Background: Patients with chronic kidney disease (CKD) have an increased mortality after percutaneous coronary intervention (PCI). Restenosis may contribute to the increased late mortality in these patients. In the current stenting era, restenosis is not increased in CKD and does not account for this increased mortality.

Results: Patients in the lowest creatinine clearance group were older, had a greater proportion of women, and had more diabetes. At 30 days, there was no difference in adverse events between those in the lowest, middle, and highest creatinine clearance groups in terms of myocardial infarction (1% vs. 0%, vs. 0%, p=0.33), death (0%, vs. 0%, vs. 0%, p=0.06), or target vessel revascularization (1% vs. 1%, vs. 1%, p=0.28) respectively. At 9 months, mortality and major adverse cardiac events were lower in the lowest creatinine clearance group (vs. 1% vs. 1%, vs. p=0.001), but myocardial infarction and target vessel revascularization were not different. In patients undergoing protocol follow-up angiography (n=2,556), restenosis was not increased with CKD (22% vs. 22% vs. 27%, p=0.13).

Conclusion: Mortality at 3 months is modestly increased in patients with mild or moderate CKD after PCI. Restenosis is not increased in CKD and does not account for this increased mortality.