Protocol: **AC (Doxorubicin/Cyclophosphamide)**

Indications: Breast Cancer – Adjuvant, Palliative

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doxorubicin</td>
<td>60mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
<tr>
<td>Cyclophosphamide</td>
<td>600mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks  Total number of cycles: 4 (Adjuvant) 6 (Palliative)

Dose modifications: Discuss with consultant

Administration and safety:
- Anti-emetic group – Moderately High
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Check liver function
- Treatment every 2 weeks if given on a neo-adjuvant or accelerated basis with pegylated G-CSF on day 2

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, cardiotoxicity, amenorrhoea, haematuria, carcinogenesis, infertility

Symptomatic treatment of side effects: Mouth care, encourage oral fluids

Investigations

Pre-treatment:
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle.

Protocol: **Paclitaxel**

Indications: Breast Cancer – Adjuvant (high risk), Palliative

**Schedule:**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paclitaxel</td>
<td>175mg/m²</td>
<td>500mls 5% dex/3hrs</td>
<td>Day 1</td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks
Total number of cycles: 4 (adjuvant) 6 (palliative)

Dose modifications: Discuss with Consultant

Administration and safety:
- Anti-emetic group – Low
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Following 4 cycles of AC if adjuvant
- Pre-medication (chlorpheniramine, ranitidine, dexamethasone)

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, cardiotoxicity, amenorrhoea, fluid retention, sensitivity reaction, peripheral neuropathy, diarrhoea, tiredness, carcinogenesis, infertility

Symptomatic treatment of side effects: Mouth care

Investigations
Pre-treatment:
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Mid Treatment: After AC, prior to commencing Taxol

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **EC (Epirubicin/Cyclophosphamide)**

Indications: Breast Cancer – Adjuvant, Palliative

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epirubicin</td>
<td>75mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
<tr>
<td>Cyclophosphamide</td>
<td>750mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks  Total number of cycles: 4 (Adjuvant)  6 (Palliative)

Dose modifications: Discuss with Consultant

Administration and safety:
- Anti-emetic group – Moderately high
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Check liver function
- Treatment every 2 weeks if given on a neo-adjuvant or accelerated basis with pegylated G-CSF on day 2

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, cardiotoxicity, amenorrhoea, carcinogenesis, infertility

Symptomatic treatment of side effects: Mouth care, encourage oral fluids

Investigations

Pre-treatment:
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Mid Treatment: Re-assess every two cycles if palliative

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **ET (Epirubicin/Taxol)**

Indications: Breast Cancer – Metastatic

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epirubicin</td>
<td>75mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
<tr>
<td>Paclitaxel</td>
<td>175mg/m²</td>
<td>500mls 5% dex/3hrs</td>
<td>Day 1</td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks  
Total number of cycles: 4-6

Dose modifications: Discuss with Consultant

Administration and safety:
- Anti-emetic group – Moderately high
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Pre-medication (chlorpheniramine, ranitidine, dexamethasone)

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, cardiotoxicity, amenorrhoea, peripheral neuropathy, diarrhoea, hypersensitivity reactions, skin rash, fluid retention, hepatic dysfunction, abdominal pain, carcinogenesis, infertility

Symptomatic treatment of side effects: Mouth care, buscopan

Investigations

Pre-treatment:
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Mid Treatment: Re-assess after every two cycles

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **Canadian FEC (5-Fluorouracil/Epirubicin/Cyclophosphamide)**

Indications: Breast Cancer – Adjuvant (high risk)

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Fluorouracil</td>
<td>500mg/m²</td>
<td>iv</td>
<td>Days 1 &amp; 8</td>
</tr>
<tr>
<td>Epirubicin</td>
<td>60mg/m²</td>
<td>iv</td>
<td>Days 1 &amp; 8</td>
</tr>
<tr>
<td>Cyclophosphamide</td>
<td>500mg/m²</td>
<td>iv</td>
<td>Days 1 &amp; 8</td>
</tr>
</tbody>
</table>

Cycle frequency: Every four weeks  Total number of cycles: 6

Dose modifications: Discuss with Consultant

Administration and safety:

- Anti-emetic group – Moderately high
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Check liver function

