Multiple myeloma DRd (daratumumab lenalidomide dexamethasone)

ID: 3613 v.2 **Endorsed**

⚠ Blood transfusion warning:

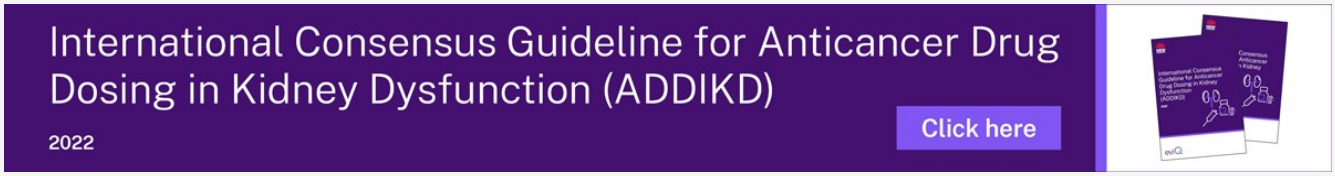
Interference with indirect antiglobulin tests may occur. Please notify your blood transfusion laboratory and send a blood sample for extended red blood cell phenotype and RBC antibody screen BEFORE the first dose of daratumumab.

If an emergency transfusion is required, non-cross-matched ABO/RhD-compatible RBCs can be given as per local blood bank practices. Please refer to the ANZSBT/MSAG position paper. [1]

Patients with myeloma should be considered for inclusion into clinical trials. Link to ALLG website and ANZCTR website.

Link to Medical Scientific Advisory Group (MSAG) Clinical Practice Guideline Multiple Myeloma

The anticancer drug(s) in this protocol may have been included in the ADDIKD guideline. Dose recommendations in kidney dysfunction have yet to be updated to align with the ADDIKD guideline. Recommendations will be updated once the individual protocol has been evaluated by the reference committee. For further information refer to the ADDIKD guideline. To assist with calculations, use the eviQ Estimated Glomerular Filtration Rate (eGFR) calculator.



Treatment schedule - Overview

Cycle 1

Drug	Dose	Route	Day
Dexamethasone	20 mg	IV infusion	1
Daratumumab	16 mg/kg	IV infusion	1, 8, 15, 22 *
Lenalidomide	25 mg ONCE a day	PO	1 to 21
Dexamethasone	20 mg	PO	2, 8 and 9, 15 and 16, 22 and 23

Cycle 2

Drug	Dose	Route	Day
Dexamethasone	20 mg	PO	1 and 2, 8 and 9, 15 and 16, 22 and 23 **
Daratumumab	16 mg/kg	IV infusion	1, 8, 15, 22
Lenalidomide	25 mg ONCE a day	PO	1 to 21

Cycle 3 to 6

Drug	Dose	Route	Day
Dexamethasone	20 mg	PO	1 and 2, 8 and 9, 15 and 16, 22 and 23 **

Drug	Dose	Route	Day
Daratumumab	16 mg/kg	IV infusion	1 and 15
Lenalidomide	25 mg ONCE a day	PO	1 to 21

Cycle 7 and further cycles

Drug	Dose	Route	Day
Dexamethasone	20 mg	PO	1 and 2, 8 and 9, 15 and 16, 22 and 23 **
Daratumumab	16 mg/kg	IV infusion	1
Lenalidomide	25 mg ONCE a day	PO	1 to 21

* First dose of daratumumab on day 1 of cycle 1 may be administered as a split dose infusion over two consecutive days. See daratumumab Product Information for details.

** Dexamethasone dose may be reduced to 20 mg/week for patients > 75 years, BMI < 18.5, poorly controlled diabetes mellitus or prior intolerance to steroid therapy. For patients on a reduced dexamethasone dose, the entire 20 mg dose was given as pre-infusion medication.

Frequency: 28 days

Cycles: Continuous until disease progression or unacceptable toxicity.

