Real-world persistence with direct oral anticoagulants (DOACs) in naïve patients with non-valvular atrial fibrillation


BACKGROUND
Anticoagulation therapy is central for the management of stroke in patients with non-valvular atrial fibrillation (NVAF). Persistence with oral anticoagulation is essential to prevent thromboembolic complications.

METHODS
We performed a population-based retrospective cohort study in the Veneto Region (northeastern Italy, about 5 million inhabitants) using the regional health system databases. Naïve patients initiating direct oral anticoagulants (DOACs) for stroke prevention in NVAF from July 2013 to September 2017 were included in the study. Patients were identified using Anatomical Therapeutic Chemical (ATC) codes, excluding other indications for anticoagulation therapy using ICD-9CM codes. Treatment persistence was defined as the time from initiation to discontinuation of the therapy, including any therapeutic switching among DOACs. Baseline characteristics and comorbidities associated to the persistence of therapy with DOACs were explored by means of Kaplan-Meier curves and assessed through Cox regression.

RESULTS
Naïve patients initiating direct oral anticoagulants for stroke prevention in NVAF identified in a 4.25-year period are 17,920. After one year, the persistence to the DOACs is 72.9%. Approximately 9.8% of the discontinuations are due to switch to vitamin k antagonists (VKAs). On multivariate analysis, factors negatively affecting persistence were female gender, age <65 years, renal disease and history of bleeding. On the other hand, persistence was better in patients with hypertension, previous cerebral ischemic events, and previous acute myocardial infarction.

CONCLUSION
In this study of real world data, one out four naive patients stopped treatment with DOACs within 12 months. Some characteristics may identify patients with poor persistence.