

DOCETAXEL FLUOROURACIL OXALPLATIN (FLOT)

INDICATION (ICD10) C15, C16

1. Peri-operative use in resectable gastric or gastro-oesophageal junction adenocarcinoma.
Suitable for fit patients only, with PS 0, 1 (unlicensed)

REGIMEN

Day 1 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 50mg/m² in 250ml sodium chloride 0.9% IV infusion over 60 minutes

CALCIUM LEVOFOLINATE 175mg in glucose 5% infusion over 2 hours concurrently with oxaliplatin via a Y site placed immediately before the injection site

OXALIPLATIN 85mg/m² in 250ml* glucose 5% IV infusion over 2 hours

FLUOROURACIL 2600mg/m² continuous IV infusion over 24 hours

*oxaliplatin doses 225mg to 395mg in 500ml glucose 5%

NB Calcium levofolinate is not the same as calcium folinate (calcium leucovorin). Calcium levofolinate is a single isomer of folinic acid and the dose is generally half that of calcium folinate. If calcium levofolinate is not available calcium folinate (leucovorin) may be used instead.

CYCLE FREQUENCY AND NUMBER OF CYCLES

Every 14 days for 4 cycles before surgery, plus a further 4 cycles after surgery.

ANTI-EMETICS

Moderately emetogenic day 1
Low emetogenic risk day 2

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 every docetaxel cycle
Fluorouracil	Mouth and bowel support eg Loperamide, benzydamine mouthwash
Oxaliplatin	Flush with glucose 5% after infusion
GCSF	GCSF to be added if delays / neutropenic sepsis.

EXTRAVASATION AND TYPE OF LINE / FILTERS

Docetaxel – exfoliant
Fluorouracil – inflammitant
Oxaliplatin – exfoliant

Central line

INVESTIGATIONS

Blood results required before SACT administration
FBC, U&E and LFTs every cycle
Neutrophils x 10⁹/L ≥1.5
Platelets x 10⁹/L ≥100
Serum creatinine
ECG (possible ECHO) required if patient has preexisting cardiac disease
DPD test
Baseline weight and every cycle

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MAIN TOXICITIES AND ADVERSE REACTIONS

Docetaxel	Cutaneous reactions, peripheral neuropathy or fluid retention, hypersensitivity reactions
Fluorouracil	Palmar plantar (handfoot syndrome) causing red palms and soles – treat with pyridoxine 50mg tds Diarrhoea – treat with loperamide or codeine Cardiotoxicity – monitor cardiac function. Special attention is advisable in treating patients with a history of heart disease, arrhythmias or angina pectoris or those who develop chest pain during treatment with fluorouracil. Stomatitis
Oxaliplatin	Peripheral sensory neuropathy and laryngeal spasm – avoid cold drinks and touching cold items

INTERACTIONS WHICH MAY REQUIRE DOSE MODIFICATIONS (not exhaustive list check SPC/BNF/Stockleys)

Fluorouracil	Cimetidine slightly increases exposure to fluorouracil Metronidazole increased toxicity Phenytoin concentration increased Warfarin
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DOSE MODIFICATIONS

Haematological

If neutrophils $<1.5 \times 10^9/L$ or platelets $<100 \times 10^9/L$ delay treatment, if neutrophils and platelets recover within 2 weeks then 100% dose.

If after 2 weeks delay counts have not recovered give $\leq 75\%$ oxaliplatin dose and $\leq 75\%$ docetaxel dose but maintain fluorouracil dose unless platelets $<10 \times 10^9/L$ and neutrophils $<0.5 \times 10^9/L$.

Discuss with Consultant.

If neutrophils $1.0-1.5 \times 10^9/L$ and platelets $75-100 \times 10^9/L$ Consultant decision

Non-haematological

General persistent toxicity Consultant decision

Docetaxel

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

Oxaliplatin

If patients develop acute laryngopharyngeal dysaesthesia infuse the next cycle over 6 hours.

If symptoms persist give 80% dose.

If persistent sensory symptoms occur, withdraw treatment

Hepatic impairment

Docetaxel

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

Fluorouracil

Significantly impaired hepatic function eg bilirubin $>50 \text{micromol}/L$ may be a sign of disease progression and require cessation of, or change in, treatment. Always discuss deteriorating liver function with consultant.

Bilirubin $>85 \text{micromol}/L$	not recommended
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Renal impairment

Fluourouracil

CrCl >30ml/min	give 100% dose
CrCl <30ml/min	consider dose reduction

Oxaliplatin

GFR >30ml/min	give 100% dose
GFR <30ml/min	Dose reduce (consider 50% of original dose)

REFERENCES