

## DOCEtaxel, CARBOplatin and Trastuzumab (TCH) - 21 days

### INDICATIONS FOR USE:

INDICATION	ICD10	Regimen Code	Reimbursement Status
Adjuvant treatment HER2 positive early breast cancer	C50	00258a	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 patients individual clinical circumstances.

Trastuzumab, DOCEtaxel and CARBOplatin are administered once every 21 days for 6 cycles or until disease progression or unacceptable toxicity develops.

Trastuzumab treatment then continues every 21 days for a total of one year from date of first dose (usually 18 doses of trastuzumab in total, including the initial loading dose).

Alternatively trastuzumab may be administered as a 4mg/kg loading dose on Day 1 of cycle 1 followed by trastuzumab 2mg/kg weekly starting on Day 8 until 3 weeks after the last cycle of chemotherapy. Subsequently trastuzumab 6mg/kg is administered once every 21 days for a total of one year from date of first dose. DOCEtaxel and CARBOplatin are administered one day 1 of cycle 1 and repeated once every 21 days for 6 cycles.

Facilities to treat anaphylaxis MUST be present when systemic anti cancer therapy (SACT) is administered.

#### Cycle 1

Order of Admin	Day	Drug	Dose	Route	Diluent & Rate
1	1	<sup>a, b, c</sup> Trastuzumab	8mg/kg	IV infusion Observe post infusion <sup>a</sup>	250ml 0.9% sodium chloride over 90min
2	1	<sup>d, e</sup> DOCEtaxel	75mg/m <sup>2</sup>	IV infusion	250ml 0.9% sodium chloride over 60min
3	1	CARBOplatin	AUC 6	IV infusion	500ml glucose 5% over 30 min

#### Cycles 2 -6

Order of Admin	Day	Drug	Dose	Route	Diluent & Rate
1	1	<sup>a, b, c</sup> Trastuzumab	6mg/kg	IV infusion Observe post infusion <sup>a</sup>	250ml 0.9% sodium chloride over 30min
2	1	<sup>d, e</sup> DOCEtaxel	75mg/m <sup>2</sup>	IV infusion	250ml 0.9% sodium chloride over 60min
3	1	CARBOplatin	AUC 6	IV infusion	500ml glucose 5% over 30 min

<sup>a</sup>Recommended Observation period: Patients should be observed for at least six hours after the start of the first infusion and for two hours after the start of the subsequent infusions for symptoms like fever and chills or other infusion-related symptoms. Any deviation should be noted in local policies.

<sup>b</sup>If no adverse reactions use 250ml 0.9% sodium chloride over 30min from cycle 2 onwards

<sup>c</sup>Trastuzumab is incompatible with glucose solution

<sup>d</sup>Primary prophylaxis with G-CSF should be considered to reduce the risk of neutropenic complications with DOCEtaxel (See Adverse Effects/Regimen Specific Complications)

<sup>e</sup> Concentration of final volume should be <0.74mg/ml  
Use non-PVC infusion bag

NCCP regimen: TCH-21 day	Published: 10/09/2015 Review: 15/07/2025	Version number: 8
Tumour Group: Breast NCCP regimen Code: 00258	ISMO Contributor: Prof Maccon Keane	Page 1 of 8
<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>This information is valid only on the day of printing, for any updates please check <a href="http://www.hse.ie/NCCPchemoprotocols">www.hse.ie/NCCPchemoprotocols</a></p>		

## Cycles 7-18

Day	Drug	Dose	Route and Method of Administration	Diluent & Rate
1	<sup>a,b,c</sup> Trastuzumab	6mg/kg	IV infusion Observe post infusion <sup>a</sup>	250ml 0.9% sodium chloride over 30min

OR

## Cycle 1

Order of Admin	Day	Drug	Dose	Route	Diluent & Rate
1	1	<sup>a,b,c</sup> Trastuzumab	4mg/kg	IV infusion Observe post infusion <sup>a</sup>	250ml 0.9% sodium chloride over 90min
	8, 15	<sup>a,b,c</sup> Trastuzumab	2mg/kg	IV infusion Observe post infusion <sup>a</sup>	250ml 0.9% sodium chloride over 30min
2	1	<sup>d,e</sup> DOCEtaxel	75mg/m <sup>2</sup>	IV infusion	250ml 0.9% sodium chloride over 60min
3	1	CARBOplatin	AUC 6	IV infusion	500ml glucose 5% over 30 min