Notes:

- Daratumumab may be administered subcutaneously as a flat dose of 1,800 mg. For more information see ID 4084 Multiple myeloma daratumumab subcutaneous.
- For patients with a history of chronic obstructive pulmonary disease or asthma, consider the use of post-infusion medications, including short and long-acting bronchodilators, and inhaled corticosteroids. Inhaled post-infusion medications may be discontinued following the fourth infusion, at the discretion of the treating clinician if the patient experiences no major IRRs[2].

Drug status: **Dexamethasone**: PBS general schedule

Daratumumab: PBS authority

Lenalidomide: (PBS authority)

NB: patient registration into a pregnancy prevention risk management program is required.
Full prescribing information and Authority Application forms available from the Department of Human Services

Lenalidomide is available as **5 mg**, **10 mg, 15 mg** and **25 mg** capsules

Dexamethasone is available as **4 mg** and **0.5 mg** tablets

Treatment schedule - Detail

The supportive therapies (e.g. antiemetics, premedications, etc.), infusion times, diluents, volumes and routes of administration, if included, are listed as defaults. They may vary between institutions and can be substituted to reflect individual institutional policy.

*Antiemetics if included in the treatment schedule are based upon recommendations from national and international guidelines. These are **defaults only** and may be substituted to reflect individual institutional policy. Select here for recommended doses of alternative antiemetics.*

Cycle 1

Day 1		
Paracetamol	1,000 mg (PO)	1 to 3 hours before treatment
Loratadine	10 mg (PO)	1 to 3 hours before treatment
Dexamethasone	20 mg (IV infusion)	1 to 3 hours before treatment

Day 1		
Daratumumab	16 mg/kg (IV infusion)	in sodium chloride 0.9% as per graded administration rate.^ Note: first infusion (cycle 1 day 1) is in 1000 mL.* If no reaction, all subsequent infusions in 500 mL
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 2		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 3 to 7		
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 8		
Paracetamol	1,000 mg (PO)	1 to 3 hours before treatment
Loratadine	10 mg (PO)	1 to 3 hours before treatment
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Daratumumab	16 mg/kg (IV infusion)	in sodium chloride 0.9% as per graded administration rate.^ Note: first infusion (cycle 1 day 1) is in 1000 mL.* If no reaction, all subsequent infusions in 500 mL
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 9		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 10 to 14		
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 15		
Paracetamol	1,000 mg (PO)	1 to 3 hours before treatment
Loratadine	10 mg (PO)	1 to 3 hours before treatment
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Daratumumab	16 mg/kg (IV infusion)	in sodium chloride 0.9% as per graded administration

Day 15		
		rate.^ Note: first infusion (cycle 1 day 1) is in 1000 mL.* If no reaction, all subsequent infusions in 500 mL
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 16		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 17 to 21		
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 22		
Paracetamol	1,000 mg (PO)	1 to 3 hours before treatment
Loratadine	10 mg (PO)	1 to 3 hours before treatment
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Daratumumab	16 mg/kg (IV infusion)	in sodium chloride 0.9% as per graded administration rate.^ Note: first infusion (cycle 1 day 1) is in 1000 mL.* If no reaction, all subsequent infusions in 500 mL

Day 23		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **

Cycle 2

Day 1		
Paracetamol	1,000 mg (PO)	1 to 3 hours before treatment
Loratadine	10 mg (PO)	1 to 3 hours before treatment
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Daratumumab	16 mg/kg (IV infusion)	in sodium chloride 0.9% as per graded administration rate^
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 2		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **

Day 2		
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 3 to 7		
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 8		
Paracetamol	1,000 mg (PO)	1 to 3 hours before treatment
Loratadine	10 mg (PO)	1 to 3 hours before treatment
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Daratumumab	16 mg/kg (IV infusion)	in sodium chloride 0.9% as per graded administration rate^
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 9		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 10 to 14		
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 15		
Paracetamol	1,000 mg (PO)	1 to 3 hours before treatment
Loratadine	10 mg (PO)	1 to 3 hours before treatment
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Daratumumab	16 mg/kg (IV infusion)	in sodium chloride 0.9% as per graded administration rate^
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 16		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.

