

## Cost Action CA16225

#### Chair:

Derek Hausenloy (UK)

### Vice Chair:

Peter Ferdinandy (Hungary)

### WG1: New Targets

Ioanna Andreadou (Leader, Greece) Derek Hausenloy (Co-leader, UK) Hector Cabrera-Fuentes (Co-leader, Germany)

## WG2: Combination

Therapy Sean Davidson

Sean Davidson (Leader, UK) David Garcia-Dorado (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) Hector Cabrera-Fuentes (Germany)

### **Grant Manager:**

Elizabeth Owen (UK)

# **3<sup>rd</sup> EU-CARDIOPROTECTION COST Action WG Meeting**

Oct 8th - 10th 2018, Kamari, Santorini, Greece



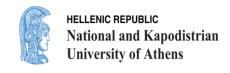
# **Meeting Venue**

LA MER DELUXE Spa Resort & Conference Centre, Epar.Od. Mesarias-Archeas Thiras, Kamari, Santorini 847 00, Greece

# **Program committee**

COST Action Core Group committee Ioanna Andreadou (local organisor)





## Day 1: Monday October 8th 2018

0830-1000 COST Action Core Group meeting (COST Action Core Group Members only)

1000-1045 Welcome and introductions

Derek Hausenloy, Ioanna Andreadou, Peter Ferdinandy

**Opening Keynote Lecture** (40,5)

Inorganic nitrite: cardioprotection not lost in translation.

Amrita Ahluwalia (UK)

**WG1 NEW TARGETS** 1045-1115

Chairs: Ioanna Andreadou, Hector Cabrera-Fuentes, Derek Hausenloy

BNIP3-induced Mitochondrial Injury and Mitophagy as targets for cardioprotection (25,5)

Invited specialist: Lorrie Kirshenbaum (Canada)

Coffee break 1115-1130

1130-1330 **WG1 NEW TARGETS** 

Chairs: Ioanna Andreadou, Hector Cabrera-Fuentes, Derek Hausenloy

Mitochondria

Cardiac Protection afforded by monoamine oxidase inhibition (15,5) Fabio di Lisa (Italy)

Succinate metabolism: a new therapeutic target for myocardial reperfusion Injury (15,5) Thomas Krieg (UK)

## Inflammation

Role of NLRP3 Inflammasome in the Exacerbation of Myocardial Injury (15,5) Pasquale Pagliaro (Italy)

DAMPS as targets for cardioprotection (15,5)

Klaus Preissner (Germany)

Trained Innate Immunity in cardiovascular disease (15.5)

Niels Riksen (Netherlands)

Role of IL-3 exosomes in cardioprotection against ischemia-reperfusion injury (15.5) Maria Felice Brizzi (Italy)

1310-1330 Rapid fire presentations (3 slides each)

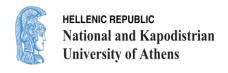
> Mechanisms of cardiac injury and protection related to mitochondrial ROS formation and Ca<sup>2+</sup> homeostasis

Salvatore Antonucci (Italy)

Tumor Necrosis Factor (TNF-α) Shedding and TNF-Receptor-1 Activation Contribute to Extracellular RNA-mediated Cell Death During Cardiac Reperfusion Injury Hector Cabrera-Fuentes (Germany)

Monoamine oxidases are mediators of oxidative stress in human vessels and adipose tissue in the setting of inflammation Adrian Sturza (Romania)





## PPARβ/δ as a target for cardioprotection Antigone Lazou (Greece)

## 1330-1430 Lunch

1430-1530 **WG1 NEW TARGETS** 

Chairs: Ioanna Andreadou, Hector Cabrera-Fuentes, Derek Hausenloy

Cardioprotective non-coding RNAs (15,5)

Yvan Devaux (Luxembourg)

Proteostasis and cardioprotection (15,5)

Henrique Girao (Portugal)

Stress hyperglycaemia, excess myocardial injury and the role for SGLTs (15,5)

Rob Bell (UK)

