sup>, Humbert Marc<sup>[2]</sup>, Mussot Sacha<sup>[4]</sup>

<sup>[1]</sup>CHRU ~ Lille ~ France, <sup>[2]</sup>CHU Bicêtre. Université Paris Sud. ~ Le Kremlin Bicêtre ~ France, <sup>[3]</sup>CHU Cochin ~ Paris ~ France, <sup>[4]</sup>Centre chirurgical Marie Lannelongue ~ Le Plessis Robinson ~ France

### SURVIVAL IN INCIDENT PAH PATIENTS IN THE ERA OF TARGETED TREATMENT: A SINGLE CENTRE EXPERIENCE FROM CENTRAL-EASTERN EUROPE

Luknár Milan<sup>[1]</sup>, Liška Branislav<sup>[2]</sup>, Lesný Peter<sup>[1]</sup>, Varga Ivan<sup>[1]</sup>, Soubrier Florent<sup>[1]</sup>, Goncalvesová Eva<sup>[1]</sup>

<sup>[1]</sup>National Cardiovascular Institute ~ Bratislava ~ Slovakia, <sup>[2]</sup>Kliniken Nordoberpfalz, Klinikum Weiden ~ Germany

### EXERCISE TRAINING IN PULMONARY ARTERIAL HYPERTENSION ASSOCIATED WITH CONNECTIVE TISSUE DISEASES

Maier Felicitas C<sup>[3]</sup>, Ehlik Nicola<sup>[3]</sup>, Nagel Christian<sup>[3]</sup>, Lichtblau Mona<sup>[3]</sup>, Fischer Christine<sup>[1]</sup>, Blank Norbert<sup>[2]</sup>, Grünig Ekkehard<sup>[3]</sup>

<sup>[1]</sup>Departments of Human Genetics ~ Heidelberg ~ Germany, <sup>[2]</sup>Department of Rheumatology ~ Heidelberg ~ Germany, <sup>[3]</sup>Thoracic Clinic of the University ~ Heidelberg ~ Germany

### LUNG TRANSPLANTATION IN PATIENTS WITH PULMONARY HYPERTENSION: A RETROSPECTIVE SINGLE CENTER EXPERIENCE

Nierlich Patrick<sup>[1]</sup>, Jaksch Peter<sup>[1]</sup>, Ghanim Bahil<sup>[1]</sup>, Aigner Clemens<sup>[1]</sup>, Lang Georg<sup>[1]</sup>, Taghavi Shahrokh<sup>[1]</sup>, Klepetko Walter<sup>[1]</sup>

<sup>[1]</sup>Division of Thoracic Surgery, Department of Surgery ~ Medical University Vienna ~ Austria

## Poster Sessions

Thursday, February 28

### **NEW INSIGHT AND OUR CLINICAL EXPERIENCES:TREATING PULMONARY HYPERTENSION IN LIVER FAILURE**

Rankovic Ivan<sup>[1]</sup>, Stojkovic Milica<sup>[1]</sup>, Pavlovic Markovic Aleksandra<sup>[1]</sup>, Culafic Djordje<sup>[1]</sup>, Popovic Dragan<sup>[1]</sup>, Spuran Milan<sup>[1]</sup>, Jovicic Ivana<sup>[1]</sup>, Jovanovic Ivan<sup>[1]</sup>, Krstic Miodrag<sup>[1]</sup>, Rajic Zoran<sup>[2]</sup>, Pesko Predrag<sup>[3]</sup>, Milosavljevic Tomica<sup>[1]</sup>

<sup>[1]</sup>Clinical Center of Serbia, Clinic for Gastroenterology ~ Belgrade ~ Serbia, <sup>[2]</sup>Clinical Center of Serbia, Clinic for Haematology ~ Belgrade ~ Serbia, <sup>[3]</sup>Clinical Center of Serbia, Clinic for Digestive Surgery ~ Belgrade ~ Serbia

### **COMPARISON OF CLINICAL, FUNCTIONAL AND HAEMODYNAMIC CHARACTERISTICS OF PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION ASSOCIATED WITH PORTAL HYPERTENSION, HIV INFECTION OR BOTH**

Rizzo Nicole<sup>[1]</sup>, Bachetti Cristina<sup>[1]</sup>, Palazzini Massimiliano<sup>[1]</sup>, Terzi Francesca<sup>[1]</sup>, Conficoni Elisa<sup>[1]</sup>, Dardi Fabio<sup>[1]</sup>, Rinaldi Andrea<sup>[1]</sup>, Gotti Enrico<sup>[1]</sup>, Mazzanti Gaia<sup>[1]</sup>, Albini Alessandra<sup>[1]</sup>, Monti Enrico<sup>[1]</sup>, Manes Alessandra<sup>[1]</sup>, Galie Nazzareno<sup>[1]</sup>

<sup>[1]</sup>Institute of Cardiology, University of Bologna ~ Italy

### **EXTRACORPOREAL MEMBRANE OXYGENATION (ECMO) AS A NOVEL AND EMERGING BRIDGING STRATEGY IN IDIOPATHIC PULMONARY HYPERTENSION (IPAH)/ASSOCIATED PULMONARY HYPERTENSION (APAH)**

Rosenzweig Erika<sup>[1]</sup>, Brodie Daniel<sup>[1]</sup>, Abrams Darryl<sup>[1]</sup>, Agerstand Cara<sup>[1]</sup>, Bacchetta Matthew<sup>[1]</sup>

<sup>[1]</sup>Columbia University ~ New York ~ USA

### **INTERACTION OF PDE5 INHIBITORS WITH PROSTACYCLIN AND GUANYLATE CYCLASE ACTIVATORS ON CELL PROLIFERATION OF SMOOTH MUSCLE IN PAH**

Rupasinghe Binara<sup>[1]</sup>, Clapp Lucie<sup>[1]</sup>, Hobbs Adrian<sup>[2]</sup>, Abraham David<sup>[1]</sup>

<sup>[1]</sup>Division of Medicine, University College London ~ United Kingdom, <sup>[2]</sup>Barts & The London School of Medicine & Dentistry, Queen Mary University of London ~ United Kingdom

### **OUTCOME OF CANDIDATES FOR LIVER TRANSPLANTATION SUFFERING FROM PORTOPULMONARY HYPERTENSION**

Savale Laurent<sup>[1]</sup>, Sattler Caroline<sup>[1]</sup>, Magnier Romain<sup>[2]</sup>, Jais Xavier<sup>[1]</sup>, Parent Florence<sup>[1]</sup>, Artaud-Macari Elise<sup>[1]</sup>, Günther Sven<sup>[1]</sup>, Montani David<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>, Simonneau Gérald<sup>[1]</sup>, Sitbon Olivier<sup>[1]</sup>

<sup>[1]</sup>CHU Bicêtre, Université Paris-Sud ~ Le Kremlin Bicêtre ~ France, <sup>[2]</sup>CHRU Caen ~ France

### **INTRAVENOUS SILDENAFIL - NEW ROLE FOR A NOT SO NEW DRUG?**

Shekar Kiran<sup>[1]</sup>, Buschel Rachel<sup>[1]</sup>, Kermeen Fiona<sup>[1]</sup>

<sup>[1]</sup>The Prince Charles Hospital ~ Brisbane ~ Australia

### **ASYMMETRIC DIMETHYLARGININE, A BIOMARKER FOR THE EFFECTS OF DRUG THERAPY IN PULMONARY HYPERTENSION**

Skoro-Sajer Nika<sup>[1]</sup>, Aschauer Stefan<sup>[2]</sup>, Hlavin Gerald<sup>[3]</sup>, Wolzt Michael<sup>[2]</sup>, Sadushi-Kolici Roela<sup>[1]</sup>, Lang Irene<sup>[1]</sup>

<sup>[1]</sup>Department of Internal Medicine, Division of Cardiology, Medical University of Vienna ~ Austria, <sup>[2]</sup>Department of Clinical Pharmacology, Medical University of Vienna ~ Austria, <sup>[3]</sup>Section of Medical Statistics, Medical University of Vienna ~ Austria

### **MORTALITY REVIEW OF PULMONARY ARTERIAL HYPERTENSION PATIENTS ON IV PROSTACYCLIN ANALOGUES**

Spikes Leslie<sup>[1]</sup>, Maalouf Najla<sup>[1]</sup>, Satterwhite Lewis<sup>[1]</sup>, Westhoff Ryan<sup>[1]</sup>, Landzaat Lindy<sup>[1]</sup>, Williamson Timothy<sup>[1]</sup>

<sup>[1]</sup>University of Kansas Medical Center ~ Kansas City ~ USA

### **330 PATIENT MONTHS WITH INTRAVENOUS TREPROSTINIL AND LENUS PRO - A MULTICENTER SAFETY ANALYSIS**

Steringer-Mascherbauer Regina<sup>[1]</sup>, Andreassen Arne K<sup>[2]</sup>, Hohenforst-Schmidt Wolfgang<sup>[3]</sup>, Jansa Pavel<sup>[4]</sup>, Ewert Ralf<sup>[5]</sup>

<sup>[1]</sup>KH Elisabethinen ~ Linz ~ Austria, <sup>[2]</sup>Oslo University Hospital ~ Oslo ~ Norway, <sup>[3]</sup>Medical Hospital Coburg ~ Germany, <sup>[4]</sup>Charles University, 1st Faculty of Medicines Prague ~ Czech Republic, <sup>[5]</sup>University Hospital Greifswald ~ Germany

### **INTRAVENOUS TREPROSTINIL IN PAH: A NOVEL „SURGICAL“ APPROACH**

Steringer-Mascherbauer Regina<sup>[1]</sup>, Fuegger Reinhold<sup>[1]</sup>, Froeschl Uwe<sup>[1]</sup>, Eder Veronika<sup>[1]</sup>, Huber Charlotte<sup>[1]</sup>, Nesser Hans-Joachim<sup>[1]</sup>

<sup>[1]</sup>KH Elisabethinen ~ Linz ~ Austria

## Poster Sessions

Thursday, February 28

### **G PROTEIN $\beta$ 3 SUBUNIT GNB3 C825T POLYMORPHISM AFFECTS THE EFFICACY OF SILDENAFIL ON PULMONARY HYPERTENSION**

Tanabe Nobuhiro<sup>[1]</sup>, Sekine Ayako<sup>[1]</sup>, Sugiura Toshihiko<sup>[1]</sup>, Nisihmura Rintaro<sup>[1]</sup>, Jujo Takayuki<sup>[1]</sup>, Ichimura Yasunori<sup>[1]</sup>, Sakao Seiichiro<sup>[1]</sup>, Kasahara Yasunori<sup>[1]</sup>, Tatsumi Koichiro<sup>[1]</sup>

