

Treatment pathways of oral anticoagulants for stroke prevention in atrial fibrillation patients – Patterns from multiple countries

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Yes No

Abstract

We conducted retrospective cohort study using multiple secondary data-sources to assess the treatment pathways for use of oral anticoagulants in atrial fibrillation patients to understand its use in routine clinical practice and visualize it using sunburst graphs.

Introduction

Gradual introduction of non-vitamin K antagonist oral anticoagulants (NOACs) provided new treatment options for stroke prevention of atrial fibrillation (SPAF).¹ The aim is to characterize the treatment pathways for SPAF in a real world setting across a network of databases.

Methods

This retrospective cohort study used multiple data sources (Belgium, France, Germany, UK and US) analysed using an adaptation of the Observational Health Data Sciences and Informatics (OHDSI) Treatment Pathway Tool.² Patients aged ≥ 18 years with a diagnosis of AF and at least one prescription of oral anticoagulants (OACs) from 2010 through 2017 were included. Treatment share of OACs at index year vs. end year of follow-up was presented for patients with adequate follow-up. Sequence of treatments changes are presented as sunburst graphs.

Results

More than 3.0 million patients were analysed across data sources from five countries in which the majority of patients were aged 65 and over. Treatment pathways (Figure 1) from multiple countries reflect the uptake of NOACs and clinical practice in the respective countries. Compared to the European countries, the uptake of NOACs was fastest in US and also had more switchers within two years of follow-up. The uptake of NOACs was slowest in UK relative to other countries. Early uptake of edoxaban is seen in Germany compared to other countries. Rivaroxaban seems to be the leading treatment choice for SPAF since 2013 and shared by Apixaban from 2015 onwards, except UK which was slow on uptake.

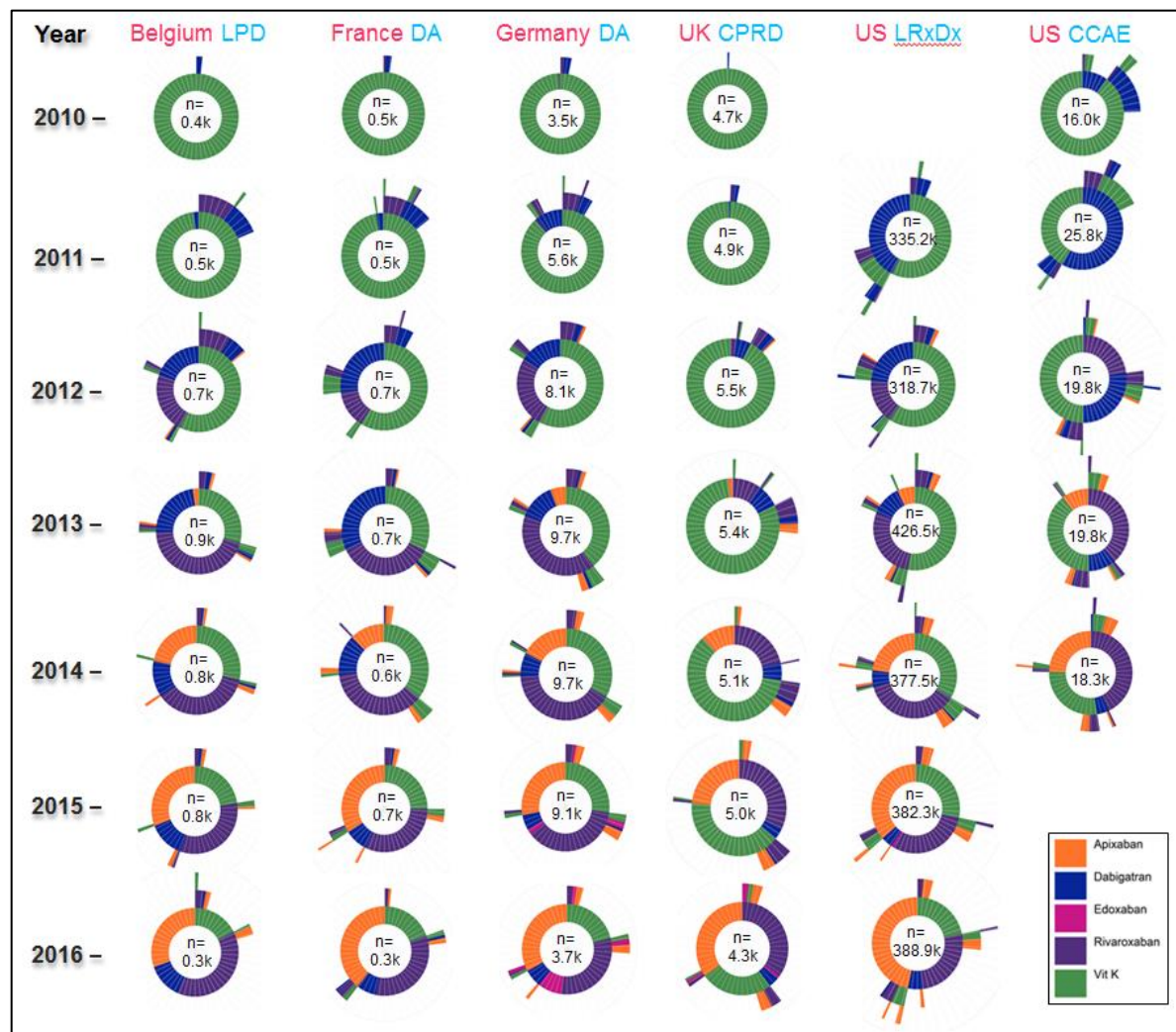


Figure 1. Treatment pathway for new users of OACs within two years of follow-up in AF patients by index year of treatment. It depicts proportions of drug used for treatment and sequences between lines of treatment. LPD – Longitudinal Patient Database; CPRD – Clinical Practice Research Datalink; DA – Disease Analyser; LRxDx – Longitudinal Prescription Diagnosis database; CCAE – MarketScan Commercial Claims and Encounters.

Conclusions:

This international observational study using multiple data sources provides insights into treatment choices in routine clinical practice as well as shows patterns of OACs use in SPAF treatment since 2010. The majority of AF patients currently receive apixaban and rivaroxaban as the first line of treatment.

References:

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