Aims & Scope:

Cardiovascular events represent the major cause of morbidity and mortality among patients with end-stage renal disease (ESRD). These patients exhibit a substantially greater risk for cardiovascular disease as compared with the general population, but the reasons for this huge cardiovascular burden are not yet fully elucidated. Accumulation of traditional risk factors — i.e., hypertension, diabetes mellitus, hyperlipidemia, smoking — as well as the presence of overt cardiovascular disease from earlier stages of renal impairment are for long considered as obvious explanations. It has to be noted, however, that several ESRD-specific risk factors may influence the progression of cardiovascular damage and exacerbate the already heightened cardiovascular risk of patients with ESRD. In this direction, acute and chronic volume overload, inflammation and oxidative stress, secondary hyperparathyroidism, vascular and valvular calcification and acceleration of the atherosclerotic process may play a distinct role in the development of cardiovascular disease in this population. Furthermore, the exclusion of patients with advanced kidney disease or ESRD from major clinical trials raises substantial therapeutic uncertainties around the safety and efficacy of several pharmacological interventions with proven cardiovascular benefits in non-ESRD populations. Accordingly, the aim of this special thematic issue is to provide an overview of traditional and ESRD-specific risk factors that are proposed to be implicated in the complex pathophysiology of cardiovascular disease in those with ESRD.

Keywords: cardiovascular disease, cardiovascular mortality, end-stage renal disease, hemodialysis, peritoneal dialysis, randomized clinical trials

Subtopics:

The sub-topics that are covered within this special thematic issue include the following:

1) Editorial: Cardiovascular disease in end-stage renal disease.
   Vassilios Liakopoulos (Thessaloniki, Greece)

2) Assessment and management of volume overload among patients on chronic dialysis.
   Adrian Covic (Iasi, Romania)

3) Antihypertensive agents in the dialysis population: what is the clinical-trial evidence?
   Panagiotis I. Georgianos (Thessaloniki, Greece) & Rajiv Agarwal (Indianapolis, USA)

4) Arterial stiffness as a novel therapeutic target in end-stage renal disease.
   Panagiotis I. Georgianos & Vassilios Liakopoulos (Thessaloniki, Greece)

5) Innate immune system in ESRD: Special focus on cardiovascular implications.
   Evangelia Dounoussi (Ioannina, Greece) and Carmine Zoccali (Reggio Calabria, Italy)

6) Oxidative stress and Cardiovascular disease in ESRD
   Stefanos Roumeliotis and Peter Mertens (Magdeburg, Germany)

7) FGF-23 and Klotho as biomarkers in Cardiovascular disease in ESRD
   Aikaterini Papagianni (Thessaloniki, Greece)

8) Nocturnal HD and cardiovascular disease
   Andreas Pierratos (Toronto, Canada)

9) Hyperuricemia and cardiovascular disease in ESRD
   Ioannis Stefanidis (Larissa, Greece)

Schedule:

- Manuscript submission deadline: October 1, 2019
- Peer review due: November 1, 2019
- Revision due: November 15, 2019
Contacts:

Guest Editor: Vassilios Liakopoulos, MD, PhD,
Affiliation: Division of Nephrology and Hypertension, 1st Department of Medicine, AHEPA Hospital, School of Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece
E-mail: liakopul@otenet.gr, vliak@auth.gr

Co-Guest Editor: Panagiotis I. Georgianos, MD, PhD
Affiliation: Division of Nephrology and Hypertension, 1st Department of Medicine, AHEPA Hospital, School of Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece
E-mail: pangeorgi@yahoo.gr