

3rd EU-CARDIOPROTECTION COST Action WG Meeting Oct 8th – 10th 2018, Kamari, Santorini, Greece

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
(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)



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 organiser)

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)
- 1045-1115 **WG1 NEW TARGETS**
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)*
- 1115-1130 **Coffee break**
- 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 Ca²⁺ 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)

PPAR β/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 Tgαq*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 Inerte (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- Nitrite- NO pathway activation and by upregulation of cardioprotective microRNAs expression
Ignatios Ikonmidis (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 acquisition 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