

## The Heart and the Kidneys



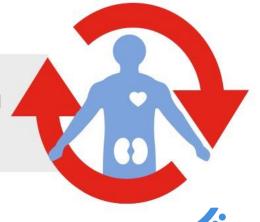
CVD is the leading cause of death in CKD patients



## CKD and CVD share risk factors:

hypertension, diabetes, altered bone mineral metabolism, anemia, volume overload and the presence of uremic toxins.

state



CKD is associated with several CKD outcomes



**Coronary heart** disease



Stroke



Peripheral artery disease



**Arrhythmias** 



**Heart failure** 



Venous thrombosis



**Myocardial** fibrosis



Vascular calcification



**Mvocardial** remodeling processes

**Atherosclerotic** CKD causes a systemic, chronic proinflammatory









New therapies can prevent CVD in CKD populations, but mitigating the risk of CVD in patients with CKD effectively requires multidisciplinary care involving nephrologists, cardiologists and allied professionals.

1. Matsushita, K., et al (2022). Epidemiology and risk of cardiovascular disease in populations with chronic kidney disease. Nature Reviews Nephrology, 18(11), 696-707 Jankowski, J., et al. (2021).

Cardiovascular Disease in Chronic

Kidney Disease. Circulation, 143(11),

CVD, cardiovascular disease; CKD, chronic kidney disease