Rota code:HROTA423	Issue date: June 2024	Written by: Steve Hill	Authorised by: Prem Mahendra	Page: 1 of 4
Version no.1.0	Valid until: Next review	Checked by (Pharmacist) 20/6/24	Clinical Nurse Specialist: KStockton	Reference : Zhang et el. Am J Hematol. 2021;96:1481–1490.

NHS University Hospitals Birmingham NHS Foundation Trust

Pegasparaginase, Gemcitabine, Oxaliplatin (P-GemOx). Natural Killer Cell Lymphoma.

MRN: Ward/Unit:

Name:

DOB: Consultant:

Address:

NHS No:

Hb		Na+		Alb		Height	
WBC		K+		AlKP		Weight	
Plt		Urea		ALT		BSA	
Neuts		Cr		Bili		Date	
PT		GFR		Amylase		Allergies :	
APTT		Ca		Glucose			
Fibrinogen		Mg				Nature of allergy:	
Recorded by		Date					

Funding status: N/A

Emetogenic potential: Moderately emetogenic

Extravasation classification: Oxaliplatin—irritant.
Gemcitabine and Peg-asparaginase—non-vesicant.

Hepatitis B serology:

Treatment intent: Palliative

Cycle number:

To be given every 21 days. First 2 courses prior to radiotherapy then 2-4 courses after radiotherapy.

Tick if EBV PCR has been checked ☐

Day No. Date	DRUG or ELECTROLYTE	CALCULATION	DOSE	IV FLUIDS	VOL. MLS.	ROUTE/FLOW RATE	SPECIAL DIRECTIONS/ ADMINISTRATION DETAILS	DRUG ADMINISTRATION Sig.	DRUG ADMINISTRATION Sig.	TIME	Pharmacy
1	Akynzeo		One capsule	Oral			1 hour prior to chemotherapy				
	Famotidine		20mg	Oral			30min - 1h pre Pegasparaginase				
	Paracetamol		1000mg	Oral			30min - 1h pre Pegasparaginase				
	Chlorphenamine		10mg				IV bolus 30min pre-pegasparaginase				
	Dexamethasone		8mg				IV bolus 30min pre-pegasparaginase				
	PEGASPARAGINASE	2000 units/m^2		Intramuscular							
				Sodium Chloride 0.9%	50ml	IV over 5 mins	IV infusion to flush line				
	GEMCITABINE	1000mg/m^2		Sodium Chloride 0.9%	250ml	IV infusion over 30 mins					
				Glucose 5%	50ml	IV over 5 mins	IV infusion to flush line				
	OXALIPLATIN	130mg/m^2		Glucose 5%	250ml	IV infusion over 2 hours					
				Glucose 5%	50ml	IV over 5 mins	IV infusion to flush line				

Prescriber sig: .....Name..... Date: ..... Pharmacist initial sig: .....Name..... ..... Date: .....

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PT		GFR		Amylase		Allergies :	
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Day No. Date	DRUG or ELECTROLYTE	CALCULATION	DOSE	IV FLUIDS	VOL. MLS.	ROUTE/FLOW RATE	SPECIAL DIRECTIONS/ ADMINISTRATION DE-TAILS	DRUG ADMINISTRATION Sig.	Sig.	TIME	Pharmacy
							IV bolus				
	Metoclopramide		10mg								
				Sodium Chloride 0.9%	50ml	IV over 5 mins	IV infusion to flush line				
8	**GEMCITABINE**	1000mg/m^2		Sodium Chloride 0.9%	250ml	IV infusion over 30 mins					
				Sodium Chloride 0.9%	50ml	IV over 5 mins	IV infusion to flush line				

Medications to be prescribed on PICS

Anti-emetics

- Metoclopramide 10mg TDS PO PRN
- Dexamethasone 4mg BD PO for 3 days starting on day 1

Supportive medication

- Allopurinol 300mg OD for cycle 1 only
- Aciclovir 400mg BD
- Co-trimoxazole 480mg BD M/W/F
- Filgrastim as required

Prescriber sig: .....Name..... Date: .....

Pharmacist initial sig: .....Name..... Date: .....

Pegasparaginase, Gemcitabine, Oxaliplatin (P-GemOx). Natural Killer Cell Lymphoma.

Proceed rules

FBC valid within 96 hours of day 1, with 48 hours of day 8. (U+Es/LFTs within 7 days of day 1):

Drug	Neuts (x 10^9/L)	Platelets (x 10^9/L)	Dose Modification	Renal	Hepatic
Gemcitabine and Oxaliplatin Day 1	≥1.0	≥75	100% dose	**Oxaliplatin:** CrCl ≥ 30 ml/min— No dose adjustment needed CrCl < 30 ml/min— discuss with consultant, consider 50% dose **Gemcitabine:** N/A	**Oxaliplatin :** N/A **Gemcitabine:** Bilirubin ≥27µmol/L— Consider starting at 80% dose
	≥1.0	<75	Delay 1 week If platelets >75 resume at 100% If platelets 50-75 resume at 100% dose with platelet support If platelets < 50 resume at 75%		
	<1.0	≥75	Delay 1 week If neuts > 1.0 resume at 100% with GCSF support		
	<1.0	<75	Delay 1 week If neuts > 1.0 platelets >75 resume at 100% with GCSF support If platelets 50-75 resume at 100% dose with platelet support If platelets < 50 resume at 75%		
Gemcitabine Day 8	≥1.0	≥75	100% dose		
	<1.0	<75	Contact prescriber		
Pegasparaginase	≥1.0	≥75	100% dose	N/A	No dose adjustments but can cause liver toxicity

If amylase > 3 x ULN, fibrinogen < 0.5 g/L, or new onset significant LFT derangement contact prescriber

Prescriber sig: .....Name..... Date: ..... Pharmacist initial sig: .....Name..... ..... Date: .....

Pegasparaginase, Gemcitabine, Oxaliplatin (P-GemOx). Natural Killer Cell Lymphoma.

Other Information

Pegasparaginase:

For Pegasparaginase, monitor BP and vitals and visual inspection of injection site before and after injection, observe for 1 hour after injection

Fresh frozen plasma not recommended

Oxaliplatin:

If the neurosensory toxicity is NCI-CTC grade 1–2 and lasts less than 7 days administer full dose oxaliplatin. If the toxicity is NCI-CTC grade 2 and persists for more than 7 days reduce the oxaliplatin dose to 97.5mg/m2 . Oxaliplatin should be discontinued for neuro-sensory toxicities NCI-CTC grade 3 or above.

If NCI-CTC grade 3-4 diarrhoea or stomatitis recurs despite appropriate reduction in the dose the oxaliplatin dose should be re-duced to 97.5mg/m2 .