

CISPLATIN ETOPOSIDE with concurrent RT (NSCLC)

INDICATION (ICD10) C34

1. Superior sulcus non-small cell carcinoma concurrent radiotherapy. PS 0, 1, 2

REGIMEN

Day 1 Prehydration
CISPLATIN 50mg/m² in 1000ml sodium chloride 0.9% IV infusion over 2 hours
Post hydration
ETOPOSIDE 50mg/m² in #ml sodium chloride 0.9% IV infusion over 60 minutes
Days 2 to 5 ETOPOSIDE 50mg/m² in #ml sodium chloride 0.9% IV infusion over 60 minutes
Day 8 Prehydration
CISPLATIN 50mg/m² in 1000ml sodium chloride 0.9% IV infusion over 2 hours
Post hydration
Day 29 Prehydration
CISPLATIN 50mg/m² in 1000ml sodium chloride 0.9% IV infusion over 2 hours
Post hydration
ETOPOSIDE 50mg/m² in #ml sodium chloride 0.9% IV infusion over 60 minutes
Days 30 to 33 ETOPOSIDE 50mg/m² in #ml sodium chloride 0.9% IV infusion over 60 minutes
Day 36 Prehydration
CISPLATIN 50mg/m² in 1000ml sodium chloride 0.9% IV infusion over 2 hours
Post hydration

diluent volume for dose prescribed as per national standardised product specification

This regimen is given concurrently with radiotherapy. Radiation and chemotherapy to start within 24 hours of each other. Best started on Monday.

CYCLE FREQUENCY AND NUMBER OF CYCLES

One cycle

ANTI-EMETICS

High emetic risk days 1, 8, 29 and 36

Low emetic risk days 2 to 5 and 30 to 33

CONCURRENT MEDICATION REQUIRED

Cisplatin	Ensure adequate pre and post hydration. If urine output is <100ml/hour or if patient gains >2kg in weight during IV administration post cisplatin give 20-40mg furosemide PO/IV.
GCSF	GCSF to be added if delays / neutropenic sepsis.

EXTRAVASATION AND TYPE OF LINE / FILTERS

Cisplatin – exfoliant

Etoposide - irritant

Central or peripheral 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
 Ideally EDTA GFR should be used
 Creatinine clearance (GFR) calculated, at the Consultants discretion
 Serum creatinine - each cycle,
 Baseline weight and every cycle

MAIN TOXICITIES AND ADVERSE REACTIONS

Cisplatin	Nephrotoxicity – ensure adequate pre and post hydration is prescribed. Ototoxicity – assess patient for tinnitus or hearing abnormalities.
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INTERACTIONS WHICH MAY REQUIRE DOSE MODIFICATIONS

(not exhaustive list check SPC/BNF/Stockleys)

Cisplatin	Aminoglycosides increased risk of nephrotoxicity and ototoxicity. Renal function should be well monitored and audiometric tests as required. Carboplatin can cause a decrease in phenytoin serum levels. This may lead to reappearance of seizures and may require an increase of phenytoin dosages.
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DOSE MODIFICATIONS

Non-haematological

If patient complains of tinnitus, tingling of fingers and/or toes, discuss with SpR or Consultant before administration.

Hepatic impairment

Etoposide

Bilirubin ≥50micromol/L or decreased albumin	give 50% dose
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Renal impairment

Cisplatin

CrCl >60ml/min	give 100% dose
CrCl 50-59ml/min	give 75% dose
CrCl 40-49ml/min	give 50% dose (curative intent) not recommended (palliative intent)
CrCl <40ml/min	not recommended

Etoposide

CrCl >50ml/min	give 100% dose
CrCl 15-50ml/min	give 75% dose
CrCl <15ml/min	Further dose reduction

REFERENCES

1. Rusch VW, Giroux KJ, Kraut JC et al. Induction Chemoradiation and Surgical Resection for Superior Sulcus Non-Small Cell Lung Carcinomas: Long-Term Results of Southwest Oncology Group Trial 9416 (Intergroup Trial 0160). J Clin Oncol 25: 313-318, 2007.