

Title: Evaluation of the Impact of Chronic Kidney Disease on Occurrence of Major Adverse Cardiovascular Events in Patients on Dual Antiplatelet Therapy Post-Acute Coronary Syndrome Resulting in Percutaneous Coronary Intervention

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Introduction:

Given its lower bleeding risk as compared to the other P2Y12 inhibitors, clopidogrel is commonly used in patients with chronic kidney disease (CKD) who undergo percutaneous coronary intervention (PCI) after an acute coronary syndrome (ACS) event. However, the association between CKD and cardiovascular events in patients initiated on dual antiplatelet therapy (DAPT) with clopidogrel remains unclear. Current evidence in the CKD population is limited to post-hoc analyses and suggests worse outcomes, which may be attributed to insufficient active metabolite generation and enhanced platelet turnover.

Methods:

This retrospective cohort study evaluated patients admitted to the VA St. Louis Health Care System from 1 January 2013 – 1 January 2019 who had an ACS event, underwent PCI with stent placement, and were subsequently initiated on DAPT with clopidogrel. Patients were divided into two study arms: $GFR \geq 60$ mL/min/1.73m² and $GFR < 60$ mL/min/1.73m². The primary outcome was a composite of major adverse cardiovascular events (MACE) at 12 months. Secondary outcomes included stent thrombosis, non-fatal myocardial infarction, ischemic stroke, unplanned coronary revascularization, all-cause mortality, and cardiovascular mortality. Multiple variables were run through a univariate analysis including: demographics, CKD stage, lesion characteristics, concomitant disease states, and the use of other cardiovascular medications. Variables with a $p < 0.2$ were then included in a multivariate logistic regression model.

Results:

TBD

Conclusions:

TBD