

ANTICOAGULANT TREATMENT

## CANADIAN INSIGHTS INTO THE MANAGEMENT OF BREAKTHROUGH THROMBOSIS

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**Introduction.** Management of recurrent venous thromboembolism (VTE) despite anticoagulant therapy remains challenging. Moreover, this is a recurrent theme particularly in the Cancer Thrombosis setting. In the absence of evidence-based guidance when supratherapeutic anticoagulation fails, this study aims to describe national practices for managing these complex cases in Canada.

**Aim.** To identify current strategies and uncertainties in the management of breakthrough thrombosis among different physicians specialized in thrombosis in Canada.

**Materials and Methods.** An anonymous bilingual survey was distributed through the CanVECTOR and AMHOQ networks to Canadian physicians involved in thrombosis management. The present analysis reports preliminary data collected between November 2025 and February 2026.

**Results.** 28 responses were received from specialists in internal medicine, hematology, neurology, and pulmonology, with 80% in academic and 20% in community practice. While initial management of recurrent VTE on low molecular weight heparin (LMWH) was generally consistent, marked differences arose regarding laboratory and diagnostic approaches, especially in Anti-Xa and D-dimer testing, as

well as cancer screening. 70% performed age-appropriate screening, while 20% favored more extensive imaging, and 23% respondents reported colonoscopy as part of the work-up. Myeloproliferative neoplasms were explored in 47% and paroxysmal nocturnal hemoglobinuria in 18%. For recurrences under direct oral anticoagulants (DOAC), 16% favored continuing or increasing the dose, 70% switched to LMWH, and 4% considered an IVC filter. The greatest uncertainty concerned recurrence under LMWH increased to 120-125%, with heterogeneous strategies: escalation to 150% in 47%, or switching to DOAC or fondaparinux in 12% of physicians. Cases involving unresected gastrointestinal or genitourinary cancer showed the lowest confidence score (3.2/5), prompting many options, including alternative dosing such as 140% increase or twice-daily LMWH guided by anti-Xa levels.

**Conclusions.** This study highlights key therapeutic challenges in recurrent VTE management, including diagnostic assessment, use of anti-Xa or D-dimer testing, and treatment of recurrences under DOACs or in high-risk cancer settings. These findings emphasize the need for further studies to establish consistent, evidence-based approaches for breakthrough thrombosis, especially for cancer patients.