SHORT-TERM RISK OF BLEEDING DURING HEPARIN BRIDGING AT INITIATION OF VITAMIN K ANTAGONIST THERAPY IN MORE THAN 90,000 PATIENTS WITH NON-VALVULAR ATRIAL FIBRILLATION MANAGED IN OUTPATIENT CARE

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BACKGROUND

- Few studies have investigated bridging risks during vitamin K antagonist (VKA) initiation, in particular in outpatient settings.
- There is an overall consensus in favour of a bridging therapy prior to urgent cardioversion in patients with life-threatening hemodynamic instability caused by new-onset NVAF.
- The recommendation in guidelines is less clear for those with stable NVAF who do not require rapid anticoagulation
- In real-life conditions, a bridging regimen is commonly used in those with a low stroke risk.[1–4] This practice is not supported by evidence.

OBJECTIVES

To assess the safety and effectiveness of a bridging regimen during the initiation of VKA therapy in NVAF patients managed in outpatient care.

METHODS

Sources

- French health insurance claims databases (SNIIRAM)
- French hospital discharge database (PMSI)

Study population

Patients starting a VKA (warfarin, fluindione, or acenocoumarol) dispensed from a community pharmacy between January 2010 and November 2014 for NVAF, aged 18 years or over.

Comparison groups

- Bridging therapy: SC bridging agent (LMWH, fondaparinux, UFH) + VKA
- Reference group: VKA only

Outcomes (ICD-10 codes)

- Bleeding: intracranial, gastrointestinal, other
- Arterial thromboembolism: ischemic stroke, systemic embolism (IS/SE)

Statistical analysis

- Multivariate analysis: adjusted hazard ratios (HR) with 95% confidence intervals (CI) were estimated using Cox models
- Duration of follow-up: first and two following months of anticoagulation
- Covariates: sex, age, social deprivation index, type of VKA therapy, type of VKA prescribers, comorbidities (CHA2DS2-VASc and HAS-BLED scores etc.), concomitant medications.

RESULTS

Study population: 90,826 individuals (mean age of 72 years, 50% women), 30% with bridging therapy.

Figure 1. Multivariable adjusted association of bridging therapy with bleeding and IS/SE risks

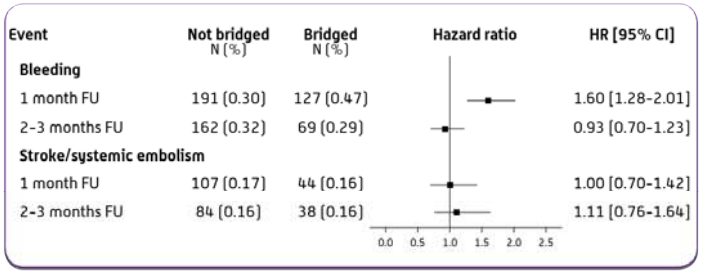


Figure 2. Multivariable adjusted association of bridging therapy with one-month bleeding risk according to sex

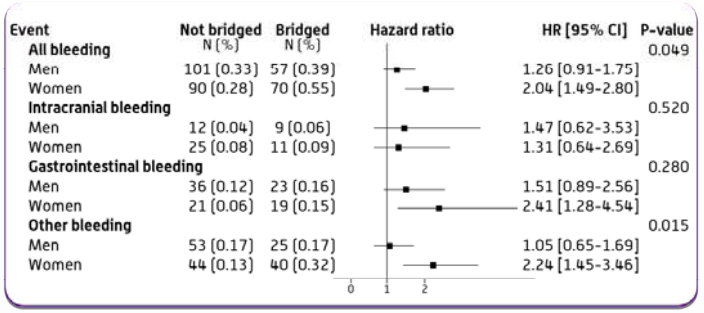
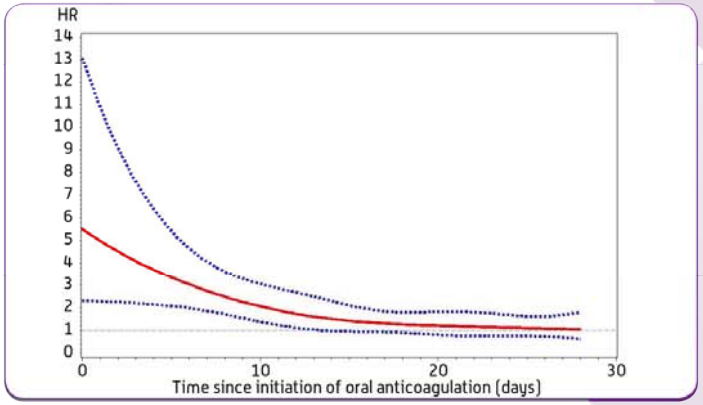


Figure 3. Effect of bridging therapy on bleeding with time estimated by a cubic spline function



CONCLUSION

At VKA initiation for NVAF managed in ambulatory settings, bridging therapy is associated with a higher risk for bleeding and a similar risk for arterial thromboembolism as compared with no bridging therapy.

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Declaration of Interest: Authors have nothing to disclose.

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