Day 17 to 21

Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 22		
Paracetamol	1,000 mg (PO)	1 to 3 hours before treatment
Loratadine	10 mg (PO)	1 to 3 hours before treatment
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Daratumumab	16 mg/kg (IV infusion)	in sodium chloride 0.9% as per graded administration rate^
Day 23		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **

Cycle 3 to 6

Day 1		
Paracetamol	1,000 mg (PO)	1 to 3 hours before treatment
Loratadine	10 mg (PO)	1 to 3 hours before treatment
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Daratumumab	16 mg/kg (IV infusion)	in 500 mL sodium chloride 0.9% as per graded administration rate^
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 2		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 3 to 7		
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 8 and 9		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 10 to 14		

Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 15		
Paracetamol	1,000 mg (PO)	1 to 3 hours before treatment
Loratadine	10 mg (PO)	1 to 3 hours before treatment
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Daratumumab	16 mg/kg (IV infusion)	in 500 mL sodium chloride 0.9% as per graded administration rate^
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 16		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 17 to 21		
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 22 and 23		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **

Cycle 7 and further cycles

Day 1		
Paracetamol	1,000 mg (PO)	1 to 3 hours before treatment
Loratadine	10 mg (PO)	1 to 3 hours before treatment
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Daratumumab	16 mg/kg (IV infusion)	in 500 mL sodium chloride 0.9% as per graded administration rate^
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 2		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each

Day 2		
		day, either with or without food.
Day 3 to 7		
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 8 and 9		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 10 to 14		
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 15 and 16		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 17 to 21		
Lenalidomide	25 mg (PO)	ONCE a day on days 1 to 21. Take at same time each day, either with or without food.
Day 22 and 23		
Dexamethasone	20 mg (PO)	ONCE a day. Take in the morning with food. On the days of daratumumab administration, dexamethasone dose should be given as a pre-infusion medication 1 to 3 hours before treatment. **

* First dose of daratumumab on day 1 of cycle 1 may be administered as a split dose infusion over two consecutive days. See daratumumab Product Information for details.

^ Refer to daratumumab infusion table for detailed administration instructions.

** Dexamethasone dose may be reduced to 20 mg/week for patients > 75 years, BMI < 18.5, poorly controlled diabetes mellitus or prior intolerance to steroid therapy. For patients on a reduced dexamethasone dose, the entire 20 mg dose was given as pre-infusion medication.

Frequency: 28 days

Cycles: Continuous until disease progression or unacceptable toxicity.

Indications and patient population

- Relapsed/refractory multiple myeloma (after failure of at least one prior therapy)
- Patients with multiple myeloma who are ineligible for autologous stem cell transplantation.

