ESOPHAGEAL CANCER

COMBINED MODALITY THERAPY

CISPLATIN – 5-FLUOROURACIL – RADIATION (DEFINITIVE THERAPY)

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose/m^2/day</th>
<th>Route</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Fluorouracil</td>
<td>1000</td>
<td>CIVI</td>
<td>Days 1 – 4, weeks 1, 5, 8 and 11</td>
</tr>
<tr>
<td>Cisplatin</td>
<td>75</td>
<td>IV*</td>
<td>Day 1, weeks 1, 5, 8 and 11</td>
</tr>
</tbody>
</table>

Concurrent with

Radiation therapy 50 Gy starting on Day 1, week 1 of chemotherapy

*Administer at a rate of 1 mg/minute with routine pre- and post-hydration.


CISPLATIN–5-FLUOROURACIL–RADIATION (NEOADJUVANT)

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose/m^2/day</th>
<th>Route</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Fluorouracil</td>
<td>1000</td>
<td>CIVI</td>
<td>Days 1 – 4 and 29 – 32</td>
</tr>
<tr>
<td>Cisplatin</td>
<td>100</td>
<td>IV*</td>
<td>Days 1 and 29</td>
</tr>
</tbody>
</table>

Concurrent with

Radiation therapy 50.4 Gy starting on Day 1, week 1 of chemotherapy

Followed by

Surgery Upon recovery from chemoradiotherapy

*Routine pre- and post-hydration required.


CISPLATIN – PACLITAXEL – HYPERFRACTIONATED RADIATION (NEOADJUVANT)

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose/m^2/day</th>
<th>Route</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cisplatin</td>
<td>75</td>
<td>IV*</td>
<td>Day 1</td>
</tr>
<tr>
<td>Paclitaxel‡</td>
<td>60</td>
<td>IV**</td>
<td>Days 1, 8, 15 and 22</td>
</tr>
<tr>
<td>Radiation</td>
<td>1.5 Gy twice</td>
<td></td>
<td>Days 1 – 5, Days 8 – 12, and Days 15 – 19, for a total dose of 45 Gy (minimal interfraccion interval = 6 hours).</td>
</tr>
<tr>
<td>Filgrastim</td>
<td>5 micrograms</td>
<td>SQ</td>
<td>Day 23 until ANC recovery</td>
</tr>
</tbody>
</table>

Followed by

Surgery Transhiatal esophagectomy performed on approximately Day 50

‡Routine premedication required; *Administer over 2 hours with routine pre- and post-hydration; **Administer over 3 hours.


Last Updated on October 9, 2007
5-FLUOROURACIL – LEUCOVORIN – RADIATION (MACDONALD ADJUVANT REGIMEN)

5-Fluorouracil   425 mg/m²/day  IV  Days 1 – 5
Leucovorin     20 mg/m²/day  IV  Days 1 – 5

The above treatment was initiated on Day 1. On Day 29 the following chemoradiotherapy is started:

Radiation    45 Gy (1.8 Gy per day) five days per week for 5 weeks plus
5-Fluorouracil   400 mg/m²/day  IV  On the first four and last 3 days of radiation
Leucovorin    20 mg/m²/day  IV  On the first 4 and last 3 days of radiation

One month following completion of chemoradiotherapy the following is initiated

5-Fluorouracil   425 mg/m²/day  IV  Days 1 – 5
Leucovorin     20 mg/m²/day  IV  Days 1 – 5

Repeat this cycle every 28 days for 2 cycles.

*Administer as an IV bolus.

NOTE: Regimen indicated for GE-junction adenocarcinoma only.


PACLITAXEL – CARBOPLATIN – 5-FLUOROURACIL – RADIATION (NEOADJUVANT)

Paclitaxel‡  200 mg/m²  IV  Days 1 and 22
Carboplatin  AUC 6**  IV  Days 1 and 22
5-Fluorouracil   225 mg/m²/day  CIVI  Days 1 – 42
Radiation therapy  5 days per week for 5 weeks beginning Day 1 of chemotherapy. Administered as 1.8 Gy single daily fractions, to a total dose of 45 Gy.

Followed by

Surgery    Esophagectomy 4 – 8 weeks after completion of therapy

OR

Additional cycle of carboplatin/paclitaxel and additional radiation boost to a total of 54 – 60 Gy.

‡Routine premedication required; *Administer over 1 hour; **Dose calculated using the Calvert formula.

