

## Chemotherapy Protocol

### Myeloma

#### Daratumumab

#### Regimen

- Myeloma – Daratumumab monotherapy

#### Indication

- Daratumumab monotherapy is recommended as an option for treating relapsed and refractory multiple myeloma in adults whose previous therapy included a proteasome inhibitor and an immunomodulator ('imid) as a fourth line of treatment, that is, after 3 previous treatments.

#### Toxicity

Drug	Adverse Effect
Daratumumab	Infusion related reactions, hypotension, headache, rash, urticaria, pruritus, nausea, vomiting, respiratory tract infections (including pneumonia), neutropenia, thrombocytopenia, anaemia, lymphopenia, peripheral neuropathy, diarrhoea, muscle spasms, fatigue, pyrexia and peripheral oedema, blood transfusion related events

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

#### Monitoring

#### Drugs

- FBC, U&Es, Ca<sup>2+</sup> and LFTs prior to day one of each cycle of treatment.
- Paraprotein and / or light chains prior to each cycle.
- All patients should be tested for hepatitis B virus (HBV) before initiating treatment with daratumumab. Those patients who test positive for HBV infection should be discussed with a consultation specialist in HBV prior to initiating treatment with daratumumab to plan monitoring requirements whilst on treatment. Patients should also be tested for hepatitis C, CMV and HIV at the same time.
- Send a blood sample to transfusion and inform patient and transfusion laboratory that patient is due to commence daratumumab. Patient will require red cell phenotyping as cross match fails due to binding of daratumumab to red cells.
- Regular monitoring of blood glucose is considered good practice due to dexamethasone use.

## 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.

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*

No dose reductions of daratumumab are recommended. Dose delay may be required to allow recovery of blood cell counts in the event of haematological toxicity. Always refer to the responsible consultant, as any dose delays will be dependent on clinical circumstances and treatment intent. Low counts can be a consequence of bone marrow infiltration as well as drug toxicity.

Consider blood transfusion or the use of erythropoietin according to NICE TA323 if patient symptomatic of anaemia or where the haemoglobin is less than 8g/dL (80g/L).

Consider growth factor support as an alternative to the options below, particularly where there is evidence of bone marrow suppression.

To initiate a new cycle of daratumumab, the neutrophil count must be  $1 \times 10^9/L$  or greater and the platelet count must be  $50 \times 10^9/L$  or greater, unless the low counts are due to bone marrow infiltration with myeloma. In this situation the daratumumab may be administered at the discretion of the treating consultant haematologist with the appropriate blood product and growth factor support.

Neutrophils ( $\times 10^9/L$ )	Dose Modifications
Less than $0.5 \times 10^9/L$ or febrile neutropenia (fever greater than or equal to $38.5^\circ C$ and neutrophils less than 1)	Interrupt daratumumab treatment and monitor FBC weekly. Once neutrophils recover to $1 \times 10^9/L$ , resume daratumumab at a dose of 16mg/kg.
Platelets ( $\times 10^9/L$ )	Dose Modifications
Less than $50 \times 10^9/L$	Interrupt daratumumab treatment and monitor FBC weekly. Once platelets recover to $50 \times 10^9/L$ or greater resume daratumumab at a dose of 16mg/kg.

## *Hepatic Impairment*

No formal studies of daratumumab in patients with hepatic impairment have been conducted. Based on population pharmacokinetic analysis no dosage adjustments are necessary for patients with hepatic impairment

## *Renal Impairment*

No dosage adjustment is necessary for patients with pre-existing renal impairment

### *Infusion related reactions (IRR)*

Infusion reactions are reported in approximately half of patients who receive daratumumab and may occur up to 48 hours after the infusion has finished. The majority of infusion related reactions, 46%, occur with the first infusion, 2% with the second infusion and 3% with subsequent infusions. Signs and symptoms include bronchospasm, hypoxia, dyspnoea, hypertension, respiratory symptoms such as cough, wheezing, larynx and throat tightness and irritation, laryngeal oedema, pulmonary oedema, nasal congestion and allergic rhinitis.

For infusion reactions of any grade/severity, immediately interrupt the infusion and manage the symptoms. Management of infusion reactions may further require reduction in the rate of infusion, or treatment discontinuation as outlined below.

