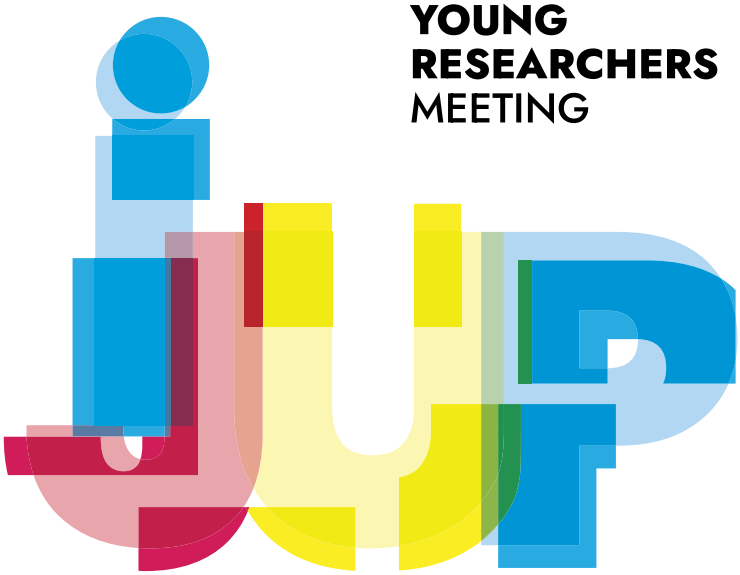
BOOK OF ABSTRACTS

YOUNG RESEARCHERS MEETING



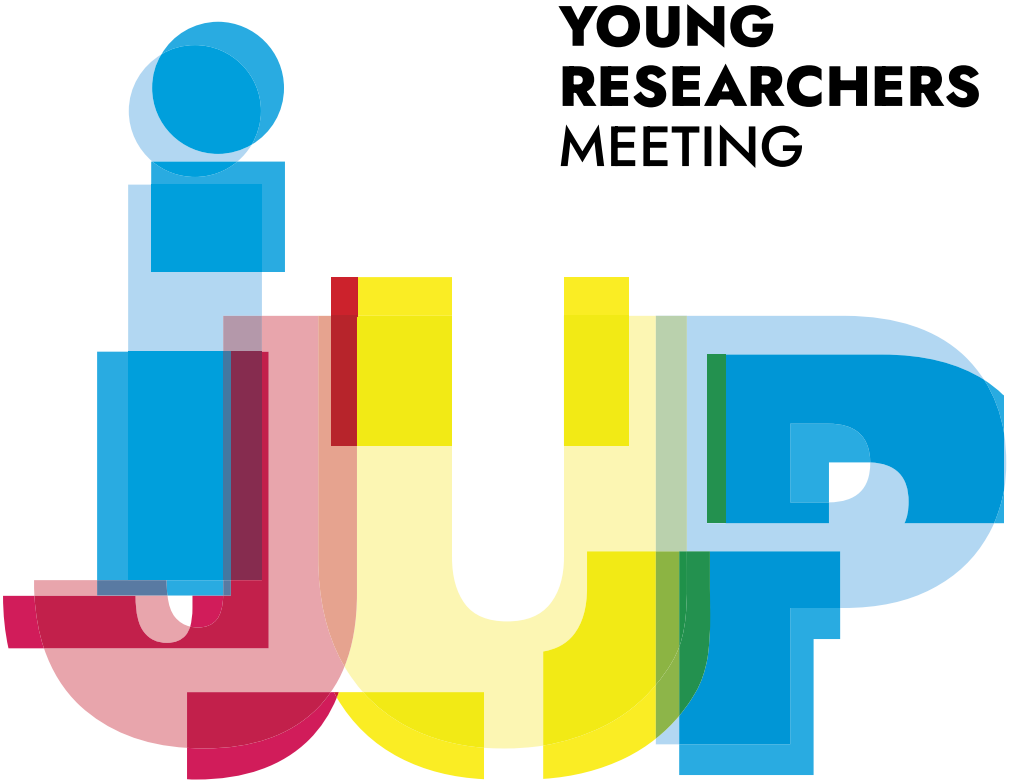
IJUP
4.5.6 MAIO 2022

15.ª EDIÇÃO

ONLINE
REITORIA
DA U.PORTO

U.PORTO

YOUNG RESEARCHERS MEETING



IJUP

4.5.6 MAIO 2022

15.ª EDIÇÃO

ONLINE
REITORIA
DA U.PORTO

U.PORTO

Santander Universidades

TÍTULO | *TITLE*

Livro de Resumos do 15.º Encontro de Investigação Jovem da U.Porto

Universidade do Porto

Vice-reitor para a investigação, inovação e internacionalização

Professor Doutor Pedro Rodrigues

ijup@reit.up.pt

ISBN

978-989-746-329-7

Design

Serviço de Comunicação e Imagem da U.Porto

COMISSÃO CIENTÍFICA | *SCIENTIFIC COMMITTEE*

Pedro Rodrigues

Alexandra Pinto

Ana Rita Gaio

Aurora Teixeira

Elisabete Ferreira

Elisa Keating

Filipe Castro

Gonçalo Furtado

Graciela Machado

Inês Guedes

Isabel Pinto

Jorge Teixeira

Laura Oliveira

Liliana Grenho

Manuel Simões

Maria Oliveira

Maria Paula Santos

Patrícia Antunes

Patrícia Valentão

Ricardo Fernandes

Rute Pedro

Sérgio Sousa

PROGRAMA
PROGRAM

U.PORTO

Santander Universidades

ONLINE **EVENT LINK** (CLICK HERE)

