

## EpiRUBicin, CISplatin and Capecitabine (ECX) Therapy

### INDICATIONS FOR USE:

| INDICATION  | ICD10 | Regimen Code | Reimbursement Status  |
|---|-------|--------------|---|
| Perioperative treatment of resectable gastric adenocarcinoma                          | C16   | 00380a       | EpiRUBicin:<br>Hospital<br>CISplatin:<br>Hospital<br>Capecitabine:<br>CDS |
| Perioperative treatment of resectable gastroesophageal junction adenocarcinoma        | C16   | 00380b       |   |
| Perioperative treatment of resectable lower oesophageal adenocarcinoma                | C15   | 00380c       |   |
| Palliative therapy for metastatic or locally advanced gastric adenocarcinoma          | C16   | 00380d       |   |
| Palliative therapy for metastatic or locally advanced oesophagogastric adenocarcinoma | C16   | 00380e       |   |

### 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 patients individual clinical circumstances.*

EpiRUBicin and CISplatin are administered on day 1 and capecitabine is administered continuously from day 1-21 throughout the 21 day cycle.

**Perioperative Treatment:** 3 cycles are administered perioperatively and 3 cycles postoperatively. Surgery should take place 3-6 weeks after completion of Cycle 3 and Cycle 4 should begin 6-12 weeks after surgery.

**Palliative:** Treatment is administered until disease progression or unacceptable toxicity develops.

| Admin. Order | Day            | Drug                        | Dose   | Route        | Diluent & Rate  | Cycle         |
|--------------|----------------|-----------------------------|--|--------------|---|---------------|
| 1            | 1              | EpiRUBicin <sup>a</sup>     | 50 mg/m <sup>2</sup>                           | IV bolus     | Via the tubing of a free-running intravenous saline infusion over a period of up to 30 mins | Every 21 days |
| 2            | 1              | CISplatin <sup>b</sup>      | 60 mg/m <sup>2</sup>                           | IV           | 1000 ml NaCl 0.9% over 60 mins  | Every 21 days |
| 3            | 1-21 inclusive | Capecitabine <sup>c,d</sup> | 625 mg/m <sup>2</sup> Twice Daily <sup>e</sup> | PO with food | N/A   | Every 21 days |

<sup>a</sup>Life time cumulative dose for epiRUBicin is 900 mg/m<sup>2</sup>

**In establishing the maximal cumulative dose of an anthracycline, consideration should be given to the risk factors outlined below<sup>1</sup> and to the age of the patient.**

<sup>b</sup>**Pre and post hydration therapy required for CISplatin**

See local hospital policy recommendations.

Suggested prehydration for CISplatin therapy:

1. Administer 10mmol magnesium sulphate (MgSO<sub>4</sub>) ((+/-)KCl 20mmol/L if indicated) in 1000 mL sodium chloride 0.9% over 60 minutes.

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.

<sup>c</sup>The dose to be administered should consider the available tablet strengths.

Reference to the NCCP DOSE BANDING TABLES for dosing of capecitabine [here](#)

Tablets should be swallowed whole with plenty of water within 30 minutes of eating. Tablets should not be crushed or cut

<sup>e</sup>(Total daily dose =1250mg/m<sup>2</sup>)

<sup>d</sup>See dose modifications section for patients with identified partial DPD deficiency

|  |  |                   |
|--|--|-------------------|
| NCCP Regimen: EpiRUBicin, CISplatin and Capecitabine (ECX) therapy   | Published: 11/11/2016<br>Review: 23/9/2025 | Version number: 4 |
| Tumour Group: Gastrointestinal<br>NCCP Regimen Code: 00380   | ISMO Contributor: Prof Maccon Keane        | Page 1 of 7       |
| <p>The information contained in this document is a statement of consensus of NCCP and ISMO or IHS professionals regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. Use of these documents is the responsibility of the prescribing clinician and is subject to HSE's terms of use available at <a href="http://www.hse.ie/eng/Disclaimer">http://www.hse.ie/eng/Disclaimer</a></p> <p><i>This information is valid only on the day of printing, for any updates please check <a href="http://www.hse.ie/NCCPchemoregimens">www.hse.ie/NCCPchemoregimens</a></i></p> |  |                   |

## ELIGIBILITY:

- Indications as above
- ECOG status 0-2
- Adequate haematological, renal and liver status