IRR grade	Dose modification
Grade 1-2 (mild to moderate)	Once symptoms resolve, resume the infusion at no more than half the rate at which the reaction occurred. If the patient does not experience any further reaction symptoms, infusion rate escalation may resume at increments and intervals as appropriate.
Grade 3 (severe)	If the intensity of the reaction decreases to $\leq$ Grade 2, consider restarting the infusion at no more than half the rate at which the reaction occurred. If the patient does not experience additional symptoms, resume infusion rate escalation at increments and intervals as appropriate. Permanently discontinue treatment upon the third occurrence of a Grade 3 or greater reaction.
Grade 4 (life threatening)	Permanently discontinue treatment.

### Regimen

**28 day cycle until disease progression or intolerance (12 cycles will be set in Aria)**

#### **Cycles 1 and 2**

Drug	Dose	Days	Administration
Daratumumab	16mg/kg	1,8,15,22	Intravenous infusion in 500ml sodium chloride 0.9%

#### **Cycles 3 to 6**

Drug	Dose	Days	Administration
Daratumumab	16mg/kg	1 and 15	Intravenous infusion in 500ml sodium chloride 0.9%

## Cycles 7 onwards

Drug	Dose	Day	Administration
Daratumumab	16mg/kg	1	Intravenous infusion in 500ml sodium chloride 0.9%

### [Dose Information](#)

- Daratumumab will be prescribed in accordance with the national dose bands (20 NS).

### [Administration Information](#)

- The rate of daratumumab administration varies and depends on infusion related reactions. In order to determine the rate of the second and ongoing infusions all reactions and the first reaction free infusion must be recorded in the ARIA journal.
- Administer the diluted solution by intravenous infusion using an infusion set fitted with a flow regulator and with an in-line, sterile, non-pyrogenic, low protein-binding polyethersulfone (PES) filter (pore size 0.22 or 0.2 micrometre). Polyurethane (PU), polybutadiene (PBD), PVC, PP or PE administration sets must be used.

	Final volume	Initial rate (first hour)	Rate increment <sup>a</sup>	Maximum rate
<b>First infusion</b>	500ml	25ml/hour	25ml/hour every hour	100ml/hour
<b>Second infusion<sup>b</sup></b>	500ml	50ml/hour	50ml/hour every hour	200ml/hour
<b>Subsequent infusions<sup>c</sup></b>	500ml	100ml/hour	50ml/hour every hour	200ml/hour

<sup>a</sup> Consider the incremental escalation of the infusion rate only in the absence of infusion reactions with the previous infusion

<sup>b</sup> Escalate only if the patient's first infusion of daratumumab was well tolerated (defined by an absence of NCI-CTC grade 2 or greater infusion-related reactions during the first 3 hours). If the previous infusion was not well tolerated then instructions for the first infusion

<sup>c</sup> Escalate only if the patient's first 2 infusions of daratumumab were well tolerated (defined by an absence of NCI-CTC grade 1 or greater infusion-related reactions during a final infusion rate of greater than or equal to 100 ml/hr). If the previous infusion was not well tolerated, then instructions for the second infusion will be used.

For guidance on infusion rates in the case of infusion related reactions. See the managing infusion reactions section above.

## Rapid Infusion Protocol

Data from a prospective, single-center and open label safety study of an accelerated daratumumab infusion suggests that a rapid (90 minute) daratumumab infusion schedule is well tolerated and safe, when administered from the 3<sup>rd</sup> infusion onwards in patients who have tolerated the 500mL daratumumab infusion at the manufacturer recommended rates.

- The rapid rate of infusion is currently unlicensed.

### **Inclusion criteria for daratumumab rapid rate infusion**

- Patients on cycle 2 and onwards who have received and tolerated the previous 500mL daratumumab infusion at the standard manufacturer licensed rate without Grade 1 infusion related reactions.
- Patients must demonstrate tolerability of a 500mL daratumumab infusion at the manufacturer recommended rates prior to receiving the accelerated infusion.
- Daratumumab when used as monotherapy only
- Patients who have given consent to rapid rate daratumumab infusion if required by the individual Trust

### **Exclusion criteria for daratumumab rapid rate infusion**

- Previous greater than or equal to grade 3 infusion related toxicity with daratumumab
- Infusion related reactions greater than or equal to grade 1 with the most recent daratumumab infusion given at the standard manufacturer licensed rate i.e. patients must have received and tolerated the previous 500mL daratumumab infusion at the standard manufacturer licensed rate without grade 1 or above infusion related reactions.
- Patients whose most recent dose was prepared in the 1000mL dilution due to moderate or severe infusion related reactions. Patients must demonstrate tolerability of a 500mL daratumumab infusion at the manufacturer recommended rates prior to receiving the accelerated infusion.
- Patients receiving daratumumab as part of a combination regimen
- Cardiac amyloid patients
- Patients receiving daratumumab as part of clinical trials (follow trial protocol)

### **Rapid infusion rate**

Daratumumab prepared in 500mL NaCl 0.9%

- Infuse 100mL of the daratumumab infusion (20%) of the dose **over 30 minutes**
- Then infuse the remaining 400mL (80% of the dose) **over 60 minutes** (total infusion time 90 minutes).

