



# Enoxaparin (Inhixa) (Amber TLS)

## RUH and SFT Shared Care Guidelines: For the treatment of cancer associated thrombosis

### AREAS OF RESPONSIBILITY FOR THE SHARING OF CARE

This shared care agreement outlines suggested ways in which the responsibilities for managing the prescribing of **enoxaparin (Inhixa) for the treatment of cancer associated thrombosis (CAT)** are shared between the specialist and general practitioner (GP) [or other primary care prescriber]. GPs are **invited** to participate. If the GP is not confident to undertake these roles, then he or she is under no obligation to do so. In such an event, the total clinical responsibility for the patient for the diagnosed condition remains with the specialist. If a specialist asks the GP to prescribe this drug, the GP should reply to this request as soon as practicable.

Sharing of care assumes communication between the specialist, GP and patient. The intention to share care is usually explained to the patient by the doctor initiating treatment. It is important that patients are consulted about treatment and are in agreement with it. Patients with the condition are under regular specialist follow-up, which provides an opportunity to discuss drug therapy.

The doctor who prescribes the medication legally assumes clinical responsibility for the drug and the consequences of its use.

**Enoxaparin should be prescribed as the brand Inhixa.**

### RESPONSIBILITIES and ROLES

Specialist responsibilities	
1.	Discuss the benefits and side effects of treatment with the patient. To ensure patient has a basic understanding of what risks and benefits are associated with enoxaparin (Inhixa) therapy, to provide a patient information leaflet and to inform the patient of what action to take in the event of adverse effects (particularly any unexplained bleeding).
2.	Confirm the patient's understanding, and consent to treatment and to inform the patient of the need for blood monitoring.
3.	Undertake baseline monitoring (detailed below).
4.	Discontinue any drugs affecting haemostasis, if deemed appropriate (e.g. NSAIDs, antiplatelets).
5.	Initiate treatment with enoxaparin (Inhixa) and provide the first 30 days of treatment and to inform the patient of the arrangements for obtaining further prescriptions and provide at least 30 days' supply. (Although it is standard for 28 days treatment to be provided, 30 days is more appropriate in this instance as enoxaparin (Inhixa) is packed in multiples of 10 syringes).
6.	Instruct the patient or carer on administration (or arrange for GP practice nurse or district nurse (where patient house bound) to be involved)
7.	Monitor for heparin-induced thrombocytopenia (HIT) or hyperkalaemia. The patient should undergo repeat monitoring within the first 3 weeks of treatment. It is the responsibility of the initiating physician to ensure that the patient has received clear advice and that any discrepancies are actioned appropriately.
8.	Ask the GP whether he or she is willing to participate in shared care, and agree with the GP as to who will discuss the shared care arrangement with the patient.
9.	Review the patient's condition and monitor response to treatment regularly where indicated.
10.	Give advice to the GP on when to stop treatment.
11.	Report adverse events to the MHRA.
12.	Ensure that clear backup arrangements exist for GPs to obtain advice and support.
13.	Initiating clinician to keep patient under clinical review, assessing need for ongoing enoxaparin (Inhixa) treatment at six months.
14.	Where the risk/benefit to the patient is considered to favour continuation beyond the licensed six-month duration then, with the patient's acceptance, further written consent should be obtained from the GP for the continued off label prescribing.
15.	Ensure the patient has a sharps bin to dispose of used syringes.



**General Practitioner  
responsibilities**

1. Reply to the request for shared care as soon as practicable using the forms linked [here](#) (in writing or via secure email).
2. Monitor and prescribe enoxaparin (Inhixa) in collaboration with the specialist and follow these guidelines.
3. Refer promptly to specialist when any loss of clinical efficacy is suspected (e.g. worsening of disease-related symptoms, new symptoms suggestive of disease recurrence or progression) or intolerance to therapy occurs.
4. Report to and seek advice from the specialist on any aspect of patient care that is of concern to the GP and may affect treatment.
5. Whenever practicable, to reaffirm with the patient the importance of reporting any unexplained bleeding.
6. Monitor for hyperkalaemia in those patients at higher risk of raised plasma-potassium concentrations.
7. To give a timely response to any further specialist request to continue prescribing enoxaparin (Inhixa) beyond the licensed six- month duration. Clinicians should use their discretion to avoid any interruptions in treatment.
8. Discontinuation of treatment if patient is experiencing severe side effects and specialist advice is not immediately available.
9. Report adverse events to the specialist and MHRA

**Patient's role**

1. Report to the specialist or GP if he or she does not have a clear understanding of the treatment.
2. Share any concerns in relation to treatment with medicine.
3. To attend hospital and GP clinic appointments. Failure to attend will result in medication being stopped on specialist advice.
4. To report adverse effects to their specialist or GP (particularly any unexplained bleeding).
5. To dispose of syringes safely in sharps bin.