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, cardiotoxicity, amenorrhoea, conjunctivitis, diarrhoea, palmar-plantar syndrome, carcinogenesis, infertility

Symptomatic treatment of side effects: Mouth care, codeine phosphate, encourage oral fluids

Investigations

Pre-treatment:

- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:

- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Mid Treatment: Review formally after every 2 cycles

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **FEC100 (5-Fluorouracil/Epirubicin/Cyclophosphamide)**

**Indications:** Breast Cancer – Adjuvant (moderate & high risk – pre-menopausal)

**Schedule:**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Fluorouracil</td>
<td>500mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
<tr>
<td>Epirubicin</td>
<td>100mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
<tr>
<td>Cyclophosphamide</td>
<td>500mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks  
Total number of cycles: 6

**Dose modifications:** Discuss with Consultant

**Administration and safety:**
- Anti-emetic group – Moderately high
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Check liver function

**Toxicities:** Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, cardiotoxicity, amenorrhea, conjunctivitis, diarrhoea, palmar-plantar syndrome, carcinogenesis, infertility

**Symptomatic treatment of side effects:** Mouth care, codeine phosphate, encourage oral fluids

**Investigations**

**Pre-treatment:**
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol

**Prior to each cycle:**
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

**Mid Treatment:** Review formally prior to fourth cycle

**Post Treatment:** Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **FEC60 (5-Fluorouracil/Epirubicin/Cyclophosphamide)**

**Indications:** Breast Cancer – Adjuvant (moderate risk – post-menopausal)

**Schedule:**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Fluorouracil</td>
<td>600mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
<tr>
<td>Epirubicin</td>
<td>60mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
<tr>
<td>Cyclophosphamide</td>
<td>600mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks  Total number of cycles:  6

Dose modifications: Discuss with Consultant

**Administration and safety:**
- Anti-emetic group – Moderately high
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Check liver function

**Toxicities:** Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, cardiotoxicity, amenorrhoea, conjunctivitis, diarrhoea, palmar-plantar syndrome, carcinogenesis, infertility

Symptomatic treatment of side effects: Mouth care, codeine phosphate, encourage oral fluids

**Investigations**

**Pre-treatment:**
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol

**Prior to each cycle:**
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

**Mid Treatment:** Review formally prior to fourth cycle

**Post Treatment:** Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: MMM (Methotrexate/Mitozantrone/Mitomycin C)

Indications: Breast Cancer – Palliative

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>Dosage</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methotrexate</td>
<td>30mg/m²</td>
<td>iv</td>
<td>Days 1 &amp; 21</td>
<td></td>
</tr>
<tr>
<td>Mitozantrone</td>
<td>7mg/m²</td>
<td>100mls N. Saline/10mins</td>
<td>Days 1 &amp; 21</td>
<td></td>
</tr>
<tr>
<td>Mitomycin C</td>
<td>7mg/m²</td>
<td>iv</td>
<td>Day 1</td>
<td></td>
</tr>
</tbody>
</table>

Cycle frequency: Every six weeks  Total number of cycles: 3

Dose modifications: Discuss with Consultant

Administration and safety:
- **Mitomycin C once every six weeks only**
- Anti-emetic group – Moderate
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Ensure no third space and no renal impairment

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, hair thinning, mucositis, amenorrhoea, diarrhoea, discoloured urine, infertility

Symptomatic treatment of side effects: Mouth care

Investigations
Pre-treatment:
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Mid Treatment: Re-assess after every each cycle

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **TAC (Taxotere/Doxorubicin/Cyclophosphamide)**

**Indications:** Breast Cancer – Adjuvant (high risk), Palliative

**Schedule:**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Docetaxel</td>
<td>75mg/m²</td>
<td>250mls N. Saline/1hr</td>
<td>Day 1</td>
</tr>
<tr>
<td>Doxorubicin</td>
<td>50mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
<tr>
<td>Cyclophosphamide</td>
<td>500mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks  Total number of cycles: 6

Dose modification: Discuss with Consultant

**Administration and safety:**

- Anti-emetic group – Moderately high
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Pre-medication dexamethasone 8mg bd oral, for three days, starting 1 day prior

