

## CISplatin (40mg/m<sup>2</sup>) Weekly with Radiotherapy (RT)

### INDICATIONS FOR USE:

INDICATION	ICD10	Regimen Code	Reimbursement Status
Chemoradiation treatment for locally advanced (stage IIB to IVA) cervical squamous cell carcinoma (SCC)	C53	00385a	Hospital
Chemoradiation treatment for locally advanced bladder cancer	C67	00385b	Hospital
Chemoradiation treatment for locally advanced nasopharyngeal carcinoma	C11	00385c	Hospital
Chemoradiation treatment for locally advanced unresectable head and neck squamous carcinoma (SCC) in patients who cannot tolerate three weekly CISplatin regimens.	C76	00385d	Hospital

### TREATMENT:

The starting dose of the drugs detailed below may be adjusted downward by the prescribing clinician, using their independent medical judgement, to consider each patient's individual clinical circumstances.

**Cervical Carcinoma:** CISplatin is administered once every 7 days with concurrent radiotherapy for 5 cycles and can be continued weekly with concurrent radiotherapy at the discretion of the prescribing consultant.

**Bladder, Nasopharyngeal, Head and Neck:** CISplatin is administered once every 7 days with concurrent radiotherapy for 6 cycles.

Facilities to treat anaphylaxis MUST be present when the chemotherapy is administered.

Day	Drug	Dose	Route	Diluent & Rate	Cycle
1	CISplatin	40mg/m <sup>2</sup>	IV Infusion	1000ml NaCl 0.9% over 2 hours (Pre and Post hydration therapy required)**	Every 7 days
<p><b>** Pre and post hydration therapy required for CISplatin</b> See local hospital policy recommendations. Suggested <u>prehydration</u> for CISplatin therapy:</p> <ol style="list-style-type: none"> <li>Administer 10mmol magnesium sulphate (MgSO<sub>4</sub>) ((+/-KCl 20mmol/L if indicated) in 1000 mL sodium chloride 0.9% over 60 minutes.</li> </ol> <p>Administer CISplatin as described above Post hydration: Administer 1000 ml 0.9% NaCl over 60mins Mannitol 10% may be used to as per local policy to induce diuresis, although there is no conclusive evidence that this is required. The routine use of furosemide to increase urine flow is not recommended unless there is evidence of fluid overload (9,10).</p> <p>CISplatin (radiosensitizer) – Radiotherapy Since CISplatin is used in this protocol as a radiosensitising agent, it is to be administered on the day on which radiotherapy is delivered. Radiotherapy should start after CISplatin infusion is completed. If radiotherapy is cancelled on the CISplatin day, do not give CISplatin that day and postpone chemotherapy until radiation therapy resumes.</p>					

### ELIGIBILITY:

- Indications as above
- ECOG 0-2
- Adequate hepatic, renal, and bone marrow function

NCCP Regimen: CISplatin 40mg/m <sup>2</sup> Weekly with Radiotherapy	Published: 20/12/2016 Review: 08/01/2025	Version number: 4
Tumour Group: Genitourinary/Gynaecology/Head & Neck NCCP Regimen Code: 00385	ISMO Contributor: Prof Maccon Keane	Page 1 of 5
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## EXCLUSIONS:

- Hypersensitivity to CISplatin or any of the excipients
- Moderate/severe renal impairment (creatinine clearance < 60 mL/min)
- Significant hearing impairment/tinnitus
- Pregnancy
- Breast Feeding

## PRESCRIPTIVE AUTHORITY:

The treatment plan must be initiated by a Consultant Medical Oncologist

## TESTS:

### Baseline tests:

- Blood, renal and liver profile
- Audiology and creatinine clearance if clinically indicated

### Regular tests:

- Blood, renal and liver profile prior to each cycle.

### Disease monitoring:

Disease monitoring should be in line with the patient's treatment plan and any other test/s as directed by the supervising Consultant.

## DOSE MODIFICATIONS:

- Any dose modification should be discussed with a Consultant.

## Haematological:

**Table 1: Dose modification of CISplatin in haematological toxicity**

ANC (x10 <sup>9</sup> /L)		Platelets (x10 <sup>9</sup> /L)	Dose
<1	or	<100	Delay chemoradiation until recovery

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## Renal and Hepatic Impairment:

**Table 2: Dose modification of CISplatin in renal and hepatic impairment**

Renal Impairment		Hepatic Impairment
<b>CrCl (ml/min)</b>	<b>Dose</b>	No dose modifications for hepatic impairment
≥60	100%	
45-59	75%	
<45	Hold CISplatin or delay with additional IV fluids or go to CARBOplatin	

## Management of adverse events:

**Table 3: Dose Modification of CISplatin for Adverse Events**

Adverse reactions	Recommended dose modification
Peripheral neuropathy Grade 2	Reduce CISplatin dose by 25%
Grade 3 or 4	Omit CISplatin

## SUPPORTIVE CARE:

**EMETOGENIC POTENTIAL:** High (Refer to local policy).

### PREMEDICATIONS:

Hydration pre and post CISplatin administration (**Reference local policy or see recommendations above**).

**OTHER SUPPORTIVE CARE:** No specific recommendations

## ADVERSE EFFECTS / REGIMEN SPECIFIC COMPLICATIONS:

*The adverse effects listed are not exhaustive. Please refer to the relevant Summary of Product Characteristics for full details.*

- **Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated appropriately.
- **Renal toxicity:** Renal toxicity is common with CISplatin. Encourage oral hydration.
- **Ototoxicity and sensory neural damage** should be assessed by history prior to each cycle.

## DRUG INTERACTIONS:

- Avoid concurrent use of CISplatin with nephrotoxic drugs (e.g. aminoglycosides, furosemide, NSAIDS) due to additive nephrotoxicity. If necessary monitor renal function closely.
- Current drug interaction databases should be consulted for more information.

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## ATC CODE:

CISplatin L01XA01

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Version	Date	Amendment	Approved By
1			Prof Maccon Keane
2	20/09/2017	Applied new NCCP regimen template Clarified dosing in Cervical Carcinoma	Prof Maccon Keane
3	06/12/2017	Updated with revised CISplatin hydration regimen recommendations	Prof Maccon Keane
4	08/01/2020	Reviewed. Standardised treatment table.	Prof Maccon Keane

Comments and feedback welcome at [oncologydrugs@cancercontrol.ie](mailto:oncologydrugs@cancercontrol.ie).

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