**BACK-UP ADVICE AND SUPPORT**

Contact details	Telephone No.	Bleep:	Email address:
<b>RUH</b>			
Specialist: Nathan Hutchinson-Jones (Lead Pharmacist for Thrombosis and Anticoagulation)	Haematology secretaries	7164	<a href="mailto:Ruh-tr.AnticoagulationTeam@nhs.net">Ruh-tr.AnticoagulationTeam@nhs.net</a>
Hospital Pharmacy Dept. Royal United Hospital, Bath	Meds Info 01225 824633	-	<a href="mailto:Ruh-tr.medicinesinformation@nhs.net">Ruh-tr.medicinesinformation@nhs.net</a>
RUH Anticoagulation team (includes Haematology CAT clinic)	CINAPSIS or 01225 825812	-	<a href="mailto:Ruh-tr.AnticoagulationTeam@nhs.net">Ruh-tr.AnticoagulationTeam@nhs.net</a> <b>Preferred contact option</b>
Other: Acute Oncology Team	CINAPSIS	-	-

**SUPPORTING INFORMATION**

**Summary of condition and licensed indications**

This medicine is indicated for:

- The extended treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE) and prevention of its recurrence in patients with active cancer.

**Treatment aims (Therapeutic plan)**

- Enoxaparin (Inhixa) is the choice of LMWH currently at the RUH, Bath and should be used interchangeably with other LMWHs or brands of enoxaparin. It is licensed for the extended treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE) and prevention of its recurrence in patients with active cancer.

**Treatment Schedule (including dosage and administration)**

**NB:** Patients with cancer often experience dramatic changes in weight and this should be monitored to ensure the correct dose of enoxaparin (Inhixa) is prescribed.

Enoxaparin (Inhixa) is available in the following pre-filled syringes of 20mg, 40mg, 60mg, 80 mg, 100mg, 120mg, 150mg.

For cancer patients with a CrCL is > 30ml/min administer enoxaparin (Inhixa) 1mg/kg TWICE daily (use dose banding table below):



<b>Dosing of enoxaparin (Inhixa) for the treatment of DVT/PE in CrCL &gt;30ml/min: 1mg/kg BD</b>		
<b>Weight range</b>	<b>Renal dose</b>	<b>Additional administration information</b>
< 45kg	1mg/kg BD – Please discuss with haematology or the anticoagulation team if needed	
≥45-55kg	50mg BD	0.5ml from 60mg syringe
≥55-65kg	60mg BD	-
≥65-75kg	70mg BD	0.7ml from 80mg syringe
≥75-85kg	80mg BD	-
≥85-95kg	90mg BD	0.9ml from 100mg syringe
≥95-105kg	100mg BD	-
≥105-115kg	110mg BD	60mg + 0.5ml (i.e. 50mg) from a 60mg syringe
≥115-125kg	120mg BD	-
≥125-135kg	130mg BD	80mg + 0.5ml (i.e. 50mg) from a 60mg syringe
≥135-145kg	140mg BD	80mg + 60mg
≥145-155kg	150mg BD	-
≥155kg	Discuss with haematology or the anticoagulation team	

In patients with a CrCL of < 30ml/min use 1mg/kg ONCE daily dosing (use dose banding table below) with anti-Xa monitoring (this should be discussed with Haematology or the Anticoagulation Team):