<sup>[1]</sup>Graduate School of Medicine, Chiba University ~ Chiba ~ Japan

### **THE LESS-STRICT CRITERIA OF PULMONARY ARTERY VASOREACTIVITY PREDICTS TREATMENT EFFICACY IN PATIENTS WITH PULMONARY HYPERTENSION**

Toyao Kaori<sup>[1]</sup>, Taguchi Hiroki<sup>[1]</sup>, Yanagisawa Ryoji<sup>[1]</sup>, Shimura Nobuhiko<sup>[1]</sup>, Inami Takumi<sup>[1]</sup>, Ishiguro Haruhisa<sup>[1]</sup>, Kataoka Masaharu<sup>[1]</sup>, Yoshino Hideaki<sup>[1]</sup>, Satoh Toru<sup>[1]</sup>

<sup>[1]</sup>Division of Cardiology, Department of Medicine, Kyorin University School of Medicine ~ Tokyo ~ Japan

### **OUTCOMES OF SYSTEMIC SCLEROSIS PATIENTS WITH EXERCISE INDUCED PULMONARY ARTERIAL HYPERTENSION TREATED WITH ADVANCED THERAPIES**

Treleaven Jeanette<sup>[1]</sup>, Fowler Robin<sup>[1]</sup>, Gabbay Eli<sup>[1]</sup>

<sup>[1]</sup>Royal Perth Hospital ~ Perth ~ Australia

### **PREVALENCE OF DEPRESSION, ANXIETY AND STRESS IN ADULT PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION (PAH) AND THEIR IMPACT ON THE HEALTH RELATED QUALITY OF LIFE (QOL)**

Vandeveldt Ellen<sup>[1]</sup>, Vanhoof Jasper<sup>[2]</sup>, Wuyts Wim<sup>[1]</sup>, Dobbels Fabienne<sup>[2]</sup>, Delcroix Marion<sup>[1]</sup>

<sup>[1]</sup>University Hospitals of Leuven ~ Belgium, <sup>[2]</sup>University of Leuven ~ Belgium

### **EVALUATION OF ANXIETY AND DEPRESSION IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION**

Yorke Janelle<sup>[1]</sup>, Campbell Malcolm<sup>[1]</sup>, Armstrong Iain<sup>[2]</sup>

<sup>[1]</sup>University of Manchester ~ United Kingdom, <sup>[2]</sup>Royal Hallamshire Hospital and PHA UK ~ Sheffield ~ United Kingdom

### **RECURRENCE OF PAH TWENTY TWO YEARS AFTER SINGLE LUNG TRANSPLANTATION**

Zhao Yidan<sup>[1]</sup>, Yun Hanna<sup>[1]</sup>, Lu Catherine<sup>[1]</sup>, Peng Jenny<sup>[1]</sup>, Wu Licun<sup>[1]</sup>, Granton John<sup>[1]</sup>, De Perrot Marc<sup>[1]</sup>

<sup>[1]</sup>University Health Network ~ Toronto ~ Canada

## THERAPY - GOALS

### **A QUALITATIVE INVESTIGATION OF PATIENTS' EXPERIENCES OF LIVING WITH PULMONARY HYPERTENSION**

Armstrong Iain<sup>[1]</sup>, Yorke Janelle<sup>[2]</sup>

<sup>[1]</sup>Royal Hallamshire Hospital and PHA UK ~ Sheffield ~ United Kingdom, <sup>[2]</sup>University of Manchester ~ United Kingdom

### **THE GOAL OF THE EPOPROSTENOL THERAPY IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION**

Kikuchi Hanako<sup>[1]</sup>, Taguchi Hiroki<sup>[1]</sup>, Yanagisawa Ryoji<sup>[1]</sup>, Shimura Nobuhiko<sup>[1]</sup>, Inami Takumi<sup>[1]</sup>, Ishiguro Haruhisa<sup>[1]</sup>, Kataoka Masaharu<sup>[1]</sup>, Yoshino Hideaki<sup>[1]</sup>, Satoh Toru<sup>[1]</sup>

<sup>[1]</sup>Division of Cardiology, Department of Medicine, Kyorin University School of Medicine ~ Tokyo ~ Japan

### **METHODS FOR CONSIDERING TREATMENT EFFECTS ON MULTIPLE ENDPOINTS WHEN DEFINING PATIENT RESPONSE IN PAH CLINICAL TRIALS**

Kittelson John<sup>[3]</sup>, Dusek Alex<sup>[1]</sup>, Badesch David B<sup>[2]</sup>

<sup>[1]</sup>Bayer Health Care Pharmaceuticals ~ Berlin ~ Germany, <sup>[2]</sup>Pulmonary Sciences and Critical Care Medicine, University of Colorado Denver ~ Aurora, Colorado ~ USA, <sup>[3]</sup>Professor Department of Biostatistics and Informatics, Colorado School of Public Health, University of Colorado Denver ~ Aurora, Colorado ~ USA

# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Poster Sessions

FRIDAY, MARCH 1

### NEW TRIALS DESIGN AND NEW THERAPIES

#### **ACUTE HEMODYNAMIC RESPONSE TO INHALED NITRITE IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION**

Bachman Tim<sup>[1]</sup>, Longhini Anthony<sup>[1]</sup>, Pogozelski Andrew<sup>[1]</sup>, White Pamela<sup>[1]</sup>, Edelman Kathy<sup>[1]</sup>, Risbano Michael<sup>[1]</sup>, Simon Marc<sup>[1]</sup>, Shiva Sruti<sup>[1]</sup>, Gladwin Mark<sup>[1]</sup>, Champion Hunter<sup>[1]</sup>

<sup>[1]</sup>University of Pittsburgh ~ USA

#### **(-)-EPICATEHIN MIGHT HAVE BENEFICIAL EFFECTS IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION**

Barnett Christopher<sup>[1]</sup>, McGlothlin Dana<sup>[1]</sup>, De Marco Teresa<sup>[1]</sup>

<sup>[1]</sup>University of California San Francisco ~ San Francisco ~ United States

#### **PERCUTANEOUS GENE TRANSFER TO THE PULMONARY VASCULATURE OF SWINE**

Benza Raymond<sup>[1]</sup>, Murali Srinivas<sup>[1]</sup>, Sokos George<sup>[1]</sup>, Geguchadze Ramaz<sup>[1]</sup>, Passineau Michael<sup>[1]</sup>

<sup>[1]</sup>West Penn Allegheny Health System ~ Pittsburgh ~ United States

#### **THE PI 3-KINASE ISOFORM P110 ALPHA REPRESENTS A PROMISING THERAPEUTIC TARGET FOR PULMONARY ARTERIAL HYPERTENSION**

Berghausen Eva Maria<sup>[1]</sup>, Janssen Wiebke<sup>[2]</sup>, Vantler Marius<sup>[1]</sup>, Ten Freyhaus Henrik<sup>[1]</sup>, Zhao Jean J<sup>[3]</sup>, Schermuly Ralph Theo<sup>[2]</sup>, Rosenkranz Stephan<sup>[1]</sup>

<sup>[1]</sup>University Hospital of Cologne ~ Germany, <sup>[2]</sup>University of Giessen Lung Center ~ Giessen ~ Germany, <sup>[3]</sup>Dana-Farber Cancer Institute ~ Boston ~ USA

#### **UPDATE ON DASATINIB RELATED PULMONARY ARTERIAL HYPERTENSION**

Montani David<sup>[1]</sup>, Bergot Emmanuel<sup>[1]</sup>, Günther Sven<sup>[1]</sup>, Savale Laurent<sup>[1]</sup>, Bergeron Anne<sup>[1]</sup>, Bourdin Arnaud<sup>[1]</sup>, Canuet Matthieu<sup>[1]</sup>, Pison Christophe<sup>[1]</sup>, Macro Margareth<sup>[1]</sup>, Poubeau Patrice<sup>[1]</sup>, Girerd Barbara<sup>[1]</sup>, Prevot Grégoire<sup>[1]</sup>, Guignabert Christophe<sup>[1]</sup>, Perros Frédéric<sup>[1]</sup>, Jaïs Xavier<sup>[1]</sup>, Zalcman Gérard<sup>[1]</sup>, Sitbon Olivier<sup>[1]</sup>, Simonneau Gérald<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>

<sup>[1]</sup>Réseau Français de l'HTAP, Centre de référence de l'HTAP, Service de Pneumologie, Hôpital de Bicêtre ~ Le Kremlin Bicêtre ~ France

#### **SYNERGISTIC EFFECT OF IMATINIB AND SILDENAFIL ON AMELIORATION OF PULMONARY HYPERTENSION - ROLE OF BONE MORPHOGENIC PROTEIN (BMP)-SIGNALING PATHWAY**

Pullamsetti Soni Savai<sup>[1]</sup>, Berk Joachim<sup>[2]</sup>, Scheidl Sandra<sup>[2]</sup>, Kojonazarov Baktybek<sup>[2]</sup>, Weissmann Norbert<sup>[2]</sup>, Grimminger Friedrich<sup>[2]</sup>, Seeger Werner<sup>[2]</sup>, Ghofrani Hossein Ardeschir<sup>[2]</sup>, Butrous Ghazwan<sup>[3]</sup>, Schermuly Ralph Theo<sup>[2]</sup>

<sup>[1]</sup>Max Planck Institute for Heart and Lung Research ~ Bad Nauheim ~ Germany, <sup>[2]</sup>Universities of Giessen and Marburg Lung Center ~ Giessen ~ Germany, <sup>[3]</sup>University of Kent ~ United Kingdom

#### **THE CASE OF THE EFFECTIVE APPLICATION OF AUTOLOGOUS MESENCHYMAL STEM CELLS IN PATIENT WITH EISENMENGER SYNDROME**

Salakhova Ganna<sup>[1]</sup>, Popandopulo Andrew<sup>[1]</sup>

<sup>[1]</sup>Institute of Urgent and Recovery Surgery ~ Donetsk ~ Ukraine

#### **EFFECTS OF BROAD SPECTRUM TYROSIN KINASE INHIBITOR IN EXPERIMENTAL PULMONARY HYPERTENSION**

Seferian Andrei<sup>[1]</sup>, Tu Ly<sup>[2]</sup>, Huertas Alice<sup>[2]</sup>, Phan Carole<sup>[2]</sup>, Ricard Nicolas<sup>[2]</sup>, Perros Frédéric<sup>[2]</sup>, Simonneau Gérald<sup>[1]</sup>, Humbert Marc<sup>[1]</sup>, Montani David<sup>[1]</sup>, Guignabert Christophe<sup>[2]</sup>

<sup>[1]</sup>CHU Bicêtre Service de Pneumologie et Réanimation Respiratoire, Inserm U999, DHU TORINO, Centre Chirurgical Marie Lannelongue, Université Paris-Sud ~ Paris ~ France, <sup>[2]</sup>INSERM U999, LabEx LERMIT, DHU TORINO, Centre Chirurgical Marie Lannelongue, Université Paris-Sud ~ Paris ~ France

