SACT PROTOCOL

The Clatterbridge Cancer Centre NHS Foundation Trust

Systemic Anti Cancer Therapy Protocol

POMALIDOMIDE & DEXAMETHASONE Multiple Myeloma

PROTOCOL REF: MPHAPOMDHA
(Version No. 1.1)

Approved for use in:

- Patients with multiple myeloma who have received 3 prior lines of therapy ***(i.e. 4th line and onwards)*** including a proteasome inhibitor (bortezomib, carfilzomib, ixazomib), lenalidomide and alkylating agents (cyclophosphamide, melphalan).

Blueteq registration required

Dosage:

Drug	Dose	Route	Frequency
Pomalidomide	**4mg ONCE daily**	PO	Day 1 to 21
Dexamethasone	**40mg ONCE weekly***	PO	Days 1, 8, 15 and 22

*Reduce dose to 20mg in patients >75 years

Cycle length: every 28 days. Continue until disease progressions or intolerance.

Administration:

- Pomalidomide tablets should be taken at the same time each day. The capsules should not be opened, broken or chewed. The capsules should be swallowed whole with water.
- If a dose of pomalidomide is missed omit dose and continue with next scheduled dose.
- It is recommended to press only one end of the capsule of pomalidomide to remove it from the blister thereby reducing the risk of capsule deformation or breakage.
- Dexamethasone tablets should be taken in the morning after food.

- The prescriber must inform male and female patients about the expected teratogenic risk and the strict pregnancy prevention measures as specified in the pregnancy prevention programme (with pomalidomide) and provide patients with appropriate patient educational brochure and patient card.

Pregnancy Prevention Programme:

Due to the increased risk of birth defects associated fetal exposure to lenalidomide the following should be adhered to:

- A Treatment Initiation Form (TIF) must be completed prior to treatment initiation with pomalidomide
- A Prescription Authorisation Form (PAF) must be completed by the prescriber for each supply of pomalidomide. This must be approved by a pharmacist when verifying each prescription and confirmation of dispensing completed by the relevant dispensing pharmacy. Supply must be completed within 7 days of the prescription generation.
- A maximum of 3 months can be supplied for men or women of non-child bearing potential
- A maximum of 1 month can be supplied for women of child bearing potential. A negative pregnancy test must be confirmed within 3 days of prescription generation.

Emetogenic risk:

Low risk

Supportive treatments:

- Allopurinol 300mg daily for 28 days (cycle one only)
- Aciclovir 400mg twice daily
- Co-trimoxazole 480mg once daily
- Nystatin 1ml QDS **OR** Fluconazole 100mg daily for antifungal prophylaxis (if higher doses of steroids being used, review each cycle)
- Ondansetron 4-8mg TDS PRN for 5-7 days, usually prescribed for cycle 1 only
- Omeprazole 20mg once daily – review each cycle
- VTE prophylaxis:

- Dalteparin 5,000 units subcutaneous injection daily (or alternative prophylactic LMWH)
- Therapeutic dose LMWH in high risk patients. Patients may continue previously established DOAC treatment or be switched to a LMWH.
- Aspirin 75mg daily (for those patients who decline LMWHs or for those deemed to be low risk on long term treatment)

- Consider adding Clarithromycin 500mg twice daily if poor response to initial treatment to augment effect of pomalidomide. Be mindful of drug-drug interactions. Dose can be reduced to 250mg twice daily if tolerability an issue. Avoid in patients with a history of *C. Difficile.*

Dosing in renal and hepatic impairment:

Renal Dose Modifications	
Pomalidomide	No dose adjustments required

Hepatic Dose Modifications	
Pomalidomide	No dose adjustment necessary, however patients with hepatic impairment should be carefully monitored for adverse reactions and dose reduction or interruption of pomalidomide should be used as needed.

Interactions:

Pomalidomide:

- If strong inhibitors of CYP1A2 (e.g. ciprofloxacin, enoxacin and fluvoxamine) are co-administered with pomalidomide, reduce the dose of pomalidomide by 50%.

Please refer to the SPC for full list of interactions and further information.

Main toxicities:

Pomalidomide
Bone marrow suppression (anaemia, thrombocytopenia, neutropenia), fatigue, pyrexia, peripheral oedema, peripheral neuropathy, infections (including pneumonia), and venous thromboembolism.