1530-1550 Rapid fire presentations (3 slides each)

Heart rate reduction and its protective influence on heart function (rat post MI model)

Przemysław Leszek (Poland)

In a search for a cardioprotective pathways in the delayed progression of heart failure in

Tgαg\*44 mice; focus on ACE2/Ang-(1-7) pathway

Stefan Chlopicki (Poland)

Impact of cardiac fibrosis on reverse remodeling

Bruno Podesser (Austria)

Neoglycoconjugates: galectin ligands with a therapeutic potential in cardiology

Vladimír Křen (Czech Republic)

1550-1630 **Discussion**:

Choosing new targets and strategies and Action plan

1630-1645 Coffee break

1645-1745 WG2: COMBINATION THERAPY

Chairs: Sean Davidson, Attila Kiss, David Garcia-Dorado

Non-cardiomyocyte targets

Platelets and pericytes (15,5)

Philip Wenzel (Germany)

AMPK - Its protective action in and beyond the cardiomyocyte (15,5)

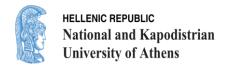
Luc Bertrand (Belgium)

Platelets and cardioprotection (15,5)

Lina Badimon (Spain)

1745-1820 Rapid fire presentations (3 slides each)





AGEs in the aging heart. Marisol Ruiz-Meana (Spain)

Trimethylamine-N-oxide: microbiota-derived cardiometabolic risk marker and novel drug target?

Maija Dambrova (Latvia)

Cardiac energy metabolism in postconditioning Sarah Longnus (Switzerland)

Exercise-induced microRNAs as targets for cardioprotection Clarissa Pedrosa da C. Gomes (Luxembourg)

Role of PKG-related Pathways in the Diastolic Response to Acute Myocardial Stretch Under Ischemic Conditions

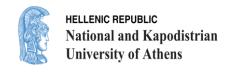
Ines Pires (Portugal)

Fat mass and obesity associated protein in hypoxic myocardium Markéta Hlaváčková (Czech Republic)

Survivin: a molecular target in cardioprotection against ischemia/reperfusion injury *Lana Nezic (Bosnia)* 

2000 Meeting dinner in Fira





## Day 2: Tuesday October 9th 2018

0830-0940 WG2: COMBINATION THERAPY

Chairs: Sean Davidson, Attila Kiss, David Garcia-Dorado

Enhancing Cell Survival following Myocardial Infarction Using Modified mRNA (25,5)

Invited specialist: Lior Zangi (US)

Metoprolol – one agent, 2 different targets (15,5)

Borja Ibanez (Spain)

RIC + IPost – 2 different treatments (15,5)

Michel Ovize (France)

0940-0950 Rapid fire presentations (3 slides each)

Combination therapy in patients with cardiovascular diseases and metabolic disorders.

Pavle Adamovski (Macedonia)

The effects of homocysteine and methionine on rat cardiovascular system: focus on

cardiodynamic variables, biochemical and oxidative stress parameters

Dragan Djuric (Serbia)

0950-1030 **Discussion**:

Choosing multi-targeted therapies- recommendations for paper

Action plan

1030-1045 Coffee Break

1045-1235 **WG3 CONFOUNDERS** 

Chairs: Rainer Schulz, Peter Ferdinandy

Inflammation and fibrosis as targets for cardioprotection (25,5)

Invited specialist: Nikolaos G. Frangogiannis (US)

Multi-morbidity large animal models (15,5) Dirk Duncker (Rotterdam, Netherlands)

High fat diet-induced obesity increases tolerance to ischemia by delaying recovery of

intracellular pH during initial reperfusion (15,5)

Javier Inserte (Spain)

Ageing in the response of immune system to cardiac injury - focus on T-cells (15,5)

Stefan Frantz (Germany)

HDL and cardioprotection: role of comorbidities (15,5)

Sandrine Lecour (South Africa)

1235-1255 Rapid fire presentations (3 slides each)

