











Direct oral anticoagulants show lower risk for kidney disease progression vs. vitamin K antagonists

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Cardiorenal Outcomes Among Patients With Atrial Fibrillation Treated With Oral Anticoagulants

Setting, Participants, and Methods	Findings	
 Retrospective cohort study Stockholm, Sweden (<i>SCREAM Project</i>)	DOAC vs. VKA: Adjusted hazard ratio (95% CI)	
 N = 32,699 non-valvular atrial fibrillation patients		CKD progression 0.87 (0.78-0.98)
 New users of direct oral anticoagulants (DOAC) vs. vitamin K antagonists (VKA)		AKI 0.88 (0.80-0.97)
 Propensity-score weighted Cox regression		Stroke/systemic embolism 0.93 (0.78-1.11)
 2011-2018 <ul style="list-style-type: none"> • Median follow-up for kidney outcomes: 3.0 years • Median follow-up for CV outcomes: 3.8 years 		Major bleeding 0.77 (0.67-0.89)
CONCLUSION: In routine clinical practice, compared with VKA, DOAC use was associated with a lower risk of CKD progression, AKI, and major bleeding, but similar risk of stroke/systemic embolism.		
Marco Trevisan, Paul Hjerdahl, Catherine M Clase, et al @AJKDonline DOI: 10.1053/j.ajkd.2022.07.017		

Among patients with non-valvular AF treated in routine clinical practice, compared with VKA, DOAC use was associated with a lower risk of CKD progression, AKI, and major bleeding, but a similar risk of the composite of stroke/systemic embolism and death. Credit: *American Journal of Kidney Diseases* (2022). DOI: 10.1053/j.ajkd.2022.07.017

A Swedish cohort study shows 13% (95% CI, 2-22%) lower risk of

kidney function decline or kidney failure and 12% (95% CI, 3-20%) lower risk of acute kidney injury with use of direct oral anticoagulants vs. vitamin K antagonists for non-valvular atrial fibrillation.

The relative safety of anticoagulation with direct oral anticoagulants (DOAC) or vitamin K antagonists (VKA) remains inconclusive, particularly with regards to kidney outcomes.

In a cohort of patients with non-valvular [atrial fibrillation](#) from Sweden, researchers observed that compared with VKA, DOAC initiation was associated with a lower risk of the composite of [kidney failure](#) and sustained 30% eGFR decline, as well as a lower risk of AKI occurrence.

In agreement with trial evidence, DOAC vs VKA treatment was associated with a lower risk of major bleeding, but a similar risk of the composite of stroke, systemic embolism, or death.

Collectively, these findings recently published in the *American Journal of Kidney Diseases (AJKD)* add to emerging evidence on the safety and effectiveness of DOAC administered for atrial fibrillation.

More information: Marco Trevisan et al, Cardiorenal Outcomes Among Patients With Atrial Fibrillation Treated With Oral Anticoagulants, *American Journal of Kidney Diseases* (2022). [DOI: 10.1053/j.ajkd.2022.07.017](https://doi.org/10.1053/j.ajkd.2022.07.017)

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