### **Monitoring**

- Check vital signs before the start of the infusion, every 15 minutes during the first 60 minutes of the infusion and at the end of the infusion
- Monitor patient for adverse effects. For the first rapid rate infusion, observe patients in the Day Unit for 30 minutes after infusion completion to assess for delayed infusion related reactions.
- Closer monitoring is required if the patient has a history of uncontrolled hypertension, pre-existing COPD, asthma or other respiratory comorbidities. These patients should be discussed with the consultant.

### **Additional therapy**

- Consider allopurinol 300mg once a day for seven days for the first cycle only oral
- No anti-emetics are required

- Premedication required 1 to 3 hours before every infusion;
  - chlorphenamine 10mg intravenous
  - dexamethasone 20mg intravenous cycle 1 and cycle 2. This can be reduced to 10mg intravenous or oral from the third cycle onwards.
  - paracetamol 1000mg oral
  - montelukast 10mg oral for the first two cycles only and the first “fast infusion” if this does not occur on cycle two
- Dexamethasone 4mg oral each morning for 2 days starting the day after each infusion
- Consider anti-infective prophylaxis including;
  - aciclovir 400mg twice a day oral
  - co-trimoxazole 960mg once a day oral on Monday, Wednesday and Friday only
  - fluconazole 100mg once a day oral only if recurrent oral candidiasis
- Bisphosphonates in accordance with local policies.
- Mouthwashes according to local or national policy on the treatment of mucositis.
- Gastric protection with a proton pump inhibitor or an H<sub>2</sub> antagonist may be considered in patients considered at high risk of GI ulceration or bleed.
- As required for the treatment of infusion related reactions for patients at high risk of respiratory complications;
  - sodium chloride 0.9% 500ml intravenous
  - salbutamol 2.5mg nebulised
  - hydrocortisone sodium succinate 100mg intravenous
  - chlorphenamine 10mg intravenous
  - paracetamol 1000mg oral
  - oxygen as required

#### Additional Information

- All instances of infusion related reaction must be recorded on ARIA. Daratumumab will continue to be administered at the cycle one rate until a reaction free infusion is noted.
- Daratumumab interferes with indirect antiglobulin tests as it binds to CD38 on red blood corpuscles (RBCs) and interferes with compatibility testing, including antibody screening and cross matching. Daratumumab interference mitigation methods include treating reagent RBCs with dithiothreitol (DTT) to disrupt daratumumab binding or other locally validated methods. Since the Kell blood group system is also sensitive to DTT treatment, Kell-negative units should be supplied after ruling out or identifying alloantibodies using DTT-treated RBCs. Alternatively, phenotyping or genotyping may also be considered.
- Daratumumab may be detected on serum protein electrophoresis (SPE) and immunofixation (IFE) assays used for monitoring disease monoclonal immunoglobulins (M protein). This can lead to false positive SPE and IFE assay

results for patients with IgG kappa myeloma protein impacting initial assessment of complete responses by International Myeloma Working Group (IMWG) criteria. In patients with persistent very good partial response, consider other methods to evaluate the depth of response.

### Coding

- Procurement –X71.5
- Delivery – X72.1, X72.4

### References

1. Janssen-Cilag Limited (16 Aug 2017). Darzalex 20mg/ml Summary of Product Characteristics. Electronic Medicines Compendium. Online at <https://www.medicines.org.uk/emc/product/7250> , accessed 18 January 2018.
2. National Institute for Health and Care Excellence (2018). Daratumumab for multiple myeloma [TA10076]. London: National Institute for Health and Care Excellence.
3. Thames Valley Strategic Cancer Network Myeloma Group MM32 Daratumumab (Darzalex <sup>TM</sup>) Monotherapy Protocol version 1.3 July 2017.
4. 90 minute daratumumab infusion is safe in multiple myeloma. Leukemia. Hallie Barr et al. Accessed 27/11/18 <https://doi.org/10.1038/s41375-018-0120-2>.

