DOCEtaxel Monotherapy 75mg/m^2 – 21 day cycle

INDICATIONS FOR USE:

INDICATION	ICD10	Regimen Code	Reimbursement Status
Locally advanced or metastatic non-small cell lung cancer (NSCLC) after failure of prior chemotherapy	C34	00203a	Hospital
First line in high risk non metastatic castration sensitive prostate cancer[i]	C61	00203b	Hospital
First line in metastatic castration sensitive prostate cancer[i]	C61	00203c	Hospital
Advanced or metastatic adenocarcinoma of the stomach or gastro-oesophageal junction in patients who have progressed during or within 6 months after treatment with a platinum-fluoropyrimidine combination	C15 C16	00203d	Hospital
Treatment of of Relapsed/Progressing primary peritoneal carcinoma[i]	C48	00203e	Hospital
Treatment of Relapsed/Progressing Epthelial Ovarian carcinoma[i]	C56	00203f	Hospital
Treatment of of Relapsed/Progressing Fallopian Tube Carcinoma[i]	C57	00203g	Hospital
Treatment of advanced breast cancer	C50	00203h	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.

NSCLC: Treatment administered every 21 days, for a **maximum of 6 cycles** or until disease progression or unacceptable toxicity develops.

For all other indications **203b-203h** treatment is be administered every 21 days, until disease progression or unacceptable toxicity develops

Day	Drug	Dose	Route	Diluent & Rate	Cycle
1	DOCEtaxel	75mg/m^2	IV infusion	*250ml 0.9% sodium chloride over 60min	Repeat every 21 days
*75-185mg dose use 250mL infusion bag. For doses> 185mg use 500mL infusion bag Use non-PVC equipment					

ELIGIBILITY:

- Indications as above
- ECOG 0-2

EXCLUSIONS:

- Hypersensitivity to DOCEtaxel or to any of the excipients
- Severe liver impairment
- Baseline neutrophil count < 1.5 x 10^9 cells/L

PRESCRIPTIVE AUTHORITY:

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

TESTS:

Baseline tests:

- FBC, renal and liver profile

Regular tests:

- FBC, renal and liver profile*prior to each cycle
  *See Adverse Effects/Regimen specific complications for guidelines regarding hepatic dysfunction

Disease monitoring:

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

DOSE MODIFICATIONS:

- Any dose modification should be discussed with a Consultant

Haematological:

Table 1: Dose modification of DOCEtaxel for haematological toxicity

ANC (x10^9/L)	Dose
≥ 1.5	75mg/m^2
0.5 to less than 1.5	Delay treatment until recovery
Febrile neutropenia or <0.5 for more than 1 week	Reduce dose from 75 to 60mg/m^2. Discontinue treatment if continues at lower dose.

Renal and Hepatic Impairment:
No data available in patients with severely impaired renal function

Table 2: Dose modification of DOCEtaxel in hepatic impairment.

Alkaline Phosphatase		AST and/or ALT		Serum Bilirubin	Dose
> 2.5 ULN	and	> 1.5 ULN			75 mg/m^2
> 6 ULN	and/or	> 3.5 ULN (AST and ALT)	and	> ULN	Stop treatment unless strictly indicated and should be discussed with a Consultant.

Management of adverse events:

Table 3: Dose modification schedule based on adverse events

Adverse reactions	Recommended dose modification
Grade 3 skin reaction	Decrease dose to 60mg/m^2
Grade >2 peripheral neuropathy	If the patient continues to experience these reactions at 60 mg/m^2, the treatment should be discontinued
Grade 3 or 4 stomatitis	

SUPPORTIVE CARE:

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

PREMEDICATIONS:

- 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* (9,10)

OTHER SUPPORTIVE CARE:

- Prophylactic G-CSF may be used to mitigate the risk of haematological toxicities.

ADVERSE EFFECTS / REGIMEN SPECIFIC COMPLICATIONS

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

- **Fluid Retention**: Dexamethasone premedication must be given to reduce the incidence and severity of fluid retention. It can also reduce the severity of the hypersensitivity reaction.
- **Neutropenic Enterocolitis:** A number of cases of neutropenic enterocolitis have been reported in patients treated with DOCEtaxel in France (5). This is a known and rare side effect of DOCEtaxel which may affect up to one in 1,000 people.
- **Hypersensitivity Reactions:** Patients should be observed closely for hypersensitivity reactions especially during the first and second infusions. Hypersensitivity reactions may occur within a few minutes following the initiation of the infusion of DOCEtaxel, thus facilities for the treatment of hypotension and bronchospasm should be available. If hypersensitivity reactions occur, minor symptoms such as flushing or localized cutaneous reactions do not require interruption of therapy. However, severe reactions, such as severe hypotension, bronchospasm or generalised rash/erythema

require immediate discontinuation of DOCEtaxel and appropriate therapy. Patients who have developed severe hypersensitivity reactions should not be re-challenged with DOCEtaxel.

- **Extravasation**: DOCEtaxel causes pain and tissue necrosis if extravasated. (Refer to local extravasation guidelines).
- **Neutropenia**: Most frequent adverse reaction. Fever or other evidence of infection must be assessed promptly and treated aggressively. DOCEtaxel should be administered when the neutrophil count is ≥ $1.5x10^9$cells/L.
- **Hepatic Dysfunction**: DOCEtaxel undergoes hepatic metabolism. Hepatic dysfunction (particularly elevated AST) may lead to increased toxicity and usually requires a dose reduction.

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.
- Current drug interaction databases should be consulted for more information.

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14. NCCP Classification Document for Systemic Anti-Cancer Therapy (SACT) Induced Nausea and Vomiting. V2 2019. 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

Version	Date	Amendment	Approved By
1	10/02/2014		Dr Maccon Keane
2	30/05/2015	Modification of premedication regimen	Dr Maccon Keane
3	23/05/2017	Updated with new NCCP regimen format	Prof Maccon Keane
4	01/02/2019	Removed the indication 'In combination with prednisone or prednisolone is indicated for the treatment of patients with hormone refractory metastatic prostate cancer' (new regimen NCCP regimen 00546 DOCEtaxel 75-prednisolone combination therapy Inclusion of new indications 00203b-00230h . Standardisation of drug administration.	Prof Maccon Keane
5	10/03/2021	Reviewed. Amended regular tests	Prof Maccon Keane

Comments and feedback welcome at oncologydrugs@cancercontrol.ie.

[i] This is an unlicensed indication for the use of DOCEtaxel in Ireland. Patient's should be informed of this and consented to treatment in line with the hospital's policy on the use of unlicensed medication and unlicensed or "off label" indications. Prescribers should be fully aware of their responsibility in communicating any relevant information to the patient and also ensuring that the unlicensed or "off label" indication has been acknowledged by the hospital's Drugs and Therapeutics Committee, or equivalent, in line with hospital policy.