

Chemotherapy Protocol

LUNG CANCER

NIVOLUMAB-PACLITAXEL-CARBOPLATIN (AUC5)

Regimen

- Lung-Nivolumab-Paclitaxel-Carboplatin (AUC5)

Indication

- Neoadjuvant treatment of resectable, squamous or non-squamous, non-small-cell lung cancer (NSCLC) who satisfy the following criteria (NICE TA876):
 - Tumours ≥ 4 cm or node positive (stage IIA or IIB or IIIA or N2 only IIB tumour according to the UICC/AJCC TNM 8th edition).
 - NEGATIVE for EGFR 19 or 21 mutation or an ALK gene fusion (NOT a requirement for squamous histology).
 - Potentially curative resection to proceed within 6 weeks of completing the final cycle of neoadjuvant nivolumab plus chemotherapy.
 - ECOG performance status (PS) of 0 or 1.
- Following neoadjuvant SACT and successful resection:
 - Adjuvant chemotherapy, radiotherapy or chemoradiotherapy is PERMITTED if indicated.
 - Adjuvant immunotherapy is NOT PERMITTED
- **During Neoadjuvant treatment:**
 - If disease progression occurs, then further immunotherapy is NOT funded IN ANY INDICATION.
 - If no disease progression but deemed not for surgical resection, further immunotherapy is ONLY PERMITTED following a disease response of at least 6 months (duration from last Nivolumab dose to progressive disease). UNLESS stage III disease and treated with concurrent chemoradiotherapy then potentially eligible for maintenance durvalumab

Toxicity

Drug	Adverse Effect
Carboplatin	Thrombocytopenia, neutropenia, peripheral neuropathy, nephrotoxicity at high doses, electrolyte disturbances
Paclitaxel	Hypersensitivity, hypotension, bradycardia, peripheral neuropathy, myalgia and back pain on administration
Nivolumab	Fatigue, rash, pruritis, pneumonitis, diarrhoea, nausea, electrolyte disturbances, endocrine disorders such as thyroid disorders, diabetes and adrenal insufficiency hepatitis and other immune-related adverse reactions.

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

Monitoring

Disease

- A baseline chest x-ray should be performed before starting treatment and up to date (ideally within 1 month) cross section imaging should also be performed
- EGFR and ALK mutation status prior to starting treatment (cycle one)

Drugs

- FBC, LFTs and U&Es prior to day each cycle
- EDTA or calculated creatinine clearance prior to each cycle
- Random blood glucose prior to each nivolumab dose
- Thyroid function tests at baseline then every 3-6 weeks as clinically indicated
- Random blood cortisol at baseline then every 3-6 weeks
- A chest x-ray should be performed at baseline and when clinically indicated afterwards
- Consider baseline cardiac assessment in high-risk patients (known CV disease, previous cardiotoxic therapy): ECG, Troponin, NT Pro-BNP and Echocardiogram

Dose Modifications

The dose modifications listed are for haematological, liver and renal function and drug specific toxicities only. Dose adjustments may be necessary for other toxicities as well.

In principle all dose reductions due to adverse drug reactions should not be re-escalated in subsequent cycles without consultant approval. It is also a general rule for **chemotherapy** that if a third dose reduction is necessary treatment should be stopped. Generally **immunotherapy** is interrupted to allow toxicities to settle rather than the dose reduced.

Please discuss all dose reductions / delays with the relevant consultant before prescribing, if appropriate. The approach may be different depending on the clinical circumstances.

Haematological

Consider blood transfusion if patient symptomatic of anaemia or has a haemoglobin of less than 8g/dL.

Neutrophils ($\times 10^9/L$)	Dose Modifications (carboplatin and paclitaxel)
1 or greater	100%
less than 1	Delay for 7 days. If the counts recover to at least $1 \times 10^9/L$ within this time continue with the full dose. If the counts do not recover within 7 days or repeated delays are required then delay until recovery then

	reduce the dose by 20%
Platelets (x10⁹/L)	Dose Modifications (carboplatin and paclitaxel)
100 or greater	100%
50-99	Delay for 7 days. If the counts recover to at least 100x10 ⁹ /L within this time then continue with the full dose. If counts do not recover within 7 days or repeated delays are required then delay until recovery then reduce dose by 20%
less than 50	Delay until recovery then reduce dose by 50%

