

## Early initiation of direct oral anticoagulants after ischemic stroke with atrial fibrillation

February 4 2022



Credit: CC0 Public Domain

Researchers at the National Cerebral and Cardiovascular Center (NCVC) in Japan propose the new optimal timings for starting direct



oral anticoagulants (DOACs) in patients with nonvalvular atrial fibrillation (NVAF) after acute ischemic stroke, based on their results from combined registry dataset. They proposed the "1-2-3-4-day" rule that DOACs are started earlier after the index event than the current recommendations.

Suita, Japan—Anticoagulation with DOACs for secondary stroke prevention is standard therapy, but the optimal timing for starting DOACs after stroke remains unclear. A new study led by Dr. Kazunori Toyoda at the NCVC shows that relatively early initiation of DOACs decreases the risk of stroke recurrence without safety concern. The study has been published in the journal *Stroke*.

Early anticoagulation can decrease a risk of recurrent stroke and embolic events but may increase a risk of secondary hemorrhagic transformation of brain infarcts. The 1-3-6-12-day rule is a known consensus with graded increase in delay of anticoagulation between 1 and 12 days after onset of ischemic stroke or transient ischemic attack (TIA), according to neurological severity based on European expert opinions. However, this rule might be somewhat later than currently used in a real-world practical setting.

The researchers combined the dataset of two multicenter registries, SAMURAI-NVAF and RELAXED, for both the NCVC played a central role, and divided 1797 stroke/TIA patients in the dataset into four groups: TIA, mild stroke, moderate stroke, and severe stroke. The median days of starting DOACs in the four groups were 2, 3, 4, and 5 days after stroke onset.

When the patients starting DOACs at a day before the median days (1, 2, 3, and 4 days) or earlier were compared with those starting at the median days or later, the former patients showed a significantly lower risk of <a href="stroke">stroke</a> or systemic embolism and a similar risk of major bleeding. The



results were externally validated using the combined dataset of 6 European registry studies, where the early patients and late patients divided by our "1-2-3-4" day cutoff showed similar efficacy and safety.

The first author, Dr. Shunsuke Kimura, concludes that the present "1-2-3-4-day rule" seems to be feasible in the real-world clinical setting by careful exclusion of patients with factors favoring delayed initiation of anticoagulation such as huge infarcts, hemorrhagic transformation of infarcts, and uncontrolled hypertension.

**More information:** Shunsuke Kimura et al, Practical "1-2-3-4-Day" Rule for Starting Direct Oral Anticoagulants After Ischemic Stroke With Atrial Fibrillation: Combined Hospital-Based Cohort Study, *Stroke* (2022). DOI: 10.1161/STROKEAHA.121.036695

## Provided by National Cerebral and Cardiovascular Center

Citation: Early initiation of direct oral anticoagulants after ischemic stroke with atrial fibrillation (2022, February 4) retrieved 25 April 2024 from <a href="https://medicalxpress.com/news/2022-02-early-oral-anticoagulants-ischemic-atrial.html">https://medicalxpress.com/news/2022-02-early-oral-anticoagulants-ischemic-atrial.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.