

MMM

INDICATION (ICD10) C50

1. Heavily pretreated metastatic breast cancer

REGIMEN

Mitomycin to be given first

| | | |
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| Day 1 | MITOMYCIN | 10mg IV bolus |
| | MITOXANTRONE | 10mg in 100ml sodium chloride 0.9% infusion over 15 minutes |
| | METHOTREXATE | 50mg IV bolus |
| Day 22 | MITOXANTRONE | 10mg in 100ml sodium chloride 0.9% infusion over 15 minutes |
| | METHOTREXATE | 50mg IV bolus |

CYCLE FREQUENCY AND NUMBER OF CYCLES

Every 42 days for 3 cycles

ANTI-EMETICS

Low risk days 1 and 22

CONCURRENT MEDICATION REQUIRED

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| Methotrexate | Calcium folinate (calcium leucovorin) 15mg PO/IV every 6 hours for 6 doses starting 24 hours after methotrexate if: Pleural effusions/ascites Previous mucositis Serum creatinine >120micromols/L |
|--------------|--|

EXTRAVASATION AND TYPE OF LINE / FILTERS

Methotrexate – inflammitant

Mitomycin - vesicant

Mitoxantrone – irritant

No filters required

Central or peripheral line

INVESTIGATIONS

Blood results required before SACT administration

FBC, U&E and LFTs days 1 and 22 each cycle

Neutrophils x 10⁹/L ≥1.5 give

Platelets x 10⁹/L ≥100 give

Baseline weight and every cycle

MAIN TOXICITES AND ADVERSE REACTIONS

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| Methotrexate | Methotrexate induced mucositis - folinic acid (calcium folinate) rescue Caution with pleural effusions or ascites |
| Mitoxantrone | Cardiotoxicity – monitor cardiac function. Mitoxantrone may be stopped in future cycles if signs of cardiotoxicity e.g. cardiac arrhythmias, pericardial effusion, tachycardia with fatigue. |

INTERACTIONS WHICH MAY REQUIRE DOSE MODIFICATIONS

(not exhaustive list check SPC/BNF/Stockleys)

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|--------------|---|
| Methotrexate | NSAIDs, antibiotics: may reduce renal excretion |
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DOSE MODIFICATIONS

Mitoxantrone maximum cumulative dose = 110mg/m²

Hepatic impairment

Methotrexate

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|-------------------------|------|
| Bilirubin >85micromol/L | omit |
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Mitoxantrone

| | |
|--------|-----------------|
| Severe | not recommended |
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Renal impairment

Methotrexate

| | |
|------------------|-----------------|
| CrCl 20-50ml/min | give 50% dose |
| CrCl <20ml/min | not recommended |

Mitomycin

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|----------------|-----------------|
| CrCl >30ml/min | give 100% dose |
| GFR <30ml/min | not recommended |

REFERENCES