GEMCITABINE DOCETAXEL

INDICATION (ICD10) C41, C49

1. Sarcoma.PS 0, 1, 2

REGIMEN

Day 1` GEMCITABINE 675mg/m^2 infusion in 250ml sodium chloride 0.9% (or licensed dose volume) IV infusion over 30 minutes

Day 8 GEMCITABINE 675mg/m^2 infusion in 250ml sodium chloride 0.9% (or licensed dose volume) IV infusion over 30 minutes

Premedication: Dexamethasone 8mg BD starting 24 hours before chemotherapy (or 20mg IV on day of chemotherapy) and 8mg bd post-chemotherapy for 2 days

DOCETAXEL 70mg/m^2 in 250ml sodium chloride 0.9% IV infusion over 60 minutes

Gemcitabine start with 675mg/m^2, consider escalation to 900mg/m^2
Docetaxel start with 70mg/m^2, consider escalation to 100mg/m^2

CYCLE FREQUENCY AND NUMBER OF CYCLES

Every 21 days for 6 (maximum 8) cycles

ANTI-EMETICS

Low risk day 1
Moderate risk day 8

CONCURRENT MEDICATION REQUIRED

Docetaxel	Ensure premedication given before docetaxel. This can reduce the incidence and severity of fluid retention as well as the severity of hypersensitivity reactions. Loperamide prn, benzydamine mouthwash
GCSF	GCSF for 7 days starting at least 24 hours after chemotherapy

EXTRAVASATION AND TYPE OF LINE / FILTERS

Docetaxel – exfoliant
Gemcitabine – neutral

No filters required
Central or peripheral line

INVESTIGATIONS

Blood results required before SACT administration
FBC every dose, U&E, LFTs and creatinine every cycle
Neutrophils x 10^9/L ≥1.5
Platelets x 10^9/L ≥100
Baseline weight and every cycle

MAIN TOXICITES AND ADVERSE REACTIONS

Docetaxel	Cutaneous reactions, peripheral neuropathy or fluid retention, hypersensitivity reactions
Gemcitabine	Diarrhoea – see dose modifications, treat with loperamide or codeine Mucositis – see dose modifications, use routine mouthcare

DOSE MODIFICATIONS

Haematological

Docetaxel

In patients who experienced either febrile neutropenia, neutrophil count <0.5x10^9/L for more than one week during docetaxel therapy, the dose of docetaxel should be reduced to 60mg/m². If the patient continues to experience these reactions at 60mg/m², the treatment should be discontinued.

Gemcitabine

Neutrophils >1.5x10^9/L and platelets >100x10^9/L	give 100% dose
Neutrophils<1.5x10^9/L or platelets <100x10^9/L	delay treatment (day 1) or omit treatment (day 8)

Non-haematological

Docetaxel

Discuss dose reductions if severe cutaneous reactions, peripheral neuropathy or fluid retention after previous course.

In patients who experienced severe or cumulative cutaneous reactions or severe peripheral neuropathy during docetaxel therapy, the dose of docetaxel should be reduced to 60mg/m². If the patient continues to experience these reactions at 60mg/m², the treatment should be discontinued.

Gemcitabine

Diarrhoea and/or mucositis grade 2 toxicity	omit until toxicity resolved then restart at 100% dose
Diarrhoea and/or mucositis grade 3	omit until toxicity resolved then restart at 75% dose
Diarrhoea and/or mucositis grade 4	omit until toxicity resolved then restart at 50% dose

Hepatic impairment

Docetaxel

ALT and/or AST >1.5xULN and ALP >2.5xULN	recommended SPC dose for 100mg/m^2 is give 75mg/m^2
Bilirubin >ULN and ALT or AST >3.5xULN with ALP >6xULN	should not be used unless strictly indicated.

Gemcitabine

Bilirubin >27µmol/L	initiate treatment with 80% dose

REFERENCES

1. Kirsten M *et al* J Clin Oncol 2004; 22 (9) 1706-1712
2. Martee L *et al.* J Clin Oncol 2002; 20: 2824-2831