

## Chronic Kidney Disease as a Risk Factor for Cardiovascular Disease

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Chronic kidney disease affects a significant proportion of the general population and is often characterized by progression towards end-stage renal disease, requiring renal replacement treatment for patients to survive. In the same time, chronic renal impairment carries a hugely increased risk for cardiovascular disease; this risk increases along with the progressive falling of residual renal function. In recent years, several studies pointed out that even the presence of mild renal damage, clinically defined by the detection of only mildly reduced glomerular filtration rate and/or by the only presence of microalbuminuria, independently predicts the development of cardiovascular events, i.e. not as could be simply expected by the coexistence of other well known cardiovascular risk factors. At a patho-

genetic level, the possible explanations of such an association have not yet been fully clarified, potentially involving that both renal and cardiovascular damage share the same pathogenetic pathways or their ability to reciprocally promote themselves. The evidence of a strict association between renal disease and the risk for cardiovascular events allows a wider and more detailed stratification of the cardiovascular risk and suggests the opportunity of timely planning strategies of cardiovascular prevention in all renal patients, possibly starting from the earliest stages of renal damage. Unfortunately, this objective collides with the everyday clinical practice, where the late detection of renal dysfunction and the late referral of renal patients to nephrological care are common findings.