

8th EU-CARDIOPROTECTION COST Action WG Meeting

October 11th – 13th 2021, Mallorca, Spain



Cost Action CA16225

Chair:
Derek Hausenloy
(UK)

Vice Chair:
Peter Ferdinandy
(Hungary)

WG1: New Targets
Ioanna Andreadou
(Leader, Greece)
Derek Hausenloy
(Co-leader, UK)

**WG2: Combination
Therapy**
Sean Davidson
(Leader, UK)
Marisol Ruiz-Meana
(Co-leader, Spain)
Attila Kiss
(Co-leader, Austria)

WG3: Confounders
Rainer Schulz
(Leader, Germany)
Peter Ferdinandy
(Co-leader, Hungary)
Alina Scridon
(Co-leader, Romania)

WG4: Consortium
Hans Erik Botker
(Leader, Denmark)
Gerd Heusch
(Co-leader, Germany)
Jacob Lonborg
(Co-leader, Denmark)

STSM Chair:
Coert Zuurbier
(Netherlands)

**Science Communications
Manager:**
Jelena Jovanic
(Bosnia)

Webmasters:
Søren Erik Pischke
(Norway)

Grant Manager:
Beatrix Sereg (Hungary)

Meeting Venue

[Hotel Inside Palma Bosque](#)

Camilo José Cela, 5
07014 Majorca – Palma

Program committee

COST Action Core Group committee

Local organising committee

Prof Gemma Vilahur
Prof Lina Badimon
Prof Marisol Ruiz-Meana

Monday Oct 11th 2021

1200-1300 Registration and lunch

1300-1330 **Welcome and introductions to meeting**

Ioanna Andreadou, Peter Ferdinandy, Derek Hausenloy (video)
Gemma Vilahur, Lina Badimon, Marisol Ruiz-Meana

COST MC Meeting and Updates

Derek Hausenloy (UK) - video talk

Final COST Meeting in Coimbra, Portugal, Feb 2022

Henrique Girao (Portugal)

1330-1430 **Keynote Lecture**

Chair: Lina Badimon

Invited specialist: (45 min talk, 15 min QA)

Mitophagy

Jun Sadoshima (USA)- video talk

1430-1550 **WG1 NEW TARGETS – Cell Death and protein quality control**

Chairs: Gemma Vilahur, Marisol Ruiz-Meana
(4x15 min talk, 5 min QA)

1. Pyroptosis in ischemia/reperfusion
Sean Davidson (UK)
2. Senescence and senolytics
Joaquín Arribas (Spain)
3. The role of Connexin43 as regulator of membrane quality control
Henrique Girao (Portugal)
4. Cardioprotective role of Heat Shock Response in Atrial Fibrillation
Bianca Brundel (Holland)

1550-1615 Coffee Break

1615-1735 **WG1 NEW TARGETS – THERAPIES**

Chair: Petra Kleinbongard, Sean Davidson
(4x15 min talk, 5 min QA)

1. Ischaemia-targeted mitochondrial malonate delivery
Thomas Krieg (UK)
2. Neutrophil extracellular traps as a therapeutic targets
Irene Lang (Austria)
3. PPAR β activation preserves redox status and mitochondrial bioenergetics and reduces infarct size after I/R
Antigone Lazou (Greece)

1800-1900 Walking tour of centre - cathedral

1900 Fish dinner in port

Tuesday Oct 12th 2021

WG1 NEW TARGETS – THERAPIES

0800-0830 Put posters up for viewing

0830-1015 **Invited specialists:**

(5x15 min talk, 5 min QA)

Chairs: Ioanna Andreadou, Derek Hausenloy

1. A Network of Macrophages Supports Mitochondrial Homeostasis in the Heart
Andrés Hidalgo (Spain) – video talk
2. COVID-19 and the heart
Maurizio Pesce (Italy)
3. Extracellular microvesicles
Lina Badimon (Spain)
4. New data on platelet inhibitors
Gemma Vilahur (Spain)
5. Remote ischemic conditioning, starting early and late after myocardial infarction and its consequences on remodeling
Bruno Podesser (Austria)

10:15-10:45 Coffee Break – Moderated poster session 1

Chairs: Jelena Jovanic, George Kararigas, Antigone Lazou

New COST Action – META-HEART – cardiac metabolism and heart failure

10:45-12:00 **Chairs:** Christophe Maack, Marisol Ruiz-Meana, and Gemma Vilahur
(5x10 min talk, 5 min QA)