Hepatic Impairment

Drug	Bilirubin		AST/ALT	% of original dose
Carboplatin	N/A		N/A	No dose adjustment needed
Paclitaxel	less than 1.25xULN	and	less than 5xULN	100%
	1.25-2.0xULN			75%
	2.0-5.0xULN			45%
	Over 5xULN	Or	Over 5xULN	Not recommended, clinical decision
Nivolumab	Clinical decision. See below for management of immune-mediated hepatitis			

Renal Impairment

Drug	Creatinine Clearance (ml/min)	Dose
Carboplatin*	Less than 20	Significant changes in GFR (of more than 10%) may require dose adjustment Do not administer if the CrCl is less than 20ml/min
Paclitaxel	N/A	No dose adjustment needed
Nivolumab	Less than 30	Limited data, clinical decision. See below for the management of immune-mediated nephritis

* Significant changes in GFR of more than 10% may require dose adjustment.

Other

Dose reductions or interruptions in therapy are not necessary for those toxicities that are considered unlikely to be serious or life threatening. For example, alopecia, altered taste or nail changes.

Paclitaxel

NCI-CTC grade 2 peripheral neuropathy withhold paclitaxel only until the neuropathy recovers to NCI-CTC grade 1 then dose reduce to 75% of the original dose. Where the peripheral neuropathy is NCI-CTC grade 3 again withhold the paclitaxel until it resolves to NCI-CTC grade 1 and then reduce the dose of paclitaxel to 50% of the original dose. Paclitaxel should be discontinued if the neuropathy does not resolve to NCI-CTC grade 1.

Nivolumab

Nivolumab is associated with inflammatory adverse reactions resulting from increased or excessive immune activity, likely to be related to its pharmacology.

Immune-related adverse reactions, which can be severe or life-threatening, may involve the gastrointestinal, liver, skin, nervous, endocrine, or other organ systems. Most occur during treatment, however, onset months after the last dose have been reported. Unless an alternate aetiology has been identified, diarrhoea, increased stool frequency, bloody stool, LFT elevations, rash and endocrinopathy must be considered inflammatory and nivolumab-related. Early diagnosis and appropriate management are essential to minimise life-threatening complications.

Nivolumab should be permanently discontinued for: any NCI-CTC grade 3 or 4 pneumonitis or hepatitis; any other life threatening NCI-CTC grade 4 reaction (including colitis and renal impairment); any recurrence of a severe or NCI-CTC grade 3 reaction; any persistent NCI-CTC grade 2 or 3 treatment-related adverse reaction that does not recover to grade 1 or resolve within 12 weeks after the last dose.

Nivolumab should be withheld for: any NCI-CTC grade 2 pneumonitis or hepatitis; any grade 2 or 3 colitis or renal impairment; any other severe or grade 3 treatment-related adverse reaction.

Immune-related adverse reaction	Severity	Treatment modification
Immune-related pneumonitis	Grade 2 pneumonitis	Withhold until symptoms resolve, radiographic abnormalities improve, and management with corticosteroids is complete
	Grade 3 or 4 pneumonitis	Permanently discontinue
Immune-related colitis	Grade 2 or 3 diarrhoea or colitis	Withhold until symptoms resolve and management with corticosteroids, if needed, is complete
	Grade 4 diarrhoea or colitis	Permanently discontinue
Immune-related hepatitis	Grade 2 elevation in aspartate aminotransferase (AST), alanine aminotransferase (ALT), or total bilirubin	Withhold until laboratory values return to baseline and management with corticosteroids, if needed, is complete
	Grade 3 or 4 elevation in AST, ALT, or total bilirubin	Permanently discontinue

Immune-related nephritis and renal dysfunction	Grade 2 or 3 creatinine elevation	Withhold until creatinine returns to baseline and management with corticosteroids is complete
	Grade 4 creatinine elevation	Permanently discontinue
Immune-related endocrinopathies	Symptomatic endocrinopathies (including hypothyroidism, hyperthyroidism, hypophysitis, adrenal insufficiency and diabetes)	Withhold until symptoms resolve and management with corticosteroids (if needed for symptoms of acute inflammation) is complete. Nivolumab should be continued in the presence of hormone replacement therapy as long as no symptoms are present
Immune-related rash	Grade 3 rash	Withhold dose until symptoms resolve and management with corticosteroids is complete
	Grade 4 rash	Permanently discontinue

Do not resume nivolumab if the patient is still receiving immunosuppressive doses of corticosteroids or other immunosuppressive therapy.

