Gemcitabine for Malignant Pleural Mesothelioma

Indication
Previously treated malignant pleural mesothelioma (post platinum-pemetrexed)

Regimen details
Days 1 & 8:
Gemcitabine 1000mg/m^2 in 250ml 0.9% sodium chloride over 30 minutes

Cycle frequency
Every 3 weeks (21-day cycle)

Number of cycles
Continue until radiological or clinical disease progression, unacceptable toxicity, or patient choice

Administration
Do not reduce the infusion rate, increasing the infusion time leads to increased toxicity

Emetogenicity
Low emetogenicity

Investigations – pre first cycle
FBC, U&E, LFT, Calcium

Investigations –pre subsequent cycles
FBC, U&E, LFT, Calcium
Medical review

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

DAY 1	
Neutrophils > 1.5 AND Plat>100	Proceed with full dose
Neutrophils 1.0-1.5	Discuss with consultant
Neutrophils < 1.0 AND/OR platelets < 100	Defer 1 week
DAY 8	
Neutrophils > 1.0 and/or platelets >100	Proceed with full dose
Neutrophils < 1.0 and/or platelets <100	defer

Non-haematological Toxicity
Modifications are not required normally. In exceptional cases treatment delay may be necessary until the toxicity has resolved. If this happens then a 25% reduction should be made for subsequent courses

Liver transaminases: Abnormalities of liver transaminases occur in up to two-thirds of patients but changes are not progressive and rarely cause problems

Dose modifications

- **Day 8 dose may be omitted** in the event of haematological toxicity.
- Consider 20–25% dose reductions for recurrent Grade ≥3 non-haematological toxicity or persistent myelosuppression.

Adverse effects - for full details consult product literature/ reference texts

Neutropenic sepsis & thrombocytopenia	Nausea & vomiting (moderate)
Diarrhoea	Rash
Alopecia (mild)	Mucositis
Radiosensitisation – do not give RT within 7-10 days of Gemcitabine	

References

Pinto C, Zucali PA, Pagano M, et al. Gemcitabine with or without ramucirumab as second-line treatment for malignant pleural mesothelioma (RAMES): A randomised, double-blind, placebo-controlled, phase 2 trial. *Lancet Oncology*. 2021;22(10):1438-1447

This protocol has been reviewed by Dr Ali consultant oncologist

RESPONSIBILITY FOR THIS PROTOCOL LIES WITH THE HEAD OF SERVICE

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VERSION: 1