Clinical information

Caution with oral anti-cancer drugs	Select links for information on the safe prescribing, dispensing and administration of orally administered anti-cancer drugs. Read more about the COSA guidelines and oral anti-cancer therapy
Venous access required	IV cannula (IVC) or central venous access device (CVAD) is required to administer this treatment. Read more about central venous access device line selection
Hypersensitivity/infusion-related reaction	High risk with daratumumab. Infusion-Related Reactions (IRRs) can occur with administration of IV or SC daratumumab. Hypersensitivity risk is greatest with the first dose of daratumumab, and is higher in IV than SC administration.[3] Close monitoring during and after administration is recommended.[4]
Pre and post-treatment medication	The product information states that pre- and post-treatment medication is required for this treatment. Please refer to the treatment schedule for the suggested pre- and post-treatment medication regimen. This may be substituted to reflect institutional policy. For patients with a history of chronic obstructive pulmonary disease, consider the use of post-treatment medications including short and long acting bronchodilators, and inhaled corticosteroids. Following the first four infusions or injections, if the patient experiences no major infusion-related reactions (IRRs), these inhaled post-treatment medications may be discontinued at the discretion of the treating clinician.
Daratumumab rapid infusion	Administration of daratumumab by rapid infusion is not in line with the product monograph, however published literature indicates that it can be completed safely. Read more about daratumumab rapid infusion
Emetogenicity minimal or low	No routine prophylaxis required. If patients experience nausea and/or vomiting, consider using the low emetogenic risk regimen. Read more about preventing anti-cancer therapy induced nausea and vomiting
Teratogenic effects	Immunomodulatory drugs (IMiDs) include thalidomide, lenalidomide and pomalidomide. They can cause severe congenital disabilities or death to an unborn baby when taken during pregnancy. All patients and partners of patients that can conceive a child must use at least one reliable contraceptive method for at least 4 weeks before starting treatment, during treatment (including dose interruptions), and for 4 weeks after stopping treatment. Male patients should also use a condom when having sexual intercourse with a woman of childbearing potential during treatment (including dose interruptions), and for 4 weeks after stopping treatment. In female patients and female partners of male patients, a pregnancy test should be carried out prior to initiating treatment (after 4 weeks of contraception use), weekly during the first month of treatment and monthly thereafter. Effective contraception methods and adequate contraception timeframes should be discussed with all patients of reproductive potential. Prescription of an IMiD requires patient registration with a pregnancy prevention program. Full prescribing information and Authority Application forms available from the Department of Human Services website

Bone modifying agents	Use of a bone modifying agent (BMA) should be considered in all patients with symptomatic myeloma requiring treatment. For patients with newly diagnosed symptomatic myeloma, zoledronic acid, pamidronate or denosumab should be considered for monthly administration (adjust for kidney dysfunction where appropriate) for up to 2 years. A longer duration of therapy may be appropriate (MRC M IX trial).[5] For more information, please see the following protocols: ID 137 Multiple myeloma zoledronic acid ID 147 Multiple myeloma pamidronate ID 3964 Multiple myeloma denosumab - note denosumab is TGA approved but not PBS reimbursed for this indication.
Bisphosphonates and dental review	Caution should be taken with prolonged use of bisphosphonates due to the risk of osteonecrosis of the jaw (ONJ). A dental review prior to treatment is recommended, and all dental issues treated before the initiation of bisphosphonates. Dental review 6 to 12 monthly during treatment is advisable to minimise risk of ONJ. Concurrent daily oral supplements of calcium 500 mg and vitamin D 400 International Units are recommended. Read more about medication-related osteonecrosis of the jaw (MRONJ)
Thromboembolism	Patients are at an increased risk of venous thrombosis with this treatment. Risk assessment for VTE should be performed prior to and during treatment. It is the consensus opinion of the Haematology Reference Committee that concomitant thromboprophylaxis is recommended: consider using low dose aspirin for patients without pre-existing risk factors, while patients with pre-existing risk factors should receive enoxaparin 40 mg subcut daily for the duration of treatment (unless contraindicated; reduce dose in renal impairment) Read more about the prophylaxis of venous thromboembolism (VTE) in multiple myeloma
Interference with indirect antiglobulin test (indirect Coombs test)	Daratumumab binds to CD38 found at low levels on red blood cells (RBCs) and may result in a positive indirect Coombs test. Daratumumab-mediated positive indirect Coombs test may persist for up to 6 months after the last dose of daratumumab. Daratumumab bound to RBCs may cause panagglutination during pretransfusion indirect Coombs tests and may therefore mask detection of alloantibodies to red blood antigens in the patient's serum. Extended red cell phenotyping and RBC antibody screen should be done for patients prior to starting daratumumab. Please refer to the ANZSBT/MSAG position paper. [1]
Interference with serum protein electrophoresis and immunofixation tests	Daratumumab may be detected on serum protein electrophoresis (SPE) and immunofixation (IFE) assays used for monitoring disease monoclonal immunoglobulins (M protein), which can lead to false positive assay results in patients with IgG kappa myeloma protein. The initial assessment of complete responses by the International Myeloma Working Group (IMWG) criteria may be affected. For patients with persistent very good partial response other methods to evaluate the depth of response should be considered if it was to impact on management strategy.
Corticosteroids	Diabetic patients should monitor their blood glucose levels closely. To minimise gastric irritation, advise patient to take immediately after food. Consider the use of a H2 antagonist or proton pump inhibitor if appropriate. Read more about acute short term effects from corticosteroids
Tumour lysis risk	Assess patient for risk of developing tumour lysis syndrome. Read more about prevention and management of tumour lysis syndrome.
Pneumocystis jirovecii pneumonia (PJP) prophylaxis	Read more about prophylaxis of pneumocystis jiroveci (carinii) in cancer patients
Antiviral prophylaxis	Read more about antiviral prophylaxis drugs and doses