Treatment with nivolumab should be permanently discontinued for grade 2 or 3 immune-related adverse reactions that persist in spite of treatment modifications or a reduction of corticosteroid dose to 10mg prednisolone, or equivalent, cannot be achieved.

Hepatic Impairment

For patients with pre-existing mild hepatic impairment no dose adjustment is recommended. Nivolumab has not been studied in patients with moderate or severe hepatic impairment.

For a hepatitis associated with an AST / ALT of 3-5xULN and / or a total bilirubin of 1.5-3xULN then withhold treatment and administer corticosteroids. Upon improvement to NCI-CTC grade 1 hepatic injury begin to taper the corticosteroid over a period of one month. The nivolumab may be re-started when the liver function remains at NCI-CTC grade 1 following corticosteroid taper.

The nivolumab should be permanently discontinued when the hepatic injury does not improve to at least NCI-CTC grade 1 within 12 weeks of the last dose, the corticosteroid dose cannot be reduced to 10mg or less of prednisolone or equivalent per day within 12 weeks or any NCI-CTC grade 3 or above reaction.

Nivolumab should be permanently discontinued in the first instance when hepatitis develops that is associated with an AST / ALT equal to or greater than 5xULN or where the bilirubin is greater than 3xULN.

Renal Impairment

No dose adjustment is required in patients with pre-existing mild or moderate renal impairment. Data from patients with severe renal impairment are too limited to draw conclusions on this population.

Severe nephritis or renal dysfunction has been observed with nivolumab treatment. Patients should be monitored for signs and symptoms of nephritis and renal dysfunction. Most patients present with asymptomatic increases in serum creatinine. Disease-related aetiologies should be ruled out.

For NCI-CTC Grade 2 or 3 serum creatinine elevation, nivolumab should be withheld and corticosteroids initiated. Upon improvement to NCI-CTC grade 1 initiate corticosteroid taper over at least one month. Nivolumab may be resumed when the reaction remains at NCI-CTC grade 1 or below following tapering of the corticosteroid.

The nivolumab should be permanently discontinued when the serum creatinine does not improve to at least NCI-CTC grade 1 within 12 weeks of the last dose, the corticosteroid dose cannot be reduced to 10mg or less of prednisolone or equivalent per day within 12 weeks or in the case of a recurrent NCI-CTC grade 3 reaction.

For NCI-CTC Grade 4 serum creatinine elevation, nivolumab must be permanently discontinued, and corticosteroids should be initiated at a dose of 1 to 2 mg/kg/day methylprednisolone equivalents.

Endocrine

Nivolumab can cause inflammation of the endocrine system organs, specifically hypophysitis, hypopituitarism, adrenal insufficiency, and hypothyroidism. This may present with nonspecific symptoms resembling other causes such as brain metastasis or underlying disease.

Isolated hypothyroidism can be managed with replacement therapy, without treatment interruption or corticosteroids.

If there are any signs of adrenal crisis such as severe dehydration, hypotension, or shock, immediate administration of intravenous corticosteroids with mineralocorticoid activity is recommended, the patient must be evaluated for presence of sepsis or infections. If there are signs of adrenal insufficiency but the patient is not in crisis, further investigations should be considered including laboratory and imaging assessment. Evaluation of laboratory results to assess endocrine function may be performed before corticosteroid therapy is initiated. If pituitary imaging or laboratory tests of endocrine function are abnormal, a short course of high-dose corticosteroid therapy is recommended to treat the gland inflammation. The scheduled dose of nivolumab should be omitted. It is currently unknown if the corticosteroid treatment reverses the gland dysfunction. Appropriate hormone replacement should also be initiated. Long-term hormone replacement therapy may be necessary.

Once symptoms or laboratory abnormalities are controlled and overall patient improvement is evident, treatment with nivolumab may be resumed and initiation of corticosteroid taper should be based on clinical judgment.

Hypophysitis can present as a diffuse, heterogenous enlargement of the pituitary on a brain MRI but can be completely normal. When hypophysitis with pituitary dysfunction is suspected, blood tests including thyroid stimulating hormone (TSH), free T4, adrenocorticotrophic stimulating hormone (ACTH), cortisol, luteinising hormone (LH), and follicle-stimulating hormone (FSH) should be obtained in women, and the first four plus testosterone in men. Typically the anterior pituitary axis is involved, affecting thyroid, gonadal, and adrenal function, but isolated axis dysfunction can be seen. Hypophysitis will cause low free T4 as well as TSH. Hypophysitis with clinically significant adrenal insufficiency and hypotension, dehydration, and electrolyte abnormalities such as hyponatremia and hyperkalemia constitutes adrenal crisis. Hospitalization and intravenous steroids with mineralocorticoid activity, such as methylprednisolone, should be initiated while waiting for laboratory results. Cases should be jointly managed with an endocrinologist. Infection and sepsis should be ruled out with appropriate cultures and imaging. Prednisolone 1 mg/kg by mouth should be administered if patients are clinically stable. Steroids can