<b>Dosing of enoxaparin (Inhixa) for the treatment of DVT/PE in CrCL &lt;30ml/min: 1mg/kg OD</b>		
<b>Weight range</b>	<b>Renal dose</b>	<b>Additional administration information</b>
< 45kg	1mg/kg OD – Please discuss with haematology or the anticoagulation team if needed	
≥45-55kg	50mg OD	0.5ml from 60mg syringe
≥55-65kg	60mg OD	-
≥65-75kg	70mg OD	0.7ml from 80mg syringe
≥75-85kg	80mg OD	-
≥85-95kg	90mg OD	0.9ml from 100mg syringe
≥95-105kg	100mg OD	-
≥105-115kg	110mg OD	60mg + 0.5ml (i.e. 50mg) from a 60mg syringe
≥115-125kg	120mg OD	-
≥125-135kg	130mg OD	80mg + 0.5ml (i.e. 50mg) from a 60mg syringe
≥135-145kg	140mg OD	80mg + 60mg
≥145-155kg	150mg OD	-
≥155kg	Discuss with haematology or the anticoagulation team	

### Months 2-6

Administer enoxaparin (Inhixa) 1.5mg/kg subcutaneously ONCE daily (see table below).

<b>Standard dosing of enoxaparin (Inhixa) for treatment of DVT/PE in CrCL ≥30ml/min: 1.5mg/kg OD SC</b>	
<b>Weight range</b>	<b>Dose</b>
< 40kg	1.5mg/kg OD - Please discuss with haematology or the anticoagulation team if needed
≥40-48kg	60mg OD
≥48-60kg	80mg OD
≥60-73kg	100mg OD
≥73-88kg	120mg OD
≥88-110kg	150mg OD
≥110-125kg	180mg OD (i.e. 100mg + 80mg)
≥125-150kg	1.5mg/kg as a split dose (dose divided BD and rounded to nearest syringe size. This may lead to asymmetric dosing)
≥ 150kg	Please discuss with haematology or the anticoagulation

This SCA should be read in conjunction with the relevant Summary of Product Characteristics (SPC)

Approved for patients seen at RUH by BSW APC September 2025 [bswicb.prescribing@nhs.net](mailto:bswicb.prescribing@nhs.net)



team

*In patients with a CrCL of < 30ml/min use 1mg/kg ONCE daily using table as per previous with anti-Xa monitoring (this should be discussed with Haematology or the Anticoagulation Team).*

In some patient groups it may be appropriate to continue with the full therapeutic 1-month dose of enoxaparin (Inhixa) beyond the first month. For example:

- Patients with an additional indication for anticoagulation (e.g. atrial fibrillation)
- Patients with pancreatic cancer
- Patients with recurrent VTE
- Patients with persistent symptoms despite 1 month of anticoagulation

Note that all syringes other than the 20 and 40mg are graduated (importantly the 60, 80 and 100mg syringes are 100mg/ml graduations, whilst the 120 and 150mg syringes are 150mg/ml graduations)

Anti-Xa monitoring should be organized by haematology or the Anticoagulation Team for patients with CrCL < 30ml/min and those > 120kg.

**It is at the discretion of the GP to decide on whether they are happy to continue supply on the advice of a specialist.**

Patients who have had a below knee DVT and/or whose cancer is in remission and is asymptomatic may be able to stop anticoagulation after 3 months, as advised by the specialist.

PICC line associated DVT: If the line remains in situ the patient should be anticoagulated for at least 3 months and/or until line removal. If the line is removed the patient should be anticoagulated for at least a further 6 weeks.

All patients with CAT under the care of the RUH should be referred to the Haematology CAT telephone clinic or if under the care of SFT refer to the Anticoagulation and Thrombosis team (see 'Back up advice and support' section above for contact details). Patients should receive a follow up appointment at 1-, 3- and 6-months post diagnosis.

Some patients initially started on treatment with enoxaparin (Inhixa) may be able to be changed to a direct oral anticoagulant (DOAC) on the advice of a specialist. DOACs for the treatment CAT is also part of a shared care agreement with primary care (See link [here](#)).