## Cycles 2 -6

Order of Admin	Day	Drug	Dose	Route	Diluent & Rate
1	1, 8, 15	<sup>a,b,c</sup> Trastuzumab	2mg/kg	IV infusion Observe post infusion <sup>a</sup>	250ml 0.9% sodium chloride over 30min
2	1	<sup>d,e</sup> DOCEtaxel	75mg/m <sup>2</sup>	IV infusion	250ml 0.9% sodium chloride over 60min
3	1	CARBOplatin	AUC 6	IV infusion	500ml glucose 5% over 30 min

<sup>a</sup>Recommended Observation period: Patients should be observed for at least six hours after the start of the first infusion and for two hours after the start of the subsequent infusions for symptoms like fever and chills or other infusion-related symptoms. Any deviation should be noted in local policies.

<sup>b</sup>If no adverse reactions use 250ml 0.9% sodium chloride over 30min from cycle 2 onwards

<sup>c</sup>Trastuzumab is incompatible with glucose solution

<sup>d</sup>Primary prophylaxis with G-CSF should be considered to reduce the risk of neutropenic complications with DOCEtaxel (See Adverse Effects/Regimen Specific Complications)

<sup>e</sup> Concentration of final volume should be <0.74mg/ml  
Use non-PVC infusion bag.

## Cycles 7-18

Day	Drug	Dose	Route and Method of Administration	Diluent & Rate
1	<sup>a,b,c</sup> Trastuzumab	6mg/kg	IV infusion Observe post infusion <sup>a</sup>	250ml 0.9% sodium chloride over 30min

NCCP regimen: TCH-21 day	Published: 10/09/2015 Review: 15/07/2025	Version number: 8
Tumour Group: Breast NCCP regimen Code: 00258	ISMO Contributor: Prof Maccon Keane	Page 2 of 8
<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/NCCPchemoprotocols">www.hse.ie/NCCPchemoprotocols</a></i></p>		

## CARBOplatin dose:

The dose in mg of CARBOplatin to be administered is calculated as follows:

$\text{Dose (mg)} = \text{target AUC (mg/ml x min)} \times (\text{GFR ml/min} + 25)$
--

Reference NCCP regimen 00261 CARBOplatin Monotherapy for information on calculation of CARBOplatin dose.

### ELIGIBILITY:

- Indications as above
- HER2 positive as demonstrated by a validated test method
- Node positive or high risk node negative
- ECOG status 0-1
- In EBC, LVEF > 55%\* for trastuzumab therapy

\*Many clinical trials have been conducted with LVEF ≥ 50% (1). Clinical judgment should be exercised where patients fall between these two ranges.

### EXCLUSIONS:

- Hypersensitivity to DOCEtaxel, CARBOplatin\*, trastuzumab or any of the excipients
- Clinically significant cardiac disease (history of symptomatic ventricular arrhythmias, congestive heart failure or myocardial infarction within previous 12 months)
- Patients experiencing dyspnoea at rest due to complications of advanced malignancy and comorbidities may be at increased risk of a fatal infusion reaction with trastuzumab
- Significant hepatic dysfunction, contraindicating DOCEtaxel
- Baseline neutrophil count < 1.5 x 10<sup>9</sup>/L
- ≥ Grade 2 sensory or motor neuropathy
- Pregnancy
- Breast feeding

\*If it is felt that the patient may have a major clinical benefit from CARBOplatin, it may in exceptional circumstances be feasible to rechallenge a patient with a prior mild hypersensitivity reaction e.g. using a desensitisation protocol, but only with immunology advice, premedication as advised, and a desensitisation protocol under carefully controlled conditions with resuscitation facilities available and medical and/or ITU/ HDU supervision

### PRESCRIPTIVE AUTHORITY:

The treatment plan must be initiated by a Consultant Medical Oncologist.

