Bendamustine, Thalidomide, Dexamethasone

Indication
Relapsed Myeloma

Regimen details

Days 1-4 and 15-18	Dexamethasone	20mg OD	orally
Days 1 and 8	Bendamustine	60mg/m^2	IV in 500mL 0.9% NaCl
Day 1-28	Thalidomide	50mg OD (increase to 200mg if tolerated)	orally

Cycle frequency
Repeat cycle every 28 days

Number of cycles
Max 8 cycles

Administration
Give Bendamustine over 30 minutes

Emetogenicity
Low risk

Additional supportive medication
Anti infective measures as per local policy

Thromboprophylaxis

All patients must receive thromboprophylaxis for at least the first 3 months.
It is suggested that low risk patients receive aspirin 75mg daily and high risk patients should receive low molecular weight heparin.
Patients with any of the following are defined as high risk: diabetes or other comorbidities, immobility, cardiovascular disease, previous thromboembolic events, use of erythropoietic agents or hormone replacement therapy, renal failure.
In patients with severe disease related thrombocytopenia discuss with consultant

Extravasation

Bendamustine- Vesicant

Investigations – pre first cycle

Investigation	**Validity period**
FBC	14 days
U+E (including creatinine)	14 days
LFT (including AST)	14 days
Negative pregnancy test for women of child bearing age	3 days

Investigations –pre subsequent cycles

FBC, U+E (including creatinine), LFT (including AST)
Negative pregnancy test for women of child bearing age (valid for 3 days)

Standard limits for administration to go ahead
If blood results not within range, authorisation to administer **must** be given by prescriber/ consultant.

Investigation	Limit
Neutrophil count	≥ 1.0 x 10^9/L
Platelet count	≥ 75 x 10^9/L

Dose modifications

Renal Dysfunction

CrCl <40mL/min	Bendamustine has not been studied in this group – clinical decision
CrCl 40-60mL/min	Limited information – clinical decision. Use with caution.

Hepatic Dysfunction

Moderate dysfunction - AST > 2.5 X ULN and bili >50 X ULN	Bendamustine has not been studied in this group – clinical decision
Mild dysfunction - AST 1 – 2.5 X ULN, bili 20-50	Reduce Bendamustine by 30%

Peripheral Neuropathy

Grade 2	Reduce dose of thalidomide by 50% or consider treatment break
Grade 3-4	Discontinue Thalidomide

Haematological Toxicity

Neuts > 1.0 and plts > 75	Proceed with bendamustine 100% dose
Neuts <1.0 and/or platelets<75 when cycle due	Delay for up to 2 weeks and proceed if parameters met – if not met reconsider suitability for bendamustine
If treatment delayed due to neutropenia <1.0	Proceed at 100% dose with GCSF support
If treatment delayed due to neutropenia despite GCSF	Proceed with 75% dose Bendamustine for first delay, 50% for second delay
If treatment delayed due to neutropenia despite GCSF and dose reduction	Proceed with 50% bendamustine
If treatment delayed due to platelets <75 when treatment due	Proceed with 75% dose bendamustine for first delay, 50% for second delay
Treatment delay due to thrombocytopenia despite dose reduction to 50%	Reconsider suitability for bendamustine

Adverse effects –

for full details consult product literature/ reference texts

Myelosuppression

Bendamustine hypersensitivity reactions eg. rash,

urticaria

Sedation (take thalidomide at bedtime)

Dry skin or rash;

Teratogenicity

Peripheral neuropathy

Bradycardia and syncope

Alopecia

Constipation (often requiring laxatives);

Increased risk of thromboembolic events

Steroid side effects

Additional comments

- Bendamustine is no longer commisioned by NHSE for Multiple Myeloma https://www.england.nhs.uk/publication/bendamustine-for-relapsed-multiple-myeloma-all-ages/
- Inform blood transfusion that all blood products must be irradiated
- If appropriate discuss possibility of pregnancy with female patients and need for contraception with both male and female patients. Discuss risk of infertility - offer semen cryopreservation to male patients.
- Pregnancy Prevention Programme must be complied with and PAF to be completed prior to each dispensing of Thalidomide

References

THIS PROTOCOL HAS BEEN DIRECTED BY DR HOWARTH, DESIGNATED LEAD CLINICIAN FOR HAEMATOLOGY

RESPONSIBILITY FOR THIS PROTOCOL LIES WITH THE HEAD OF SERVICE

Date: 11/08/2022
Review: 11/08/2024
VERSION: 2.0