Lancashire and South Cumbria Cancer Network

RCDa (attenuated lenalidomide, cyclophosphamide, dexamethasone)

INDICATION: Myeloma

Prior to a course of treatment

- Check FBC, U&Es, creat, LFTs – *see dose modification and discuss with consultant if abnormal*
- Women of child-bearing age must have a negative pregnancy test
- Discuss the need for contraception with both male and female patients. Discuss risk of infertility - offer semen cryopreservation to male patients
- Written consent for course

Prior to each cycle

- Medical review of fitness for chemotherapy – exclude active infection, major changes in organ function
- Women of child-bearing age must have a negative pregnancy test
- Check FBC, U&Es, creat, LFTs – neutrophils must be > 1.0, platelets > 75 - *see dose modification*
- Encourage patient to drink 3L fluid daily

Cyclophosphamide	500mg od	PO	days 1,8 *(state dates on prescription)*
Lenalidomide	25mg od	PO	days 1-21
Dexamethasone	20mg od	PO	days 1-4 & days 15-18 *(state dates on prescription)*

Repeat cycle every 28 days until maximum response (at least 6 cycles) or intolerance

PRESCRIPTION OF LENALIDOMIDE & COUNSELLING MUST BE IN ACCORDANCE WITH THE CELGENE RISK MANAGEMENT PROGRAMME

Prophylaxis for acute & delayed emesis	Metoclopramide
Other medications	Allopurinol 300mg od (if Cr.Cl <20ml/min use 100mg) for 7 days with cycle 1
	Anti-infective prophylaxis according to local policy
	Anticoagulation (unless contraindicated) with LMWH for at least first 3 months then switch to aspirin

Dose modifications for haematological toxicity (unless considered due to marrow infiltration)

- If neutrophils <1.0 and/or platelets <75 — Omit cyclophosphamide for 1-3 weeks, then restart with dose reduction by 100mg **or** commence GCSF for 2-3 days per cycle
- If there is treatment delay due to neutropenia of more than 2 weeks on > 1 occasion — Start GCSF for 2-3 days per cycle

Dose modifications for haematological toxicity for lenalidomide are listed below:

Starting dose: 25 mg
Dose level 1: 15 mg
Dose level 2 :10 mg
Dose level 3: 5 mg

Thrombocytopenia

Platelets:

First fall to <30 x 10^9/l	Interrupt lenalidomide treatment
Return to ≥30 x 10^9/l	Resume lenalidomide at Dose Level 1
For each subsequent drop below 30 x 10^9/l	Interrupt lenalidomide treatment
Return to ≥30 x 10^9/l	Resume lenalidomide at next lower dose level (Dose Level 2 and 3) once daily. **Do not dose below 5 mg once daily**

Neutropenia

Neutrophils:

First fall to <0.5 x 10^9/l	Interrupt lenalidomide treatment
Return to ≥0.5 x 10^9/l when neutropenia is the only observed toxicity	Resume lenalidomide at Starting Dose once Daily
Return to ≥0.5 x 10^9/l when dose-dependent haematological toxicities other than neutropenia are observed	Resume lenalidomide at Dose Level 1 once daily
For each subsequent drop below 0.5 x 10^9/l	Interrupt lenalidomide treatment
Return to ≥0.5 x 10^9/l	Resume lenalidomide at next lower dose level (Dose Level 2 and 3) once daily. **Do not dose below 5 mg once daily**

Dose modifications for renal insufficiency

- If creatinine > 300μmol/L despite vigorous hydration omit cyclophosphamide
- See below for lenalidomide dose modification:
    - Moderate renal impairment (CrCl 30-50) – 10mg od
    - Severe renal impairment (CrCl <30) – 15mg every other day
    - End stage renal failure (CrCl <30 requiring dialysis) – 5mg daily (on dialysis days, dose should be taken following dialysis)

Dose modification for liver dysfunction

- Limited information – clinical decision

Dose modification for dexamethasone toxicity

- Reduce dose to 20mg or remove days 12-15

Toxicities	
Neutropenic sepsis & thrombocytopaenia	Nausea (none-mild)
Alopecia (mild)	Amenorrhoea & infertility (offer semen cryopreservation)
Sedation, somnolence	Hyperglycaemia
Constipation	Peripheral neuropathy
Gastric ulceration	Tremor
Venous thromboembolism	Oedema

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