## EXCLUSIONS:

- Hypersensitivity to epiRUBicin, CISplatin, capecitabine or any of the excipients.
- Uncontrolled high blood pressure, unstable angina, symptomatic congestive heart failure, myocardial infarction within the preceding 6 months, serious uncontrolled cardiac dysrhythmia.
- Patients previously treated with maximum cumulative doses of epiRUBicin or any other anthracycline.
- Pregnancy and lactation.
- Moderate/Severe renal impairment (creatinine clearance < 60 ml/min [Cockcroft and Gault] at baseline).
- Severe hepatic impairment.
- Inability to swallow capecitabine tablets
- Known complete DPD deficiency

## PRESCRIPTIVE AUTHORITY:

The treatment plan must be initiated by a Consultant Medical Oncologist

## TESTS:

### Baseline tests:

- FBC, renal and liver profile.
- MUGA scan or echocardiogram if clinically indicated.
- INR tests if patient is on warfarin as clinically indicated
- DPD testing prior to first treatment with capecitabine using phenotype and/or genotype testing unless patient has been previously tested

### Regular tests:

- FBC, renal and liver profile prior to each cycle.
- MUGA scan or echocardiogram if clinically indicated.

### 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.

|  |  |                   |
|--|--|-------------------|
| NCCP Regimen: EpiRUBicin, CISplatin and Capecitabine (ECX) therapy   | Published: 11/11/2016<br>Review: 23/9/2025 | Version number: 4 |
| Tumour Group: Gastrointestinal<br>NCCP Regimen Code: 00380   | ISMO Contributor: Prof Maccon Keane        | Page 2 of 7       |
| <p>The information contained in this document is a statement of consensus of NCCP and ISMO or IHS professionals regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. Use of these documents is the responsibility of the prescribing clinician and is subject to HSE's terms of use available at <a href="http://www.hse.ie/eng/Disclaimer">http://www.hse.ie/eng/Disclaimer</a><br/> <i>This information is valid only on the day of printing, for any updates please check <a href="http://www.hse.ie/NCCPchemoregimens">www.hse.ie/NCCPchemoregimens</a></i></p> |  |                   |

## DOSE MODIFICATIONS:

- Consider a reduced starting dose in patients with identified partial DPD deficiency.
  - Initial dose reduction may impact the efficacy of treatment. In the absence of serious toxicity, subsequent doses may be increased with careful monitoring.
- Any dose modification should be discussed with a Consultant.

### Haematological:

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

| ANC (x10 <sup>9</sup> /L)   |     | Platelets (x10 <sup>9</sup> /L) | Recommended Dose |
|---|-----|---------------------------------|------------------|
| ≥ 1.5   | and | >100                            | 100%             |
| 1.0 – 1.49  | Or  | 75-100                          | 75%              |
| <1.0  | Or  | <75                             | Delay            |
| Consider decreasing to 75% if an episode of febrile neutropenia occurs with the prior cycle of treatment. |     |                                 |                  |

### Renal and Hepatic Impairment:

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

| Drug   | Renal Impairment                 |                       | Hepatic Impairment   |     |           |     |
|--|----------------------------------|-----------------------|--|-----|-----------|-----|
|  |                                  |                       | Bilirubin (micromol/L)   | AST | Dose      |     |
| EpiRUBicin   | Reduce in severe impairment only |                       | 24-51  | OR  | 2-4 x ULN | 50% |
|  |                                  |                       | >51  | OR  | >4x ULN   | 25% |
|  |                                  |                       | No dose reduction necessary  |     |           |     |
| CISplatin  | CrCl (mL/min)                    | Dose                  | No dose reduction necessary  |     |           |     |
|  | >60                              | 100%                  |  |     |           |     |
|  | 45-59                            | 75%                   |  |     |           |     |
|  | <45                              | Consider CARBOplatin  |  |     |           |     |
| Capecitabine*  | CrCl (mL/min)                    | Dose                  | In the absence of safety and efficacy data in patients with hepatic impairment, capecitabine use should be carefully monitored in patients with mild to moderate liver dysfunction, regardless of the presence or absence of liver metastasis. |     |           |     |
|  | ≥30                              | 100%                  |  |     |           |     |
|  | <30                              | Discontinue treatment |  |     |           |     |
| *Reference table 3 for dose modification of capecitabine in treatment related hepatotoxicity |                                  |                       |  |     |           |     |

### Management of adverse events:

**Table 3: Dose modification of capecitabine in hepatotoxicity**

| Bilirubin   | or | ALT, AST    | Dose Modification   |
|-------------|----|-------------|---|
| > 3.0 x ULN |    | > 2.5 x ULN | Withhold treatment until bilirubin decreases to ≤ 3.0 x ULN or ALT, AST decrease to ≤ 2.5 x ULN |

Toxicity due to capecitabine administration may be managed by symptomatic treatment and/or modification of the dose (treatment interruption or dose reduction). See Table 4 for those toxicities which are not individually specified.

