

## PENTOSTATIN (deoxycoformycin)

**INDICATION:** Hairy cell leukaemia

### Prior to a course of treatment

- Check creatinine clearance and LFTs (*see dose modification*)
- Assess performance status – if poor, e.g ECOG  $\geq 3$ , consider starting with  $2\text{mg}/\text{m}^2$  and escalate if tolerated - *discuss with consultant*
- Blood and platelet transfusions must be irradiated indefinitely - *inform transfusion lab*
- If appropriate discuss possibility of pregnancy with female patients and need for contraception with both male and female patients. Discuss potential for infertility - offer semen cryopreservation to male patients
- Written consent for course

### Prior to each dose

- Medical review of fitness for chemotherapy – exclude active infection, major changes in organ function
- Check FBC, U&Es, creat and LFTs before each dose (*see dose modification*)
- Assess hydration and prehydrate with 1.0L N saline over 3 hrs

Pentostatin  $4\text{mg}/\text{m}^2$  IV in 50ml N saline over 30 mins \*

**Repeat every 14 days**

**Continue until maximum response plus 2 cycles**

### Prophylaxis for acute emesis

5HT antagonist

### Prophylaxis for delayed emesis

5HT antagonist + metaclopramide for 3-4 days

### Other medications

Cotrimoxazole 480mg od until 6 months after completion

Allopurinol 300mg od for 5 days with cycle 1

Anti-infective prophylaxis according to local policy

### Dose modification for haematological toxicity and infection

- Pancytopenia with first cycle is due to marrow infiltration– there are no dose modifications for this
- Delay subsequent cycles until neutrophils  $\geq 1.0$
- Patient must be monitored closely and infection must be treated promptly.
- Give blood product support as necessary
- If there is neutropenic sepsis despite use of GCSF consider dose reduction to  $2\text{mg}/\text{m}^2$

### Dose modification for renal dysfunction

- If creatinine clearance  $< 60\text{ml}/\text{min}$  reduce dose to  $2\text{mg}/\text{m}^2$  and review use of other nephrotoxic drugs
- If there is a  $>25\%$  increase in serum creatinine above baseline delay further treatment until renal function improves or a repeat creatinine clearance is  $>60\text{ml}/\text{min}$

### Dose modification for liver dysfunction

- Limited information – clinical decision

**Pentostatin Toxicities**

Neutropenic sepsis &amp; thrombocytopenia

Nausea (moderate-severe)

Rashes

Renal failure &amp; tubular toxicity

Lethargy, (rarely) seizures, coma

Abnormal liver function

Opportunistic infection

Fever (drug-related)

Neurotoxicity – lethargy, fatigue (common), seizures, coma

Keratitis and conjunctivitis (try 0.5% Predsol eye drops)

Amenorrhoea &amp; infertility (offer semen cryopreservation)

**Written by** Dr MP Macheta, Consultant Haematologist**Date** July 2013**Review date** July 2015