PIXANTRONE

Monotherapy for 3rd or 4th line use in aggressive non-Hodgkin B-cell lymphomas
NICE approved Feb 2014

Drug/Dosage:	**Pixantrone**	50mg/m^2	IV	Day 1, Day 8 and Day 15

Administration: Diluted in 250ml sodium chloride 0.9% and infused over a minimum of 60 minutes
Administer with a giving set with a 0.2 micron in-line filter

Other Drugs: Allopurinol 300mg po daily, ideally starting 24 hours before chemotherapy - review after 4 weeks

Frequency: Day 1, Day 8 and Day 15 of a 28 day cycle, for up to 6 cycles

Main Toxicities: myelosuppression; skin discolouration and coloured urine (due to blue colour of drug); alopecia; cardiac toxicity; ovarian failure; infertility

Anti-emetics: highly emetogenic (but no dexamethasone routinely required)

Extravasation: non-vesicant (no specific antidote)

Regular Investigations:	FBC	Day 1, Day 8 and Day 15
	U&Es	Day 1
	LFTs	Day 1
	LDH	Day 1
	Echo / MUGA	baseline (see Comments)

Comments: Patients with cardiac disease or risk factors such as baseline ejection fraction < 45%, myocardial infarction within the last 6 months, severe arrhythmia, uncontrolled hypertension, uncontrolled angina or prior cumulative dose of doxorubicin ≥ 450mg/m^2 should receive careful risk versus benefit consideration before receiving treatment with pixantrone.

Dose Modifications

Haematological Toxicity:

Day 1:

Neutrophils < 1.0 x 10^9/L
or
Platelets < 75 x 10^9/L

Defer the next cycle until FBC recovered to above these levels, then proceed with treatment

If low counts are due to marrow infiltration, discuss with Consultant.

Reason for Update: removed reference to PVC-free giving set, as not necessary	Approved by Chair of Alliance TSSG: Dr A Laurie
Version: 3	Date: 6.2.17
Supersedes: Version 2	Review date: March 2019
Prepared by: S Taylor	Checked by: C Tucker

Day 8 and Day 15:

Neutrophils		Platelets	Pixantrone
≥ 1.0 $x10^9$/l	&	≥ 50 $x10^9$/l	No change in dose or schedule
0.5 – 0.9 $x10^9$/l	or	25 - 49 $x10^9$/l	Delay the dose until neuts ≥ 1.0 and platelets ≥ 50
< 0.5 $x10^9$/l	or	< 25 $x10^9$/l	Delay the dose until neuts ≥ 1.0 and platelets ≥ 50, then proceed with treatment with a 20% dose reduction

Non-haematological Toxicities: For any Grade 3 or 4 non-cardiac toxicity, defer treatment until resolved to Grade 1 – 0 and then re-start treatment with a 20% dose reduction.

For any Grade 3 or 4 cardiac toxicity, or persistent fall in ejection fraction (LVEF), defer treatment and monitor patient until recovery.
If persistent decline in LVEF is ≥ 15% of baseline value, consider permanent discontinuation of pixantrone.

Renal Impairment: The safety and efficacy in patients with renal impairment has not been established. Therefore, use with caution in patients with renal impairment.

Hepatic Impairment: Pixantrone is not recommended in patients with severe liver impairment. It should be used with caution in patients with mild or moderate liver impairment.
(Biliary excretion is thought to be the major elimination pathway)

Patient Information: No Macmillan leaflet available

References: Engert, A et al; Clin Lymph Myeloma 2006; 7 (2): 152 - 154