If treatment with capecitabine is interrupted due to toxicity, retain the original stop and start dates (i.e. do not make up for missed doses when treatment is resumed).

|  |  |                   |
|--|--|-------------------|
| NCCP Regimen: EpiRUBicin, CISplatin and Capecitabine (ECX) therapy   | Published: 11/11/2016<br>Review: 23/9/2025 | Version number: 4 |
| Tumour Group: Gastrointestinal<br>NCCP Regimen Code: 00380   | ISMO Contributor: Prof Maccon Keane        | Page 3 of 7       |
| <p>The information contained in this document is a statement of consensus of NCCP and ISMO or IHS professionals regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. Use of these documents is the responsibility of the prescribing clinician and is subject to HSE's terms of use available at <a href="http://www.hse.ie/eng/Disclaimer">http://www.hse.ie/eng/Disclaimer</a></p> <p><i>This information is valid only on the day of printing, for any updates please check <a href="http://www.hse.ie/NCCPchemoregimens">www.hse.ie/NCCPchemoregimens</a></i></p> |  |                   |

**Table 4: Capecitabine dose reduction schedule (three weekly cycle) based on toxicity.**

| Toxicity grades*             | Dose changes within a treatment cycle   | Dose adjustment for next cycle/dose (% of starting dose) |
|------------------------------|---|--|
| <b>Grade 1</b>               | Maintain dose level   | Maintain dose level                                      |
| <b>Grade 2</b>               |   |  |
| • 1 <sup>st</sup> appearance | Interrupt until resolved to grade 0-1   | 100%   |
| • 2 <sup>nd</sup> appearance |   | 75%  |
| • 3 <sup>rd</sup> appearance |   | 50%  |
| • 4 <sup>th</sup> appearance | Discontinue permanently   |  |
| <b>Grade 3</b>               |   |  |
| • 1 <sup>st</sup> appearance | Interrupt until resolved to grade 0-1   | 75%  |
| • 2 <sup>nd</sup> appearance |   | 50%  |
| • 3 <sup>rd</sup> appearance | Discontinue permanently   |  |
| <b>Grade 4</b>               |   |  |
| • 1 <sup>st</sup> appearance | Discontinue permanently<br>or<br>If consultant deems it to be in patient's best interest to continue, interrupt until resolved to grade 0-1 | 50%  |
| • 2 <sup>nd</sup> appearance |   |  |

Medication may be required for management of diarrhoea, e.g. loperamide (4mg at first onset followed by 2mg after each loose stool (max 16 mg /day) or see local policy. \*Common Terminology Criteria for Adverse Events (CTCAE) version 4.0

**Table 5: Dose Modification of capecitabine for diarrhoea**

| Toxicity Grades*             | Diarrhoea   | Dose changes within a treatment cycle   | Dose adjustment for next cycle/dose (% of starting dose) |
|------------------------------|---|---|--|
| 0-1                          | Increase of 2 to 3 stools/day or nocturnal stools   | Maintain dose level   | Maintain dose level                                      |
| 2                            | Increase of 4 to 6 stools/day or nocturnal stools   |   |  |
|                              | • 1 <sup>st</sup> appearance  | Interrupt until resolved to grade 0-1   | 100%   |
|                              | • 2 <sup>nd</sup> appearance  |   | 75%  |
|                              | • 3 <sup>rd</sup> appearance  |   | 50%  |
| • 4 <sup>th</sup> appearance | Discontinue permanently   |   |  |
| 3                            | Increase of 7 to 9 stools/day or incontinence   |   |  |
|                              | • 1 <sup>st</sup> appearance  | Interrupt until resolved to grade 0-1   | 75%  |
|                              | • 2 <sup>nd</sup> appearance  |   | 50%  |
| • 3 <sup>rd</sup> appearance | Discontinue permanently   |   |  |
| 4                            | Increase of 10 or more stools/day or grossly bloody diarrhoea; may require parenteral support |   |  |
|                              | • 1 <sup>st</sup> appearance  | Discontinue permanently<br>or<br>If consultant deems it to be in patient's best interest to continue, interrupt until resolved to grade 0-1 | 50%  |
|                              | • 2 <sup>nd</sup> appearance  | Discontinue permanently   |  |