Growth factor support	G-CSF (short or long-acting) is available on the PBS for chemotherapy induced neutropenia depending on clinical indication and/or febrile neutropenia risk. Access the PBS website
Blood tests	FBC, EUC, LFTs, calcium, magnesium and phosphate at baseline and prior to each treatment.
Hepatitis B screening and prophylaxis	Routine screening for HBsAg and anti-HBc is recommended prior to initiation of treatment. Prophylaxis should be determined according to individual institutional policy. Read more about hepatitis B screening and prophylaxis in cancer patients requiring cytotoxic and/or immunosuppressive therapy
Vaccinations	Live vaccines are contraindicated in cancer patients receiving immunosuppressive therapy and/or who have poorly controlled malignant disease. Refer to the recommended schedule of vaccination for immunocompromised patients, as outlined in the Australian Immunisation Handbook. Read more about COVID-19 vaccines and cancer.
Fertility and lactation	Cancer treatment can have harmful effects on fertility and this should be discussed with all patients of reproductive potential prior to commencing treatment. Possibility of infant risk should be discussed with breastfeeding patients. Read more about the effect of cancer treatment on fertility

Dose modifications

Evidence for dose modifications is limited, and the recommendations made on eviQ are intended as a guide only. They are generally conservative with an emphasis on safety. Any dose modification should be based on clinical judgement, and the individual patient's situation including but not limited to treatment intent (curative vs palliative), the anti-cancer regimen (single versus combination therapy versus chemotherapy versus immunotherapy), biology of the cancer (site, size, mutations, metastases), other treatment related side effects, additional co-morbidities, performance status and patient preferences.Suggested dose modifications are based on clinical trial findings, product information, published guidelines and reference committee consensus . The dose reduction applies to each individual dose and not to the total number of days or duration of treatment cycle unless stated otherwise. Non-haematological gradings are based on Common Terminology Criteria for Adverse Events (CTCAE) unless otherwise specified. Renal and hepatic dose modifications have been standardised where possible. For more information see dosing considerations & disclaimer .

The dose recommendations in kidney dysfunction (i.e.renal impairment) displayed may not reflect those in the ADDIKD guideline and have been included for historical reference only. Recommendations will be updated once the individual protocol has been evaluated by the reference committee, with this version of the protocol then being archived. Clinicians are expected to refer to the ADDIKD guideline prior to prescribing in kidney dysfunction.
International Consensus Guideline for Anticancer Drug Dosing in Kidney Dysfunction (ADDIKD).

Daratumumab:[6]

- No dose reductions are recommended for daratumumab. Dose may be delayed until blood cell count recovery if haematological toxicity occurs.
- Infusion-related reactions (IRRs)
  - For IRRs of any grade/severity, immediately interrupt the daratumumab infusion and manage symptoms.
  - Management of IRRs may further require reduction in the rate of infusion, or treatment discontinuation of daratumumab.

Lenalidomide:

- Initial treatment with lenalidomide should not be started if ANC less than 1.0 x 10^9/L and/or platelets less than 75 x 10^9/L (or platelets less than 30 x 10^9/L if heavy bone marrow involvement), however, may be commenced at the discretion of the treating haematologist.