### TESTS:

#### Baseline tests:

- FBC, liver and renal profile. (Ref NCCP regimen 00203 DOCEtaxel Monotherapy 75mg/m<sup>2</sup> for precautions regarding hepatic dysfunction and DOCEtaxel)
- Cardiac function (LVEF using ECHO or MUGA scan)
- Isotope GFR measurement (preferred) or GFR / Cr Clearance estimation

#### Regular tests:

- FBC, liver and renal profile

NCCP regimen: TCH-21 day	Published: 10/09/2015 Review: 15/07/2025	Version number: 8
Tumour Group: Breast NCCP regimen Code: 00258	ISMO Contributor: Prof Maccon Keane	Page 3 of 8

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 <http://www.hse.ie/eng/Disclaimer>

*This information is valid only on the day of printing, for any updates please check [www.hse.ie/NCCPchemoprotocols](http://www.hse.ie/NCCPchemoprotocols)*

- MUGA scan or echocardiogram every 12 weeks during treatment with trastuzumab and at completion of therapy. Where there are signs of cardiac impairment four to eight weekly checks may be more appropriate

### 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:

- Doses are adjusted based on Day 1 counts and previous cycle febrile neutropenia.
- No dose reduction for nadir counts.
- **No reduction of trastuzumab dose for haematologic toxicity.**

**Table 1: Dose modification for haematological toxicity**

ANC (x 10 <sup>9</sup> /L)		Platelets (x 10 <sup>9</sup> /L)	Dose DOCEtaxel and CARBOplatin	G-CSF option
≥ 1.5	<b>and</b>	≥ 100	100%	
1 -1.49	<b>and</b>	≥ 100	75%	100% regimen
< 1.0	<b>or</b>	< 100	Delay until ANC ≥ 1.5 and platelets ≥ 100 then give 75%	Delay until ANC ≥ 1.5 and platelets ≥ 100 then give 100%

### Febrile Neutropenia:

**Table 2: Dose modification for febrile neutropenia**

Event	Dose reduction option	G-CSF option
1 <sup>st</sup> event	75% of previous cycles dose if Day 1 ≥ 1.5 and platelets ≥ 100	100% regimen
2 <sup>nd</sup> event	50% of original cycle dose if Day 1 ≥ 1.5 and platelets ≥ 100	75% regimen
3 <sup>rd</sup> event	Discontinue regimen or switch to G-CSF option	50% regimen

### Renal and Hepatic Impairment:

**Table 3: Dose modification of DOCEtaxel, trastuzumab and CARBOplatin in renal and hepatic impairment**

Drug	Renal Impairment	Hepatic Impairment
DOCEtaxel	No dose reduction necessary	<b>See note below and Table 4</b>
CARBOplatin	See note below <sup>a</sup>	No dose modification required

NCCP regimen: TCH-21 day	Published: 10/09/2015 Review: 15/07/2025	Version number: 8
Tumour Group: Breast NCCP regimen Code: 00258	ISMO Contributor: Prof Maccon Keane	Page 4 of 8
<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/NCCPchemoprotocols">www.hse.ie/NCCPchemoprotocols</a></i></p>		

Trastuzumab	<p>No dedicated studies of trastuzumab in patients with renal impairment have been conducted.</p> <p>Based on a population pharmacokinetic (PK) analysis renal impairment was not shown to affect trastuzumab disposition</p>	<p>No dedicated studies of trastuzumab in patients with hepatic impairment have been conducted. Probably no dose reduction necessary</p>
-------------	---	--

**<sup>a</sup>Renal dysfunction and CARBOplatin:**

- Patients with creatinine clearance values of <60ml/min are at greater risk of developing myelosuppression.
- If GFR between 20 to ≤ 30ml/min, CARBOplatin should be administered with extreme caution
- If GFR ≤ 20ml/min, CARBOplatin should not be administered at all
- If Cockcroft & Gault or Wright formula are used, the dose should be calculated as required per cycle based on a serum creatinine obtained within 48 hrs of drug administration.

If isotope GFR is used, the dose can remain the same provided the serum creatinine is ≤110% of its value at the time of the isotope measurement. If the serum creatinine increases, consideration should be given to remeasuring the GFR or to estimating it using Cockcroft & Gault or Wright formulae.