ESOPHAGEAL CANCER CHEMOTHERAPY

**CAPECITABINE – OXALIPLATIN**

Capecitabine 1000 mg/m² BID PO Days 1 – 14  
Oxaliplatin 130 mg/m² IV* Day 1

*Administer over 2 hours.

NOTE: Capecitabine to be ingested with water every 12 hours, approximately 30 minutes after a meal, starting the evening of day 1. Capecitabine dose should be rounded to the nearest 150 mg or 500 mg tablet size.

DOSE MODIFICATION: Persistent (≥ 14 days) paresthesia or temporary (7 – 14 days) painful paresthesia or functional impairment resulted in a 25% dose reduction of oxaliplatin. In cases of persistent (≥ 14 days) painful paresthesia or functional impairment, oxaliplatin had to be omitted until recovery and then restarted at 50% of the dose. Capecitabine was reduced by 25% in cases of grade 2 hand–foot syndrome.

Repeat cycle every 21 days. Continue treatment to a maximum of eight cycles.


**CARBOPLATIN – PACLITAXEL**

**CYCLE 1**

Paclitaxel‡ 200 mg/m² IV* Day 1  
Followed by  
Carboplatin AUC 5** IV Day 1

**CYCLE 2 ONWARDS#**

Paclitaxel‡ 225 mg/m² IV* Day 1  
Followed by  
Carboplatin AUC 6** IV Day 1

‡Routine premedication administered; *Administer over 3 hours; **Calculated using the Calvert Formula; ‡Doses escalated in cycle 2 if the ANC nadir was 1 x 10⁹/L or greater, and the platelet nadir was 100 x 10⁹/L or greater.

Repeat cycle every 21 days until best response.

CISPLATIN – 5-FLUOROURACIL

Cisplatin    100 mg/m²    IV    Day 1

Followed by

5-Fluorouracil    1000 mg/m²/day    CIVI    Days 1 – 5

*Administer over 1 hour with routine pre- and post-hydration.

Repeat every 21 days for three cycles, and then follow with surgery or radiation therapy.


CISPLATIN – 5-FLUOROURACIL (NEOADJUVANT)

Cisplatin     80 mg/m²    IV    Day 1
5-Fluorouracil 1000 mg/m²/day    CIVI    Days 1 – 4

*Administer over 4 hours with routine pre-and post-hydration.

Repeat cycle every 21 days for 2 cycles, then surgical resection 3 – 5 weeks after starting cycle number 2.


CISPLATIN – IRINOTECAN

Cisplatin     30 mg/m²    IV    Days 1 and 8

Followed by

Irinotecan    65 mg/m²    IV    Days 1 and 8

*Administer over 30 minutes.

Repeat cycle every 21 days.


DCF (DOCETAXEL – CISPLATIN – 5-FLUOROURACIL)

Docetaxel†  75 mg/m²    IV    Day 1
Cisplatin    75 mg/m²    IV    Day 1
5-Fluorouracil 750 mg/m²/day    CIVI    Days 1 – 5

†Routine premedication required; *Routine pre- and post-hydration required.

NOTE: Adenocarcinoma of the GE-junction only.

Repeat cycle every 21 days.

ECF (EPIRUBICIN–CISPLATIN–5–FLUOROURACIL)

Epirubicin  50 mg/m²  IV  Day 1
Cisplatin   60 mg/m²  IV*  Day 1
5-Fluorouracil 200 mg/m²/day  CIVI  Day 1 onwards up to 6 months

*Routine pre- and post-hydration required.

NOTE: Adenocarcinoma of the GE-junction only.

Repeat cycle every 21 days to a maximum of 8 cycles. For peri-operative use, administer only 3 cycles pre-surgery and 3 cycles post-surgery (6 total).


FOX (EPIRUBICIN – OXALIPLATIN – CAPECITABINE) – ADENOCARCINOMA ONLY

Epirubicin  50 mg/m²  IV  Day 1
Oxaliplatin  130 mg/m²  IV*  Day 1
Capecitabine  650mg/m² BID  PO  Day 1 onwards continuously

*Administer over 2 hours.

NOTE: Capecitabine dose should be rounded to the nearest 150 mg or 500 mg tablet size.

Repeat cycle every 21 days to a maximum of 8 cycles.

GASTRIC CANCER

**CAPECITABINE**

Capecitabine 1250 mg/m² BID PO Days 1 – 14

NOTE: Capecitabine dose should be rounded to the nearest 150 mg or 500 mg tablet size.

Repeat cycle every 21 days for up to 6 cycles.