Investigations and treatment plan:

	Pre	Cycle 1	Cycle 2	Cycle 3	Ongoing
Informed Consent	X				
Clinical Assessment, SACT assessment + PS recorded	X	X	X	X	Prior to every cycle
FBC	X	X	X	X	(Weekly for the first month and then monthly thereafter unless clinically indicated – myeloma team are responsible for monitoring weekly FBC). Prior to every cycle
U&E & LFTs	X	X	X	X	Prior to every cycle
CrCl (Cockcroft and Gault)	X	X	X	X	Prior to every cycle
Bone profile	X				As clinically indicated
Blood glucose and HbA1c	X				As clinically indicated
Virology screen (HepB and C/HIV)	X				
Dental assessment	X				As clinically indicated
Serum Igs/electrophoresis/serum free light chains (if indicated)	X	X	X	X	Prior to every cycle
Neurological assessment (for neuropathy)	X	X	X	X	Prior to every cycle
Respiratory Rate					If clinically indicated
Height	X				
Weight	X	X	X	X	Prior to every cycle
Imaging as per NICE/network guidance and clinical indication	X				To restage as indicated
Pregnancy test	X				If clinically indicated
Thyroid function test	X				If clinically indicated

Dose Modifications and Toxicity Management:

Haematological toxicity:

Treatment can proceed if:

ANC ≥ 1.0x10^9/L	Platelets ≥ 50 x10^9/L

Dose step reductions:

	Pomalidomide	Dexamethasone ≤75years old	Dexamethasone >75 years old
Starting dose	4mg	40mg	20mg
Dose level 1	3mg	20mg	12mg
Dose level 2	2mg	10mg	8mg
Dose level 3	1mg	Not applicable	Not applicable

Dexamethasone should be discontinued if the patient is unable to tolerate 10 mg if ≤ 75 years or 8 mg if **>** 75 years old.

If adverse reactions occur after dose reductions to 1mg pomalidomide treatment should be discontinued.

Thrombocytopenia:

When platelets	Recommended course	
Fall to < 25 x 10^9/L	First occurrence	Interrupt pomalidomide treatment for remainder of cycle. Weekly FBC monitoring recommended. Once platelet count recovers to ≥50 x 10^9/L resume pomalidomide treatment at one dose level lower than previous dose.
	Second and subsequent occurrences	Interrupt pomalidomide treatment. Once platelet count recovers to ≥50 x 10^9/L resume pomalidomide treatment at one dose level lower than previous dose.

Neutropenia:

When neutrophils	Recommended course	
Fall to < 0.5 x 10^9/L or febrile neutropenia (fever ≥38.5°C and neuts <1)	First occurrence	Interrupt pomalidomide treatment for the remainder of cycle. Weekly FBC monitoring recommended. Once neutrophils return to ≥1 x 10^9/L resume pomalidomide treatment at one dose level lower than previous dose
	Second or subsequent occurrences	Interrupt pomalidomide treatment. Once neutrophils return to ≥1 x 10^9/L resume treatment at one dose level lower than the previous dose.

- G-CSF treatment may be considered for prolonged neutropenia.

Non- Haematological toxicity:

Toxicity	Dose Modification	
Rash	Grade 2-3	Consider dose interruption or discontinuation of pomalidomide treatment.
	Grade 4 or blistering (including angioedema, exfoliative or bullous rash or if Stevens-Johnson syndrome (SJS), Toxic Epidermal Necrolysis (TEN) or Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS) is suspected)	Permanently discontinue treatment.
Other ≥ Grade 3 pomalidomide-related adverse events	Interrupt pomalidomide treatment for remainder of cycle. Resume at one dose level lower than previous dose at next cycle (adverse event must be resolved or improved to ≤ Grade 2 before restarting dosing).	

If recovery from toxicities is prolonged (≥14days), then the dose of dexamethasone will be resumed at one dose level lower than the previous dose

References:

1. Summary of Product Characteristics, Imnovid®, Pomalidomide, Celgene, last updated 22nd May 2019 [accessed on 10th May 2023] https://www.medicines.org.uk/emc
2. Summary of Product Characteristics, Dexamethasone tablet 2mg, Aspen, last updated 26th January 2018 [accessed on 10th May 2023] https://www.medicines.org.uk/emc
3. NICE TA427 – Pomalidomide for multiple myeloma previously treated with lenalidomide and bortezomib. Published: 11th January 2017. www.nice.org.uk [accessed on 10th May 2023]

Circulation/Dissemination

Date added into Q-Pulse	10th August 2023
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Version History

		Author name and designation	Summary of main changes
			To be completed by author
Feb 2020	1.0	**Kelly Crampton**	**New Protocol**
June 2023	1.1	**Jennifer Gibson (Principal Pharmacist Haematology)**	**Transferred to new template. Pregnancy prevention program section added. Rationalised interaction section and indications.**