Medication may be required for management of diarrhoea, e.g. loperamide (4mg at first onset followed by 2mg after each loose stool (max 16 mg /day) or see local policy \*Common Terminology Criteria for Adverse Events (CTCAE) version 4.0

|  |  |                   |
|--|--|-------------------|
| NCCP Regimen: EpiRUBicin, CISplatin and Capecitabine (ECX) therapy   | Published: 11/11/2016<br>Review: 23/9/2025 | Version number: 4 |
| Tumour Group: Gastrointestinal<br>NCCP Regimen Code: 00380   | ISMO Contributor: Prof Maccon Keane        | Page 4 of 7       |
| <p>The information contained in this document is a statement of consensus of NCCP and ISMO or IHS professionals regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. Use of these documents is the responsibility of the prescribing clinician and is subject to HSE's terms of use available at <a href="http://www.hse.ie/eng/Disclaimer">http://www.hse.ie/eng/Disclaimer</a><br/> <i>This information is valid only on the day of printing, for any updates please check <a href="http://www.hse.ie/NCCPchemoregimens">www.hse.ie/NCCPchemoregimens</a></i></p> |  |                   |

## Hand foot syndrome:

**Table 6: Dose modification of capecitabine in hand foot syndrome**

| Toxicity Grades* |   | Dose Modification  |
|------------------|---|--|
| Grade 1          | Skin changes (eg, numbness, dysesthesia, paresthesia, tingling, erythema) with discomfort not disrupting normal activities  | 100% Dose  |
| Grade 2          | Skin changes (eg, erythema, swelling) with pain affecting activities of daily living  | Withhold treatment until event resolves or decreases in intensity to grade 1.  |
| Grade 3          | Severe skin changes (eg, moist desquamation, ulceration, blistering) with pain, causing severe discomfort and inability to work or perform activities of daily living | Withhold treatment until event resolves or decreases in intensity to grade 1. Subsequent doses of capecitabine should be decreased |

\*Common Terminology Criteria for Adverse Events (CTCAE) version 4.0

## SUPPORTIVE CARE:

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

**PREMEDICATIONS:** Not usually required

## OTHER SUPPORTIVE CARE:

Medication may be required for management of diarrhoea, e.g. loperamide (4mg at first onset followed by 2mg after each loose stool (max 16 mg /day) or see local policy.

## 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:** Nephrotoxicity is common with CISplatin. Encourage oral hydration. Avoid nephrotoxic drugs such as aminoglycoside antibiotics.
- **Ototoxicity and sensory neural damage** should be assessed by history prior to each cycle.
- **Cardiac toxicity:** Clinical cardiac assessment is required prior to epiRUBicin if cardiac function is equivocal and recommended at any time if clinically indicated with a formal evaluation of LVEF. In establishing the maximal cumulative dose of epiRUBicin, consideration should be given to any concomitant therapy with potentially cardiotoxic drugs. A cumulative dose of 900 mg/m<sup>2</sup> should only be exceeded with extreme caution. Above this level the risk of irreversible congestive heart failure increases greatly.
- **Extravasation:** EpiRUBicin causes pain and tissue necrosis if extravasated (**Refer to local policy**).
- **Dihydropyrimidine dehydrogenase (DPD) deficiency:** DPD is an enzyme encoded by the DPYD gene which is responsible for the breakdown of fluoropyrimidines. Patients with DPD deficiency are therefore at increased risk of fluoropyrimidine-related toxicity, including for example stomatitis, diarrhoea, mucosal inflammation, neutropenia and neurotoxicity. Treatment with 5-Fluorouracil,

