Indication	R GDP for a patient with relapsed/refractory high grade B NHL.
Treatment Intent	Curative/Palliative/Disease Modification.
Frequency and number of cycles	Repeat every 21 days. A formal review must take place after 2 cycles to review the patients response. Continue for a maximum of 6 cycles, or disease progression or unacceptable toxicity.
Monitoring Parameters pre-treatment	• Check virology status prior to cycle1. • EDTA should be used to measure GFR prior to cycle 1. • If there is a delay in obtaining EDTA, C+G should be used to estimate renal function. • Monitor FBC day 1 and 8 of each cycle. • U&Es and LFTs baseline and at each cycle. • Day 1 If neuts >/= 1.5 and PLT >/=100 continue with treatment. If neuts 1.0-1.4 and PLT >/=100 d/w consultant. If neuts <1.0 or PLT <100 defer treatment and consider dose reduction. • BP before first cycle and as clinically indicated thereafter. • Blood glucose before first cycle and as clinically indicated thereafter. • Consider audiology test for hearing impaired patients and monitor all patients for ototoxicity throughout treatment. • Dose reduction should be considered if grade 3 or 4 non-haematological toxicity or repeat appearance of grade 2 (except N&V and alopecia). Delay until resolution of toxicity to </= grade 1. • **Hepatic impairment:** If bilirubin > 27 µmol/L, initiate treatment with gemcitabine 800mg/m2. • **Renal Impairment:** Cisplatin: If GFR ≥ 60ml/min give full dose, if 45 – 59ml/min give 75% and if < 45ml/min consider carboplatin. Gemcitabine: If CrCl <30ml/min, consider gemcitabine dose reduction-clinical decision. • **Haematological Toxicity:** Gemcitabine: Day 1. Delay cycle if neutrophils < 1.0 x 10^9/l or platelets < 100 x 10^9/l. Day 8. If neuts ≥ 1.0 x10^9/l & platelets ≥ 100 x10^9/l give full dose, if neuts 0.5 – 0.99 x10^9/l or platelets 50 – 99 x10^9/l give 75% of Day 1 dose, if neuts < 0.5 x10^9/l or platelets ≤ 50 x10^9/l omit the Day 8 gemcitabine or delay until neutrophils > 0.5 and platelets > 50. **Rituximab Infusion:** • First infusion – Initiate at 50 mg/hr. Increase at 50mg/hr increments every 30mins to 400mg/hr max. Subsequent infusions – Initiate infusion at 100mg/hr. Increase rate at 100mg/hr increments every 30mins to 400mg/hr max. • From cycle 2 onwards rapid infusion may be used if requested by prescriber (patient must not have had a grade 3 or 4 reaction to previous rituximab treatment). In this case infuse first 100ml over 20 minutes and, if no reaction, infuse remaining 400ml over 60 minutes. • Ensure pre-medication of rituximab with chlorpheniramine, hydrocortisone & paracetamol. Monitor rituximab infusion closely (complete monitoring form), watch for signs of dyspnoea, fever, rigors. If such symptoms occur stop infusion and seek medical advice. Infusion may be recommenced at half the previous rate, once symptoms have subsided. Anaphylaxis drugs must be available when treating with rituximab. • Consider withdrawing any anti-hypertensives 12 hours before treatment with Rituximab.

	• Patients with a high tumour burden or with a high number of lymphocytes (>/=25 x 10^9/L) who may be at higher risk of especially severe cytokine release syndrome, should only be treated with extreme caution. These patients should be very closely monitored throughout the first infusion. Consideration should be given to the use of a reduced infusion rate for the first infusion in these patients or a split dosing over two days during the first cycle.
References	ARIA off license protocol: RGDP for NHL, St Lukes cancer alliance protocol GDP+/-R

NB For funding information, refer to CDF and NICE Drugs Funding List

Repeat every 21 days

Day	Drug	Dose	Route	Infusion Duration	Administration
1	Paracetamol	1gm	PO	stat	30minutes prior to rituximab
	Chlorphenamine	10mg	IV	bolus	30minutes prior to rituximab
	Hydrocortisone	100mg	IV	bolus	30minutes prior to rituximab
	RITUXIMAB	**375mg/m²**	IV	See notes above	500ml sodium chloride 0.9%
2	Sodium chloride 0.9%	1000ml	IV	2hrs	+ 20mmol KCL + 10mmol Mg^{2}++
	Sodium chloride 0.9%	1000ml	IV	2hrs	+ 20mmol KCL
	Aprepitant	125mg	PO	stat	One hour prior to cisplatin
	Mannitol 10%	200ml	IV	15min	
	Ondansetron	<75yrs 16mg ≥75yrs 8mg	IV	15min	Sodium Chloride 0.9% 50ml
	Dexamethasone	40mg	PO	stat	
	GEMCITABINE	**1000mg/m²**	IV	30 min Consider extending if final volume greater than 500ml	Sodium Chloride 0.9% 250ml To a final volume concentration of 0.1mg/ml-10mg/ml
	CISPLATIN	**75mg/m²**	IV	2 hrs	Sodium Chloride 0.9% 1000ml

Day 2 cont	Furosemide	40mg	IV/PO	bolus	If urine output <100ml/hour or weight gain>2kg
	Sodium Chloride 0.9%	1000ml	IV	2 hrs	+ 20mmol KCl + 10mmol Mg^{2}+
	*(Furosemide)	40mg	IV/PO	*** ONLY IF REQ'D:** If patient remains in a 2L positive balance	
Day 8	Metoclopramide	10mg	PO	stat	
	GEMCITABINE	**1000mg/m²**	IV	30 min Consider extending if final volume greater than 500ml	Sodium Chloride 0.9% 250ml To a final volume concentration of 0.1mg/ml-10mg/ml
TTO	Drug	Dose	Route	Directions	
Day 1	Aprepitant	80mg	PO	OM on day 3 and 4 only	
	Allopurinol	300mg	PO	OD for 21 days. Supply cycle 1 only.	
	Co-trimoxazole	480mg	PO	BD on a Monday, Wednesday and Friday only. (for duration of therapy and 6 weeks afterwards)	
	Aciclovir	400mg	PO	BD	
	Fluconazole	100mg	PO	OD for 21 days	
	Omeprazole	20mg	PO	OD for 21 days	
	Dexamethasone	40mg	PO	OM for 3 days starting on day 3. Take with or after food.	