usually be tapered over 30 days to achieve physiologic replacement levels. Thyroid hormone and/or testosterone replacement therapy may not be permanent, as the need for those hormones may wane over months in some patients. Cortisone replacement may also not be permanent in a modest portion of patients.

Gastrointestinal

Gastro-intestinal immune reactions include diarrhoea, increased frequency of bowel movements, abdominal pain or haematochezia, with or without fever. Diarrhoea or colitis occurring after initiation of nivolumab must be promptly evaluated to exclude infectious or other alternate causes. Immune-related colitis is often associated with evidence of mucosal inflammation, with or without ulcerations and lymphocytic and neutrophilic infiltration.

NCI-CTC grade 1 diarrhoea or suspected mild colitis may continue on nivolumab. Symptomatic treatment and close monitoring are advised.

For a NCI-CTC grade 2 - 3 diarrhoea or colitis withhold the nivolumab and administer corticosteroids. Upon improvement to NCI-CTC grade 1 begin to taper the corticosteroid over a period of one month. The nivolumab may be re-started when the diarrhoea or colitis remains at NCI-CTC grade 1 following corticosteroid taper.

The nivolumab should be permanently discontinued when the diarrhoea or colitis does not improve to at least NCI-CTC grade 1 within 12 weeks of the last dose, the corticosteroid dose cannot be reduced to 10mg or less of prednisolone or equivalent per day within 12 weeks or in the case of a recurrent NCI-CTC grade 3 reaction.

For Grade 4 diarrhoea or colitis, nivolumab must be permanently discontinued, and corticosteroid treatment initiated.

Lung

Interstitial lung disease including pneumonitis and acute interstitial pneumonitis are associated with nivolumab. For NCI-CTC grade 1 events (asymptomatic with radiographic findings only) then the nivolumab may be continued with close monitoring. Radiologic findings should be followed on serial imaging studies and consideration given to pulmonary consultation and/or bronchoscopy, if clinically indicated. For NCI-CTC grade 2 events withhold the nivolumab and consider pulmonary consultation with bronchoscopy and biopsy/bronchoalveolar lavage (BAL) and pulmonary function tests. Treat with systemic corticosteroids at a dose of 1 to 2 mg/kg/day prednisone or equivalent. When symptoms improve to NCI-CTC grade 1 or less, steroid taper should be started and continued over no less than 4 weeks. Treatment with nivolumab may be resumed if the event improves to NCI-CTC grade 0 or 1 within 12 weeks and corticosteroids have been reduced to the equivalent of prednisolone 10 mg oral daily or less. Repeat chest imaging monthly as clinically indicated.

Should a second episode of pneumonitis occur then discontinue nivolumab.

For NCI-CTC grade 3 or 4 events discontinue nivolumab and consider pulmonary function tests and seek advice from a lung specialist. A bronchoscopy with biopsy and / or BAL should be considered. Treatment involves corticosteroid therapy such as intravenous methylprednisolone 125mg. When symptoms improve to NCI-CTC grade 1 or less, a high dose oral steroid such as prednisone 1 to 2 mg/kg once per day can be considered. A reducing schedule should be considered over a period of at least four weeks. If intravenous corticosteroids followed by high dose oral corticosteroids do not reduce initial symptoms

within 48 to 72 hours, treat with infliximab at 5 mg/kg once every 2 weeks. Discontinue infliximab upon symptom relief and initiate a prolonged steroid taper over 45 to 60 days. If symptoms worsen during steroid reduction, initiate a re-tapering of steroids starting at a higher dose followed by a more prolonged taper and administer infliximab.

Skin

Serious skin reactions include dermatitis exfoliative, erythema multiforme, Stevens-Johnson Syndrome and toxic epidermal necrolysis. Nivolumab can also be associated with pruritus, rash, (generalized and maculo-papular) and vitiligo. All attempts should be made to rule out other causes such as metastatic disease, infection or allergic dermatitis.

For NCI-CTC grade 1-2 skin reactions try symptomatic treatments such as topical corticosteroids or urea-containing creams in combination with oral antipruritics. Nivolumab can continue.