Cardioprotective Action of Mitochondrial-Targeted Antioxidant MitoTEMPO via Maintenance

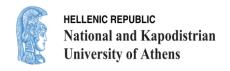
of Electrical Activity of Cardiomyocytes from Aged-Rats

Belma Turan (Turkey)

The role of quercetin in cardioprotection against ischemia-reperfusion injury: impact of age

and co-medication with doxorubicin





Monika Bartekova (Bratislava)

The uric acid paradox – confounder in cardioprotection? *Kirsti Ytrehus (Norway)* 

Cardioprotection in transgenic rat model of systemic hypertension Frantisek Kolar (Czech Republic)

1255-1330 **Discussion** 

Choosing the co-morbidities and the co-medications Action plan

1330-1430 Lunch

1430-1515 Short-Term Scientific Missions - REPORTS

Chair: Coert Zuurbier

Investigation of the role of platelets in cardioprotective effects of remote ischemic conditioning (10.5)

Maria Tousmani (Greece)

Development a cell based comorbidity model for cardioprotection (10,5)

Barbora Kaločayová (Slovakia)

Shortening CMR acquisition for clinical cardioprotection studies in STEMI (10,5)

Heerajnarain Bulluck (UK)

1515-1545 WG4: CONSORTIUM

Chairs: Hans Erik Botker, Jacob Lonborg, Gerd Heusch

Translational gaps in cardioprotection (25,5)

Gerd Heusch (Germany)

1545-1600 Coffee Break

1600-1745 ST-segment elevation and cardioprotection by remote ischemic conditioning (15,5)

Petra Kleinbogard (Germany)

Cardioprotection in the STEMI setting (15,5)

Thomas Engstrom (Denmark)

Intramyocardial haemorrhage following STEMI- a neglected therapeutic target (15,5)

Niels Van Royen (Netherlands)

Tryptophan pathways involvement in the mechanism of remote ischemic conditioning (15,5)

Fabrice Prunier (France)

1745-1820 Rapid fire presentations (3 slides each)

Hyperconditioning: a potential confounder in conditioning

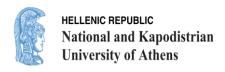
Peter Whittaker (US)

Remote ischemic conditioning confers acute short-term improvement of vascular function, through oxidative stress reduction, nitrate- NO pathway activation and by upregulation

of cardioprotective microRNAs expression

Ignatios Ikonomidis (Greece)





Animal model of intrinsic remote conditioning to prevent left ventricular remodeling *Mariann Gyongyosi (Austria)* 

Impact of remote conditioning on sympathetic nerve re-innervation in reperfused myocardium *Attila Kiss (Austria)* 

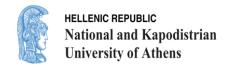
HDL in cardioprotection: detrimental effects of hypercholesterolemia. *Gemma Vilahur (Spain)* 

Standardisation of aquisition and planimetric analysis of digital images Edgars Liepinsh (Latvia)

DANAMI-3 iPOST revisited Jacob Lonborg (Denmark)

Dinner on own





## Day 3: Wednesday October 10th 2018

0830-1030 WG4: CONSORTIUM

Chairs: Hans Erik Botker, Jacob Lonborg, Gerd Heusch

Research networks: the sine qua non to facilitate clinical translation of novel cardioprotective

therapies? (25,5)

Invited specialist: Karin Przyklenk (US)

Economic Evaluation of Therapies for Myocardial Infarction: A Neglected, but Important

Component of Cardioprotection (15,5)

Peter Whittaker (US)

Setting up our European Cardioprotection Consortium 1

1030-1045 Coffee Break

1045-1230 **WG4: CONSORTIUM** 

Chairs: Hans Erik Botker, Jacob Lonborg, Gerd Heusch

Setting up our European Cardioprotection Consortium 2

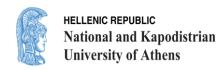
1230-1300 Summary and action plan

Closing session

1300-1400 Lunch

1400-2000 Excursion to Oia and dinner





# **Abstracts**