Rota code:HROTA 427	Issue date: September 2024	Written by: Simran Dhadda	Authorised by: Consultant: Tracey Chan	Page: 1 of 3
Version no.1.0	Valid until: Next review	Checked by (Pharmacist)	Clinical Nurse Specialist: Elena Tejero	Reference: Kyprolis SMPC and NCCP Regimen

NHS University Hospitals Birmingham

Carfilzomib, Dexamethasone and Lenalidomide (cycles 13-18) for Myeloma

Funding status: Blueteq required	
Emetogenic potential: weakly to moderately emetogenic	
Extravasation classification: non-irritant	
Cycle number:	

MRN: Ward/Unit:

Name:

DOB: Consultant:

Address:

NHS No:

Hb		Na+		Alb		Weight	
WBC		K+		AlKP		BSA	
Plt		Urea		ALT		Date	
Neuts		Cr		Bili		Allergies :	
		GFR		TSH			
		Ca		T4		Nature of allergy:	
				Cortisol			
Recorded by		Date					

Indication: Myeloma. In patients that have had only one previous therapy, which included bortezomib

To be given every **28** days until disease progression or unacceptable toxicity or until Cycle 18. If a patient continues to respond after completing 18 cycles they can continue on treatment with lenalidomide plus dexamethasone.

DAY NO. DATE	DRUG or ELECTROLYTE	CALCULATION	DOSE	I.V. FLUID	VOLUME (ml)	Route/ FLOW RATE	SPECIAL DIRECTIONS	DRUG ADMINISTRATION sig.	sig.	TIME	Pharm
1	Dexamethasone		40mg*	PO STAT			30 mins before carfilzomib				
	CARFILZOMIB	56mg/m^2	Max 123mg	5% Glucose	100ml	Over 30 mins					Max 123mg
	LENALIDOMIDE		.....mg	PO OD for **21 DAYS**							PAF□
15	Dexamethasone		40mg*	PO STAT			30 mins before carfilzomib				
	CARFILZOMIB	56mg/m^2	Max 123mg	5% Glucose	100ml	Over 30 mins					Max 123mg

Prescriber sig:	Date:	Chemo nurse sig.:	Date:	Pharmacist clinical sig.:	Date: .....

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Proceed rules for Day 1 and 15: Bloods valid for 7 days

	Lenalidomide		Carfilzomib	
Neutrophils	**Falls to <1.0 X 10^9/L**	Hold Lenalidomide therapy and resume at same dose when ANC >1.0	**Falls to <0.5 x 10^9/L**	Hold dose and resume at same dose when ANC >0.5
	For each subsequent drop to <1.0 x10^9/L	Hold Lenalidomide therapy then resume at 1 dose level reduction when ANC >1.0	**For each subsequent drop to <0.5 x 10^9/L**	Hold dose and resume when ANC >0.5 and consider 1 dose level reduction
			Febrile neutropenia, ANC <0.5 x 10^9/L and temperature >38.5°C	Hold dose and resume at same dose when ANC >0.5 and fever resolves.
Platelets (10^9/L)	**Falls to <30**	Hold Lenalidomide therapy until platelet >30 and resume at 1 dose level reduction	**<10 or evidence of bleeding**	Hold dose until >10 and/or bleeding controlled then restart at same dose level
	For each subsequent drop to <30	Hold Lenalidomide until ≥30 then resume at 1 dose level reduction. Do not dose below 5mg OD	**For each subsequent drop <10 or evidence of bleeding**	Hold until platelet >10 and/or bleeding controlled, consider restarting at 1 dose level reduction

Renal	**Creatinine Clearance (ml/min)**	**Dose modification**	**If serum creatinine ≥2 x baseline** **Or** **Creatinine clearance is <15ml/min** **Or** **Creatinine clearance decreases to ≤50% of baseline** **Or** **There is a need for dialysis**	Hold Carfilzomib and continue to monitor renal function. Resume when renal function has recovered to within 25% of baseline; consider reducing at 1 dose level reduction
	>50	Full dose		
	30-50	Reduce dose to 10mg once a day		
	<30 not requiring dialysis	15mg every other day		
	<30 requiring dialysis	Reduce dose to 5mg once a day		
Hepatic	Lenalidomide has not been formally studied in patients with hepatic impairment and there are no specific dose recommendations		A higher incidence of hepatic function abnormalities, ≥ grade 3 adverse events and serious adverse events have been reported compared with patients with normal hepatic function. Monitor closely	
Non-Haematological toxicity	All other grade 3 or 4 non-Haematological toxicities (e.g. Dyspnoea, cardiac events)- stop Carfilzomib until resolved or returned to baseline. Consider restarting at 1 dose level reduction			

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Dose Level reductions for Carfilzomib and Lenalidomide

	Carfilzomib	Lenalidomide
Starting Dose	**56mg/m^2**	**25mg**
Dose level -1	45mg/m^2	20mg
Dose level -2	36mg/m^2	15mg
Dose level -3	27mg/m^2	10mg
Dose level -4	Discontinue	5mg
Dose level -5		2.5mg

Medications to be prescribed on PICS

Anti-emetics	Supportive medication
Metoclopramide 10mg TDS PRN	Dexamethasone 40mg* to be taken on day 8 and 22. Adcal D3 chewable tablets- 1 tablet BD Apixaban 2.5mg BD Aciclovir 400mg BD Co-trimoxazole 480mg BD MWF Lansoprazole 30mg OD

Other information

*Option to reduce dexamethasone to 20mg if required.

The Pregnancy Prevention Programme should be complied with, and a Prescription Authorisation Form (PAF) must be completed for every supply of Lenalidomide.

For patients on dialysis, the dose should be administered after the dialysis procedure.

Adequate hydration is required in patients at high risk of tumour lysis syndrome or renal toxicity. All patients should be monitored for evidence of volume overload and fluid requirements should be tailored to individual patient needs. The total volume of fluids may be adjusted as clinically indicated in patients with baseline cardiac failure or who are at risk of cardiac failure. The risk of cardiac failure is increased in elderly patients (≥ 75 years). The risk of cardiac failure is also increased in Asian patients. Advise patients to report an increase in breathlessness when switching to an increased dose.

Evaluate dyspnoea to exclude cardiopulmonary conditions including cardiac failure and pulmonary syndromes. Stop Carfilzomib for grade 3 and 4 dyspnoea until resolved or returned to baseline and consider whether to restart Carfilzomib based on a benefit/risk assessment

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