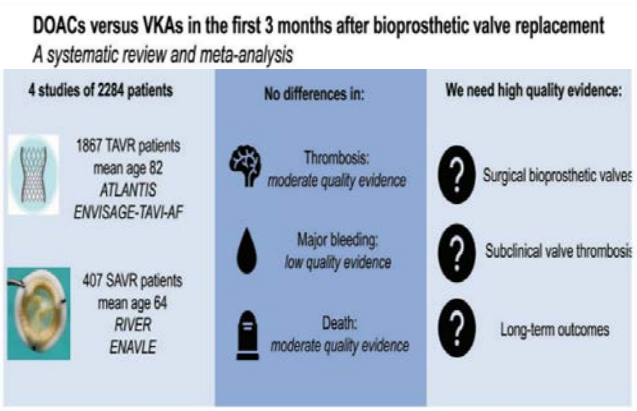
Update on Anticoagulation

DOAC vs. VKA after Bioprosthetic Valve

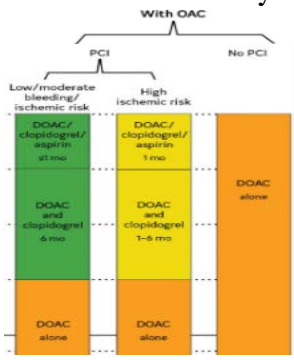
Context: Existing literature is limited surrounding efficacy and bleeding risk associated with using DOAC following bioprosthetic valve.

Current: Systematic review and meta-analysis showed no difference in rates of thrombosis, major bleeding or death between DOACs and VKA.[1]

Cutting Edge: We need high quality evidence regarding DOACs versus VKA early after bioprosthetic valve, especially with surgical valves.



DOAC use in Coronary Artery Disease



Context: Many patients undergoing elective PCI have indications to be on oral anticoagulation in addition to dual anti-platelet therapy.

Current: 2023 AHA guideline recommends triple therapy for 4 weeks in high thrombotic and low/moderate bleeding risk patients following PCI, then DOAC and clopidogrel subsequently for 6 months.[2] Long-term (>6 months) therapy is DOAC alone.

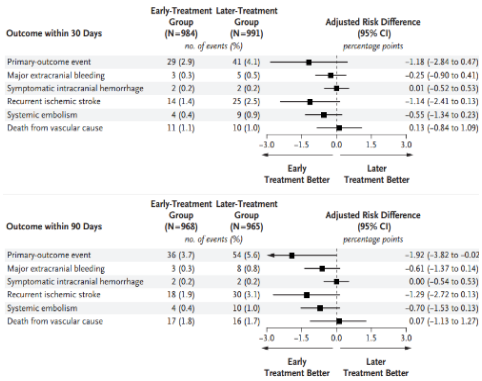
Cutting Edge: For patients with chronic coronary disease without PCI, treatment with DOAC alone may be sufficient.

DOACs and End Stage Kidney Disease

Context: DOAC use has increased over time in patients with ESKD despite patients with ESKD being excluded from most trials of DOACs.

Current: Two recent randomized control trials showed no difference in safety or efficacy between apixaban and VKA although both were underpowered to detect non-inferiority.[3, 4]

Cutting Edge: Apixaban may be a reasonable alternative to warfarin in patients with ESKD. There continues to be uncertainty about whether anticoagulation in general is net beneficial in ESKD and atrial fibrillation.



Early vs. late anticoagulation for secondary prevention of stroke

Current: Current guidelines recommend delayed anticoagulation in ischemic stroke patients with comorbid atrial fibrillation.

Current: In this RCT there was no statistically significant difference in recurrent stroke, SE, major extracranial, symptomatic ICH, or vascular death between early versus late anticoagulation groups.[5]

Cutting Edge: Anticoagulation can be started as early as within 48 hours following a small or moderate size stroke and within 6-7 days for a major stroke.

References:

1. Eikelboom et al. Direct oral anticoagulants versus vitamin K antagonists in the first 3 months after bioprosthetic valve replacement: a systematic review and meta-analysis. R. Eur J Cardiothorac Surg. 2023; 63(4):ezad110. PMID: 36971601.
2. Virani et al. 2023 AHA/ACC/ACCP/NLA?PCNA Guideline for management of Patients with Chronic Coronary Disease: A Report of the American Heart Association/American College of Cardiology Joint Committee on Clinical Practice Guidelines. Circulation. 2023;148(9):e9-e119. PMID: 37471501.
3. Pokorney et al. Apixaban for Patients With Atrial Fibrillation on Hemodialysis: A Multicenter Randomized Control Trial Circulation 2022;146:1735-1745. PMID: 36335914.
4. Reinecke et al. A randomized Controlled Trial Comparing Apixaban with the Vitamin K Antagonist Phenprocoumon in Patients on Chronic Hemodialysis: The AXADIA-AFNET 8 Study. Circulation 2023;147:296-309. PMID: 363335915.
5. Fischer et al. Early versus Later Anticoagulation for Stroke with Atrial Fibrillation. N Engl J Med. 2023;388(26):2411-2421. PMID: 37222476.