

ANTICOAGULANT TREATMENT

EVOLUTION OF ANTICOAGULANT STRATEGIES AND CLINICAL OUTCOMES IN CANCER-ASSOCIATED THROMBOSIS: A LONGITUDINAL ANALYSIS OF THE START2 REGISTRY ONCO-VTE

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Background. Anticoagulant management of cancer-associated thrombosis (CAT) is complex due to high risk of both recurrent venous thromboembolism (VTE) and bleeding. The START2 Registry ONCO-VTE prospectively collects real-world data of patients with active malignancy to monitor the evolution of clinical practice, particularly the shift toward DOACs.

Aims. To describe the clinical characteristics of patients with CAT and evaluate variations in prescribing patterns and clinical outcomes between two enrollment periods: Jan. 2022–April 2024 (Group 1) and April 2024–Dec. 2025 (Group 2).

Methods. We analyzed 333 patients (database as of 18/12/2025). Group 1 included 270 patients (enrolled through 14/04/2024), and Group 2 included 63 patients (enrolled from 15/04/2024 via REDCap). Primary outcomes were treatment choice, VTE recurrence, major bleeding, and mortality.

Results. The cohort had a median age of 69 years, with 29% ≥75 years. Median follow-up was 12 months (14 months for Group 1 vs. 6 months for Group 2). Most patients (84%) had solid tumors, predominantly lung (18%) and colorectal (13%). Deep vein thrombosis (DVT) was the most frequent

event (52%), followed by pulmonary embolism (PE) (22%) and both (12%). Of these events, 65% were symptomatic, and 35% were incidental. Central venous catheter (CVC)-related thrombosis accounted for 14%. Comorbidities included hypertension (47%), diabetes (15%), cardiovascular disease (11%), and chronic respiratory diseases (10%). A progressive shift toward DOACs was observed: in Group 1, DOACs were prescribed to 59% of patients, increasing to 64% in Group 2. Conversely, parenteral anticoagulants (LMWH/Fondaparinux) decreased from 39.8% to 34%. Overall, VTE recurrence occurred in 7.5%, major bleeding in 6.6%, and all-cause mortality was 15%. To ensure comparability, a subgroup analysis was performed on patients with at least 6 months of follow-up (n=227). In this cohort, major bleeding was significantly lower in Group 2 than in Group 1 (7.1% vs. 11.2%), whereas VTE recurrence rates were comparable (7.1% vs. 8.1%).

Conclusions. The START2 ONCO-VTE registry analysis demonstrates a shift toward DOACs as the predominant strategy. This transition is associated with a significant reduction in major bleeding without compromising antithrombotic efficacy. These findings confirm that current management ensures high safety and effectiveness even in a complex and fragile oncological scenario.