**Toxicities:** Myelosuppression and risk of neutropenic sepsis or haemorrhage, nauseas & vomiting, mucositis, alopecia, cardiotoxicity, amenorrhoea, conjunctivitis, hyper-sensitivity reaction, skin rash, fluid retention, diarrhoea, constipation, carcinogenesis, infertility

Symptomatic treatment of side effects: Mouth care, codeine phosphate, encourage oral fluids

**Investigations**

Pre-treatment:

- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:

- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Mid Treatment: Review formally after 3 cycles

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: XT (Xeloda/Docetaxel)

Indications: Breast Cancer – Metastatic

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Docetaxel</td>
<td>75mg/m²</td>
<td>250mls N. Saline/1hr</td>
<td>Day 1</td>
<td></td>
</tr>
<tr>
<td>Capecitabine</td>
<td>1250mg/m² bd oral</td>
<td></td>
<td>Days 1-14</td>
<td></td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks Total number of cycles: 6

Dose modifications: Discuss with Consultant

Administration and safety:
- Anti-emetic group – Low
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Pre-medication dexamethasone 8 mg bd oral, for three days, starting 1 day prior
- Ensure patient education regarding palmar-plantar syndrome
- Round Capecitabine tablets to the nearest 150mg or 500mg

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, amenorrhoea, peripheral neuropathy, diarrhoea, hypersensitivity reactions, skin rash, palmar-plantar syndrome, fluid retention, hepatic dysfunction, infertility

Symptomatic treatment of side effects: Mouth care

Investigations

Pre-treatment:
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Mid Treatment: Re-assess after every two cycles

Post Treatment: Review in Medical Oncology outpatients 4 weeks after last cycle

Protocol: **Docetaxel**

Indications: Breast Cancer – Metastatic

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Docetaxel</td>
<td>100mg/m²</td>
<td>250mls N. Saline/1hr</td>
<td>Day 1</td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks  Total number of cycles: 6

Dose modifications: Discuss with Consultant

Administration and safety:
- Anti-emetic group – Low
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Pre-medication dexamethasone 8 mg bd oral, for three days, starting 1 day prior

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, amenorrhoea, peripheral neuropathy, diarrhoea, hypersensitivity reactions, skin rash, fluid retention, hepatic dysfunction, infertility

Symptomatic treatment of side effects: Mouth care

Investigations
Pre-treatment:
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Mid Treatment: Re-assess after every two cycles

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **Vinorelbine**

Indications: Breast Cancer – Palliative

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinorelbine</td>
<td>30mg/m²</td>
<td>20mls N. Saline/10mins</td>
<td>Days 1, 8 &amp; 15</td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks  Total number of cycles: 6

Dose modifications: Discuss with Consultant

Administration and safety:
- Anti-emetic group – Moderate
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, amenorrhoea, peripheral neuropathy, diarrhoea, constipation, hair thinning, allergic reaction, infertility

Symptomatic treatment of side effects: Mouth care, encourage oral fluids

Investigations

Pre-treatment:
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Mid Treatment: Re-assess after every 2 cycles

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **Trastuzumab/Paclitaxel**

Indications: Breast Cancer – Metastatic (Her2/neu – positive)

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>Route</th>
<th>Volume</th>
<th>Duration</th>
<th>Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trastuzumab</td>
<td>4mg/kg</td>
<td>iv/infusion/oral</td>
<td>500mls N. Saline/90mins</td>
<td>Day -1</td>
<td></td>
</tr>
<tr>
<td>Trastuzumab</td>
<td>2mg/kg</td>
<td>iv/infusion/oral</td>
<td>250mls N. Saline/90mins</td>
<td>Days 1, 8 &amp;15</td>
<td></td>
</tr>
<tr>
<td>Paclitaxel</td>
<td>175mg/m²</td>
<td>iv/infusion/oral</td>
<td>500mls 5% dex/3hrs</td>
<td>Day 1</td>
<td></td>
</tr>
</tbody>
</table>

(↓ 30 min. if infusions are well tolerated)

Cycle frequency: Every three weeks  Total number of cycles: 6

Dose modifications: Discuss with Consultant
- First dose – administer Trastuzumab on day 1 and Paclitaxel on day 2
- Subsequent doses – administer both on day 1