Friday, March 1

## Poster Sessions

### CTEPH

#### COMPARISON OF CLINICAL OUTCOMES ACCORDING TO TREATMENT STRATEGY IN PATIENTS WITH ACUTE INTERMEDIATE-RISK PULMONARY THROMBOEMBOLISM

Ahn Jinhee<sup>[1]</sup>, Choi Jung Hyun<sup>[1]</sup>, Im Kyoung Min<sup>[1]</sup>, Yang Mi Jin<sup>[2]</sup>

<sup>[1]</sup>Pusan National University Hospital ~ Busan ~ Korea, Republic of, <sup>[2]</sup>Busan Medical Center ~ Busan ~ Korea, Republic of

#### PULMONARY EMBOLISM IN SWEDEN, ANALYSIS OF A NATIONAL COHORT. INCIDENCE OF CTEPH AND ITS DETERMINANTS

Andersson Therese<sup>[1]</sup>, Larsen Flemming<sup>[2]</sup>, Carlberg Bo<sup>[3]</sup>, Söderberg Stefan<sup>[1]</sup>

<sup>[1]</sup>Dept of Public Health and Clinical Medicine, Cardiology, Umeå University ~ Sweden, <sup>[2]</sup>Karolinska Institute ~ Stockholm ~ Sweden, <sup>[3]</sup>Dept of Public Health and Clinical Medicine, Medicine, Umeå University ~ Sweden

#### BALLOON PULMONARY ANGIOPLASTY IN CHRONIC THROMBOEMBOLIC DISEASE – AN INTERVENTION IN PATIENTS WITH DENIED OR UNSUCCESSFUL THROMBENDARTERECTOMY

Andreassen Arne K<sup>[1]</sup>, Ragnarsson Asgrimur<sup>[1]</sup>, Gude Einar<sup>[1]</sup>, Geiran Odd<sup>[1]</sup>, Andersen Rune<sup>[1]</sup>

<sup>[1]</sup>Oslo University Hospital Rikshospitalet ~ Oslo ~ Norway

#### PULMONARY HEMODYNAMIC BENEFIT IS ACHIEVED WITH RESECTION OF SEGMENTAL-LEVEL (JAMIESON TYPE III) CHRONIC THROMBOEMBOLIC DISEASE

Auger William R<sup>[1]</sup>, Madani Michael<sup>[1]</sup>, Kim Nick H<sup>[1]</sup>, Fedullo Peter F<sup>[1]</sup>, Kerr Kim<sup>[1]</sup>, Pretorius Victor<sup>[1]</sup>, Fernandes Timothy<sup>[1]</sup>, Jamieson Stuart W<sup>[1]</sup>

<sup>[1]</sup>University of California San Diego ~ La Jolla, CA ~ USA

#### CLINICAL AND EPIDEMIOLOGIC ANALYSIS OF PATIENTS UNDERGOING PULMONARY ENDARTERECTOMY IN ARGENTINA

Favaloro Roberto<sup>[1]</sup>, Peradejordi Margarita<sup>[1]</sup>, Favaloro Liliana<sup>[1]</sup>, Cánave Jorge<sup>[1]</sup>, Klein Francisco<sup>[1]</sup>, Talavera Luján<sup>[1]</sup>, Bertolotti Alejandro<sup>[1]</sup>

<sup>[1]</sup>Favaloro Foundation, University Hospital ~ Buenos Aires ~ Argentina

#### PULMONARY ENDARTERECTOMY: 19 YEAR FOLLOW-UP. SINGLE CENTER EXPERIENCE

Favaloro Roberto<sup>[1]</sup>, Peradejordi Margarita<sup>[1]</sup>, Bertolotti Alejandro<sup>[1]</sup>, Favaloro Liliana<sup>[1]</sup>, Gómez Carmen<sup>[1]</sup>, Cánave Jorge<sup>[1]</sup>, Klein Francisco<sup>[1]</sup>, Talavera Luján<sup>[1]</sup>

<sup>[1]</sup>Favaloro Foundation, University Hospital ~ Buenos Aires ~ Argentina

#### EFFECTS OF PERCUTANEOUS TRANSLUMINAL PULMONARY ANGIOPLASTY ON PULMONARY HEMODYNAMICS AND LONG-TERM PROGNOSIS OF PATIENTS WITH DISTAL-TYPE CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION

Fukumoto Yoshihiro<sup>[1]</sup>, Sugimura Koichiro<sup>[1]</sup>, Nochioka Kotaro<sup>[1]</sup>, Miura Yutaka<sup>[1]</sup>, Aoki Tatsuo<sup>[1]</sup>, Tatebe Shunsuke<sup>[1]</sup>, Miyamichi-Yamamoto Saori<sup>[1]</sup>, Shimokawa Hiroaki<sup>[1]</sup>

<sup>[1]</sup>Tohoku University Graduate School of Medicine ~ Sendai ~ Japan

#### EFFECTS OF MEDICAL TREATMENT FOR OPERABLE AND INOPERABLE CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION PATIENTS

Gotti Enrico<sup>[1]</sup>, Terzi Francesca<sup>[1]</sup>, Bachetti Cristina<sup>[1]</sup>, Conficoni Elisa<sup>[1]</sup>, Rizzo Nicole<sup>[1]</sup>, Dardi Fabio<sup>[1]</sup>, Rinaldi Andrea<sup>[1]</sup>, Mazzanti Gaia<sup>[1]</sup>, Monti Enrico<sup>[1]</sup>, Albini Alessandra<sup>[1]</sup>, Palazzini Massimiliano<sup>[1]</sup>, Manes Alessandra<sup>[1]</sup>, Galiè Nazzareno<sup>[1]</sup>

<sup>[1]</sup>Institute of Cardiology, University of Bologna ~ Italy

## Poster Sessions

Friday, March 7

### **ANXIETY AND DEPRESSION DISORDERS IN PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION AND CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION**

Grünig Ekkehard<sup>[1]</sup>, Peña Pinado Fabiola<sup>[1]</sup>, Ehlken Nicola<sup>[1]</sup>, Nagel Christian<sup>[1]</sup>, Fischer Christine<sup>[1]</sup>, Tiede Henning<sup>[2]</sup>, Rosenkranz Stephan<sup>[3]</sup>, Seyfarth Hans-Jürgen<sup>[4]</sup>, Mayer Eckhard<sup>[5]</sup>, Halank Michael<sup>[6]</sup>, Guth Stefan<sup>[5]</sup>

<sup>[1]</sup>University of Heidelberg ~ Germany, <sup>[2]</sup>University of Giessen ~ Germany, <sup>[3]</sup>University of Cologne ~ Germany, <sup>[4]</sup>University of Leipzig ~ Germany, <sup>[5]</sup>Kerckhoff-Clinic ~ Bad Nauheim ~ Germany, <sup>[6]</sup>University of Dresden ~ Germany

### **PREVALENCE OF CHRONIC-THROMBOEMBOLIC PULMONARY HYPERTENSION AFTER PULMONARY EMBOLISM: A PROSPECTIVE MULTICENTER COHORT STUDY**

Guérin Laurent<sup>[1]</sup>, Couturaud Francis<sup>[2]</sup>, Parent Florence<sup>[3]</sup>, Revel Marie-Pierre<sup>[4]</sup>, Gillaizeau Florence<sup>[1]</sup>, Simonneau Gérald<sup>[3]</sup>, Meyer Guy<sup>[1]</sup>, Sanchez Olivier<sup>[1]</sup>

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### **EFFICACY OF PERCUTANEOUS TRANSLUMINAL PULMONARY ANGIOPLASTY FOR THE PATIENTS WITH CHRONIC THROMBO-EMBOLIC PULMONARY HYPERTENSION WHO HAVE RESIDUAL PULMONARY ARTERIAL HYPERTENSION AFTER PULMONARY ENDARTERECTOMY**

Inami Takumi<sup>[1]</sup>, Kataoka Masaharu<sup>[1]</sup>, Shimura Nobuhiko<sup>[1]</sup>, Yanagisawa Ryoji<sup>[1]</sup>, Taguchi Hiroki<sup>[1]</sup>, Ishiguro Haruhisa<sup>[1]</sup>, Hayashida Kentaro<sup>[3]</sup>, Tamura Yuichi<sup>[2]</sup>, Kawakami Takashi<sup>[2]</sup>, Yoshino Hideaki<sup>[1]</sup>, Satoh Toru<sup>[1]</sup>

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### **PREDICTIVE NEW INDEX OF REPERFUSION PULMONARY EDEMA IN PERCUTANEOUS TRANSLUMINAL PULMONARY ANGIOPLASTY FOR THE TREATMENT OF CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION**

Inami Takumi<sup>[1]</sup>, Kataoka Masaharu<sup>[1]</sup>, Shimura Nobuhiko<sup>[1]</sup>, Yanagisawa Ryoji<sup>[1]</sup>, Taguchi Hiroki<sup>[1]</sup>, Ishiguro Haruhisa<sup>[1]</sup>, Hayashida Kentaro<sup>[2]</sup>, Kawakami Takashi<sup>[3]</sup>, Tamura Yuichi<sup>[3]</sup>, Yoshino Hideaki<sup>[1]</sup>, Satoh Toru<sup>[1]</sup>

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### **ANGIOGRAPHIC FLOW GRADE IS USEFUL TO DETERMINE THE ENDPOINT IN PERCUTANEOUS TRANSLUMINAL PULMONARY ANGIOPLASTY**

Inami Takumi<sup>[1]</sup>, Kataoka Masaharu<sup>[1]</sup>, Shimura Nobuhiko<sup>[1]</sup>, Yanagisawa Ryoji<sup>[1]</sup>, Taguchi Hiroki<sup>[1]</sup>, Ishiguro Haruhisa<sup>[1]</sup>, Hayashida Kentaro<sup>[2]</sup>, Kawakami Takashi<sup>[3]</sup>, Tamura Yuichi<sup>[3]</sup>, Yoshino Hideaki<sup>[1]</sup>, Satoh Toru<sup>[1]</sup>

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### **PULMONARY ARTERY SARCOMA: A SINGLE CENTER CASE SERIES WITH 40 PATIENTS**

Kerr Kim<sup>[1]</sup>, La Vine David<sup>[1]</sup>, Lin Grace<sup>[1]</sup>, Auger William R<sup>[1]</sup>, Fedullo Peter F<sup>[1]</sup>, Kim Nick H<sup>[1]</sup>, Jamieson Stuart W<sup>[1]</sup>, Poch David<sup>[1]</sup>, Madani Michael<sup>[1]</sup>