**DOCEtaxel and hepatic dysfunction:**

- DOCEtaxel doses shall be modified for hepatic toxicity. If DOCEtaxel is delayed due to hepatic toxicity, other drugs being used in combination at that time shall also be delayed and administered when DOCEtaxel is resumed.
- Since no data in patients with abnormal bilirubin level treated with lower dose of DOCEtaxel are available, in the event that bilirubin levels are abnormal during the study, the next cycle will be delayed by a maximum of two weeks. If no recovery, the patient should be taken off chemotherapy. Treatment with trastuzumab may continue.
- In the event that AST and/or ALT and/or alkaline phosphatase levels are abnormal in the absence of relapse, the following dose modifications should apply (Table 4).
- Once the dose is reduced due to impaired liver function, no further dose reduction is recommended if no worsening of the parameters is observed.
- In case of recovery of liver function tests on the following cycle, the dose should be re-escalated to the previous dose level.

**Table 4: Dose Modification of DOCEtaxel based on hepatic dysfunction**

AST / ALT Values	Alkaline Phosphatase Values	Dose Modification
≤ 1.5 x ULN	≤ 5 x ULN	no dose modification
> 1.5 x ULN to ≤2.5 x ULN	≤ 2.5 x ULN	no dose modification
> 2.5 x ULN to ≤5 x ULN	≤ 2.5 x ULN	Reduce dose of DOCEtaxel from 75 to 60mg/m <sup>2</sup>
> 1.5 x ULN to ≤ 5 x ULN	> 2.5 x ULN to ≤ 5 x ULN	Reduce dose of DOCEtaxel from 75 to 60 mg/m <sup>2</sup>
> 5 x ULN	> 5 x ULN	Dose delay by a maximum of 2weeks. If no recovery to the above figures, patient should go off chemotherapy.

NCCP regimen: TCH-21 day	Published: 10/09/2015 Review: 15/07/2025	Version number: 8
Tumour Group: Breast NCCP regimen Code: 00258	ISMO Contributor: Prof Maccon Keane	Page 5 of 8

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 <http://www.hse.ie/eng/Disclaimer>

*This information is valid only on the day of printing, for any updates please check [www.hse.ie/NCCPchemoprotocols](http://www.hse.ie/NCCPchemoprotocols)*

### Missed doses of trastuzumab:

- If the patient misses a dose of trastuzumab by one week or less, then the usual maintenance dose of 6mg/kg should be given as soon as possible. Do not wait until the next planned cycle. Subsequent maintenance doses should then be given according to the previous schedule.
- If the patient misses a dose of trastuzumab by more than one week, a re-loading dose of trastuzumab (8mg/kg) should be given over approximately 90 minutes, at the discretion of the clinician. Subsequent trastuzumab maintenance doses (6mg/kg) should then be given every 3 weeks from that point.

### Non-Haematological Toxicity:

**Table 5: Dose modification schedule based on adverse events**

Adverse reactions	Discontinue	Recommended dose modification
Grade >2 peripheral neuropathy		Decrease dose of <b>DOCEtaxel</b> to 60mg/m <sup>2</sup> If the patient continues to experience these reactions at 60mg/m <sup>2</sup> , treatment with DOCEtaxel should be discontinued
LVEF drops 10 ejection fraction points from baseline and to below 50%		Withhold treatment with <b>trastuzumab</b> . Repeat LVEF after 3 weeks. No improvement or further decline consider discontinuation. Discuss with consultant and refer to cardiologist.
Symptomatic heart failure		Consider discontinuation – refer to cardiology for review. Clinical decision
NCI-CTCAE Grade 4 hypersensitivity reactions	Discontinue	
Grade ≥3 Stomatitis		DOCEtaxel will be reduced from 75 to 60 mg/m <sup>2</sup> . If despite dose reduction, stomatitis still occurs at grade ≥ 3, DOCEtaxel will be further reduced from 60 to 50 mg/m <sup>2</sup> . No further dose reduction is planned. Trastuzumab may continue without dose reduction.