Administration and safety:
- Anti-emetic group – Low
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Loading dose of Trastuzumab once.
- Chlorpheniramine 10 mg iv pre-Trastuzumab if required
- Paclitaxel pre-med – ranitidine, dexamethasone

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, cardiotoxicity, peripheral neuropathy, hair thinning, fluid retention, sensitivity reaction, diarrhoea, carcinogenesis, infertility

Symptomatic treatment of side effects: Mouth care

Investigations

Pre-treatment:
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG, Echocardiogram
- Staging investigations as per protocol

Prior to each cycle:
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Mid Treatment: After every two cycles

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **Trastuzumab/Docetaxel**

**Indications:** Breast Cancer – Metastatic (Her2/neu – positive)

**Schedule:**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>Dose Form</th>
<th>Time</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trastuzumab</td>
<td>4mg/kg</td>
<td>500mls N. Saline/90min</td>
<td>Day -1</td>
<td></td>
</tr>
<tr>
<td>Trastuzumab</td>
<td>2mg/kg</td>
<td>250mls N. Saline/90min</td>
<td>Days 1, 8 &amp; 15</td>
<td>(↓ 30 min. if infusions are well tolerated)</td>
</tr>
<tr>
<td>Docetaxel</td>
<td>100mg/m²</td>
<td>250mls N. Saline/1hr</td>
<td>Day 1</td>
<td></td>
</tr>
</tbody>
</table>

**Cycle frequency:** Every three weeks  
**Total number of cycles:** 6

**Dose modifications:** Discuss with Consultant
- First dose – administer Trastuzumab day 1 and Docetaxel on day 2
- Subsequent doses – administer both on same day

**Administration and safety:**
- Anti-emetic group – Low
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Loading dose of Trastuzumab once
- Chlorpheniramine 10 mg iv pre-Trastuzumab if required
- Pre-medication dexamethasone 8mg bd oral, for three days, starting 1 day prior

**Toxicities:** Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, cardiotoxicity, peripheral neuropathy, hair thinning, fluid retention, sensitivity reaction, diarrhoea, carcinogenesis, infertility

**Symptomatic treatment of side effects:** Mouth care

**Investigations**

**Pre-treatment:**
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG, Echocardiogram
- Staging investigations as per protocol

**Prior to each cycle:**
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

**Mid Treatment:** After every two cycles

**Post Treatment:** Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **Trastuzumab (Weekly)**

Indications: Breast Cancer – Metastatic (Her2/neu – positive)

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trastuzumab</td>
<td>4mg/kg</td>
<td>500mls N. Saline/90mins</td>
<td>once</td>
</tr>
<tr>
<td>Trastuzumab</td>
<td>2mg/kg</td>
<td>250mls N. Saline/90mins</td>
<td>weekly</td>
</tr>
</tbody>
</table>

(↓ 30 min. if infusions are well tolerated)

Cycle frequency: Weekly

Total number of cycles: Indefinite

Dose modification: Discuss with Consultant

Administration and safety:
- Anti-emetic group – Low
- Delay if neutrophils < 1.0 x 10^9/L or platelets < 100 x 10^9/L
- Loading dose of Trastuzumab once
- Chlorpheniramine 10mg iv pre-Trastuzumab, if required

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea, cardiotoxicity, hyper-sensitivity reaction, carcinogenesis, infertility, allergic-like reaction, bronchospasm

Symptomatic treatment of side effects: Supportive therapy

Investigations

Pre-treatment
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG, Echocardiogram
- Staging investigations as per protocol

Prior to each cycle:
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Mid Treatment: After every four weeks

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **Trastuzumab (3-weekly)**

Indications: Breast Cancer – Metastatic or Adjuvant (Her2/neu – positive)

Schedule:
- **Drug** | **Dose** | **iv/infusion/oral** | **q** | **Schedule**
- Trastuzumab | 8mg/kg | 500mls N. Saline/90min | once | Trastuzumab 6mg/kg 500mls N. Saline/90min 3 weekly
  (↓ 30 min. if infusions are well tolerated)

Cycle frequency: Every three weeks  Total number of cycles: Indefinite (1 year if adjuvant)

