

Date 03/06/2026  
Your Ref  
Our Ref 11452

Enquiries to Richard Mutch  
Extension 35687  
Direct Line 0131 465 5687  
[loth.freedomofinformation@nhs.scot](mailto:loth.freedomofinformation@nhs.scot)  
[richard.mutch@nhs.scot](mailto:richard.mutch@nhs.scot)

Dear

## FREEDOM OF INFORMATION – VENOUS THROMBOEMBOLISM

I write in response to your request for information in relation to Venous thromboembolism.

### Question:

- I would like to enquire if NHS Lothian uses a specific Venous thromboembolism (VTE) prophylaxis guideline/risk assessment tool for patients on critical/intensive care units. If this exists, please could you send me a copy via email.

### Answer:

I am advised that the Dalteparin protocol has been superseded.

It is just the Enoxaparin protocol that we use now in critical care. It is based on the NHS Lothian VTE guidance.

I hope the information provided helps with your request.

If you are unhappy with our response to your request, you do have the right to request us to review it. Your request should be made within 40 working days of receipt of this letter, and we will reply within 20 working days of receipt. If our decision is unchanged following a review and you remain dissatisfied with this, you then have the right to make a formal complaint to the Scottish Information Commissioner within 6 months of receipt of our review response. You can do this by using the Scottish Information Commissioner's Office online appeals service at [www.itspublicknowledge.info/Appeal](http://www.itspublicknowledge.info/Appeal). If you remain dissatisfied with the Commissioner's response you then have the option to appeal to the Court of Session on a point of law.

If you require a review of our decision to be carried out, please write to the FOI Reviewer at the email address at the head of this letter. The review will be undertaken by a Reviewer who was not involved in the original decision-making process.

Headquarters  
Mainpoint  
102 West Port  
Edinburgh EH3 9DN

Chair Professor John Connaghan CBE  
Chief Executive Professor Caroline Hiscox  
*Lothian NHS Board is the common name of Lothian Health Board*



FOI responses (subject to redaction of personal information) may appear on NHS Lothian's Freedom of Information website at: <https://org.nhsllothian.scot/FOI/Pages/default.aspx>

Yours sincerely

**ALISON MACDONALD**  
**Executive Director, Nursing**  
Cc: Chief Executive  
Enc.

FOR CRITICAL CARE USE ONLY  
**Critical Care VTE prophylaxis protocol**



**Indications: All patients on the unit EXCEPT NEURO PATIENTS- SEE BOX BELOW**

- In Critical Care, use subcutaneous enoxaparin for VTE prophylaxis at doses below (see table).
- All patients should have a LMW (low molecular weight) Heparin level measured after 7days if CrCl <30mls/min.
- If patients are in the extreme range of body weight **and** have renal impairment, see table below highlighted in **red** for advice on when to take a LMWH level.
- For all patients with CrCl<30ml/min requiring an invasive procedure/intervention e.g. biopsy/surgery, withhold enoxaparin the evening before the procedure and take a “trough” LMW Heparin level to ensure there is no accumulation (level should be less than 0.1 anti-Xa units/ml).
- For patients with CrCl <30 ml/min who may require surgery within 24 hours (elective or emergency), use unfractionated heparin 5000units twice daily by subcutaneous injection. This includes all Transplant patients in the first 24 hours. Discuss with relevant specialties thereafter.

**Guidance on LMW Heparin (anti-factor Xa) monitoring for *prophylactic* doses of LMWH**

- Order as “LMW Heparin assay” on TRAK (search for “heparin” and you will get 5 choices – choose “LMW Heparin assay”; automated test done at all three sites, available 24 hours a day).
- Use a green-top citrated tube; ensure sample is filled to the “level” marked on the side of the tube as the lab cannot assay the sample if underfilled.
- Level must be checked 3-4 hours post administration of the dose of LMW Heparin.
- Target “peak” range is 0.1-0.4 units/ml.
- Check a one-off level and thereafter as required.