## REGIMEN SUMMARY

### Daratumumab

#### Cycle 1 Day 1, 8, 15, 22

##### 1. Warning – Inform blood transfusion

###### Administration Instructions

Daratumumab interferes with indirect antiglobulin tests as it binds to CD38 on red blood corpuscles (RBCs) and interferes with compatibility testing, including antibody screening and cross matching. Daratumumab interference mitigation methods include treating reagent RBCs with dithiothreitol (DTT) to disrupt daratumumab binding or other locally validated methods. Since the Kell blood group system is also sensitive to DTT treatment, Kell-negative units should be supplied after ruling out or identifying alloantibodies using DTT-treated RBCs. Alternatively, phenotyping or genotyping may also be considered.

Daratumumab may be detected on serum protein electrophoresis (SPE) and immunofixation (IFE) assays used for monitoring disease monoclonal immunoglobulins (M protein). This can lead to false positive SPE and IFE assay results for patients with IgG kappa myeloma protein impacting initial assessment of complete responses by International Myeloma Working Group (IMWG) criteria. In patients with persistent very good partial response, consider other methods to evaluate the depth of response

Please inform blood transfusion when a patient is prescribed daratumumab

##### 2. Chlorphenamine 10mg intravenous

##### 3. Dexamethasone 20mg intravenous

###### Administration Instructions

Administer 20mg intravenous or equivalent dose

##### 4. Paracetamol 1000mg oral

###### Administration Instructions

Please check if the patient has taken paracetamol. The maximum dose is 4000mg/24 hours

##### 5. Montelukast 10mg oral

##### 6. Daratumumab 16mg/kg in 500ml sodium chloride 0.9% intravenous infusion

###### Administration Instructions

The rate of daratumumab administration varies and is dependant the occurrence and severity of infusion related reactions. Please refer to the protocol for details of the rate of administration and management of such reactions Administer the diluted solution by intravenous infusion using an infusion set fitted with a flow regulator and with an in-line, sterile, non-pyrogenic, low protein-binding polyethersulfone (PES) filter (pore size 0.22 or 0.2 micrometre). Polyurethane (PU), polybutadiene (PBD), PVC, PP or PE administration sets must be used.

##### 7. Chlorphenamine 10mg intravenous when required for the relief of infusion related reactions

##### 8. Hydrocortisone 100mg intravenous when required for the relief of infusion related reactions

##### 9. Paracetamol 1000mg oral when required for the relief of infusion related reactions

##### 10. Salbutamol 2.5mg nebulised when required for the relief of infusion related reactions

##### 11. Sodium chloride 0.9% 500ml intravenous infusion when required for the relief of infusion related reactions

#### Take home medicines (day 1 only)

##### 12. Dexamethasone 4mg on days 2, 3, 9, 10, 16, 17, 23 and 24 oral

###### Administration Information



Take in the morning with or after food. Please dispense all days on day 1 of the cycle. This may be dispensed in one bottle, or individual bottles according to local practice.

**13. Allopurinol 300mg once a day for 7 days oral**

Administration information

Take in the morning with food and plenty of water. This should be supplied for the first cycle only.

**14. Aciclovir 400mg twice a day for 28 days oral**

Administration Instructions

Please supply 28 days or an original pack if appropriate.

**15. Co-trimoxazole 960mg once a day on Monday, Wednesday and Friday only for 28 days oral**

Administration Instructions

Co-trimoxazole 960mg once a day on Mondays, Wednesdays and Fridays. Please supply 28 days.

This may be dispensed as 480mg twice a day on Mondays, Wednesdays and Fridays according to local practice.

**16. Gastric Protection**

Administration Instructions

The choice of gastric protection is dependent on local formulary choice and may include;

- esomeprazole 20mg once a day oral
- omeprazole 20mg once a day oral
- lansoprazole 15mg once a day oral
- pantoprazole 20mg once a day oral
- rabeprazole 20mg once a day oral
- cimetidine 400mg twice a day oral
- famotidine 20mg once a day oral
- nizatidine 150mg twice a day oral
- ranitidine 150mg twice a day oral

Please supply 28 days or the nearest original pack size.