### SUPPORTIVE CARE:

#### EMETOGENIC POTENTIAL:

DOCEtaxel: Low (refer to local policy)

CARBOplatin: High (refer to local policy)

Trastuzumab: Minimal (Refer to local policy)

#### PREMEDICATIONS:

**DOCEtaxel:** dexAMETHasone 8 mg PO twice daily for 3 days, starting one day prior to each DOCEtaxel administration unless contraindicated. Patient must receive minimum of 3 doses pre-treatment

**Consideration may be given, at the discretion of the prescribing consultant, to the use of a single dose of dexAMETHasone 20mg IV immediately before chemotherapy where patients have missed taking the oral premedication dexAMETHasone as recommended by the manufacturer (2, 3).**

NCCP regimen: TCH-21 day	Published: 10/09/2015 Review: 15/07/2025	Version number: 8
Tumour Group: Breast NCCP regimen Code: 00258	ISMO Contributor: Prof Maccon Keane	Page 6 of 8

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 <http://www.hse.ie/eng/Disclaimer>

*This information is valid only on the day of printing, for any updates please check [www.hse.ie/NCCPchemoprotocols](http://www.hse.ie/NCCPchemoprotocols)*

**Trastuzumab:** Not usually required unless the patient has had a previous hypersensitivity. Paracetamol and antihistamine cover should be considered.

Patient should be educated about the possibility of delayed infusion-related symptoms.

**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.*

### Reference

**NCCP regimen 00203 DOCEtaxel Monotherapy 75mg/m<sup>2</sup>-21 day cycle,  
NCCP regimen 00200 Trastuzumab Monotherapy -21 day cycle and  
NCCP regimen 00261 CARBOplatin Monotherapy  
for detailed information on adverse effects/regimen specific complications.**

## DRUG INTERACTIONS:

- Risk of drug interactions causing increased concentrations of DOCEtaxel with CYP3A inhibitors. Patients should also be counselled with regard to consumption of grapefruit juice.
- Risk of drug interactions causing decreased concentrations of DOCEtaxel with CYP3A inducers.
- A possible interaction with warfarin has been reported. An increased INR and bleeding may occur in patients previously stabilized on warfarin. The interaction was noted in two patients after 8-10 doses of trastuzumab. Increased monitoring of INR is advised while receiving trastuzumab. Inform patient to watch for any bleeding. Modification of the warfarin dose may be needed.
- Current drug interaction databases should be consulted for more information.

## REFERENCES:

1. Baselga J, Perez EA et al. Adjuvant Trastuzumab: A Milestone in the Treatment of HER-2-Positive Early Breast Cancer. *The Oncologist* 2006;11(suppl1):4–12
2. Chouhan et al. Single premedication dose of dexamethasone 20mg IV before DOCEtaxel administration. *J Oncol Pharm Practice* 2010;17(3): 155–159
3. Rogers ES et al. Efficacy and safety of a single dose of dexamethasone pre DOCEtaxel treatment: The Auckland experience. *Annals of Oncology* (2014) 25 (suppl\_4): iv517-iv541.
4. Pegram MD, Pienkowski T, Northfelt DW, et al. Results of two open-label, multicenter phase II studies of DOCEtaxel, platinum salts, and trastuzumab in HER2-positive advanced breast cancer. *J Natl Cancer Inst.* 2004 May19; 96 (10): 759 - 69.
5. Coudert BP, Largillier R, Arnould L, et al. Multicenter phase II trial of neoadjuvant therapy with trastuzumab,DOCEtaxel, and CARBOplatin for human epidermal growth factor receptor-2-overexpressing stage II or III breast cancer: results of the GETN(A)-1 trial. *J Clin Oncol.* 2007 Jul 1; 25 (19): 2678 - 84.
6. Slamon D et al. Adjuvant trastuzumab in HER-2 positive breast cancer. *NEJM* 2011 365:1273-1283.
7. Appropriate chemotherapy dosing for obese adult patients with cancer:American Society of Clinical Oncology Clinical Practice Guideline. *J Clin Oncol* 2012; 30 (13) 1553-1561.
8. Ekhart C, Rodenhuis S et al. Carboplatin dosing in overweight and obese patients with normal renal