|  |  |                   |
|--|--|-------------------|
| NCCP Regimen: EpiRUBicin, CISplatin and Capecitabine (ECX) therapy   | Published: 11/11/2016<br>Review: 23/9/2025 | Version number: 4 |
| Tumour Group: Gastrointestinal<br>NCCP Regimen Code: 00380   | ISMO Contributor: Prof Maccon Keane        | Page 5 of 7       |
| <p>The information contained in this document is a statement of consensus of NCCP and ISMO or IHS professionals regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. Use of these documents is the responsibility of the prescribing clinician and is subject to HSE's terms of use available at <a href="http://www.hse.ie/eng/Disclaimer">http://www.hse.ie/eng/Disclaimer</a></p> <p><i>This information is valid only on the day of printing, for any updates please check <a href="http://www.hse.ie/NCCPchemoregimens">www.hse.ie/NCCPchemoregimens</a></i></p> |  |                   |

capecitabine or tegafur-containing medicinal products is contraindicated in patients with known complete DPD deficiency. Consider a reduced starting dose in patients with identified partial DPD deficiency. Initial dose reduction may impact the efficacy of treatment. In the absence of serious toxicity, subsequent doses may be increased with careful monitoring. Therapeutic drug monitoring (TDM) of fluorouracil may improve clinical outcomes in patients receiving continuous 5-fluorouracil infusions.

- **Hand-foot syndrome (HFS)**, also known as palmar-plantar erythrodysesthesia (PPE), is a common side effect associated with capecitabine (see Table 6 for dose modification of capecitabine for HFS).

## DRUG INTERACTIONS:

- CISplatin may potentiate the nephrotoxic and ototoxic effects of loop diuretics and aminoglycosides so concurrent use should be avoided.
- Capecitabine enhances the anticoagulant effect of warfarin. Patients taking coumarin derivative anticoagulants should be monitored regularly for alterations in their coagulation parameters and the anti-coagulant dose adjusted accordingly.
- Patients taking phenytoin or fosphenytoin concomitantly with capecitabine should be regularly monitored for increased phenytoin plasma concentrations.
- Sorivudine inhibits dihydropyrimidine dehydrogenase thus increasing its toxicity. Therefore, capecitabine must not be administered concomitantly with sorivudine or its chemically related analogues.
- Current drug interaction databases should be consulted for more information.

## ATC CODE:

EpiRUBicin L01DB03  
 CISplatin L01XA01  
 Capecitabine L01BC06

## REFERENCES:

1. Sumpter K, Harper-Wynne C et al. Report of two protocol planned interim analyses in a randomized multicenter phase III study comparing capecitabine with fluorouracil and oxaliplatin with CISplatin in patients with advanced oesophagogastric cancer receiving ECF. *Br J Cancer* 2005; 92: 1976-1983
2. Cunningham D, Starling N, Rao S, et al. Capecitabine and oxaliplatin for advanced esophagogastric cancer. *N Engl J Med* 2008; 358 (1):36-46.
3. Kang, YK, Kang WK, Shin DB, et al. Capecitabine/CISplatin versus 5-fluorouracil/CISplatin as first-line therapy in patients with advanced gastric cancer: a randomised phase III noninferiority trial. *Ann Oncol* 2009;20 (4):666-673.
4. Okines AF, Norman AR, McCloud P, et al. Meta-analysis of the REAL-2 and ML17032 trials: evaluating capecitabine-based combination chemotherapy and infused 5-fluorouracil-based combination chemotherapy for the treatment of advanced oesophago-gastric cancer. *Ann Oncol* 2009;20(9):1529-1534.
5. NCCP Dose Banding Table 2016 [www.hse.ie/nccpdosebanding](http://www.hse.ie/nccpdosebanding)
6. [HPRA](http://www.hpra.ie) Direct Healthcare Professional Communication. 5-Fluorouracil (i.v.), capecitabine and tegafur containing products: Pre-treatment testing to identify DPD-deficient patients at increased risk of

|  |  |                   |
|--|--|-------------------|
| NCCP Regimen: EpiRUBicin, CISplatin and Capecitabine (ECX) therapy   | Published: 11/11/2016<br>Review: 23/9/2025 | Version number: 4 |
| Tumour Group: Gastrointestinal<br>NCCP Regimen Code: 00380   | ISMO Contributor: Prof Maccon Keane        | Page 6 of 7       |
| <p>The information contained in this document is a statement of consensus of NCCP and ISMO or IHS professionals regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. Use of these documents is the responsibility of the prescribing clinician and is subject to HSE's terms of use available at <a href="http://www.hse.ie/eng/Disclaimer">http://www.hse.ie/eng/Disclaimer</a></p> <p><i>This information is valid only on the day of printing, for any updates please check <a href="http://www.hse.ie/NCCPchemoregimens">www.hse.ie/NCCPchemoregimens</a></i></p> |  |                   |