Dose reduction steps for lenalidomide to manage haematological toxicities	
Starting dose	25 mg
Dose level 1	15 mg

Dose reduction steps for lenalidomide to manage haematological toxicities	
Dose level 2	10 mg
Dose level 3	5 mg

Haematological toxicity	
ANC x 10^9/L (pre-treatment blood test)	
First fall to less than 0.5	Interrupt lenalidomide treatment
Return to greater than or equal to 0.5 when neutropenia is only observed toxicity	Resume lenalidomide at starting dose
Return to greater than or equal to 0.5 when dose-dependent haematological toxicities other than neutropenia are observed	Resume lenalidomide at dose level 1
For each subsequent drop less then 0.5	Interrupt lenalidomide treatment
Return to greater than or equal to 0.5	Resume lenalidomide at next lower dose level (dose level 2 or 3) Do not dose below 5 mg
Consider using G-CSF for neutropenia	
Platelets x 10^9/L (pre-treatment blood test)	
First fall to less than 30	Interrupt lenalidomide treatment
Return to greater than or equal to 30	Resume lenalidomide at dose level 1
For each subsequent drop less then 30	Interrupt lenalidomide treatment
Return to greater than or equal to 30	Resume lenalidomide at next lower dose level (dose level 2 or 3) Do not dose below 5 mg

Renal impairment	
Lenalidomide is substantially excreted by the kidneys. Monitoring of renal function is advised in all patients with renal impairment. The following dose adjustments are recommended at the ***start of therapy*** for patients with moderate or severe impaired renal function or endstage renal disease.	
Creatinine clearance (mL/min)	
30 to 50	Reduce lenalidomide dose to 10 mg once daily*
less than 30 (not requiring dialysis)	Reduce lenalidomide dose to 15 mg on alternate days (every 48 hours)
less than 30 (requiring dialysis)	Reduce lenalidomide dose to 5 mg once daily. On dialysis, the dose should be administered following dialysis

** The dose may be escalated to 15 mg after 2 cycles if the patient is not responding to treatment and is tolerating treatment*

Hepatic impairment
No formal studies of lenalidomide in patients with hepatic impairment, therefore no specific dose recommendations.

Dermatological reactions[7, 8]	
Rare cases of Stevens-Johnson syndrome and toxic epidermal necrolysis have been reported. These may be potentially fatal.	
Rash	
Grade 1	Continue lenalidomide. Treat with topical corticosteroids and oral antihistamines.
Grade 2	Consider interruption of lenalidomide. Treat with topical corticosteroids and oral antihistamines until toxicity resolves.

Dermatological reactions[7, 8]	
Grade 3	Consider interruption of lenalidomide. Treat with oral antihistamines or oral corticosteroids until toxicity resolves.
Stevens-Johnson syndrome or **Toxic epidermal necrolysis**	Permanent discontinuation of lenalidomide treatment.

Dexamethasone and lenalidomide
The reference committee recommend that the dexamethasone and lenalidomide dose be individualised or dose reduced where the high dose regimen is not well tolerated (i.e. in older patients or those that develop severe steroid-related side effects).

Interactions

Drug interactions in eviQ protocols are under review and being updated to align with current literature. Further site-wide updates and changes will occur in due course. References & Disclaimer

The drug interactions shown below are not an exhaustive list. For a more comprehensive list and for detailed information on specific drug interactions and clinical management, please refer to the specific drug product information and the following key resources:

- *MIMS - interactions tab (includes link to a CYP-450 table) (login required)*
- *Australian Medicines Handbook (AMH) – interactions tab (login required)*
- *Micromedex Drug Interactions (login required)*
- *Cancer Drug Interactions*
- *Cytochrome P450 Drug Interactions*

Daratumumab
No drug-drug interaction studies have been performed. Clinical pharmacokinetic assessments of daratumumab in combination with lenalidomide, pomalidomide, thalidomide, bortezomib and dexamethasone indicated no clinically-relevant drug-drug interaction

