

## Safety and Mortality: Monitoring the Patients on Rivaroxaban

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### **Background:**

No enough information available in matter of patient on Rivaroxaban a direct factor Xa inhibitor specially in Saudi population. In addition, patient with chronic kidney disease, valvular atrial fibrillation or liver disease must not be considered for such therapeutic change. This study will be the first to give an idea about current practice being used at anticoagulant clinic and criteria used to choose patients were switched to Rivaroxaban.

### **Aim:**

This study will shed the light on the current practice and criteria used to choose patients to be switched to Rivaroxaban among patient attending ambulatory clinic. To identify criteria of safety to consider in the patient for transitioning treatment, as well as to specify the causes of reversing from warfarin to Rivaroxaban and side effects.

### **Methodology:**

Retrospective Observational study. Electronic Medical Records (eSiHi) of our hospital will be used to retrieve study variables, from 2015 until 2021, for Rivaroxaban patients.

### **Results:**

NOACs should be considered for almost all NVAF patients, considering their efficacy and safety profile. However, there are some specific populations that might benefit more from

switching from VKAs to NOACs. Labile INR has been identified as a risk factor for bleeding events and this variable is included in the HAS-BLED bleeding risk score, although the relative efficacy and safety of DOACs compared with warfarin was consistent across INR time in therapeutic strata.

### **Conclusion:**

Switching from the old anticoagulant drug Warfarin to a New Oral Anticoagulant (DOACs) Rivaroxaban has been an argument for a long time, Rivaroxaban is started when INR is between 2.5 – 2.9. Meanwhile; patients with high risk or bleeding are started once the INR is in the lower half of the target range (2.0–2.5). VKAs are still the most appropriate choice for some patients, it is important to consider that patients with end-stage renal disease were not included in DOACs trials; therefore, renal function should be evaluated and switching from VKAs to Rivaroxaban is not recommended when creatinine clearance is less than 30 mL/min.

Thus, it is recommended to monitor renal function during treatment in order to detect renal impairment early and, in some cases, change the dose of the NOAC or even stop it. There is no evidence supporting the use of these new drugs for these groups of patients and therefore VKAs should be maintained. Finally, cost is another issue to be considered before switching from VKAs to DOACs since the latter are more expensive than VKAs.