DRUG REGIMEN
Rituximab + Gemcitabine

Indication for use
High grade B-cell lymphoma

Regimen

Cycle 1

Day 1, 8 & 15	Paracetamol	1000mg	PO	1 hour prior to Rituximab
	Chlorphenamine	10mg	IV	30min prior to Rituximab
	Rituximab*	375mg/m^2	IV	in 500ml Sodium Chloride 0.9% (infuse as per local protocol)
	Gemcitabine	1000mg/m^2	IV	in 250ml Sodium Chloride 0.9% over 30mins
Day 22	Paracetamol	1000mg	PO	1 hour prior to Rituximab
	Chlorphenamine	10mg	IV	30min prior to Rituximab
	Rituximab*	375mg/m^2	IV	in 500ml Sodium Chloride 0.9% (infuse as per local protocol)

Cycle 2 onwards

Day 1	Paracetamol	1000mg	PO	1 hour prior to Rituximab
	Chlorphenamine	10mg	IV	30min prior to Rituximab
	Rituximab*	375mg/m^2	IV	in 500ml Sodium Chloride 0.9% (infuse as per local protocol)
	Gemcitabine	1000mg/m^2	IV	in 250ml Sodium Chloride 0.9% over 30mins
Day 8 & 15	Gemcitabine	1000mg/m^2	IV	in 250ml Sodium Chloride 0.9% over 30mins

Repeat every 28 days for 4 - 6cycles

*Refer to local Trust Rituximab Infusion Policy

Prophylaxis for acute emesis:	Give Metoclopramide 20mg IV pre med
Prophylaxis for delayed emesis:	Metoclopramide 10mg TDS PRN
Other medications:	Allopurinol 300mg od for 5 days with cycle 1

Investigation prior to initiating treatment

Prior to a course:

- Patient should have adequate bone marrow reserve before commencing treatment, i.e neuts >1.0, platelets >50 unless due to marrow infiltration, splenomegaly.- *if not discuss with consultant*
- Use Gemcitabine with caution if LFTs abnormal – *discuss with consultant & see dose modification*
- Written consent for course

Cautions

Allergic reaction: see Rituximab infusion protocol

If the lymphocyte count is > 20 x 109/L the patient is at greater risk of cytokine-release Syndrome: see Rituximab infusion protocol

Investigations and consultations prior to each cycle

Prior to each cycle

- Medical review of **fitness for chemotherapy** – exclude active infection, major changes in organ function
- Check **FBC** on day 1– neuts must be > 1.0 and platelets >50 prior to each cycle. *See dose modifications*
- Check **U&Es, creat, LFTs**– *see dose modifications*

Acceptable levels for treatment to proceed (if outside these levels defer one week or contact consultant)

Side Effects

Gemcitabine Toxicities

Neutropenic sepsis & thrombocytopenia
Somnolence & fatigue

Alopecia
Rash & pruritus
Haemolytic-uraemic syndrome

Nausea & vomiting (moderate)
Amenorrhoea & infertility (offer semen cryopreservation)
Liver dysfunction
Dyspnoea – pneumonitis

Dose Modification Criteria

Dose modification for haematological toxicity and infection

If day 28 neutrophils <1.0 or platelets <50	Delay until these levels reached and proceed with GCSF prophylaxis starting day 9 or 25% dose reduction
If day 28 counts remain low despite 50% dose reduction and/or GCSF	*Discuss with consultant* – further treatment may be inappropriate
If there is neutropenic sepsis	*Discuss with consultant* - consider using GCSF prophylaxis starting day 9 or further treatment may be inappropriate
If there is neutropenic sepsis despite GCSF	Stop treatment

Dose modification for abnormal liver function

If bilirubin >27μmol/L there is an increased risk of hepatic toxicity due to gemcitabine. Consider starting at a reduce dose of gemcitabine 800mg/m^2 and escalating according to tolerance

Specific Information on Administration

Follow the local Rituximab infusion protocol

THIS PROTOCOL HAS BEEN DIRECTED BY DR KANYIKE – CONSULTANT HAEMATOLOGIST

RESPONSIBILITY FOR THIS PROTOCOL LIES WITH THE HEAD OF SERVICE

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