# Oxford University Hospitals NHS Foundation Trust

## **Patient Sticky**

Department of Clinical Haematology

# **Nursing Care Plan**

# Cyclophosphamide priming

Indication: Priming prior to stem cell harvest for myeloma patients undergoing autograft.

Frequency: Once only. Alopecia: Yes

#### **CYCLO = CYCLOPHOSPHAMIDE:** Alkylating agent.

Administered as IV infusion on Day 1.

Classification of extravasation = neutral.

Emetic risk = high

Side effects:

- Immediate: Nasal stuffiness (can be reduced by slowing rate of administration), dizziness.
- Short term: haemorrhagic cystitis, nausea and vomiting (may be delayed up to 48 hours after infusion), diarrhoea, anorexia, taste changes, neutropenia.
- Long term side effects: bone marrow suppression, alopecia, infertility (most cases reversible), renal and hepatic impairment.

**MESNA:** reduces risk of haemorrhagic cystitis due to high dose cyclophosphamide. Mesna reacts with a metabolite of cyclophosphamide in the urinary tract to prevent toxicity.

Administered as IV infusion on Day 1 (*Note: Baxters will make up a bag containing both Cyclophosphamide and Mesna*). This is followed by 2 oral doses.

### **Regime Specific Considerations**

- Refer to generic chemotherapy care plan for general administration guidelines.
- Medical review: If patient has been seen and consented in outpatients clinic in preparation for Cyclopriming, review on day of chemotherapy is not necessary unless nursing staff or patient have new concerns.
- Blood parameters: Bloods must be within 2 weeks of cyclopriming. No specific parameters given, discuss any concerns with doctor.
- Refer to NSSG for full protocol (B.2.20b) and required TTOs (Oral Mesna, GCSF, Anti-emetics).
- Advise patients to maintain fluid intake of 2-3 litres on the day and for next few days.
- Advise patients to report any haematuria.
- Patients may have apheresis line insitu if peripheral veins are not suitable for harvest.
- Apheresis lines must be locked with high strength hepsal 200 units/2mls.
- Antecubital fossa veins must be avoided for cannulation/venepuncture in the run up to harvest.
- Check patient is on irradiated blood list.

#### **Day 1:**

- Administer Ondansetron 30 mins prior to cyclophosphamide
- Administer IV infusion of Cyclophosphamide and Mesna over 1 hour.
- Advise patient of Oral Mesna timings:

First dose 2 hours after start of cyclo

Second dose 6 hours **after start of cyclo**; (e.g cyclo starts at 1200, 1<sup>st</sup> Mensa is given at 1400, 2<sup>nd</sup> at 1800)

#### **Days 2-10:**

- Administration of GCSF by patient, relative, district/practice nurse. GCSF should be administered in the evening.
- Check FBC 2-3 days prior to harvest and arrange blood transfusion if Hb is below 90g/dL. Note neutropenia is expected at this point.

Days 10-11: Harvest at NHSBT.	
RN name:	
Signature:	
Date:	
Time:	

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V.3.0 Cyclophosphamide priming
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