<sup>[1]</sup>University of California San Diego ~ La Jolla, CA ~ USA

### **MANAGEMENT OF AIRWAY BLEEDING DURING PULMONARY ENDARTERECTOMY**

Morsolini Marco<sup>[4]</sup>, Mattiucci Gabriella<sup>[1]</sup>, Vistarini Nicola<sup>[1]</sup>, Valsecchi Federica<sup>[2]</sup>, Salati Maurizio<sup>[1]</sup>, Orlandoni Giulio<sup>[3]</sup>, D'Armini Andrea Maria<sup>[1]</sup>

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### **PULMONARY ENDARTERECTOMY IN PATIENTS WITH CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION PRESENTING WITH WHO II SYMPTOMS**

Morsolini Marco<sup>[1]</sup>, Mattiucci Gabriella<sup>[2]</sup>, Vistarini Nicola<sup>[2]</sup>, Monterosso Cristian<sup>[2]</sup>, Silvaggio Giuseppe<sup>[2]</sup>, Ghio Stefano<sup>[3]</sup>, D'Armini Andrea Maria<sup>[2]</sup>

<sup>[1]</sup>University of Pavia School of Medicine Department of Surgery, Division of Cardiac Surgery ~ Pavia ~ Italy, <sup>[2]</sup>University of Pavia School of Medicine Division of Cardiac Surgery ~ Pavia ~ Italy, <sup>[3]</sup>University of Pavia School of Medicine Division of Cardiology ~ Pavia ~ Italy

### **EXTRACORPOREAL MEMBRANE OXYGENATION SUPPORT EARLY AFTER PULMONARY ENDARTERECTOMY**

Morsolini Marco<sup>[1]</sup>, Vistarini Nicola<sup>[2]</sup>, Degani Antonella<sup>[3]</sup>, Cattadori Barbara<sup>[2]</sup>, Pellegrini Carlo<sup>[2]</sup>, Goggi Claudio<sup>[2]</sup>, D'Armini Andrea Maria<sup>[2]</sup>

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### **SURGICAL TREATMENT OF CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION: 20 YEARS OF EXPERIENCE FROM A SINGLE CENTER**

Nierlich Patrick<sup>[1]</sup>, Taghavi Shahrokh<sup>[1]</sup>, Hoda Mir Ali Reza<sup>[1]</sup>, Ghanim Bahil<sup>[1]</sup>, Skoro-Sajer Nika<sup>[2]</sup>, Lang Irene<sup>[2]</sup>, Klepetko Walter<sup>[1]</sup>

<sup>[1]</sup>Division of Thoracic Surgery, Department of Surgery, Medical University Vienna ~ Austria, <sup>[2]</sup>Division of Cardiology, Department of Internal Medicine, Medical University Vienna ~ Austria

### **PREVALENCE OF VQ SCAN UTILIZATION AND MEDICAL THERAPY TRIAL IN CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION: UCSD REFERRAL CENTER EXPERIENCE**

Poch David<sup>[1]</sup>, Kerr Kim<sup>[1]</sup>, Auger William R<sup>[1]</sup>, Fedullo Peter F<sup>[1]</sup>, Mandel Jess<sup>[1]</sup>, Pretorius Victor<sup>[1]</sup>, Jamieson Stuart W<sup>[1]</sup>, Madani Michael<sup>[1]</sup>, Kim Nick H<sup>[1]</sup>

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### **SHOULD WE OFFER PULMONARY ENDARTERECTOMY TO OCTOGENARIANS?**

Pretorius Victor<sup>[1]</sup>, Poch David<sup>[1]</sup>, Auger William R<sup>[1]</sup>, Kerr Kim<sup>[1]</sup>, Fedullo Peter F<sup>[1]</sup>, Kim Hyong<sup>[1]</sup>, Madani Michael<sup>[1]</sup>, Jamieson Stuart W<sup>[1]</sup>

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### **DIFFERENT SURVIVAL IN PATIENTS WITH OPERABLE AND INOPERABLE CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION: A SINGLE CENTER EXPERIENCE**

Rinaldi Andrea<sup>[1]</sup>, Gotti Enrico<sup>[1]</sup>, Terzi Francesca<sup>[1]</sup>, Bachetti Cristina<sup>[1]</sup>, Conficoni Elisa<sup>[1]</sup>, Rizzo Nicole<sup>[1]</sup>, Dardi Fabio<sup>[1]</sup>, Mazzanti Gaia<sup>[1]</sup>, Albini Alessandra<sup>[1]</sup>, Monti Enrico<sup>[1]</sup>, Palazzini Massimiliano<sup>[1]</sup>, Manes Alessandra<sup>[1]</sup>, Galiè Nazzareno<sup>[1]</sup>

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### **CLINICAL WORSENING ASSESSMENT FOLLOWING PULMONARY ENDARTERECTOMY IN CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION**

Schölzel Bas<sup>[1]</sup>, Post Marco<sup>[1]</sup>, Plokker Thijs<sup>[1]</sup>, Snijder Repke<sup>[1]</sup>, Budts Werner<sup>[2]</sup>, Morshuis Wim<sup>[1]</sup>, Wuyts Wim<sup>[2]</sup>, Meyns Bart<sup>[2]</sup>, Delcroix Marion<sup>[2]</sup>

<sup>[1]</sup>St. Antonius Hospital ~ Nieuwegein ~ Netherlands, <sup>[2]</sup>University Hospitals ~ Leuven ~ Belgium

### **PREDICTION OF OUTCOME AFTER PULMONARY THROMBO-ENDARTERECTOMY IN CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION BY USING INDEXED PULMONARY ARTERY DIAMETER**

Schölzel Bas<sup>[1]</sup>, Post Marco<sup>[1]</sup>, Dymarkowski Steven<sup>[2]</sup>, Wuyts Wim<sup>[2]</sup>, Meyns Bart<sup>[2]</sup>, Budts Werner<sup>[2]</sup>, Morshuis Wim<sup>[1]</sup>, Snijder Repke<sup>[1]</sup>, Delcroix Marion<sup>[2]</sup>

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### **PREDICTION OF HEMODYNAMIC IMPROVEMENT AFTER PULMONARY ENDARTERECTOMY IN CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION USING OCCLUSION PRESSURE ANALYSIS**

Schölzel Bas<sup>[1]</sup>, Post Marco<sup>[1]</sup>, Fesler Pierre<sup>[2]</sup>, Van De Bruaene Alexander<sup>[3]</sup>, Dymarkowski Steven<sup>[3]</sup>, Wuyts Wim<sup>[3]</sup>, Meyns Bart<sup>[3]</sup>, Budts Werner<sup>[3]</sup>, Delcroix Marion<sup>[3]</sup>

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### **PREDICTION OF HEMODYNAMIC IMPROVEMENT AFTER PULMONARY ENDARTERECTOMY IN CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION USING NON-INVASIVE IMAGING**

Schölzel Bas<sup>[1]</sup>, Post Marco<sup>[1]</sup>, Van De Bruaene Alexander<sup>[2]</sup>, Dymarkowski Steven<sup>[2]</sup>, Wuyts Wim<sup>[2]</sup>, Meyns Bart<sup>[2]</sup>, Budts Werner<sup>[2]</sup>, Delcroix Marion<sup>[2]</sup>

<sup>[1]</sup>St. Antonius Hospital ~ Nieuwegein ~ Netherlands, <sup>[2]</sup>University Hospitals ~ Leuven ~ Belgium

### **REFINED BALLOON PULMONARY ANGIOPLASTY AS A PROMISING OPTION FOR INOPERABLE PATIENTS WITH CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION**

Shimokawahara Hiroto<sup>[1]</sup>, Ogawa Aiko<sup>[1]</sup>, Mizoguchi Hiroki<sup>[1]</sup>, Munemasa Mitsuru<sup>[1]</sup>, Miyaji Katsumasa<sup>[1]</sup>, Matsubara Hiromi<sup>[1]</sup>

<sup>[1]</sup>National Hospital Organization Okayama Medical Center ~ Okayama ~ Japan

### **INTERLEUKINE-6 IS A USEFUL MARKER FOR IDENTIFYING HEMODYNAMICS AND PREDICTING REPERFUSION PULMONARY EDEMA AFTER ANGIOPLASTY IN CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION**

Shimura Nobuhiko<sup>[1]</sup>, Inami Takumi<sup>[1]</sup>, Kataoka Masaharu<sup>[1]</sup>, Yanagisawa Ryoji<sup>[1]</sup>, Taguchi Hiroki<sup>[1]</sup>, Ishiguro Haruhisa<sup>[1]</sup>, Hayashida Kentaro<sup>[2]</sup>, Kawakami Takashi<sup>[3]</sup>, Tamura Yuichi<sup>[3]</sup>, Yoshino Hideaki<sup>[1]</sup>, Satoh Toru<sup>[1]</sup>, Kimura Go<sup>[1]</sup>, Isaka Aoi<sup>[1]</sup>

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### **ELECTROCARDIOGRAPHY PROPERLY REFLECTS THE CHANGES OF RIGHT-SIDED HEART OVERLOAD IN PATIENTS WITH CHRONIC PULMONARY THROMBOEMBOLISM TREATED BY PERCUTANEOUS TRANSLUMINAL PULMONARY ANGIOPLASTY**

Shimura Nobuhiko<sup>[1]</sup>, Inami Takumi<sup>[1]</sup>, Kataoka Masaharu<sup>[1]</sup>, Yanagisawa Ryoji<sup>[1]</sup>, Ishiguro Haruhisa<sup>[1]</sup>, Hayashida Kentaro<sup>[2]</sup>, Taguchi Hiroki<sup>[1]</sup>, Kawakami Takashi<sup>[3]</sup>, Tamura Yuichi<sup>[3]</sup>, Yoshino Hideaki<sup>[1]</sup>, Satoh Toru<sup>[1]</sup>

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### **CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION: IS THERE A PARAMETER ABLE TO PREDICT SURGICAL INDICATION?**

Silva Doroteia<sup>[1]</sup>, Garrido-Lestache Elvira Barrios<sup>[2]</sup>, Alonso Catherina Sergio<sup>[2]</sup>, Flox Camacho Ángela<sup>[2]</sup>, Velázquez Martin María Teresa<sup>[2]</sup>, Ruiz Cano María José<sup>[2]</sup>, Escribano Pilar<sup>[2]</sup>, Gómez Sánchez Miguel Angel<sup>[2]</sup>, Cortina José María<sup>[2]</sup>

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### **RIOCIGUAT FOR THE TREATMENT OF CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION (CTEPH): A PHASE 3 LONG-TERM EXTENSION STUDY (CHEST-2)**

