

# Venous Thromboembolism (VTE) Risk Assessment for Day Case Surgery patients aged 16 and above

Complete on Pre-op clinic, review on admission and discharge, unless:

**Cohort** ☐ and **No Previous VTE** ☐ Dr Sign: \_\_\_\_\_  
**or Overrule Cohort** ☐

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Name

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If applies, choose between

Thrombosis risk factors: Please mark each box that apply, gain information from the patient and/or clinical notes	Score	Pre-op	DSU	Discharge
Personal history of previous VTE (i.e. deep vein clots or lung clots)	★			
First degree relative (brother, sister, father, mother) with previous history of VTE not provoked by surgery, cancer or hormones (i.e. deep vein clots or lung clots)	+2			
Surgery with total anaesthetic + surgical time >90 minutes <b>OR</b>	+2			
Surgery involving pelvis/lower limb with total anaesthetic+surgical time >60minutes <b>OR</b>	+2			
Lower limb orthopaedic surgery with post-operative immobilization <b>OR</b>	+2			
Surgery other than lower limb orthopaedic surgery with significant reduced mobility for 3 days or more (NICE defines significantly reduced mobility as: people who are bed bound, unable to walk unaided or likely to spend a substantial proportion of their day in bed or in a chair).	+2			
Varicose veins surgery under general anaesthesia	+2			
Active cancer or cancer treatment	+2			
Thrombophilia e.g. Factor V Leiden, prothrombin gene mutation, anti-thrombin deficiency, protein C or S deficiency, antiphospholipid syndrome (discuss with haematology)	+2			
Pregnancy and within 6 weeks of childbirth	+2			
Will be taking oral hormone replacement therapy (HRT) on admission	+2		Stopped ?	
Will be taking oral oestrogen-containing contraceptive therapy (COCP) on admission	+2		Stopped ?	
Marked Obesity BMI >40 (kg/m <sup>2</sup> )	+2			
Moderate obesity BMI between 30 and 39 (kg/m <sup>2</sup> )	+1			
Varicose veins with phlebitis	+1			
Age >60	+1			
Dehydration (admission and post-op only)	+1	n/a		
Smoking	+1			
One or more significant medical co-morbidities such as long-term medical conditions requiring treatment e.g. heart failure, COPD, diabetes, IBS, psoriasis, etc.	+1			
Leaflet: 'Blood Clots: Reducing the risk' given and explained: Yes/No	TOTAL SCORE on PRE-OP assessment PRE-OP nurse sign: _____ Date: __/__/__			
DAY OF ADMISSION – Review Pre-op VTE risk score. VTE risk assessment must be repeated if new factors arise.				
DOCTOR PRINT / SIGN _____ DATE __/__/__ TIME _____				
Leaflet: 'How to inject Dalteparin at home, a patient guide' given and explained: Yes/No	TOTAL SCORE on DISCHARGE from DSU Re-assess if new risk factors arise			

Score	Identify total score, see prophylaxis guidance below and instructions overleaf
Cohort and 0-1 Low risk	No pharmacological prophylaxis or antiembolism stockings required. Use Intermittent Pneumatic Compression (IPC) intra-op and continue until patient is mobile.
2-3 Moderate risk	Give weight-based dose <u>dalteparin 6 hours</u> post wound closure and continue on discharge for <b>1 week</b> . Give IPC intra-op and continue until patient is mobile. Give antiembolism stockings for <b>1 week</b> . For <u>hand, wrist, elbow, shoulder and forefoot without leg immobilisation surgeries</u> , <u>dalteparin</u> is not required, give only IPC and antiembolism stockings as described.
4 or greater High risk	<b>Option 1: Day before surgery</b> give weight-based dose <u>dalteparin 12 hours</u> pre-op and 5,000 units <b>6 hours</b> post wound closure. Then 24 hours later start weight-based dose <u>dalteparin</u> for <b>2 weeks</b> . Give IPC intra-op and until patient is mobile and antiembolism stockings for <b>2 weeks</b> . <b>Option 2: Day of surgery</b> give <u>dalteparin 2,500 units up to 1-2 hours</u> before surgery and 2,500 units 8-12 hours later. Then 24 hours later start weight-based dose <u>dalteparin</u> for <b>2 weeks</b> . Give IPC intra-op and until patient is mobile and antiembolism stockings for <b>2 weeks</b> .
★	All patients with personal history of previous VTE must be treated as at <b>high risk</b> (see above) <b>with the difference</b> that on discharge both <u>dalteparin</u> at a weight-based dose and antiembolism stockings must be prescribed for 6 weeks.
Doctor Overruled Score	Consider discussing with the on-call haematologist. Please document your clinical decision along with the rationale in this box: _____

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For patients who cannot self-administer the dalteparin subcutaneous injection and do not have anyone to do it for them, start **rivaroxaban PO 10mg once a day** for as long as they would have been given dalteparin according to score. The first dose is given 6 to 10 hours post wound closure. **Note: Unlicensed use.**

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## Pharmacological thromboprophylaxis assessment

Bleeding risk factors: Please mark each box that apply Weigh the bleeding risk against the VTE risk	Dalteparin Guidance	DSU	D/C
Creatinine clearance <30ml/min	Seek Advice		
Platelets <50 x10 <sup>9</sup> /L	Seek Advice		
Heparin allergy or previous heparin induced thrombocytopenia	Seek Advice		
Spinal, neuro or eye surgery or other procedure with high bleeding risk	Seek Advice		
Active bleeding	Seek Advice		
Acute stroke less than 14 days ago	Seek Advice		
Hypertension - BP 230/120 or higher	Seek Advice		
Anticoagulants known to increase bleeding risk such as warfarin with INR>2	Ensure Bridged		
Inherited or acquired bleeding disorders, such as haemophilia or liver failure	Seek Advice		
Lumbar puncture/epidural/spinal/ anaesthesia performed within the last 4 hours or expected within the next 12 hours	Omit		

### Any bleeding risk factors identified? Yes / No

If VTE risk outweighs bleeding risk, **prescribe prophylaxis** according to Score, including antiembolism stockings on TTOs if discharged with. Dalteparin is first choice. The dose is weight-dependent, see table for dosage.

**If unsure seek advice from on-call haematologist or see BHT guideline 733fm**

Doctor Signature \_\_\_\_\_ Date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

### Weight-based Dalteparin dosage:

Weight	Dose
Weight 150 kg or more	7,500 units twice daily
Weight 100 – 149 kg	5,000 units twice daily
Weight 50-99 kg	5,000 units daily
Weight 49kg or less	2,500 units daily

## Mechanical thromboprophylaxis assessment

**Provide patients with stockings and IPC based on their score** (See scoring table overleaf)

Patients assessed as low risk cohort and scoring 0-1 do not need stockings, only IPC intra-op.



Antiembolism Stockings: DSU to assess for contraindications before applying	Tick	Sign
Suspected/proven peripheral arterial disease or arterial bypass surgery		
Skin – fragile, damaged, ulcerated, recent grafts		
Massive leg oedema, heart failure		
Lower limb sensory impairment		
Acute Stroke (use IPC only)		
Surgery, surgical site or surgeon's decision		
<b>No Contraindications</b>		



IPC devices: Theatre/Recovery to assess for contraindications before applying	Tick	Sign
Suspected or confirmed acute DVT or PE		
Presence of malignancy in the leg		
Suspected/proven peripheral arterial disease or arterial bypass surgery		
Skin – fragile, damaged, ulcerated, recent grafts (consider foot cuffs instead)		
Massive leg oedema, heart failure		
Surgery, surgical site or surgeon's decision		
<b>No Contraindications</b>		