**CAPECITABINE – CISPLATIN**

Capecitabine 1000 mg/m² BID PO Days 1 – 14
Cisplatin 80 mg/m² IV* Day 1

*Routine pre- and post-hydration required.

NOTE: Capecitabine dose should be rounded to the nearest 150 mg or 500 mg tablet size.

Repeat cycle every 21 days until disease progression or unacceptable toxicity.


**CAPECITABINE – OXALIPLATIN**

Capecitabine 1000 mg/m² BID PO Days 1 – 14
Oxaliplatin 130 mg/m² IV* Day 1

*Administer over 2 hours.

NOTE: Capecitabine to be ingested with water every 12 hours, approximately 30 minutes after a meal, starting the evening of day 1. Capecitabine dose should be rounded to the nearest 150 mg or 500 mg tablet size.

DOSE MODIFICATION: Persistent (≥ 14 days) paresthesia or temporary (7 – 14 days) painful paresthesia or functional impairment resulted in a 25% dose reduction of oxaliplatin. In cases of persistent (≥ 14 days) painful paresthesia or functional impairment, oxaliplatin had to be omitted until recovery and then restarted at 50% of the dose. Capecitabine was reduced by 25% in cases of grade 2 hand–foot syndrome.

Repeat cycle every 21 days. Continue treatment to a maximum of eight cycles.

### DCF (DOCETAXEL – CISPLATIN – 5-FLUOROURACIL)

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>Route</th>
<th>Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Docetaxel‡</td>
<td>75 mg/m²</td>
<td>IV</td>
<td>Day 1</td>
</tr>
<tr>
<td>Cisplatin</td>
<td>75 mg/m²</td>
<td>IV*</td>
<td>Day 1</td>
</tr>
<tr>
<td>5-Fluorouracil</td>
<td>750 mg/m²/day</td>
<td>CIVI</td>
<td>Days 1 – 5</td>
</tr>
</tbody>
</table>

*Routine premedication required; †Routine pre- and post-hydration required.

Repeat cycle every 21 days.


### DOCETAXEL – CAPECITABINE

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>Route</th>
<th>Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Docetaxel‡</td>
<td>75 mg/m²</td>
<td>IV</td>
<td>Day 1</td>
</tr>
<tr>
<td>Capecitabine</td>
<td>825 mg/m² BID</td>
<td>PO</td>
<td>Days 1 – 14</td>
</tr>
</tbody>
</table>

*Routine premedication required.

NOTE: Capecitabine dose should be rounded to the nearest 150 mg or 500 mg tablet size.

Repeat cycle every 21 days until progression.


### ECF (EPIRUBICIN – CISPLATIN – 5-FLUOROURACIL)

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>Route</th>
<th>Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epirubicin</td>
<td>50 mg/m²</td>
<td>IV</td>
<td>Day 1</td>
</tr>
<tr>
<td>Cisplatin</td>
<td>60 mg/m²</td>
<td>IV*</td>
<td>Day 1</td>
</tr>
<tr>
<td>5-Fluorouracil</td>
<td>200 mg/m²/day</td>
<td>CIVI</td>
<td>Day 1 onwards up to 6 months</td>
</tr>
</tbody>
</table>

*Routine pre- and post-hydration required.

Repeat cycle every 21 days to a maximum of 8 cycles. For peri-operative use, administer only 3 cycles pre-surgery and 3 cycles post-surgery (6 total).

**ELF (ETOPOSIDE – LEUCOVORIN – 5–FLUOROURACIL)**

Leucovorin 300 mg/m²/day IV* Days 1 – 3

*Followed immediately by*

Etoposide 120 mg/m²/day IV** Days 1 – 3

*Followed by*

5–Fluorouracil 500 mg/m²/day IVB Days 1 – 3

*Administer over 10 minutes; **Administer over 50 minutes.

Repeat cycle every 22 days.


**FOX (EPIRUBICIN – OXALIPLATIN – CAPECITABINE)**

Epirubicin 50 mg/m² IV Day 1

Oxaliplatin 130 mg/m² IV* Day 1

Capecitabine 650mg/m² BID PO Day 1 onwards continuously

*Administer over 2 hours.

NOTE: Capecitabine dose should be rounded to the nearest 150 mg or 500 mg tablet size.

Repeat cycle every 21 days to a maximum of 8 cycles.