Simonneau Gérard<sup>[1]</sup>, D'Armini Andrea Maria<sup>[2]</sup>, Ghofrani Hossein Ardeschir<sup>[3]</sup>, Grimminger Friedrich<sup>[3]</sup>, Hoepfer Marius M<sup>[4]</sup>, Jansa Pavel<sup>[5]</sup>, Kim Nick H<sup>[6]</sup>, Wang Chen<sup>[7]</sup>, Wilkins Martin<sup>[8]</sup>, Fritsch Arno<sup>[9]</sup>, Neuser Dieter<sup>[9]</sup>, Weimann Gerrit<sup>[9]</sup>, Mayer Eckhard<sup>[10]</sup>

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### **PREDICTORS OF LONG-TERM OUTCOME IN PATIENTS WITH CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION UNDERGOING PULMONARY ENDARTERECTOMY**

Skoro-Sajer Nika<sup>[2]</sup>, Marta Gabriel<sup>[1]</sup>, Hlavin Gerald<sup>[3]</sup>, Gerges Christian<sup>[2]</sup>, Nierlich Patrick<sup>[1]</sup>, Sadushi-Kolici Roela<sup>[2]</sup>, Klepetko Walter<sup>[1]</sup>, Lang Irene<sup>[2]</sup>

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### **DIFFUSING CAPACITY FOR CARBON MONOXIDE AND MORTALITY IN PATIENTS WITH CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION**

Suda Rika<sup>[1]</sup>, Tanabe Nobuhiro<sup>[1]</sup>, Kato Fumiaki<sup>[1]</sup>, Sekine Ayumi<sup>[1]</sup>, Ichimura Yasunori<sup>[1]</sup>, Nishimura Rintaro<sup>[1]</sup>, Jujo Takayuki<sup>[1]</sup>, Sugiura Toshihiko<sup>[1]</sup>, Shigeta Ayako<sup>[1]</sup>, Sakao Seiichiro<sup>[1]</sup>, Kasahara Yasunori<sup>[1]</sup>, Tatsumi Koichiro<sup>[1]</sup>

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### **QUANTITATIVE MEASUREMENT OF CROSS-SECTIONAL AREA OF SMALL PULMONARY VESSELS USING NON-ENHANCED COMPUTED TOMOGRAPHY IN CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION**

Sugiura Toshihiko<sup>[1]</sup>, Tanabe Nobuhiro<sup>[1]</sup>, Matsuura Yukiko<sup>[1]</sup>, Kawata Naoko<sup>[1]</sup>, Yanagawa Noriyuki<sup>[1]</sup>, Sekine Ayumi<sup>[1]</sup>, Suda Rika<sup>[1]</sup>, Jujo Takayuki<sup>[1]</sup>, Sakao Seiichiro<sup>[1]</sup>, Kasahara Yasunori<sup>[1]</sup>, Tatsumi Koichiro<sup>[1]</sup>

<sup>[1]</sup>Chiba University ~ Japan

### **PAH WITH IN SITU THROMBOSIS MIMICKING CTEPH**

Taype-Roberts Carmen A<sup>[1]</sup>, Papamatheakis Demosthenes G<sup>[1]</sup>, Poch David<sup>[1]</sup>, Mandel Jess<sup>[1]</sup>, Kerr Kim<sup>[1]</sup>, Auger William R<sup>[1]</sup>, Fedullo Peter F<sup>[1]</sup>, Pretorius Victor<sup>[1]</sup>, Jamieson Stuart W<sup>[1]</sup>, Madani Michael<sup>[1]</sup>, Kim Nick H<sup>[1]</sup>

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### **PREDICTIVE FACTORS FOR SUCCESS OF PULMONARY ENDARTERECTOMY (PEA) IN CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION (CTEPH)**

Tromeur Cécile<sup>[4]</sup>, Jaïs Xavier<sup>[2]</sup>, Mercier Olaf<sup>[3]</sup>, Montani David<sup>[2]</sup>, Savale Laurent<sup>[2]</sup>, Günther Sven<sup>[2]</sup>, Artaud-Macari Elise<sup>[2]</sup>, Sitbon Olivier<sup>[2]</sup>, Fadel Elie<sup>[3]</sup>, Mussot Sacha<sup>[3]</sup>, Humbert Marc<sup>[2]</sup>, Dartevelle Philippe<sup>[3]</sup>, Couturaud Francis<sup>[1]</sup>, Simonneau Gérard<sup>[2]</sup>

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### **ROLE OF TRANSTHORACIC ECHOCARDIOGRAPHY IN THE MANAGEMENT OF CTEPH**

Ugolotti Tito<sup>[1]</sup>, Serra Walter<sup>[1]</sup>, Cattabiani Maria Alberta<sup>[1]</sup>, Sverzellati Nicola<sup>[1]</sup>, Ardissino Diego<sup>[1]</sup>, Gherli Tiziano<sup>[1]</sup>

<sup>[1]</sup>University Hospital ~ Parma ~ Italy

### **PERCUTANEOUS TRANSLUMINAL PULMONARY ANGIOPLASTY IS A USEFUL THERAPEUTIC STRATEGY FOR HIGH RISK PATIENTS OF PULMONARY ENDARTERECTOMY**

Yanagisawa Ryoji<sup>[1]</sup>, Kataoka Masaharu<sup>[1]</sup>, Taguchi Hiroki<sup>[1]</sup>, Shimura Nobuhiko<sup>[1]</sup>, Inami Takumi<sup>[1]</sup>, Ishiguro Haruhisa<sup>[1]</sup>, Kawakami Takashi<sup>[2]</sup>, Tamura Yuichi<sup>[2]</sup>, Hayashida Kentaro<sup>[3]</sup>, Fukuda Keiichi<sup>[2]</sup>, Yoshino Hideaki<sup>[1]</sup>, Satoh Toru<sup>[1]</sup>

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### PH DUE TO LEFT HEART DISEASES AND CHRONIC LUNG DISEASES

#### **EFFECT OF MEDICAL THERAPY IN PATIENTS WITH OUT-OF-PROPORTION PULMONARY HYPERTENSION DUE TO LUNG DISEASE**

Bachetti Cristina<sup>[1]</sup>, Mazzanti Gaia<sup>[1]</sup>, Conficoni Elisa<sup>[1]</sup>, Terzi Francesca<sup>[1]</sup>, Rizzo Nicole<sup>[1]</sup>, Dardi Fabio<sup>[1]</sup>, Rinaldi Andrea<sup>[1]</sup>, Gotti Enrico<sup>[1]</sup>, Albini Alessandra<sup>[1]</sup>, Monti Enrico<sup>[1]</sup>, Palazzini Massimiliano<sup>[1]</sup>, Manes Alessandra<sup>[1]</sup>, Galiè Nazzeno<sup>[1]</sup>

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#### **THE ROLE OF ECHOCARDIOGRAPHY IN THE DISCRIMINATION BETWEEN PRE- AND POST-CAPILLARY HAEMODYNAMICS IN PATIENTS WITH PULMONARY HYPERTENSION AND RISK FACTORS FOR LEFT HEART DISEASE**

Charalampopoulos Athanasios<sup>[1]</sup>, Howard Luke<sup>[1]</sup>, Davies Rachel<sup>[1]</sup>, Gin-Sing Wendy<sup>[1]</sup>, Tzoulaki Ioanna<sup>[1]</sup>, Wilkins Martin<sup>[1]</sup>, Gibbs Simon<sup>[1]</sup>

<sup>[1]</sup>Imperial Healthcare NHS Trust-Imperial College ~ London ~ United Kingdom

#### **ATTENUATION OF PULMONARY HYPERTENSION SECONDARY TO LEFT VENTRICULAR DYSFUNCTION IN THE RAT BY ACE2 ACTIVATOR**

Dai Zen-Kong<sup>[1]</sup>, Wu Jiunn-Ren<sup>[1]</sup>, Chen I-Chen<sup>[1]</sup>, Hsu Jong-Hau<sup>[1]</sup>

<sup>[1]</sup>Kaohsiung Medical University Hospital ~ Kaohsiung ~ Taiwan, R.O.C.

#### **IN VIVO ASSESSMENT OF PULMONARY VASCULOPATHY IN PATIENTS WITH SEVERE CHRONIC RESPIRATORY FAILURE EVALUATED FOR LUNG TRANSPLANTATION. DIFFERENCES FROM PULMONARY ARTERIAL HYPERTENSION VASCULOPATHY**

Domingo Enric<sup>[1]</sup>, Arredondo Christian<sup>[1]</sup>, Vazquez Manuel<sup>[1]</sup>, Nadia Bouteldja<sup>[1]</sup>, Marti Gerard<sup>[1]</sup>, Bravo Carlos<sup>[1]</sup>, Ferrer Rita<sup>[1]</sup>, Roman Antonio<sup>[1]</sup>

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#### **DIFFERENT PROFILE AND MANAGEMENT BUT SOME OVERLAPPING IN THE TREATMENT OF PATIENTS WITH ARTERIAL AND VENOUS PULMONARY HYPERTENSION. INSIGHTS FROM HINPULSAR REGISTRY**

Echazarreta Diego<sup>[1]</sup>, Coronel Maria<sup>[2]</sup>, Bonafede Roberto<sup>[3]</sup>, Coria Pablo<sup>[3]</sup>, Nuñez Cristian<sup>[3]</sup>, Pereira Zini Gustavo<sup>[3]</sup>, Acevedo Pablo<sup>[2]</sup>, Alvarez Jorge<sup>[3]</sup>, Alvarez Soledad<sup>[3]</sup>, Perna Eduardo<sup>[2]</sup>

<sup>[1]</sup>Hospital San Juan de Dios ~ La Plata ~ Argentina, <sup>[2]</sup>Instituto de Cardiologia J. F. Cabral ~ Corrientes ~ Argentina, <sup>[3]</sup>Heart Failure and Pulmonary Hypertension Committee ~ Argentinean Federation of Cardiology ~ Argentina

#### **PULMONARY ARTERY PRESSURE AND SERUM BIOMARKERS IN HIGH-ALTITUDE PULMONARY EDEMA SUSCEPTIBLE SUBJECTS DURING ACUTE HYPOXIC EXPOSURE**

Hanaoka Masayuki<sup>[1]</sup>, Droma Yunden<sup>[1]</sup>, Ikeda Mariko<sup>[1]</sup>, Kobayashi Nobumitsu<sup>[1]</sup>, Yasuo Masanori<sup>[1]</sup>, Urushihata Kazuhisa<sup>[1]</sup>, Kubo Keishi<sup>[1]</sup>

<sup>[1]</sup>Shinshu University School of Medicine ~ Matsumoto ~ Japan

#### **PULMONARY HYPERTENSION (PH) IN IDIOPATHIC PULMONARY FIBROSIS (IPF) DOES NOT INFLUENCE SIX MINUTE WALK DISTANCE (6MWD)**

Harari Sergio<sup>[1]</sup>, Luisi Francesca<sup>[1]</sup>, Cassandro Roberto<sup>[1]</sup>, Madotto Fabiana<sup>[2]</sup>, Conti Sara<sup>[2]</sup>, Cesana Giancarlo<sup>[2]</sup>

