

EFFECTIVE SHARED CARE AGREEMENT FOR DALTEPARIN (FRAGMIN®) FOR THE TREATMENT OF DVT AND PE IN ADULT CANCER PATIENTS

RESPONSIBILITIES and ROLES

Specialist responsibilities	
1	Discuss the benefits and side effects of treatment with the patient.
2	Check for possible drug interactions with dalteparin and patients regular medication. Avoid prescribing interacting drugs.
3	Assess likelihood of compliance.
4	Ensure patient or carer is given sufficient information about their treatment (i.e. administration of dalteparin).
5	If administration by the patient or carer is not possible, initiate referral to the district nurse.
6	Ensure accurate weight is recorded in patient notes and clinic letter.
7	Perform all baseline tests (including FBC, INR, APTT, U&Es, eGFR & LFTs (repeat FBC within 24hrs if previous exposure to heparin) and ensure a monitoring plan for the patient is in place.
8	Monitor for heparin induced thrombocytopenia in the first 14 days of treatment if necessary.
9	Monitor anti-Xa levels if necessary.
10	Monitor FBC, U&E's and eGFR at regular intervals if clinically appropriate.
11	Undertakes all monitoring as stated in the monitoring requirements.
12	Initiate treatment and provide the first 4 weeks supply. Continue to supply dalteparin until care is transferred to GP.
13	Ask the GP whether he or she is willing to participate in shared care and explain the intention to share care with patient/carers and obtain consent.
14	Inform GP of the dose to be prescribed, any changes in dose, when to stop treatment and when to refer the patient back to specialist.
15	Ensure GP has access to blood results for information.
16	Monitor for side effects and report adverse events to the MHRA and GP where appropriate.
17	Inform GP if patient does not attend specialist appointments and action to be taken.
18	Have a mechanism in place to receive rapid referral of a patient from the GP in event of deteriorating clinical condition.
19	Ensure that clear backup arrangements exist for GPs to obtain advice and support.
General Practitioner responsibilities	
1	Reply to the request for shared care as soon as possible.
2	Check for possible drug interactions with dalteparin and patients regular medication. Avoid prescribing interacting drugs.
3	Prescribe dalteparin at the dose recommended.
4	Adjust the dose as advised by the specialist.
5	Contact the specialist if you suspect the patient is not complying with their medication.
6	Check for possible drug interaction when prescribing new medication and avoid prescribing interacting drugs.
7	Unless exceptional circumstances or urgent issues arise, discuss with the specialist prior to discontinuing treatment.
8	Refer the patient to the specialist if his/her condition deteriorates.
9	Report any suspected adverse events to specialist team and any severe adverse events to MHRA.
Patient's / Carer's role	
1	Administer dalteparin as recommended by specialist if not being administered by a district nurse.
2	Report to the specialist or GP if he / she does not have a clear understanding of the treatment.
3	Request repeat prescriptions from the GP at least 5 days before the next supply is needed.
4	Attend scheduled appointments with specialist, GP and for monitoring.
5	Share any concerns in relation to treatment with GP or specialist.
6	Inform specialist or GP of any other medication being taken, including over-the-counter products
7	Inform specialist or GP if you feel you are having problems taking your medication or have stopped taking it.
8	Report any adverse effects to the specialist or GP (particularly any unexplained bleeding).

SUPPORTING INFORMATION EFFECTIVE SHARED CARE AGREEMENT

Information on therapeutic indication, dosage, method of administration, side effects and management considerations in special populations can be found in the Summary of Product Characteristics for dalteparin available from www.medicines.org.uk

Dose of dalteparin for treatment of VTE in adult cancer patients:

DALTEPARIN DOSES FOR TREATMENT OF VTE IN ADULT CANCER PATIENTS		
weight	Dose of s/c dalteparin	
	Month 1	Month 2-6
<46 kg	7500 units once daily	7500 units once daily
46-56 kg	10000 units once daily	7500 units once daily
57-68 kg	12500 units once daily	10000 units once daily
69-82 kg	15000 units once daily	12500 units once daily
83-98 kg	18000 units once daily	15000 units once daily
≥ 99 kg	18000 units once daily	18000 units once daily

Chemotherapy induced thrombocytopenia should lead to the following dose changes:

- If platelet count is between 50 and 100 x 10⁹/L then dalteparin dose should be reduced by 2500 units (dose reduce to next dose step) until the platelet count recovers to ≥100.
- If platelet count is below 50 discontinue dalteparin until platelet count recovers to ≥50.

Monitoring requirements (all are the responsibility of the Consultant)

All patients

- Baseline FBC, INR, APTT, U&E, eGFR, LFT.
- Anti-Xa as per guidelines and on the advice of a Consultant Haematologist.
- In patients at high risk of hyperkalaemia at least monthly potassium levels are required.

Patients on active chemotherapy treatment

- Monitor bloods as specified in patient specific monitoring plan, as this is highly dependant on patient history and the chemotherapy regimen used.
- For some patients nadir blood tests may be appropriate, especially during therapy with drugs known to cause low platelet count (i.e. gemcitabine and carboplatin) or if the patient has a history of treatment induced thrombocytopenia.
- FBC, U&E's, eGFR and LFT's will be monitored regularly (at least before each cycle of anticancer therapy).
- The frequency of blood tests may increase due to chemotherapy schedule. Should a drop in platelet count occur leading to a dose reduction/ omission then more frequent monitoring is advised to allow for a dose increase once platelet count has recovered.

Patients not on active chemotherapy treatment

- As per table below:

	FBC	U&Es	eGFR	LFTs	INR	APTT	Consultant/GP
Baseline	✓	✓	✓	✓	✓	✓	Consultant
Day 4-14	✓*						Consultant
Monthly Thereafter	✓**	✓	✓	✓			Consultant

* As per current UHNS guidelines. If patient is being, or has (in last 3 months) been, treated with unfractionated heparin or is a post-operative surgical patient being treated with LMWH, check platelet count on alternate days starting from day 4 until day 14 of heparin treatment (from day 2 if patient has been given heparin in preceding 100 days).

**The Consultant will decide whether monthly monitoring is necessary depending on the history of the patient and baseline results.

Primary Care Costs

BNF 66 price excluding VAT

(Only the pre-filled syringes should be prescribed)

Product		Pack size	Cost per OP
Dalteparin sodium Injection (single-dose syringe)	7500-unit (0.3-mL)	10	£42.30
	10 000-unit (0.4-mL)	5	£28.25
	12 500-unit (0.5-mL)	5	£35.30
	15 000-unit (0.6-mL)	5	£42.35
	18 000-unit (0.72-mL)	5	£50.80

Additional information which cannot be found in the SPC

BACK-UP ADVICE AND SUPPORT

Contact details	Telephone No.	Bleep:	Fax:	Email address:
In hours specialist: Dr Arshad Jamil Gillian Smith (Oncology Secretary)	Secretary: (01782) 672563			Arshad.jamil@uhns.nhs.uk Secretary: Gillian.Smith@uhns.nhs.uk
Out of hours Contact Haematology Consultant or SPR via UHNS Switchboard				
Hospital Medicines Information Dept:	01782 674537			Medicines.Information@uhns.nhs.uk