

# short & snappy

-A CLINICAL OVERVIEW

## DOACS in Cancer-Associated Thrombosis

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**In patients with cancer-associated VTE, how does edoxaban, rivaroxaban, and apixaban compare to dalteparin in terms of efficacy (recurrent VTE) and safety (major bleeding)?**

Cancer patients are at higher risk of thrombosis and may experience higher rates of venous thromboembolism (VTE) recurrence and bleeding complications during treatment. LMWH has been the standard of care with disadvantages including discomfort, anxiety over needle administration, and cost. Three randomized trials compared the direct oral anticoagulants (DOACs) edoxaban, rivaroxaban, and apixaban with LMWH in cancer-associated VTE treatment.

**DOAC VTE Treatment RCT Summary Table**

Study	HOKUSAI VTE Cancer		SELECT-D		ADAM VTE	
Trial Design	Randomized, open-label, Non-inferiority trial		Randomized, open-label, Pilot trial		Randomized, open-label, Superiority trial	
Comparison	LMWH + Edoxaban	Dalteparin	Rivaroxaban	Dalteparin	Apixaban	Dalteparin
Follow-up	12 months		6 months		6 months	
Results	Recurrent VTE (%)	7.9 11.3 HR 0.71 95% CI 0.48-1.06 P = 0.09	4 11 HR 0.43 95% CI 0.19-0.99 P = NR		0.7 6.3 HR 0.099 95% CI 0.013-0.78 P = 0.0281	
	Major Bleeding (%)	6.9 4 HR 1.77 95% CI 1.03-3.04 P = 0.04	6 4 HR 1.83 95% CI 0.68-4.96 P = NR		0 1.4 Cannot estimate HR P = 0.138	

Edoxaban, rivaroxaban, and apixaban are appropriate treatment options for cancer-associated VTE allowing oral administration, non-inferior or lower recurrent VTE rates, no monitoring, and reduced cost. However, precautions to consider prior to initiation include:

- Bleed risk
- Drug-drug interactions: P-gp or CYP3A4 inhibitors or inducers
- Extremes of body weight - BMI over 40 Kg/m<sup>2</sup> or weight over 120kg
- Reduced CrCl less than 30mL/min
- Safety among different tumour types - GI and GU malignancies shown to experience more bleeding while on edoxaban and rivaroxaban

**DOAC VTE Treatment Dosing Summary Table**

Setting	DOAC	Dose	Schedule	Duration
Initial	Apixaban	10mg	Twice daily	7 days
	Rivaroxaban	15mg	Twice daily	21 days
Long Term	Apixaban	5mg	Twice daily	6 months or more
	Rivaroxaban	20mg	Daily	
	Edoxaban	60mg	Daily	
		*Dose reduction for weight ≤60kg, drug interactions, and CrCL	30mg	Daily

**References**

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