MITOXANTRONE AND PREDNISOLONE (or DEXAMETHASONE)

Symptom control in hormone-resistant metastatic prostate cancer, only for patients not suitable for docetaxel

Drug /Dosage:  
- Mitoxantrone 12mg/m² IV Day 1
- Prednisolone 5mg PO twice daily throughout treatment
- or
- Dexamethasone 0.5mg to 1mg¹ PO once daily throughout treatment

Administration: mitoxantrone diluted in 0.9% sodium chloride and administered as a bolus injection via fast running infusion 0.9% sodium chloride.

Frequency: 3 weekly cycle
continue to a minimum of 6 cycles if showing PR, or if improved biochemical parameters.

Main toxicities:  
- myelosuppression;
- mucositis;
- alopecia (mild);
- steroid side effects;
- cardiomyopathy;
- infertility

Anti-emetics: moderately emetogenic

Extravasation: non-vesicant

Regular Investigations:  
- FBC Day 1
- LFTS Day 1
- U&Es Day 1
- PSA Day 1
- MUGA scan see Comments

Comments: Maximum cumulative dose of mitoxantrone = 160mg/m²

A baseline MUGA scan should be performed where the patient is considered at risk of having impaired cardiac function e.g. significant cardiac history, hypertension, obese, smoker, elderly, previous exposure to anthracyclines, previous thoracic radiotherapy. MUGA scan should be repeated if there is suspicion of cardiac toxicity at any point during treatment.

Use of an H₂ antagonist or proton pump inhibitor is recommended during treatment with steroids.

Dose Modifications

Haematological Toxicity:  
- WBC < 3.0 x 10⁹/l  
  Delay for 1 week.
- or
- Neutrophils < 1.5 x 10⁹/l  
  Repeat FBC and continue treatment if results within normal parameters
- or
- Platelets < 100 x 10⁹/l
Hepatic Impairment: Bilirubin > 60 μmol/l and patient with good performance status; give 60% mitoxantrone dose.
Bilirubin > 60 μmol/l and patient with poor performance status; mitoxantrone not recommended.


¹Choice of dose via personal communication from RMH