<sup>[1]</sup>Ospedale San Giuseppe ~ Milano ~ Italy, <sup>[2]</sup>Research Center of Public Health, University of Milan-Bicocca ~ Monza ~ Italy

#### **PATIENTS WITH INTERSTITIAL LUNG DISEASES ASSOCIATED WITH CONNECTIVE TISSUE DISEASES AND PH (IL-CT-PH) SURVIVE MUCH LONGER THAN THOSE WITH IDIOPATHIC PULMONARY FIBROSIS (IPF) AND PULMONARY HYPERTENSION (PH)**

Harari Sergio<sup>[1]</sup>, Luisi Francesca<sup>[1]</sup>, Cassandro Roberto<sup>[1]</sup>, Madotto Fabiana<sup>[2]</sup>, Conti Sara<sup>[2]</sup>, Cesana Giancarlo<sup>[2]</sup>

<sup>[1]</sup>Ospedale San Giuseppe ~ Milan ~ Italy, <sup>[2]</sup>Research Center on Public Health, University of Milan-Bicocca ~ Monza ~ Italy

## Poster Sessions

Friday, March 1

### **ONLY OUT OF PROPORTION PULMONARY HYPERTENSION (PH) AND NOT SLIGHT TO MODERATE PH IS A PROGNOSTIC FACTOR IN IDIOPATHIC PULMONARY FIBROSIS (IPF)**

Harari Sergio<sup>[1]</sup>, Luisi Francesca<sup>[1]</sup>, Cassandro Roberto<sup>[1]</sup>, Madotto Fabiana<sup>[2]</sup>, Conti Sara<sup>[2]</sup>, Cesana Giancarlo<sup>[2]</sup>

<sup>[1]</sup>Ospedale San Giuseppe ~ Milan ~ Italy, <sup>[2]</sup>Research Center on Public Health, University of Milano-Bicocca ~ Monza ~ Italy

### **INCREASED MAST CELL CHYMASE IN VASCULAR PATHOLOGIES OF PULMONARY HYPERTENSION AND COPD**

Kosanovic Djuro<sup>[1]</sup>, Dahal Bhola Kumar<sup>[1]</sup>, Peters Dorothea<sup>[1]</sup>, Seimetz Michael<sup>[1]</sup>, Messinger Josef<sup>[2]</sup>, Fischer Yvan<sup>[2]</sup>, Hoffmann Katrin<sup>[2]</sup>, Antel Jochen<sup>[2]</sup>, Husen Bettina<sup>[2]</sup>, Hanke Nina<sup>[2]</sup>, Mayet Stephanie<sup>[2]</sup>, Reiss Irwin<sup>[3]</sup>, Ghofrani Hossein Ardeschir<sup>[1]</sup>, Weissmann Norbert<sup>[1]</sup>, Grimminger Friedrich<sup>[1]</sup>, Seeger Werner<sup>[4]</sup>, Schermuly Ralph Theo<sup>[1]</sup>

<sup>[1]</sup>Universities of Giessen and Marburg Lung Center, Member of the German Center for Lung Research ~ Giessen ~ Germany, <sup>[2]</sup>Abbott Products GmbH ~ Hannover ~ Germany, <sup>[3]</sup>Division of Neonatology, Erasmus MC-Sophia Children's Hospital ~ Rotterdam ~ Netherlands, <sup>[4]</sup>Max Planck Institute for Heart and Lung Research, Member of the German Center for Lung Research ~ Bad Nauheim ~ Germany

### **NPY/NPYR1 AXIS IN HYPOXIA-INDUCED VASCULAR REMODELLING**

Kwapiszewska Grazyna<sup>[1]</sup>, Egemnazarov Bakytbek<sup>[1]</sup>, Crnkovic Slaven<sup>[1]</sup>, Marsh Leigh M<sup>[1]</sup>, Weissmann Norbert<sup>[2]</sup>, Olschewski Andrea<sup>[1]</sup>

<sup>[1]</sup>Ludwig Boltzmann Institute for Lung Vascular Research ~ Graz ~ Austria, <sup>[2]</sup>Universities of Giessen and Marburg Lung Center ~ Giessen ~ Germany

### **INFLUENCE OF HEMODYNAMIC SEVERITY AND TARGETED THERAPY ON OUTCOME IN PATIENTS WITH PULMONARY HYPERTENSION AND LUNG DISEASE**

Lange Tobias J<sup>[1]</sup>, Baron Miriam<sup>[1]</sup>, Seiler Isabella<sup>[1]</sup>, Arzt Michael<sup>[1]</sup>, Pfeifer Michael<sup>[2]</sup>

<sup>[1]</sup>University Medical Center Regensburg ~ Regensburg ~ Germany, <sup>[2]</sup>University Medical Center Regensburg and Donaustauf Hospital ~ Regensburg / Donaustauf ~ Germany

### **POSSIBLE ROLE FOR EXERCISE HEMODYNAMICS IN OTHERWISE UNDETECTABLE DIASTOLIC HEART FAILURE IN PATIENTS SENT TO THE CENTRE WITH SUSPICION OF PULMONARY ARTERIAL HYPERTENSION**

Lesný Peter<sup>[1]</sup>, Luknár Milan<sup>[1]</sup>, Varga Ivan<sup>[1]</sup>, Solik Peter<sup>[1]</sup>, Goncalvesova Eva<sup>[1]</sup>

<sup>[1]</sup>Heart Failure and Transplant Dep. ~ Bratislava ~ Slovakia

### **PULMONARY HEMODYNAMICS AND RIGHT VENTRICULAR FUNCTION IN HEALTHY LOWLANDERS DURING ACCLIMATIZATION TO HIGH ALTITUDE**

Maripov Abdirashit<sup>[1]</sup>, Shermatov Ulan<sup>[1]</sup>, Sarybaev Akpay<sup>[1]</sup>

<sup>[1]</sup>National Center of Cardiology and Internal Medicine ~ Bishkek ~ Kyrgyzstan

### **NITRIC OXIDE (NO) IS NOT SUITABLE FOR PULMONARY ARTERY REACTIVITY TEST IN HEART TRANSPLANT CANDIDATES WITH PULMONARY HYPERTENSION DUE TO LEFT VENTRICLE SYSTOLIC DYSFUNCTION**

Nowacka Magdalena<sup>[1]</sup>, Kopec Grzegorz<sup>[1]</sup>, Podolec Piotr<sup>[1]</sup>

<sup>[1]</sup>Department of Cardiac and Vascular Diseases, John Paul II Hospital ~ Cracow ~ Poland

### **INTRAVENOUS SILDENAFIL IN PATIENTS WITH POST-CAPILLARY PULMONARY HYPERTENSION UNDERGOING MAJOR CARDIAC SURGERY: CLINICAL RESPONSE AND PHARMACOKINETICS**

Pasero Daniela<sup>[1]</sup>, Ivaldi Francesca<sup>[1]</sup>, D'Avolio Antonio<sup>[1]</sup>, Simiele Marco<sup>[1]</sup>, Checco Luca<sup>[1]</sup>, Grosso Marra Walter<sup>[1]</sup>, Rana Nerlep Kaur<sup>[1]</sup>, Lupo Mario<sup>[1]</sup>, Marra Sebastiano<sup>[1]</sup>, Gaita Fiorenzo<sup>[1]</sup>, Rinaldi Mauro<sup>[1]</sup>

<sup>[1]</sup>University of Turin ~ Italy

### **TADALAFIL SAFETY IN PULMONARY HYPERTENSION PATIENTS WITH ELEVATED PULMONARY CAPILLARY WEDGE PRESSURE**

Rahaghi Franck<sup>[1]</sup>, Agarwal Amitesh<sup>[1]</sup>, Ramakrishna Ravindra<sup>[1]</sup>, Mehta Jinesh<sup>[1]</sup>, Ferrer Gustavo<sup>[1]</sup>, Ramirez Jose<sup>[1]</sup>, Hadeh Anas<sup>[1]</sup>, Oliveira Eduardo<sup>[1]</sup>, Smolley Laurence<sup>[1]</sup>

<sup>[1]</sup>Cleveland Clinic Florida ~ Weston ~ United States

### **PULMONARY HYPERTENSION IN PULMONARY INTENSIVE CARE: CLINICAL EXPERIENCE**

Roccia Fernando<sup>[1]</sup>, Pelaia Girolamo<sup>[1]</sup>, Maselli Rosario<sup>[1]</sup>

<sup>[1]</sup>Università Magna Graecia di Catanzaro ~ Italy

## Poster Sessions

Friday, March 7

### **PULMONARY PULSE TRANSIT TIME (PPTT): A NOVEL ECHOCARDIOGRAPHIC INDICATOR OF VASCULAR CHANGES IN PULMONARY HYPERTENSION (PH) AND PULMONARY FIBROSIS (PF)**

Rüdiger Stefan<sup>[1]</sup>, Spiess Jochen<sup>[1]</sup>, Scharnbeck Dominik<sup>[1]</sup>, Radermacher Micheal<sup>[1]</sup>, Markovic Sinisa<sup>[1]</sup>, Stoiber Kathrin M<sup>[1]</sup>, Slatosch Holger<sup>[1]</sup>, Blanta Ioanna<sup>[1]</sup>, Kropf-Sanchen Cornelia<sup>[1]</sup>, Rottbauer Wolfgang<sup>[1]</sup>, Schumann Christian<sup>[1]</sup>, Wibmer Thomas<sup>[1]</sup>

<sup>[1]</sup>University Hospital of Ulm ~ Germany

### **ACUTE HEMODYNAMIC RESPONSE TO INHALED ILOPROST (VENTAVIST<sup>TM</sup>) IN PATIENTS WITH PULMONARY HYPERTENSION OUT OF PROPORTION TO LEFT VENTRICULAR FILLING PRESSURE**

Segel Michael<sup>[1]</sup>, Balmor Ronen<sup>[1]</sup>, Yaron Prina<sup>[1]</sup>, Segev Amit<sup>[1]</sup>, Ben-Dov Issahar<sup>[1]</sup>

<sup>[1]</sup>Sheba Medical Center (affiliated to Sackler Medical School, Tel-Aviv University) ~ Tel HaShomer ~ Israel

### **SPECKLE TRACKING ECHOCARDIOGRAPHY AS A SCREENING METHOD FOR PULMONARY HYPERTENSION IN SEVERE COPD**

Stream Amanda<sup>[1]</sup>, Rice Jessica<sup>[1]</sup>, Geraci Mark<sup>[1]</sup>, Clark Brendan<sup>[1]</sup>, Dorosz Jennifer<sup>[1]</sup>, Bull Todd<sup>[1]</sup>