<b>Critical Care Guidelines: Critical Care VTE prophylaxis protocol</b>	
<b>Authors:</b> Dr K Kefala, Dr A Page, Dr J Anderson, C Hannah	
<b>Document Version:</b> 3.0	<b>Authoriser:</b> Lothian Critical Care Directorate QIT Editorial Board
<b>Authorisation Date:</b> September 2025	<b>Review Date:</b> September 2027

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**Pharmacological thromboprophylaxis- ENOXAPARIN**

CrCl mls/min	<50kg	50-100kg	101-150kg	>150kg
≥30	20mg once daily	40mg once daily	40mg twice daily	<b>*60mg twice daily</b>
15-29	<b>*20mg once daily</b>	20mg once daily	40mg once daily	<b>*40mg twice daily</b>
<15 or intermittent HD or CVVHD	<b>*20mg once daily</b>	<b>*20mg once daily</b>	<b>*40mg once daily</b>	<b>*40mg once daily</b>

**\*Check LMWH level after 3 days in extreme range of weight and/or renal impairment**

**Cautions:**

- potentially bleeding lesions (e.g. varices, active peptic ulcer in last 3 months)
- advanced liver disease
- severe uncontrolled arterial hypertension
- acquired coagulopathy i.e. APTTr ≥1.5 or INR ≥1.5
- uncorrected bleeding disorders

**Contraindications:**

- uncorrected severe bleeding disorders (e.g. haemophilias)
- active bleeding of any sort
- platelet count <50 x 10<sup>9</sup>/L
- previous history of Heparin-induced Thrombocytopenia (HIT)

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**Mechanical thromboprophylaxis**

1. All patients will wear Thrombo-embolus Deterrent Stockings (TEDS).
2. Intermittent pneumatic compression devices (IPCD) should be used if pharmacological prophylaxis contraindicated.

\*\*TEDS or IPC devices should be prescribed on ICCA and on HEPMA.

**Mechanical thromboprophylaxis should NOT be used if patients have any of the following:**

- a stroke where IPCD should be used alone
- severe leg oedema
- severe peripheral artery disease
- severe peripheral neuropathy
- major leg deformity
- dermatitis or cellulitis
- an existing acute DVT in a leg

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**NEURO PATIENTS-mechanical thromboprophylaxis as above.**

**Subarachnoid haemorrhage:** once aneurysm is secured (e.g.coiled or clipped), enoxaparin as above.

**Intracerebral haemorrhage:** use of pharmacological thromboprophylaxis should be discussed with the referring neurosurgeon initially and at 14 days.

**Traumatic head injury:** Patients should not receive pharmacological thromboprophylaxis initially. **VTE prophylaxis should be given within 48-72 hours of injury in stable\* traumatic brain injury following discussion with the Neurosurgical team.**

**\*clinical, radiological and/or monitoring parameters.**

**Elective neurosurgery:** The majority of patients should receive enoxaparin. Discuss each case with the Neurosurgical team.

**Spinal cord injury (SCI):** All patients should receive enoxaparin unless there is incomplete SCI associated with suspected or proven spinal haematoma.

**Haemorrhagic stroke:** Avoid aspirin and enoxaparin initially and discuss with Stroke team.

**Cerebral infarction:** If no thrombolysis given, aspirin 300mg should be considered immediately, then continued (300mg daily) for 2 weeks. If thrombolysis has been given, withhold aspirin for 24 hours, then review with Stroke team. Discuss enoxaparin with Stroke team at 24 hours post event for all stroke patients.

References:

1. NHS Lothian Antithrombotic Guide. September 2025, Version 5.0.
2. Enoxaparin (Inhixa) 40mg/0.4ml solution for injection. Summary of Product Characteristics. Techdow Pharma England Ltd. [Inhixa 4,000 IU \(40 mg\)/0.4 mL solution for injection - Summary of Product Characteristics \(SmPC\) - \(emc\) | 784](#)

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