

# Consistent Venous Thromboembolism Risk Reduction by Extended- Versus Standard-Duration Enoxaparin Prophylaxis in Subgroups of Acutely Ill Medical Patients in the EXCLAIM Study

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## INTRODUCTION

In the EXCLAIM study, extended-duration enoxaparin prophylaxis reduced the relative risk of VTE in acutely ill medical patients by 44% compared with placebo, following standard-duration prophylaxis (2.8% vs 4.9%; RR 0.56; 95% CI 0.39-0.80; p=0.0011). We

assessed the benefits of extended-duration enoxaparin prophylaxis in subgroups of acutely ill medical patients with the most prominent primary diagnoses enrolled in EXCLAIM.

## METHODS

Patients enrolled in EXCLAIM had: recent reduced mobility ( $\leq 3$  days) due to a medical illness, age  $\geq 40$  years, and anticipated level 1 (total bed rest or sedentary without bathroom privileges) or level 2 (level 1 with bathroom privileges) reduced mobility with further risk factors. Eligible patients received enoxaparin 40 mg SC once-daily for 10 $\pm$ 4 days, and were then double-blind randomized and received enoxaparin 40 mg SC once-daily (n=2013) or placebo (n=2027) for a further 28 $\pm$ 4 days.

Asymptomatic DVT were diagnosed by bilateral compression ultrasound after completion of the randomized treatment. Suspected cases of symptomatic DVT or PE were confirmed by objective tests. Fatal PE were confirmed by autopsy where possible. Univariate logistic regressions were conducted to estimate treatment effects in patient subgroups. The primary safety endpoint was major bleeding.

## CONCLUSION

Extended enoxaparin prophylaxis consistently reduced VTE risk in acutely ill medical patients with the most prominent primary diagnoses compared with placebo following standard-duration prophylaxis. Major bleeding was generally higher in the extended-duration enoxaparin arm, but rates of bleeding were low. These findings are consistent with the primary findings of the EXCLAIM study which demonstrated the clinical benefit of the extended-duration enoxaparin regimen.

## RESULTS

Baseline characteristics were similar between treatments within each primary diagnosis subgroup, and the considered primary diagnoses accounted for >80% of the enrolled population. The reduced VTE incidence associated with extended-

duration enoxaparin prophylaxis was consistent across subgroups of patients with different primary diagnoses (Table). The incidence of major bleeding was generally higher in patients receiving extended-duration prophylaxis (Table).

**Table:** VTE and major bleeding in patient subgroups receiving extended-duration vs standard-duration prophylaxis/placebo

Primary Diagnosis	Incidence of VTE (%)*		Odds ratio (95% CI)**	Incidence of Major Bleeding (%) ***		Odds ratio (95% CI)
	Extended Enoxaparin	Standard Enox/Placebo		Extended Enoxaparin	Standard Enox/Placebo	
Heart failure, NYHA class III or IV	3.1	4.7	0.64 (0.29-1.39)	0.0	0.2	N/A
Acute respiratory insufficiency	2.2	3.7	0.60 (0.27-1.34)	0.6	0.2	3.15 (0.33-30.4)
Post ischemic stroke	2.1	8.3	0.24 (0.06-0.91)	0.6	0.0	N/A
Acute infection without septic shock	3.6	5.3	0.66 (0.36-1.22)	0.8	0.2	5.16 (0.60-44.3)

\*N=3347 evaluable patients; \*\*Alpha adjustment for an interim analysis; \*\*\*N=4040 treated patients

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