Abstract: **P4754**

**Time to discontinuation of non-vitamin k antagonist oral anticoagulants in patients with non-valvular atrial fibrillation**

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**Topic(s):**
Oral Anticoagulation

**Citation:**

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**Background:** Despite widespread use of non-vitamin K antagonist oral anticoagulants (NOACs), real-world data on time to discontinuation and time to re-initiation of the NOAC treatment are still scarce.

**Purpose:** To identify patterns of time to discontinuation as well as time to re-initiation of NOACs in patients with NVAF during the first year of treatment in UK primary care.

**Methods:** This population-based retrospective cohort study included 11,481 patients with NVAF, aged 18 and above, enrolled in The Health Improvement Network (THIN) with at least 1 year of follow-up after first recorded prescription of apixaban, dabigatran, or rivaroxaban between Jan 2012 to Dec 2016, and received two or more prescriptions of index NOAC. Discontinuation was defined as an interval greater than 30 days between the end of supply of the index NOAC and the date of the next prescription of the index NOAC. Discontinuers were further categorized as switchers, re-initiators or non-re-initiators. Re-initiators were patients who re-started OAC therapy after they discontinued treatment. Proportion of patients who discontinued NOAC treatment as well as mean duration (months) on treatment was calculated.

**Results:** The majority of patients were continuous users of their initial NOAC; discontinuation within the first year of treatment accounted for 26.1% of the apixaban cohort, 40.0% of the dabigatran cohort, and 29.6% of the rivaroxaban cohort.

**Time to discontinuation:-**
Among discontinuers, the mean time patient stayed on initial treatment was the least for dabigatran (4.5 months), followed by apixaban (4.7 months) and highest for rivaroxaban (4.9 months). Discontinuers who did not later reinitiate any OAC therapy had a slightly longer time to discontinuation (mean 5.5 months) than those who later reinitiated OAC therapy (either on the same NOAC, a different NOAC or VKA; mean 4.6 months), or who switched treatment (4.0 months).

**Time to re-initiation:-**
Among OAC reinitiators, no difference was seen in the time to re-initiation between NOACs (apixaban - 1.9 months, dabigatran - 2.1 months, and rivaroxaban - 2.0 months).

**Conclusion:** The proportion of discontinuation among new users of NOAC with NVAF in the first year was 30%. Average time on treatment for switchers, re-initiators and those who completely discontinued shows that such activities occurs around 4-5 months after initiating NOAC treatment, which is when further monitoring might be required. Once discontinued, re-initiation of NOAC treatment on average took 55-65 days.
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