**Cycle 2 days 1, 8, 15, 22**

**17. Chlorphenamine 10mg intravenous**

**18. Dexamethasone 20mg intravenous**

Administration Instructions

Administer 20mg intravenous or equivalent dose

**19. Paracetamol 1000mg oral**

Administration Instructions

Please check if the patient has taken paracetamol. The maximum dose is 4000mg/24 hours

**20. Montelukast 10mg oral**

**21. Daratumumab 16mg/kg in 500ml sodium chloride 0.9% intravenous infusion**

Administration Instructions

The rate of daratumumab administration varies and is dependant the occurrence and severity of infusion related reactions. Please refer to the protocol for details of the rate of administration and management of such reactions. Administer the diluted solution by intravenous infusion using an infusion set fitted with a flow regulator and with an in-line, sterile, non-pyrogenic, low protein-binding polyethersulfone (PES) filter (pore size 0.22 or 0.2 micrometre). Polyurethane (PU), polybutadiene (PBD), PVC, PP or PE administration sets must be used.

**22. Chlorphenamine 10mg intravenous when required for the relief of infusion related reactions**

**23. Hydrocortisone 100mg intravenous when required for the relief of infusion related reactions**

**24. Paracetamol 1000mg oral when required for the relief of infusion related reactions**

25. Salbutamol 2.5mg nebulised when required for the relief of infusion related reactions
26. Sodium chloride 0.9% 500ml intravenous infusion when required for the relief of infusion related reactions

### Take home medicines (day 1 only)

27. Dexamethasone 4mg on days 2, 3, 9, 10, 16, 17, 23 and 24 oral  
Administration Information  
Take in the morning with or after food. Please dispense all days on day 1 of the cycle. This may be dispensed in one bottle, or individual bottles according to local practice.
28. Aciclovir 400mg twice a day for 28 days oral  
Administration Instructions  
Please supply 28 days or an original pack if appropriate.
29. Co-trimoxazole 960mg once a day on Monday, Wednesday and Friday only for 28 days oral  
Administration Instructions  
Co-trimoxazole 960mg once a day on Mondays, Wednesdays and Fridays. Please supply 28 days.  
This may be dispensed as 480mg twice a day on Mondays, Wednesdays and Fridays according to local practice.
30. Gastric Protection  
Administration Instructions  
The choice of gastric protection is dependent on local formulary choice and may include;
  - esomeprazole 20mg once a day oral
  - omeprazole 20mg once a day oral
  - lansoprazole 15mg once a day oral
  - pantoprazole 20mg once a day oral
  - rabeprazole 20mg once a day oral
  - cimetidine 400mg twice a day oral
  - famotidine 20mg once a day oral
  - nizatidine 150mg twice a day oral
  - ranitidine 150mg twice a day oral

Please supply 28 days or the nearest original pack size.

### Cycle 3, 4, 5, 6 days 1, 15

31. Chlorphenamine 10mg intravenous
32. Dexamethasone 10mg intravenous  
Administration Instructions  
Administer 10mg intravenous or equivalent dose
33. Paracetamol 1000mg oral  
Administration Instructions  
Please check if the patient has taken paracetamol. The maximum dose is 4000mg/24 hours
34. Daratumumab 16mg/kg in 500ml sodium chloride 0.9% intravenous infusion  
Administration Instructions  
The rate of daratumumab administration varies and is dependant the occurrence and severity of infusion related reactions. Please refer to the protocol for details of the rate of administration and management of such reactions  
Administer the diluted solution by intravenous infusion using an infusion set fitted with a flow regulator and with an in-line, sterile, non-pyrogenic, low protein-binding polyethersulfone (PES) filter (pore size 0.22 or 0.2 micrometre). Polyurethane (PU), polybutadiene (PBD), PVC, PP or PE administration sets must be used.
35. Chlorphenamine 10mg intravenous when required for the relief of infusion related reactions

36. Hydrocortisone 100mg intravenous when required for the relief of infusion related reactions
37. Paracetamol 1000mg oral when required for the relief of infusion related reactions
38. Salbutamol 2.5mg nebulised when required for the relief of infusion related reactions
39. Sodium chloride 0.9% 500ml intravenous infusion when required for the relief of infusion related reactions