1. Introduction to the New COST Action of Metabolism and Heart Failure
Christoph Maack (Germany)
2. 4x Talks by new WG Leads

Discussion session (15 min)

12:00-13:00 Lunch – Moderated poster session 2

Chairs: Jelena Jovanic, George Kararigas, Antigone Lazou

13:00-14:00 **WG1 New targets**

Chairs: Rainer Schulz, Peter Ferdinandy
(3x15 min talk, 5 min QA)

1. Red blood cells as therapeutic targets
John Pernow (Sweden)
2. Sex-dependent cardiac responses in mitochondrial glucose oxidation
George Kararigas (Iceland)
3. Inactivation of the TMLHE gene induces cardio- and mitochondrial-protective phenotype
Reinis Vilskersts (Latvia)

14:00-15:30 **Oral abstract ECI presentations and STSMs**

Chairs: Christophe Maack, Lina Badimon
(10 min talk, 5 min QA)

1. SGLT2 inhibitor Dapagliflozin initiates left ventricular hypertrophy regression and cardiac functional impairment in mice myocardial infarction and its consequences on remodeling

Attila Kiss (Austria)

2. SGLT-2 inhibitors and cardioprotection

Naya Nikolaou (Greece)

3. Microvascular leakage after acute myocardial infarction – from bench to bedside.

Lara Konijnenberg (Holland)

4. MRI-based in vivo detection of coronary microvascular dysfunction in murine models of insulin resistance and of humanized dyslipidaemia

Grzegorz Kwiatkowski (Poland)

5. Targets and cardioprotective strategies for preventing myocardial fibrosis

Dominika Lukovic (Austria)

6. Experimental atrial fibrillation induces autophagy-mediated degradation of Connexin43 and affects cardiomyocyte-fibroblast crosstalk

Tania Martins-Marques (Portugal)

15:30-16:00 Coffee Break – Moderated poster session 3
Chairs: TBC

WG3 CONFOUNDERS - AGING

16:00-17:20 **Invited specialists:**
Chair: Gemma Vilahur, Marisol Ruiz-Meana
(4x15 min talk, 5 min QA)

1. The aging of the heart
Geneviève Derumeaux (France)
2. Insulin provides cardioprotection by reversing the depressed KCNQ1-current in ventricular cardiomyocytes from aged-rats through modification of cGMP-dependent protein kinase
Belma Turan (Turkey)
3. Dicarbonyl's stress and cardiovascular aging
Marisol Ruiz Meana (Spain)
4. Abnormal allocation of connexin 43 contributes to remodeling of electrophysiological properties of the heart from metabolic syndrome or elderly rat
Yusuf Olgar (Turkey)

1720-1750 **WG4: CONSORTIUM** – Pre-clinical assessment and Networks
Chairs: Hans Erik Botker, Gerd Heusch (**video**)

Invited specialists:
Chair: Hans Erik Botker, Gerd Heusch – (**video**)

Preclinical trial of a MAP4K4 inhibitor to reduce infarct size in the pig: does cardioprotection in human stem cell-derived myocytes predict success in large mammals?

Michael Schneider (USA) – 20 min – video talk

1800-2000 Bus to village in centre of island

2000-2200 Meeting dinner

Wednesday Oct 13th 2021

0900-1015 **WG4: CONSORTIUM** – Pre-clinical assessment and Networks
Chairs: Hans Erik Botker, Gerd Heusch (**video**)

1. IMPACT Criteria for pre-clinical workup of novel cardioprotective therapy
Sandrine Lecour (South Africa) – 15 min
2. Small animal AMI network – an update
Derek Hausenloy (UK) – 15 min- video talk
3. Challenges with setting-up up a pig AMI network
Borja Ibanez (Spain) – 15 min

Discussion session (30 min)

1015-1145 **WG4 CONSORTIUM**

Chair: Hans Erik Botker, Gerd Heusch (**video talk**)

1. Neutral and negative studies with RIC – 15 min
Zoltán Gircz (Hungary)
2. RIC in high-risk patients:
 - Heart failure – RIP-HIGH - 15 min
Holger Thiele (Germany)
 - Remote Conditioning – Rationale for studies in Africa – 15 min
Derek Yellon (UK) – ?video talk
3. RIC in stroke
 - RESIST trial – 15 min
Rolf Blauenfeldt (Denmark)

1145-1200 Summary and action plan
Derek Hausenloy (UK) - video talk
Meeting close

1200 Lunch