For NCI-CTC grade 3 or above events withhold nivolumab and consider a dermatology referral. Treatment with systemic corticosteroids such as prednisolone 1mg/kg each day may be necessary. When symptoms improve to NCI-CTC grade 1 or less then nivolumab may be restarted and steroid taper should be started and continued over no less than 4 weeks.

For NCI-CTC grade 4 or recurrent grade 3 reactions nivolumab should be permanently discontinued.

Regimen

The starting dose of carboplatin AUC 5 is used with calculated GFR. The recommended maximum dose when using a calculated creatinine clearance at AUC5 is 750mg (creatinine clearance 125ml/min). This is not a dose included in the national dose banding table, therefore a maximum dose has been set at 790mg in ARIA. Please check if this dose is appropriate. If you have an obese patient or an individual with a calculated creatinine clearance above 125ml/min please seek advice from the relevant consultant.

It should be noted that the dose of carboplatin may need to be altered if there is a change (improvement or reduction) in renal function of more than 10% from the previous cycle.

21 day cycle for 3 cycles

Drug	Dose	Days	Administration
Nivolumab	360mg	1	Intravenous infusion in 100ml sodium chloride 0.9% over 30minutes
Paclitaxel	175mg/m ²	1	Intravenous infusion in 500ml sodium chloride 0.9% over 180 minutes.
Carboplatin	AUC 5 (maximum dose 790mg)	1	Intravenous infusion in 500ml glucose 5% over 60 minutes

Please note that due to the different options for monotherapy the combination therapy will be set up as one regimen in ARIA. This can then be discontinued and the appropriate monotherapy prescribed.

Dose Information

- Carboplatin will be dose banded in accordance with the national dose bands (10mg/ml)
- The maximum dose of carboplatin for AUC 5 is 750mg. This will be set as 790mg in ARIA to comply with national dose bands.
- It should be noted that the dose of carboplatin may need to be altered if there is a change (improvement or reduction) in renal function of more than 10% from the previous cycle
- Paclitaxel will be dose banded in accordance with the national dose bands (6mg/ml)
- Nivolumab is a flat dose. Doses are delayed, not reduced, for toxicity

Administration Information

- Patients should be monitored (blood pressure, pulse and temperature) every 30 minutes during the infusion for infusion related reactions. If these resolve promptly (within 5 minutes) the infusion may be restarted at a lower rate with intensive monitoring. Immediately discontinue the infusion for server reactions which include profound hypotension, bronchospasm and generalised erythema.
- Nivolumab will be administered before the carboplatin and paclitaxel. It should be administered via a 0.2-1.2 micron a low protein binding filter. The polyethylene lined giving sets used for paclitaxel with a 0.22 micron filter are appropriate.
- Paclitaxel is administered in 250- 500mL sodium chloride 0.9% non-PVC infusion bag with a 0.22 micron in-line filter over 3 hours. Blood pressure and pulse should be monitored regularly (e.g. every 30 minutes) during paclitaxel infusion.
- Carboplatin should be administered in 250-500mL glucose 5% over 30-60 minutes, starting 30 minutes after the end of the paclitaxel infusion

Extravasation

- Nivolumab – neutral
- Carboplatin – irritant
- Paclitaxel – vesicant

Additional Therapy

- Premedication to reduce of risk of hypersensitivity reaction

30 minutes before paclitaxel

- chlorphenamine 10mg intravenous
- dexamethasone 20mg oral or intravenous
- H₂ antagonist according to local formulary choice and availability

- Antiemetics

15-30 minutes prior to chemotherapy:

- ondansetron 8mg oral or intravenous

As take home medication:

- dexamethasone 4mg oral twice a day for 3 days
- metoclopramide 10mg oral three times a day as required

- As required for the treatment of infusion related reactions;

- chlorphenamine 10mg intravenous
- hydrocortisone 100mg intravenous
- paracetamol 1000mg oral

- Gastric protection with a H₂ antagonist may be considered in patients considered at high risk of GI ulceration or bleed

Additional Information

- The use of systemic corticosteroids, before starting treatment with nivolumab should be avoided because of their potential interference with the pharmacodynamic activity and efficacy of the agent. However, systemic corticosteroids can be used after starting nivolumab to treat immune-related adverse reactions. The use of systemic corticosteroids after starting treatment does not appear to impair the efficacy of nivolumab.
- Patients must be given a nivolumab Patient Alert Card.

