

## **Appendix**

This appendix was part of the submitted manuscript and has been peer reviewed. It is posted as supplied by the authors.

### **Hospital codes of interest**

Venous thrombosis/embolus events included ICD codes I80.1 Phlebitis and thrombophlebitis of femoral vein, I80.2 Phlebitis and thrombophlebitis of other deep vessels of lower extremities, I80.3 Phlebitis and thrombophlebitis of lower extremities, unspecified; and I26 Pulmonary embolism.

Bleeding events included H31.3 , H35.6, H43.1 for intra-ocular haemorrhage; I61 for intracerebral haemorrhage; K29.0 acute haemorrhagic gastritis, K92 Other diseases of digestive system (including haematemesis, melaena, gastrointestinal haemorrhage, unspecified); R58 Haemorrhage, not elsewhere specified; R57.1 Hypovolaemic shock (screened manually for bleeding secondary to enoxaparin use); R04 Haemorrhage from respiratory passages; and Y44.2 (Complications of medical and surgical care > Drugs and biological substances causing adverse effects in therapeutic use > Anticoagulants)

**Supplementary Table 1 Regression analysis- prediction of trough anti-Xa levels**

<b>Univariate linear regression analysis for trough anti-Xa levels</b>			
<b>Variable</b>	<b>Regression coefficient</b>	<b>95% CI for regression coefficient</b>	<b>p-value</b>
Weight (kg)	$1.0 \times 10^{-3}$	$(-2.5 \times 10^{-4}, 2.3 \times 10^{-3})$	0.36
BMI (kg/m <sup>2</sup> )	$1.3 \times 10^{-3}$	$(-1.1 \times 10^{-3}, 3.7 \times 10^{-3})$	0.28
b.d. enoxaparin dosing (rather than o.d. dosing)	$7.4 \times 10^{-2}$	$(4.3 \times 10^{-2}, 1.1 \times 10^{-1})$	<0.001
eCrCl (ml/min)	$-5.7 \times 10^{-5}$	$(-4.9 \times 10^{-4}, 3.7 \times 10^{-4})$	0.78
<b>Linear regression model for trough anti-Xa levels</b>			
intercept	$2.0 \times 10^{-2}$	$(1.6 \times 10^{-4}, 4.0 \times 10^{-2})$	0.05
b.d. enoxaparin dosing (rather than o.d. dosing)	$7.4 \times 10^{-2}$	$(4.3 \times 10^{-2}, 1.1 \times 10^{-1})$	<0.001

**Predicted trough anti-Xa (IU/mL) = 0.02 + 0.07 × bd\_dosing**

(where b.d. dosing = 1 for b.d. administration and 0 for once-daily dosing)

BMI – Body Mass Index, eCrCl – estimated creatinine clearance; b.d. twice daily; o.d. once daily. Note that only b.d. enoxaparin was retained in the final model,  $R^2 = 0.43$ .

**Supplementary Table 2 Regression analysis- prediction of peak anti-Xa levels**

<b>Univariate linear regression analysis for peak anti-Xa levels</b>			
<b>Variable</b>	<b>Regression coefficient</b>	<b>95% CI for regression coefficient</b>	<b>p-value</b>
Weight (kg)	$-5.5 \times 10^{-4}$	$(-2.6 \times 10^{-3}, 1.5 \times 10^{-3})$	0.58
BMI (kg/m <sup>2</sup> )	$-7.3 \times 10^{-4}$	$(-4.8 \times 10^{-3}, 3.3 \times 10^{-3})$	0.71
b.d. enoxaparin dosing (rather than o.d. dosing)	$1.5 \times 10^{-2}$	$(-4.5 \times 10^{-2}, 7.4 \times 10^{-2})$	0.62
eCrCl (ml/min)	$1.5 \times 10^{-5}$	$(-5.6 \times 10^{-4}, 5.9 \times 10^{-4})$	0.96

CI – confidence interval

BMI – Body Mass Index, eCrCl – estimated creatinine clearance; b.d. twice daily; o.d. once daily.