severe toxicity. Accessed Aug 2020 Available at: [https://www.hpra.ie/docs/default-source/default-document-library/important-safety-information-from-marketing-authorisation-holders-of-products-containing-5-fluorouracil-\(i-v\)-capecitabine-and-tegafur-as-approved-by-the-hpra.pdf?sfvrsn=0](https://www.hpra.ie/docs/default-source/default-document-library/important-safety-information-from-marketing-authorisation-holders-of-products-containing-5-fluorouracil-(i-v)-capecitabine-and-tegafur-as-approved-by-the-hpra.pdf?sfvrsn=0)

7. EpiRUBicin 2mg/ml Solution for Injection. Summary of Product Characteristics Accessed Sept 2020 Available at [http://www.hpra.ie/img/uploaded/swedocuments/LicenseSPC\\_PA0405-081-001\\_22122015162042.pdf](http://www.hpra.ie/img/uploaded/swedocuments/LicenseSPC_PA0405-081-001_22122015162042.pdf)
8. CISplatin 1mg/ml Concentrate for Solution for Infusion. Summary of Product Characteristics Accessed Sept 2020. Available at [https://www.hpra.ie/img/uploaded/swedocuments/Licence\\_PA2315-081-001\\_13022020153905.pdf](https://www.hpra.ie/img/uploaded/swedocuments/Licence_PA2315-081-001_13022020153905.pdf)
9. Xeloda® Summary of Product Characteristics Accessed Sept 2020. Available at [http://www.ema.europa.eu/docs/en\\_GB/document\\_library/EPAR\\_-\\_Product\\_Information/human/000316/WC500058151.pdf](http://www.ema.europa.eu/docs/en_GB/document_library/EPAR_-_Product_Information/human/000316/WC500058151.pdf)

| Version | Date       | Amendment   | Approved By       |
|---------|------------|---|-------------------|
| 1       | 11/11/2016 |   | Prof Maccon Keane |
| 2       | 26/11/2018 | Updated to new NCCP template.<br>Updated CISplatin hydration regimen recommendations. Updated capecitabine dosing in renal impairment and in adverse events.  | Prof Maccon Keane |
| 3       | 11/03/2020 | Updated capecitabine dosing in renal impairment   | Prof Maccon Keane |
| 4       | 25/8/2020  | Reviewed.<br>Updated exclusion criteria, baseline testing, dose modifications and adverse events with respect to DPD deficiency as per DHPC from HPRA June 2020<br>Updated Adverse events regarding palmar-plantar erythrodysesthesia | Prof Maccon Keane |

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

<sup>1</sup>Cardiotoxicity is a risk associated with anthracycline therapy that may be manifested by early (acute) or late (delayed) effects.

Risk factors for developing anthracycline-induced cardiotoxicity include:

- high cumulative dose, previous therapy with other anthracyclines or anthracenediones
- prior or concomitant radiotherapy to the mediastinal/pericardial area
- pre-existing heart disease
- concomitant use of other potentially cardiotoxic drugs

In establishing the maximal cumulative dose of an anthracycline, consideration should be given to the risk factors above and to the age of the patient

|  |  |                   |
|--|--|-------------------|
| NCCP Regimen: EpiRUBicin, CISplatin and Capecitabine (ECX) therapy   | Published: 11/11/2016<br>Review: 23/9/2025 | Version number: 4 |
| Tumour Group: Gastrointestinal<br>NCCP Regimen Code: 00380   | ISMO Contributor: Prof Maccon Keane        | Page 7 of 7       |
| <p>The information contained in this document is a statement of consensus of NCCP and ISMO or IHS professionals regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. Use of these documents is the responsibility of the prescribing clinician and is subject to HSE's terms of use available at <a href="http://www.hse.ie/eng/Disclaimer">http://www.hse.ie/eng/Disclaimer</a><br/> <i>This information is valid only on the day of printing, for any updates please check <a href="http://www.hse.ie/NCCPchemoregimens">www.hse.ie/NCCPchemoregimens</a></i></p> |  |                   |