### Take home medicines (day 1 only)

40. Dexamethasone 4mg on days 2, 3, 16 and 17 oral  
Administration Information  
Take in the morning with or after food. Please dispense all days on day 1 of the cycle. This may be dispensed in one bottle, or individual bottles according to local practice.
41. Aciclovir 400mg twice a day for 28 days oral  
Administration Instructions  
Please supply 28 days or an original pack if appropriate.
42. Co-trimoxazole 960mg once a day on Monday, Wednesday and Friday only for 28 days oral  
Administration Instructions  
Co-trimoxazole 960mg once a day on Mondays, Wednesdays and Fridays. Please supply 28 days.  
This may be dispensed as 480mg twice a day on Mondays, Wednesdays and Fridays according to local practice.
43. Gastric Protection  
Administration Instructions  
The choice of gastric protection is dependent on local formulary choice and may include;
  - esomeprazole 20mg once a day oral
  - omeprazole 20mg once a day oral
  - lansoprazole 15mg once a day oral
  - pantoprazole 20mg once a day oral
  - rabeprazole 20mg once a day oral
  - cimetidine 400mg twice a day oral
  - famotidine 20mg once a day oral
  - nizatidine 150mg twice a day oral
  - ranitidine 150mg twice a day oral

Please supply 28 days or the nearest original pack size.

### Cycle 7 day 1 onwards

44. Chlorphenamine 10mg intravenous
45. Dexamethasone 10mg intravenous  
Administration Instructions  
Administer 10mg intravenous or equivalent dose
46. Paracetamol 1000mg oral  
Administration Instructions  
Please check if the patient has taken paracetamol. The maximum dose is 4000mg/24 hours
47. Daratumumab 16mg/kg in 500ml sodium chloride 0.9% intravenous infusion  
Administration Instructions  
The rate of daratumumab administration varies and is dependant the occurrence and severity of infusion related reactions. Please refer to the protocol for details of the rate of administration and management of such reactions  
Administer the diluted solution by intravenous infusion using an infusion set fitted with a flow regulator and with an in-line, sterile, non-pyrogenic, low protein-binding polyethersulfone (PES) filter (pore size 0.22 or 0.2 micrometre). Polyurethane (PU), polybutadiene (PBD), PVC, PP or PE administration sets must be used.

48. Chlorphenamine 10mg intravenous when required for the relief of infusion related reactions
49. Hydrocortisone 100mg intravenous when required for the relief of infusion related reactions
50. Paracetamol 1000mg oral when required for the relief of infusion related reactions
51. Salbutamol 2.5mg nebulised when required for the relief of infusion related reactions
52. Sodium chloride 0.9% 500ml intravenous infusion when required for the relief of infusion related reactions

### **Take home medicines (day 1 only)**

53. Dexamethasone 4mg on days 2, 3 oral  
Administration Information  
Take in the morning with or after food. Please dispense all days on day 1 of the cycle. This may be dispensed in one bottle, or individual bottles according to local practice.
54. Aciclovir 400mg twice a day for 28 days oral  
Administration Instructions  
Please supply 28 days or an original pack if appropriate.
55. Co-trimoxazole 960mg once a day on Monday, Wednesday and Friday only for 28 days oral  
Administration Instructions  
Co-trimoxazole 960mg once a day on Mondays, Wednesdays and Fridays. Please supply 28 days.  
This may be dispensed as 480mg twice a day on Mondays, Wednesdays and Fridays according to local practice.
56. Gastric Protection  
Administration Instructions  
The choice of gastric protection is dependent on local formulary choice and may include;
  - esomeprazole 20mg once a day oral
  - omeprazole 20mg once a day oral
  - lansoprazole 15mg once a day oral
  - pantoprazole 20mg once a day oral
  - rabeprazole 20mg once a day oral
  - cimetidine 400mg twice a day oral
  - famotidine 20mg once a day oral
  - nizatidine 150mg twice a day oral
  - ranitidine 150mg twice a day oral

Please supply 28 days or the nearest original pack size.

## DOCUMENT CONTROL

Version	Date	Amendment	Written By	Approved By
1.2	December 2018	Rapid infusion protocol added Additional tests prior to starting treatment	Nanda Basker Pharmacist	Dr Deborah Wright Pharmacist
1.1	August 2018	National dose bands added Daratumumab administration instructions updated. Disclaimer updated	Dr Deborah Wright Pharmacist	Donna Kimber Pharmacy Technician
1	January 2018	None	Harriet Launders Pharmacist  Dr Deborah Wright Pharmacist	Dr Mathew Jenner Consultant Haematologist

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 that occur as a result of following these guidelines. These protocols should be used in conjunction with other references such as the Summary of Product Characteristics and relevant published papers.