#### **Extended anticoagulation beyond 6 months**

Recommended duration of treatment is six months. Relevance of continuing treatment beyond this period will be evaluated according to individual risk/benefit ratio, taking into account particularly the progression of cancer. No data is available with enoxaparin (Inhixa) beyond six months of treatment in the original RCT. **In practice an individual specialist /clinician may choose to extend the duration beyond six months. It is at the discretion of the GP to decide on whether they are happy to continue supply beyond 6 months on the advice of a specialist.**

#### **Contra-indications and precautions for use**

- Patients with the following conditions are excluded from this protocol:
- Known or suspected hypersensitivity to enoxaparin (Inhixa) or other LMWHs and/or heparins.
- History of immunologically mediated Heparin Induced Thrombocytopenia.
- Renal impairment (calculated creatinine clearance < 30ml/min).
- Significant hepatic impairment.
- Active gastric/duodenal ulceration or oesophageal varices.
- Haemophilia and other inherited/major bleeding disorders or any unusual susceptibility to bleeding or haemorrhagic pericardial/ pleural effusion.
- Thrombocytopenia with platelets < 50.
- Recent (within three months) cerebral haemorrhage (stroke due to systemic emboli excepted).
- Severe hypertension.
- Recent neurosurgery or eye/ear surgery and injuries to the central nervous system, eyes and ears
- Subacute endocarditis.
- Children under 16 years.
- Low body weight (< 40kg at time of venous thromboembolic event).
- Body weight >90 kg.
- Pregnancy.



- In patients receiving enoxaparin (Inhixa) for treatment (rather than prophylaxis), local and/or regional anaesthesia in elective surgical procedures is contra-indicated.
- Enoxaparin (Inhixa) is latex free.

### Side effects

Clinical condition (reported frequency)	Proposed management
Major haemorrhage (<1%)	Stop enoxaparin (Inhixa) and seek urgent advice
Skin necrosis at the site of injection (<1%)	Stop enoxaparin (Inhixa) and seek urgent advice
Cutaneous or systemic allergic reaction (>1% - <10%)	Stop enoxaparin (Inhixa) and seek urgent advice
Pain, haematoma and mild local irritation at injection site (>1% - <10%)	Continue enoxaparin (Inhixa), may be self-limiting, and seek advice if needed.

Please see the BNF and SPC for a comprehensive list.

### Other side effects:

- Long term treatment with heparin has been associated with an increased risk of osteoporosis, although this has not been specifically observed with enoxaparin (Inhixa).
- Heparins can increase the risk of hyperkalaemia. Clinically relevant hyperkalaemia may occur in patients with chronic renal failure or diabetes.

Patients should report any bleeding immediately. All serious adverse events should be reported to the MHRA.

### Monitoring

**Baseline monitoring:** To be undertaken by the specialist.

- FBC; U+Es; LFTS; Clotting screen; Weight

### Ongoing monitoring:

Parameter	Frequency of monitoring	Action (adjustment and referral back to hospital)
FBC	Monthly	Platelets < 50 or drop in count of more than 50% - discuss with specialist/ Haematology as soon as possible.
U & E	Monthly ( <i>if high risk of hyperkalaemia i.e. those with diabetes mellitus, chronic renal failure, acidosis, raised potassium concentrations or those taking potassium-sparing drugs / potassium supplements</i> )	K > 5.5mmol/L Repeat the U & E test and seek specialist/ Haematology advice if K still > 5.5mmol/L
Weight	Monthly	Adjust dose of enoxaparin (Inhixa) as per dosing schedule if needed. Discuss with specialist as needed.

Other specific monitoring / monitoring parameters may be requested by the specialist depending on the individual patient circumstances.

### Drug Interactions

See SPC/BNF for common interactions.

Drugs affecting haemostasis such as aspirin, dipyridamole, NSAIDs and clopidogrel should be discontinued prior to enoxaparin (Inhixa) therapy unless their use is essential.

enoxaparin (Inhixa) may increase the risk of hyperkalaemia in patients on potassium-sparing drugs (e.g. ACE inhibitors).

### Cost

TBC



## References

1. National Institute for Clinical Excellence, 2020. Venous thromboembolic diseases: diagnosis, management and thrombophilia testing. Nice guideline (CG158).
2. Enoxaparin (Inhixa). Summary of product characteristics (SPC). [www.medicines.org.uk](http://www.medicines.org.uk) Last updated: 27 April 2022
3. Lee, Agnes YY, et al. "Low-molecular-weight heparin versus a coumarin for the prevention of recurrent venous thromboembolism in patients with cancer." *New England journal of medicine* 349.2 (2003): 146-153.

## Document details

Document reviewed by Nathan Hutchinson-Jones (Lead Pharmacist for Thrombosis and Anticoagulation, RUH Bath) on the 25/07/2023. SFT entered into SCA November 2023. Next review due July 2025.