<sup>[1]</sup>University of Colorado Health Sciences Center ~ Aurora ~ USA

### **ROLE OF NO-SGC SIGNALING PATHWAY IN PULMONARY HYPERTENSION DUE TO LEFT HEART FAILURE**

Sydykov Akylbek<sup>[1]</sup>, Pradhan Kabita<sup>[1]</sup>, Luitel Himall<sup>[1]</sup>, Arakelyan Karen<sup>[1]</sup>, Weissmann Norbert<sup>[1]</sup>, Seeger Werner<sup>[1]</sup>, Grimminger Friedrich<sup>[1]</sup>, Ghofrani Hossein Ardeschir<sup>[1]</sup>, Schermuly Ralph Theo<sup>[1]</sup>

<sup>[1]</sup>Universities of Giessen and Marburg Lung Center (UGMLC), Department of Internal Medicine, Member of the German Lung Center (DZL), Justus Liebig University of Giessen ~ Germany

### **HEMODYNAMIC CHARACTERISTICS IN 100 PATIENTS WITH PULMONARY HYPERTENSION AND INTERSTITIAL LUNG DISEASE**

Traclat Julie<sup>[1]</sup>, Reynaud-Gaubert Martine<sup>[2]</sup>, Kiakouama Lize<sup>[1]</sup>, Nunes Hilario<sup>[3]</sup>, Wallaert Benoit<sup>[4]</sup>, Montani David<sup>[5]</sup>, Camara Boubou<sup>[6]</sup>, Khouatra Chahéra<sup>[1]</sup>, Israël-Biet Dominique<sup>[7]</sup>, Marchand-Adam Sylvain<sup>[8]</sup>, Gomez Emmanuel<sup>[9]</sup>, Jais Xavier<sup>[5]</sup>, Launay David<sup>[4]</sup>, Magnier Romain<sup>[10]</sup>, Têtu Laurent<sup>[11]</sup>, Dromer Claire<sup>[12]</sup>, Dury Sandra<sup>[13]</sup>, Zeghmar Sabrina<sup>[1]</sup>, Polazzi Stephanie<sup>[1]</sup>, Humbert Marc<sup>[5]</sup>, Cordier Jean-François<sup>[1]</sup>, Cottin Vincent<sup>[1]</sup>

<sup>[1]</sup>University of Lyon ~ France, <sup>[2]</sup>University of Marseille ~ France, <sup>[3]</sup>University of Paris ~ Bobigny ~ France, <sup>[4]</sup>University of Lille ~ France, <sup>[5]</sup>University of Paris ~ Bicêtre ~ France, <sup>[6]</sup>University of Grenoble ~ France, <sup>[7]</sup>University of Paris ~ France, <sup>[8]</sup>University of Tours ~ France, <sup>[9]</sup>University of Nancy ~ France, <sup>[10]</sup>University of Caen ~ France, <sup>[11]</sup>University of Toulouse ~ France, <sup>[12]</sup>University of Bordeaux ~ France, <sup>[13]</sup>University of Reims ~ France

### **INCREASED PULMONARY ARTERIAL PERFUSION MEASURED BY TECHNETIUM-99M IS ASSOCIATED WITH INCREASED PULMONARY ARTERIAL REMODELING IN COPD**

Wrobel Jeremy<sup>[1]</sup>, Mclean Catriona<sup>[2]</sup>, Thompson Bruce<sup>[2]</sup>, Stuart-Andrews Christopher<sup>[2]</sup>, Paul Eldho<sup>[1]</sup>, Snell Gregory<sup>[2]</sup>, Williams Trevor<sup>[2]</sup>

<sup>[1]</sup>Monash University ~ Melbourne ~ Australia, <sup>[2]</sup>The Alfred ~ Melbourne ~ Australia

## Poster Sessions

### PEDIATRIC PH

Friday, March 1

#### HIGHER MORBIDITY AND MORTALITY IN PRETERM INFANTS WITH PULMONARY ARTERIAL HYPERTENSION SECONDARY TO BRONCHOPULMONARY DYSPLASIA: A CASE-CONTROL STUDY

Aluquin Vincent<sup>[1]</sup>, Sabharwal Geetika<sup>[1]</sup>, Kanhere Mansi<sup>[1]</sup>

<sup>[1]</sup>Penn State Children's Hospital ~ Hershey ~ United States

#### CLINICAL PROFILES OF PULMONARY ARTERIAL HYPERTENSION ASSOCIATED TO CONGENITAL HEART DISEASE IN PEDIATRIC AND ADULT SPANISH POPULATION: INSIGHTS FROM REHIPED AND REHAP REGISTRIES

Cerro Marín María Jesús Del<sup>[1-8]</sup>, Oliver Jose Maria<sup>[2]</sup>, Mendoza Alberto<sup>[3]</sup>, Dos Laura<sup>[4]</sup>, Rodriguez Alejandro<sup>[5]</sup>, Quero Maria Concepcion<sup>[6]</sup>, Escribano Pilar<sup>[7]</sup>

<sup>[1]</sup>La Paz Children's Hospital ~ Madrid ~ Spain, <sup>[2]</sup>La Paz Hospital ~ Madrid ~ Spain, <sup>[3]</sup>Pediatric Cardiology, Doce De Octubre Hospital ~ Madrid ~ Spain, <sup>[4]</sup>Cardiology, Congenital Heart Disease Unit Hospital Vall D'Hebron-Hospital Santa Pau I Santa Creu ~ Barcelona ~ Spain, <sup>[5]</sup>Pediatric Cardiology, Hospital Gregorio Marañón ~ Madrid ~ Spain, <sup>[6]</sup>Pediatric Cardiology Hospital Ramon y Cajal ~ Madrid ~ Spain, <sup>[7]</sup>Cardiology Department, Hospital Doce De Octubre ~ Madrid ~ Spain, <sup>[8]</sup>Rehaped Invest Gators ~ Spain

#### EPIDEMIOLOGY AND OUTCOMES OF THE DIFFERENT ETHIOLOGIES OF PULMONARY HYPERTENSION IN PEDIATRICS DATA FROM THE SPANISH REGISTRY FOR PEDIATRIC PULMONARY HYPERTENSION (REHIPED)

Cerro Marín María Jesús Del<sup>[1-7]</sup>, Sabaté Rotés Anna<sup>[1]</sup>, Quero Maria Concepcion<sup>[2]</sup>, Villagrà Sandra<sup>[3]</sup>, Raposo Ines<sup>[4]</sup>, Moyá Amparo<sup>[5]</sup>, Gil Antonio<sup>[6]</sup>

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#### CLINICAL FEATURES, MANAGEMENT AND OUTCOMES OF PEDIATRIC PULMONARY ARTERIAL HYPERTENSION (PAH) IN SPAIN: INSIGHTS FROM THE REHIPED REGISTRY

Cerro Marín María Jesús Del<sup>[1-8]</sup>, Moreno Antonio<sup>[2]</sup>, Jimenez Soledad<sup>[3]</sup>, Viadero Maria Teresa<sup>[4]</sup>, Siles Ana<sup>[5]</sup>, Iñigo Gema<sup>[6]</sup>, Conejo Lourdes<sup>[7]</sup>

<sup>[1]</sup>Pediatric Cardiology, Hospital Infantil La Paz ~ Madrid ~ Spain, <sup>[2]</sup>Pediatric Neumology, Hospital Vall D'Hebron ~ Barcelona ~ Spain, <sup>[3]</sup>Pediatric Cardiology, Hospital General de Segovia La Paz ~ Segovia ~ Spain, <sup>[4]</sup>Department of Pediatrics, Hospital Marques de Valdecilla ~ Santander ~ Spain, <sup>[5]</sup>Pediatric Cardiology, Hospital Puerta de Hierro ~ Madrid ~ Spain, <sup>[6]</sup>Department of Pediatrics Hospital Virgen de La Salud ~ Toledo ~ Spain, <sup>[7]</sup>Pediatric Cardiology, Hospital General Universitario Carlos Haya ~ Malaga ~ Spain, <sup>[8]</sup>Rehaped Registry ~ Spain

#### INCIDENCE AND PREVALENCE OF PULMONARY ARTERIAL HYPERTENSION IN SPANISH PEDIATRIC POPULATION: DATA FROM REHIPED AND REHAP REGISTRIES

Cerro Marín María Jesús Del<sup>[1-8]</sup>, Dimpna Calila Albert<sup>[2]</sup>, Gavilan Jose Luis<sup>[3]</sup>, Gomez Elena<sup>[4]</sup>, Lopez Marta<sup>[5]</sup>, Perin Francesca<sup>[6]</sup>, Escribano Pilar<sup>[7]</sup>

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#### PULMONARY ARTERIAL HYPERTENSION COMPLICATING ARTERIAL SWITCH SURGERY FOR SIMPLE TRANSPOSITION OF THE GREAT ARTERIES-PREVALENCE AND OUTCOMES

Levy Marilyne<sup>[1]</sup>, Celermajer David<sup>[2]</sup>, Vouhe Pascal<sup>[1]</sup>, Bajolle Fanny<sup>[1]</sup>, Bonnet Damien<sup>[1]</sup>

<sup>[1]</sup>Université Paris Descartes ~ Paris ~ France, <sup>[2]</sup>University of Sidney ~ Australia

#### DISTRIBUTION OF CAUSES AND OUTCOMES OF PULMONARY HYPERTENSIONS IN A TERTIARY PEDIATRIC HOSPITAL

Levy Marilyne<sup>[1]</sup>, Celermajer David<sup>[2]</sup>, Szezepanski Isabelle<sup>[1]</sup>, Boudjemline Younes<sup>[1]</sup>, Bonnet Damien<sup>[1]</sup>

<sup>[1]</sup>Université Paris Descartes ~ Paris ~ France, <sup>[2]</sup>University of Sidney ~ Australia

# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Poster Sessions

Friday, March 7

### **CIRCULATING ENDOTHELIAL CELL LEVELS DECREASE AFTER VASODILATOR THERAPY AND ARE A BIOMARKER OF WORSENING IN REFRACTORY PEDIATRIC PULMONARY HYPERTENSION**

Levy Marilyn<sup>[1]</sup>, Bonnet Damien<sup>[1]</sup>, Gaussem Pascale<sup>[1]</sup>, Smadja David<sup>[1]</sup>

<sup>[1]</sup>Université Paris Descartes ~ Paris ~ France

### **WHOLE LUNG TRANSCRIPTOMIC ANALYSIS OF THE EFFECTS OF SILDENAFIL IN A NEONATAL MODEL OF HYPOXIA-INDUCED PULMONARY HYPERTENSION**

Moreno Laura<sup>[1]</sup>, Menendez Carmen<sup>[1]</sup>, Barreira Bianca<sup>[2]</sup>, Moreno Enrique<sup>[2]</sup>, Cogolludo Angel<sup>[1]</sup>, Mitchell Jane A<sup>[3]</sup>, Perez-Vizcaino Francisco<sup>[1]</sup>

