



Lancashire and South Cumbria
Cancer Network

RCD (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

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|------------------|----------|----|--------------------------------------------------------------|
| Cyclophosphamide | 500mg od | PO | days 1,8 (<i>state dates on prescription</i>) |
| Lenalidomide | 25mg od | PO | days 1-21 |
| Dexamethasone | 40mg od | PO | days 1-4 & days 12-15 (<i>state dates on prescription</i>) |

Repeat cycle every 28 days for 4-6 cycles

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 < 20 ml/min use 100mg) for 7 days with cycle 1

Anti-infective prophylaxis according to local policy

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:

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

Neutropenia

Neutrophils:

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|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| First fall to $<0.5 \times 10^9/l$ | Interrupt lenalidomide treatment |
| Return to $\geq 0.5 \times 10^9/l$ when neutropenia is the only observed toxicity | Resume lenalidomide at Starting Dose once Daily |
| Return to $\geq 0.5 \times 10^9/l$ when dose-dependent haematological toxicities other than neutropenia are observed | Resume lenalidomide at Dose Level 1 once daily |
| For each subsequent drop below $0.5 \times 10^9/l$ | Interrupt lenalidomide treatment |
| Return to $\geq 0.5 \times 10^9/l$ | 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 $> 300 \mu\text{mol/L}$ despite vigorous hydration omit cyclophosphamide
- 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

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|---------------------------------------|----------------------------------------------------------|
| Neutropenic sepsis & thrombocytopenia | 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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Date April 2013

Review date April 2015