NCCP regimen: TCH-21 day	Published: 10/09/2015 Review: 15/07/2025	Version number: 8
Tumour Group: Breast NCCP regimen Code: 00258	ISMO Contributor: Prof Maccon Keane	Page 7 of 8

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 <http://www.hse.ie/eng/Disclaimer>

*This information is valid only on the day of printing, for any updates please check [www.hse.ie/NCCPchemoprotocols](http://www.hse.ie/NCCPchemoprotocols)*

- function, does weight matter? Cancer Chemother Pharmacol 2009; 64:115-122.
9. NCCN CARBOplatin dosing in adults [https://www.nccn.org/docs/default-source/clinical/order-templates/appendix\\_b.pdf?sfvrsn=6286822e\\_6](https://www.nccn.org/docs/default-source/clinical/order-templates/appendix_b.pdf?sfvrsn=6286822e_6)
  10. Wright JG, Boddy AV, et al, Estimation of glomerular filtration rate in cancer patients. British Journal of Cancer 2001; 84(4):452-459
  11. NCCP Classification Document for Systemic Anti-Cancer Therapy (SACT) Induced Nausea and Vomiting. V5 2023. Available at: <https://www.hse.ie/eng/services/list/5/cancer/profinfo/chemoprotocols/nccp-classification-document-for-systemic-anti-cancer-therapy-sact-induced-nausea-and-vomiting.pdf>
  12. Herceptin<sup>®</sup> Summary of Product Characteristics Accessed June 2023. Available at [http://www.ema.europa.eu/ema/index.jsp?curl=pages/medicines/human/medicines/000278/human\\_med\\_000818.jsp&mid=WCOb01ac058001d124](http://www.ema.europa.eu/ema/index.jsp?curl=pages/medicines/human/medicines/000278/human_med_000818.jsp&mid=WCOb01ac058001d124)
  13. CARBOplatin 10mg/ml Summary of Product Characteristics Accessed June 2023 . Available at [http://www.hpra.ie/img/uploaded/swedocuments/2143630.PA0789\\_003\\_001.8cb74f0e-453d-4409-b514-60370fd07280.000001Carboplatin%20Final%20PIL.140822.pdf](http://www.hpra.ie/img/uploaded/swedocuments/2143630.PA0789_003_001.8cb74f0e-453d-4409-b514-60370fd07280.000001Carboplatin%20Final%20PIL.140822.pdf)
  14. Taxotere<sup>®</sup> 20mg/0.5ml Summary of Product Characteristics. Accessed June 2023 . Available at [http://www.ema.europa.eu/docs/en\\_GB/document\\_library/EPAR\\_-\\_Product\\_Information/human/000073/WC500035264.pdf](http://www.ema.europa.eu/docs/en_GB/document_library/EPAR_-_Product_Information/human/000073/WC500035264.pdf)

Version	Date	Amendment	Approved By
1	10/09/2015		Dr Maccon Keane
2	20/9/2017	Applied new NCCP regimen template, clarified use of G-CSF, administration order and dosing in renal and hepatic impairment	Prof Maccon Keane
3	16/03/2018	Treatment table updated for standardisation and inclusion of other treatment options.	Prof Maccon Keane
4	26/02/2020	Updated DOCEtaxel final volume concentration, standardised CARBOplatin renal impairment guidance, heart failure guidance updated, updated INR monitoring.	Prof Maccon Keane
5	15/07/2020	Amended Trastuzumab administration details in the Treatment table	Prof Maccon Keane
6	09/09/2020	Updated emetogenic potential of Trastuzumab	Prof Maccon Keane
7	09/09/2021	Clarification of requirement for non-PVC infusion bag only.	Prof Maccon Keane
8	04/09/2023	Updated CARBOplatin infusion time. Updated standard wording for CARBOplatin dosing, renal impairment and creatinine value. Updated baseline tests.	Prof Maccon Keane

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

NCCP regimen: TCH-21 day	Published: 10/09/2015 Review: 15/07/2025	Version number: 8
Tumour Group: Breast NCCP regimen Code: 00258	ISMO Contributor: Prof Maccon Keane	Page 8 of 8
<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/NCCPchemoprotocols">www.hse.ie/NCCPchemoprotocols</a></i></p>		