<sup>[1]</sup>School of Medicine, Universidad Complutense de Madrid ~ Spain, <sup>[2]</sup>CIBERES ~ Madrid ~ Spain, <sup>[3]</sup>National Heart and Lung Institute, Imperial College of London ~ United Kingdom

### **HEMODYNAMIC AND GENETIC ANALYSIS IN CHILDREN WITH IDIOPATHIC/HERITABLE AND CONGENITAL HEART DISEASE ASSOCIATED PULMONARY ARTERIAL HYPERTENSION**

Pfarr Nicole<sup>[6]</sup>, Fischer Christine<sup>[6]</sup>, Szmalek-Hoegel Justyna<sup>[6]</sup>, Ehlken Nicola<sup>[1]</sup>, Miera Oliver<sup>[2]</sup>, Schranz Dietmar<sup>[3]</sup>, Gorenflo Matthias<sup>[4]</sup>, Hager Alfred<sup>[5]</sup>, Hinderhofer Katrin<sup>[6]</sup>, Nagel Christian<sup>[1]</sup>, Grünig Ekkehard<sup>[1]</sup>

<sup>[1]</sup>Center for Pulmonary Hypertension, Thorax Clinic ~ Heidelberg ~ Germany, <sup>[2]</sup>German Heart Center Berlin ~ Germany, <sup>[3]</sup>Department of Paediatric Cardiology, University of Giessen ~ Germany, <sup>[4]</sup>Department of Paediatric Cardiology, University of Heidelberg ~ Germany, <sup>[5]</sup>Department of Pediatric Cardiology and Congenital Heart Disease, Deutsches Herzzentrum München, Technische Universität München ~ Munich ~ Germany, <sup>[6]</sup>Institute of Human Genetics, University of Heidelberg ~ Germany

### **RIGHT VENTRICULAR VOLUME RESPONSE TO PRESSURE OVERLOAD IN INFANCY**

Yamada Osamu<sup>[1]</sup>, Iwasa Toru<sup>[1]</sup>, Yazaki Satoshi<sup>[1]</sup>, Tsuda Etsuko<sup>[1]</sup>, Ohuchi Hideo<sup>[1]</sup>

<sup>[1]</sup>National Cerebral and Cardiovascular Center ~ Suita ~ Japan



# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## General Information

### Congress Location

#### Nice Acropolis Congress Center

Risso Boulevard, Nice

Ph: +33 (0)4 93 92 83 00

Fax: +33 (0)4 93 92 82 55

### Badges

Participants are requested to wear their congress badge during all sessions, coffee breaks, lunches and social events.

### Internet connection

All the congress venue is **wifi area** – codes to access internet are:

- WIFI name: WSPH2013
- login: wsph2013
- password: wsph2013

### Registration and poster desk

**The desks will be open during the congress as follows:**

Tuesday February 26 from 16.00 to 19.00

Wednesday February 27 from 08.00 to 18.30

Thursday February 28 from 08.00 to 18.30

Friday March 1 from 08.00 to 18.30

### Voting System

In the Meeting Hall, attendees will find a voting device fixed to any chair to be used during the scientific sessions. The use of the voting system is reserved to PHYSICIANS employed in Universities or Public Hospitals; the Organizing Secretariat invites any participant to comply with this guideline.

### Poster presentation

The poster presenters are invited to be near their posters during lunch time in order to assist attendees interested in having information on their works.

No poster discussion is planned.

### Coffee breaks, lunches and welcome cocktail

Coffee breaks and welcome cocktail will be arranged in Agora 2, outside the Meeting Hall.

Lunch will be served in Agora 3, while desserts and coffees in Agora 2, next to the Poster Area.

No accompanying person will be allowed to access coffee breaks and lunches during the working times.

The attendance in the welcome cocktail is admitted by presenting the voucher received before the congress, upon due request.

No particular dress-code is requested for welcome cocktail.

## General Information

### Information for Speakers, Abstract Presenters and Awarded Young Investigators

#### **SPEAKERS: Slide center opening times**

Tuesday February 26 from 16.00 to 19.00

Wednesday February 27 from 08.00 to 18.30

Thursday February 28 from 08.00 to 18.30

Friday March 1 from 08.00 to 18.30

Speakers are kindly requested to reach our technical support team in the slide center not later than 2 hours before the respective scheduled session in order to copy the presentation onto the meeting computer.

Presentations must be in Power Point and no personal PC will be allowed.

The operating system is Microsoft Windows Office 2007 and converter for Macintosh is available.

If the speech is at 9.00 in the morning, the speaker is kindly invited to deliver his/her slides the day before.

#### **POSTER PRESENTERS: Mounting and dismantling rules**

Poster presenters will find our staff directly next to the Poster Area (Agora 2) ready to help them to fix their posters.

Near the poster desks, they'll find the Abstracts List ordered by Presenters' family name – near each name the number of the corresponding panel (where fixing the poster) will be indicated.

In the Poster Area, presenters will find the necessary material to hang their poster.

#### **Mounting Time:**

Any presenter must fix his/her poster/s on the assigned day from 08.00 to 09.00.

For presentations on February 27, poster mounting is allowed also the day before from 16.00 to 19.00.

#### **Dismounting Time:**

Any presenter is requested to dismount his/her poster/s at the end of the day of his/her presentation (from 17.30 to 19.00).

At 19.00 of the same day, our Organization will remove and eliminate all posters not dismantled by presenters.

#### **AWARDED YOUNG INVESTIGATORS**

All winners are kindly requested to be present in Apollon room on February 27 at 17.15 for the Young Investigator Awards Ceremony.

# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## General Information

### Transportation

#### Access to Nice Acropolis Congress Center

##### From the airport:

Take Bus n° 98 to the station "cathédrale vieille-ville"; then take the tramway towards "Pont Michel"; Stop at "Acropolis".

##### From the train station:

Take the tramway towards "Pont Michel"; Stop at "Acropolis".

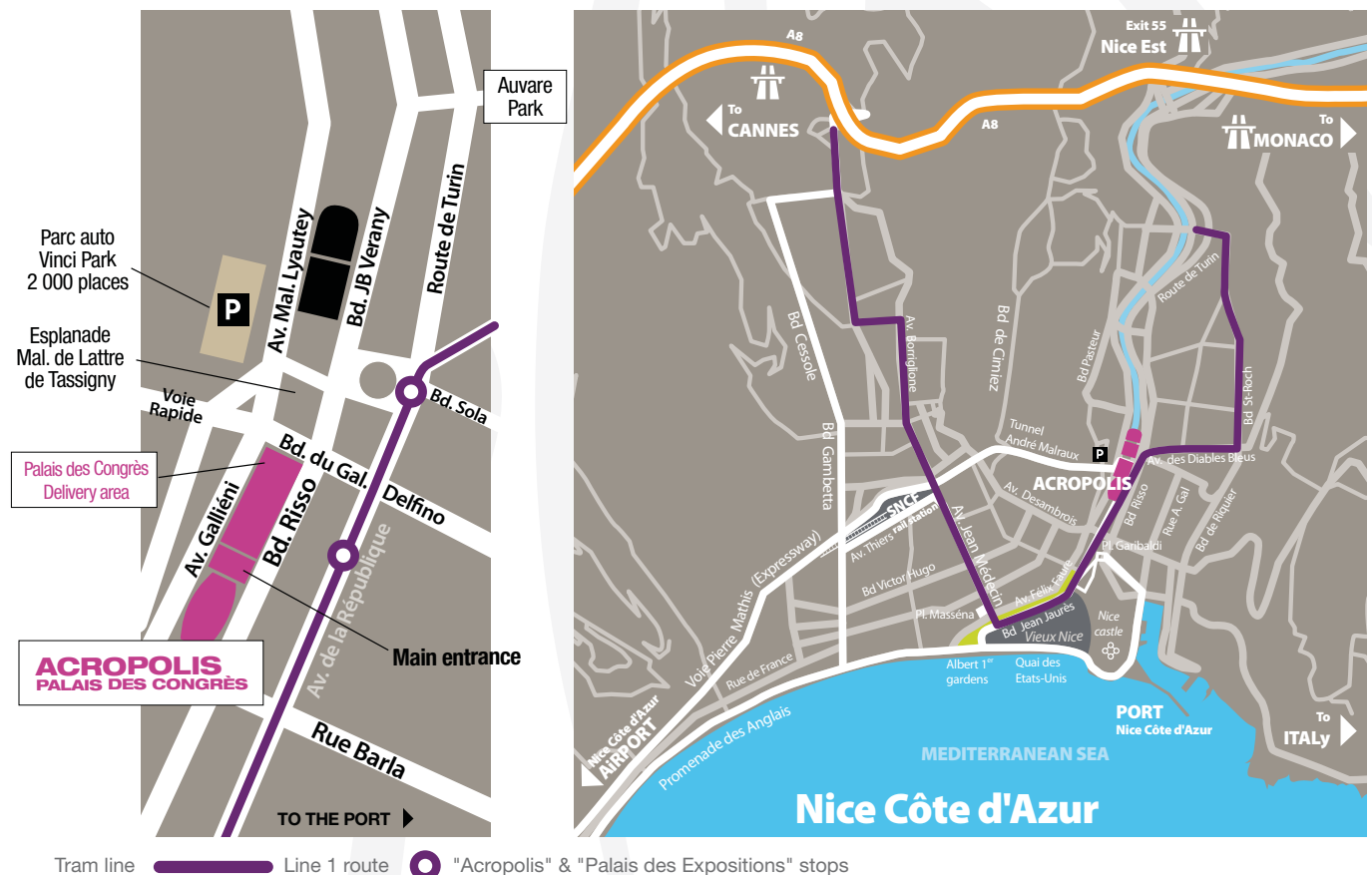
##### From the A8 motorway "Provençal":

Exit n° 50 towards "Nice Centre" and the "Promenade des Anglais"; then follow the directions for "Acropolis".

#### NICE TRAMWAY

Nice inaugurated the first line of its tramway (T1) on November 24, 2007. The line runs for 8.7 km and stretches from the northern tip of Nice, Nice-Nord (Boulevard Comte de Falicon) to Pont Michel in the Saint Roch neighbourhood.

Name of the tramway stop for the congress: ACROPOLIS



# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

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# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Notes



A series of horizontal dotted lines for taking notes, overlaid on a faint background graphic of a hand.

# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Notes



A series of horizontal dotted lines for taking notes, set against a background featuring a large, faint, stylized graphic of a hand or wing-like shape.



# 5<sup>th</sup> WORLD SYMPOSIUM ON PULMONARY HYPERTENSION

## Notes



A series of horizontal dotted lines for taking notes, overlaid on a faint background illustration of a hand.



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