

Tentative Outline

Special Thematic Issue for the journal : *Current Drug Targets*

Title of the Thematic Issue: Translational aspect of Pharmacological Cardioprotection

Guest Editors: *Dr. Naseer Ahmed, MBBS, PhD, FESC, Prof. Giuseppe Faggian, MD and Prof. Guido Fumagalli, MD, PhD*

- **Scope of the Thematic Issue:**

Objective of this special issue is to collect latest advancement of Pharmacological cardioprotection with regard to Ischemia reperfusion injury using novel drugs and to bring the most necessary information in a timely and concise format, Translational aspect of Pharmacological Cardioprotection takes a fresh and energetic look at advances in this dynamic field.

In the last 1-2 decades' huge number of experimental work has been done but unfortunately majority of the finding were not able to translate in clinical settings. Inflammation and oxidative stress has been documented as playing a vital role following ischemia-reperfusion injury and, as a consequence, to be an important therapeutic target for the treatment of heart failure. However, inflammation and oxidative stress contributes differently to the pathogenesis of cardiac dysfunction and to various patterns of cardiac remodeling. Several mediators of inflammation and oxidative stress trigger the remodeling cascade, a process that initially confers protection to the heart as a compensatory mechanism. Yet chronic inflammation after myocardial infarction also leads to cardiac remodeling that, when prolonged, leads to heart failure progression. The diversity of inflammation and oxidative stress further demonstrates the need for a personalized characterization of inflammation enabling subsequent target-specific strategies. This inevitability is supported by the disappointing outcomes to date of anti-inflammatory and anti-oxidative stress strategies used in heart failure patients. This special issue is designed to focus on the interplay of inflammation/oxidative stress and cell injury/death following myocardial ischemia-reperfusion. The issue also aims to investigate the impact of regulation of inflammatory signals on the evolution of cardiac remodeling and function and to identify novel potential therapeutic targets. Both basic science and clinical studies are welcomed.

Potential topics include but are not limited to the following:

- Markers of inflammation and oxidative stress in myocardial ischemia-reperfusion with potential therapeutic targets
- Kinetics of interventions and their role in short and long-term remodeling
- Potential therapeutic targets to modulate inflammation following myocardial ischemia-reperfusion
- New experimental models/approaches to investigate myocardial ischemia reperfusion injury and therapeutic options
- Strategies to encounter failure of translational aspects during experimental protocols
- Clinical Trials regarding pharmacological cardioprotection
- Future strategies of translational impact in Myocardial Ischemia reperfusion

Keywords: Cardioprotection, therapeutic targets, Heart Failure, Anti-inflammatory drugs, Antioxidants, Ischemia reperfusion injury, Translational research, experimental models, clinical trials

Sub-topics: Cardiac Surgery, Interventional Cardiology, Heart Failure, Cardiopulmonary bypass, Heart Transplantation

List of contributors:

List of contributors with their names, designations, addresses and email addresses should be provided.

- Natasja de Groot, Erasmus MC, Rotterdam, NL, Prof. of Cardiology
- Prof. Giovanni Luciani, Professor of Cardiac surgery, University of Verona, Italy.
- Faisal H. Cheema, Associate Professor, Houston College, Texas, USA
- Sultan Ayoub Meo, Professor of Physiology, King Saud University, Riyadh, KSA,
- Giulio Innamorati, University of Verona, Italy

- Alessio Rungtacher, Assistant Professor of Cardiac surgery, University of Verona, Italy
- Daniele Linardi, Assistant Professor of Cardiac surgery. University of Verona, Italy

- Muhammad Aslam, Laiden University, Germany, Senior Researcher
- Sajeela Ahmed, Assistant Professor, NUTECH University, Islamabad,
- Riffat Mehboob, Prof and Director Allied Health Sciences, University of Lahore, Pakistan
- Mebratu Gebrie, Researcher, Chicago University, USA,
- Abeer Al Masri, Cardiovascular Researcher King Saud University, KSA

Schedule:

- ✧ Thematic issue submission deadline: 15th April, 2021

Contacts:

Guest Editors Names:

Dr. Naseer Ahmed, MBBS, PhD, FESC

Affiliation: Aga Khan University, Karachi, Pakistan

Email: dr.naseer99@gmail.com/ Naseer.ahmad@aku.edu

Prof. Giuseppe Faggian, MD

University of Verona, Verona, Italy

Email: Giuseppe.faggian@univr.it

Prof. Guido Fumagalli, MD, PhD

Email: giudo.fumagalli@univr.it

Any queries should be addressed to cdt@benthamscience.net