References

1. National Institute for Health and Care Excellence (TA876) accessed 11th February 2025 via www.nice.org.uk
2. Summary of Product Characteristics Nivolumab - Opdivo®(BMS) accessed 22nd January 2025 via www.medicines.org.uk
3. Summary of Product Characteristics Carboplatin accessed 22nd January 2025 via www.medicines.org.uk
4. Summary of Product Characteristics Paclitaxel 6 mg/ml concentrate for solution for infusion accessed 22nd January 2025 via www.medicines.org.uk
5. Forde PM, et al. CheckMate 816 Investigators. Neoadjuvant Nivolumab plus Chemotherapy in Resectable Lung Cancer. N Engl J Med. 2022 May 26;386(21):1973-1985.
6. Baseline cardiac assessment in individuals receiving immune checkpoint inhibitors: a Joint Consensus statement. (2024). The Immuno-oncology Clinical Network. IOCN. <https://ioclinicalnetwork.co.uk/clinical-support/iocn-consensus-statements>

REGIMEN SUMMARY

Nivolumab-Paclitaxel-Carboplatin (AUC 5)

Cycle 1, 2, 3

1. **Nivolumab 360mg intravenous infusion in 100ml sodium chloride 0.9% over 30 minutes**
Administration Instructions
Nivolumab should be administered using a low protein binding filter. Ensure the patient has been given a nivolumab patient alert card
2. **Chlorphenamine 10mg intravenous**
Administration instructions: To be administered 30 minutes before paclitaxel
3. **Dexamethasone 20mg intravenous**
Administration instructions: To be administered 30 minutes before paclitaxel
4. **H₂ antagonist according to local formulary choice and availability**
Administration Instructions:
Administer according to local formulary choice and availability one of the following 30 minutes prior to chemotherapy;
 - Famotidine 20mg oral once only
 - Nizatidine 150mg oral once only
 - Ranitidine 150mg oral once only

If there is no stock of these products due to national shortages treatment may proceed without the H₂ antagonist provided there is no instruction in the ARIA journal indication the patient **must have** H₂ antagonist treatment.

All infusion related reactions must be recorded in the ARIA journal and reported to the appropriate consultant. Many Trusts do not administer an H₂ antagonist from cycle three onwards. They have been left in the ARIA protocols so that decisions can be made on an individual Trust and patient basis.
5. **Ondansetron 8mg oral or intravenous**
Administration instructions: Administer 15-30 minutes prior to chemotherapy. This may be given as ondansetron 8mg IV stat if required.
6. **Paclitaxel 175mg/m² in 500ml sodium chloride 0.9% intravenous infusion over 180 minutes.**
Administration Instructions
Paclitaxel must be administered via a non-PVC administration set containing an in-line 0.22 micron filter
7. **Carboplatin AUC 5 (maximum dose 790mg) intravenous infusion in 500ml glucose 5% over 60 minutes**
Administration Instructions
This recommended maximum dose is 750mg based on a creatinine clearance of 125ml/min. This will be set at 790mg in ARIA to comply with national dose bands
8. **Chlorphenamine 10mg intravenous injection when required for infusion related reactions**
9. **Hydrocortisone sodium succinate 100mg intravenous injection when required for infusion related reactions**
10. **Paracetamol 1000mg oral when required for infusion related reactions**
Administration Instructions
Please check if the patient has taken paracetamol. Maximum dose is 4g per 24 hours. There should be 4 hours between doses.

Take Home Medicines

11. **Dexamethasone 4mg oral twice a day for 3 days starting the day after chemotherapy administration (day 2 of the cycle)**
12. **Metoclopramide 10mg oral three times a day for three days then 10mg three times a day when required for nausea**

DOCUMENT CONTROL

Version	Date	Amendment	Written By	Approved By
1.0	Jan 26	New protocol	Alexandre Guedes	Dr Luke Nolan

This chemotherapy protocol has been developed as part of the chemotherapy electronic prescribing project. This was and remains a collaborative project that originated from the former CSCCN. These documents have been approved on behalf of the following Trusts;

Hampshire Hospitals NHS Foundation Trust
 NHS Isle of Wight
 Portsmouth Hospitals NHS Trust
 Salisbury NHS Foundation Trust
 University Hospital Southampton NHS Foundation Trust
 Western Sussex Hospitals NHS Foundation Trust

All actions have been taken to ensure these protocols are correct. However, no responsibility can be taken for errors which occur as a result of following these guidelines.