FAMTX (5-FLUOROURACIL – METHOTREXATE – LEUCOVORIN – DOXORUBICIN)

Methotrexate*  1500 mg/m²  IV  Day 1

Followed 1 hour later by

5-Fluorouracil  1500 mg/m²**  IV  Day 1
Leucovorin  30 mg Q6H***  PO  Days 2 and 3
Doxorubicin  30 mg/m²  IV  Day 15

*Ensure the patient has alkaline urine (i.e., pH greater than 7), and is well hydrated prior to methotrexate, and check each urine void to ensure pH is 7 and greater. If not increase bicarbonate or consider acetazolamide; **Start 1 hour after the methotrexate on Day 1; ***Leucovorin begins 24 hours after methotrexate dose. Plasma levels of methotrexate are evaluated at 24 hours and 48 hours after the methotrexate dose, and leucovorin rescue at 30 – 60 mg every 6 hours was administered until the plasma levels were less than 2.5 x 10⁶ mol/L.

Repeat cycle every 29 days.


FUP (5–FLUOROURACIL – CISPLATIN)

5-Fluorouracil  1000 mg/m²/day  CIVI  Days 1 – 5
Cisplatin  100 mg/m²  IV*  Day 2

*Administer over 1 hour with routine pre- and post-hydration.

Repeat cycle every 29 days.


5–FLUOROURACIL – LEUCOVORIN

Leucovorin  200 mg/m²/day  IVB  Days 1 – 5

Followed immediately afterwards by

5-Fluorouracil  370–400 mg/m²/day*  IV**  Days 1 – 5

*Initially administered at a dose of 370 mg/m², increased to 400 mg/m² if toxicity was absent at the 370 mg/m² dosing level; **Administer over 15 minutes.

Repeat cycle every 26 days.

**5–FLUOROURACIL – LEUCOVORIN – IRINOTECAN**

Leucovorin 200 mg/m\(^2\)/day IV* Days 1 and 2

*Followed by*

5–Fluorouracil 400 mg/m\(^2\)/day IVB** Days 1 and 2

*Then*

5–Fluorouracil 600 mg/m\(^2\)/day CIVI*** Days 1 and 2
Irinotecan 180 mg/m\(^2\) IV# Day 1

*Administer over 2 hours; **Administer as an IV bolus over 2 – 4 minutes; ***Administer as a 22 hour continuous infusion; #Administer over 90 minutes.

Repeat cycle every 14 days until disease progression or toxicity.


**FOLFOX 6 (OXALIPLATIN – 5–FLUOROURACIL – LEUCOVORIN)**

Oxaliplatin 100 mg/m\(^2\) IV* Day 1
Leucovorin 400 mg/m\(^2\) IV Day 1

*Followed by*

5–Fluorouracil 400 mg/m\(^2\) IV** Day 1

*Followed immediately by*

5–Fluorouracil 3000 mg/m\(^2\) CIVI*** Day 1

*Administer over 2 hours simultaneously in D\(_5\)W; **IV bolus administered over 10 minutes; ***Administer as a CIVI of 5–Fluorouracil over 46 hours, following the bolus dose.

Repeat cycle every 14 days (for at least 6 cycles, except in the event of disease progression).

GASTRIC CANCER
ADJUVANT TREATMENT

5-FLUOROURACIL-LEUCOVORIN-RADIATION (MACDONALD ADJUVANT REGIMEN)

5-Fluorouracil 425 mg/m²/day IV Days 1 – 5
Leucovorin 20 mg/m²/day IV Days 1 – 5

The above treatment was initiated on Day 1. On Day 29 the following chemoradiotherapy is started:

Radiation 45 Gy (1.8 Gy per day) five days per week for 5 weeks
5-Fluorouracil 400 mg/m²/day IV On the first four and last 3 days of radiation
Leucovorin 20 mg/m²/day IV On the first 4 and last 3 days of radiation

One month following completion of chemoradiotherapy the following is initiated

5-Fluorouracil 425 mg/m²/day IV Days 1 – 5
Leucovorin 20 mg/m²/day IV Days 1 – 5

Repeat this cycle every 28 days for 2 cycles.

*Administer as an IV bolus.


ECF (EPIRUBICIN–CISPLATIN–5–FLUOROURACIL)

Epirubicin 50 mg/m² IV Day 1
Cisplatin 60 mg/m² IV Day 1
5-Fluorouracil 200 mg/m²/day CIWI Day 1 onwards up to 6 months

*Routine pre- and post-hydration required.

Repeat cycle every 21 days. Administer 3 cycles pre-surgery and 3 cycles post-surgery (6 total).