Dose modification: Discuss with Consultant

Administration and safety:
- Anti-emetic group – Low
- Delay if neutrophils < 1.0 x 10^9/L or platelets < 100 x 10^9/L
- Loading dose of Trastuzumab once
- Chlorpheniramine 10mg iv pre-Trastuzumab if required

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea, cardiotoxicity, hyper-sensitivity reaction, carcinogenesis, infertility, allergic-like reaction, bronchospasm

Symptomatic treatment of side effects: Supportive therapy

Investigations
- Pre-treatment
  - History and Examination
  - Performance score, weight
  - FBC
  - U & E’s, LFTs, creatinine, urate
  - LDH
  - ECG, Echocardiogram
  - Staging investigations as per protocol
- Prior to each cycle:
  - Performance score, weight
  - FBC
  - U & E’s, LFTs, creatinine
  - LDH
- Mid Treatment: After every nine weeks and Echocardiogram
- Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: AC/T (Accelerated)

Indications: Breast Cancer - Adjuvant (high risk)

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doxorubicin</td>
<td>60mg/m2</td>
<td>IV</td>
<td>Day 1, cycles 1-4</td>
</tr>
<tr>
<td>Cyclophosphamide</td>
<td>600mg/m2</td>
<td>IV</td>
<td>Day 1, cycles 1-4</td>
</tr>
<tr>
<td>Then Paclitaxel</td>
<td>175mg/m2</td>
<td>IV 500mls 5% dex/3hrs</td>
<td>Day 1, cycles 5-8</td>
</tr>
</tbody>
</table>

Cycle frequency: Every two weeks (14 days)  Total number of cycles: 8

Dose modifications: Discuss with Consultant

Administration and safety:

- Anti-emetic group - Moderately High
- Delay if neutrophils < 1.5 x 10^9/L or platelets < 100 x 10^9/L
- Pre-medications required for Paclitaxel (chlorpheniramine, ranitidine, dexamethasone)
- Pegylated G-CSF on day 2 of each cycle

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea and vomiting, mucositis, alopecia, cardiotoxicity, amenorrhoea, fluid retention, sensitivity reaction, peripheral neuropathy, diarrhoea, tiredness, carcinogenesis, infertility

Symptomatic treatment of side effects: Mouth care

Investigations

Pre-treatment:
- History and Examination
- Performance score, weight
- FBC
- U & Es, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol:

Prior to each cycle:
- Performance score, weight
- FBC
- U & Es, LFTs, creatinine
- LDH

Consultant Review: After AC, prior to commencing Paclitaxel

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **AC/T**

**Indications:** Breast Cancer - Adjuvant (high risk)

**Schedule:**

<table>
<thead>
<tr>
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<td>600mg/m2</td>
<td>IV</td>
<td>Day 1, cycles 1-4</td>
</tr>
<tr>
<td><strong>Then</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paclitaxel</td>
<td>175mg/m2</td>
<td>IV 500mls 5% dex/3hrs</td>
<td>Day 1, cycles 5-8</td>
</tr>
</tbody>
</table>

**Cycle frequency:** Every three weeks (21 days)  
**Total number of cycles:** 8

**Dose modifications:** Discuss with Consultant

**Administration and safety:**
- Anti-emetic group - Moderately High
- Delay if neutrophils < 1.5 x 10^9/L or platelets < 100 x 10^9/L
- Pre-medications required for Paclitaxel (chlorpheniramine, ranitidine, dexamethasone)

**Toxicities:** Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea and vomiting, mucositis, alopecia, cardiotoxicity, amenorrhoea, fluid retention, sensitivity reaction, peripheral neuropathy, diarrhoea, tiredness, carcinogenesis, infertility

**Symptomatic treatment of side effects:** Mouth care

**Investigations**

**Pre-treatment:**
- History and Examination
- Performance score, weight
- FBC
- U & Es, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol:

**Prior to each cycle:**
- Performance score, weight
- FBC
- U & Es, LFTs, creatinine
- LDH

**Consultant Review:** After AC, prior to commencing Paclitaxel

**Post Treatment:** Review in Medical Oncology Clinic 4 weeks after last cycle