	MAY, 4TH	MAY, 5TH
08:00 - 18:00		
	PARALLEL ORAL SESSIONS I	**PARALLEL ORAL SESSIONS VI**
	A1 – Mathematics	A1 – Biological Sciences IV
	A2 – Architecture I	A2 – Engineering I
09:00 - 10:30	A3 – Chemistry I	A3 – Physics II
	A4 – Environment I	A4 – Language & Communication
	A5 – AgroFood I	A5 – Health Sciences VI
	A6 – Health Sciences I	A6 – Psychology & Sciences of Education I
10:30 - 10:40	Break	
	PARALLEL ORAL SESSIONS II	**PARALLEL ORAL SESSIONS VII**
	A1 – Health Sciences II	A1 – Biological Sciences V
	A2 – Architecture II	A2 – Engineering II
10:40 - 12:00	A3 – AgroFood II	A3 – Chemistry II
	A4 – Environment II	A4 – Geo-Politics I
	A5 – Physics I	A5 – Health Sciences VII
		A6 – Psychology & Sciences of Education II
12:00 - 12:20	Break	
	PARALLEL ORAL SESSIONS III	**PARALLEL ORAL SESSIONS VIII**
	A1 – Economics & Management	A1 – Biological Sciences VI
	A2 – Biological Sciences I	A2 – Engineering III
12:20 - 13:40	A3 – Architecture III	A3 – Geo-Politics II
	A4 – Chemistry III	A4 – Health Sciences VIII
	A5 – Sport Sciences I	A5 – Health Sciences IX
	A6 – Health Sciences III	A6 – Psychology & Sciences of Education III
13:40 - 14:30	Lunch Break	
	PARALLEL ORAL SESSIONS IV	**PARALLEL ORAL SESSIONS IX**
	A1 – Arts I	A1 – Biological Sciences VII
	A2 – Biological Sciences II	A2 – Engineering IV
14:30 - 16:00	A3 – Sport Sciences II	A3 – Law and Criminology I
	A4 – Chemistry IV	A4 – Health Sciences X
	A5 – Architecture IV	A5 – Heritage & History I
	A6 – Health Sciences IV	A6 – Psychology & Sciences of Education IV
16:00 - 16:10	Break	
	PARALLEL ORAL SESSIONS V	**PARALLEL ORAL SESSIONS X**
	A1 – Astronomy & Physics	A1 – Law and Criminology II
	A2 – Arts II	A2 – Health Sciences XI
16:10 - 17:40	A3 – Sport Sciences III	A3 – Psychology & Sciences of Education V
	A4 – Biological Sciences III	A4 – Heritage & History II
	A5 – Health Sciences V	

RECTORATE OF THE UNIVERSITY OF PORTO

	MAY, 6TH
08:30 - 09:00	*Opening of the secretariat for all participants*
09:00 - 10:00	**POSTER SESSION I**
10 min	Coffee-break
10:10 - 11:00	**POSTER SESSION I**
11:00 - 11:15	Break
11:15 - 12:00	**POSTER SESSION II**
10 min	Coffee-break
12:10 - 13:15	**POSTER SESSION II**
13:15 - 15:00	Lunch Break
15:00 - 18:00	**CLOSING SESSION AND CELEBRATION OF THE 15-YEARS ANNIVERSARY OF IJUP**

ENCONTRO INVESTIGAÇÃO JOVEM

IJUP

IJUP
4.5.6 MAIO 2022

ONLINE
REITORIA
DA U.PORTO

15.ª EDIÇÃO

An overview of circulating pulmonary arterial hypertension biomarkers

Santos-Gomes, Joana, Faculdade de Medicina
Gandra, Inês, Faculdade de Medicina
Adão, Rui, Faculdade de Medicina
Perros, Frédéric, Université Paris–Saclay, AP-HP, INSERM UMR_S 999, Service de Pneumologie et Soins Intensifs Respiratoires, Hôpital de Bicêtre, Le Kremlin Bicêtre, France
Brás-Silva, Carmen, Faculdade de Ciências da Nutrição e Alimentação

Abstract

Introduction: Pulmonary arterial hypertension (PAH), also known as Group 1 Pulmonary Hypertension (PH), is a PH subset characterized by pulmonary vascular remodelling and pulmonary arterial obstruction. It has an estimated incidence of 15 to 50 people per million in the United States and Europe and is associated with high mortality and morbidity, with patients' survival time after diagnosis being only 2.8 years. According to current guidelines, right heart catheterization is the gold standard for diagnostic and prognostic evaluation of PAH patients. However, this technic is highly invasive, so it is not used in routine clinical practice or patient follow-up. Thereby, it is essential to find new non-invasive strategies for evaluating disease progression. Biomarkers can be an effective solution for determining PAH patient prognosis and response to therapy, and aiding in diagnostic efforts, so long as their detection is non-invasive, easy, and objective. This review aims to clarify and describe some of the potential new candidates as circulating biomarkers of PAH.

Results: All biomarkers included in this review were found to be significantly altered in PAH patients of various subtypes, and almost all (except for homocysteine, serotonin, monocyte chemoattracting protein-1, oxidized lipids and CD40/CD49L) were found to be good indicators of disease severity and/or prognosis. Some, like red cell distribution width, endostatin and galectin-3, when added to current risk stratification tools, improved their accuracy and predictive power.

Conclusion: Although no biomarker to date has shown to be ideal, there are some that stand out as independent predictors of disease outcomes, while others can improve the performance of the clinical tools currently in use. However, larger studies providing more high-quality evidence are needed before these novel biomarkers can be introduced into clinical practice.