Dexamethasone		
	Interaction	**Clinical management**
CYP3A4 interactions	Dexamethasone is a substrate of CYP3A4 and a weak to moderate inducer of CYP3A4. The clinical relevance of CYP3A4 induction by dexamethasone is unknown as the mechanism has yet to be established	The effects of the concomitant use of dexamethasone with other CYP3A4 inducers, inhibitors or substrates is variable. If used concomitantly, monitor patients closely for adverse drug reactions
Warfarin	Concurrent use may result in increased risk of bleeding or diminished effects of warfarin	Monitor prothrombin time / INR (especially during initiation or discontinuation) and for signs of drug toxicity during concomitant use; adjust warfarin dose as required
Oral hypoglycaemics	Corticosteroids may cause hyperglycaemia and worsen diabetes control	Monitor blood glucose levels and adjust oral hypoglycaemic dose as required

Lenalidomide		
	Interaction	**Clinical management**
Digoxin	Potentially increased digoxin plasma levels when combined with lenalidomide; mechanism unknown	Monitor digoxin levels and for signs of drug toxicity during treatment with lenalidomide
HMG-CoA reductase inhibitors (Statins)	Potentially additive toxicity	Monitor for signs and symptoms of myotoxicity and rhabdomyolysis (e.g.: unexplained muscle pain, muscle stiffness or tenderness, dark urine) during concomitant use
Erythropoietic agents, combined oral contraceptives or hormone replacement therapy	Additive risk of thromboembolic events due to an increased risk of VTE	Consider the benefit/risk of concomitant therapy

General		
	Interaction	**Clinical management**
Warfarin	Anti-cancer drugs may alter the anticoagulant effect of warfarin.	Monitor INR regularly and adjust warfarin dosage as appropriate; consider alternative anticoagulant.
Direct oral anticoagulants (DOACs) e.g. apixaban, rivaroxaban, dabigatran	Interaction with both CYP3A4 and P-gp inhibitors /inducers. DOAC and anti-cancer drug levels may both be altered, possibly leading to loss of efficacy or toxicity (i.e. increased bleeding).	Apixaban: avoid concurrent use with strong CYP3A4 and P-gp inhibitors. If treating VTE, avoid use with strong CYP3A4 and P-gp inducers. Rivaroxaban: avoid concurrent use with strong CYP3A4 and P-gp inhibitors. Dabigatran: avoid combination with strong P-gp inducers and inhibitors. If concurrent use is unavoidable, monitor closely for efficacy/toxicity of both drugs.
Digoxin	Anti-cancer drugs can damage the lining of the intestine; affecting the absorption of digoxin.	Monitor digoxin serum levels; adjust digoxin dosage as appropriate.
Antiepileptics	Both altered antiepileptic and anti-cancer drug levels may occur, possibly leading to loss of efficacy or toxicity.	Where concurrent use of an enzyme-inducing antiepileptic cannot be avoided, monitor antiepileptic serum levels for toxicity, as well as seizure frequency for efficacy; adjust dosage as appropriate. Also monitor closely for efficacy of the anti-cancer therapy.
Antiplatelet agents and NSAIDs	Increased risk of bleeding due to treatment related thrombocytopenia.	Avoid or minimise combination. If combination deemed essential, (e.g. low dose aspirin for ischaemic heart disease) monitor for signs of bleeding.
Serotonergic drugs, including selective serotonin reuptake inhibitors (SSRIs e.g. paroxetine) and serotonin noradrenaline reuptake inhibitors (SNRIs e.g. venlafaxine)	Increased risk of serotonin syndrome with concurrent use of 5-HT3 receptor antagonists (e.g. palonosetron, ondansetron, granisetron, tropisetron, dolasetron, etc.)	Avoid combination. If combination is clinically warranted, monitor for signs and symptoms of serotonin syndrome (e.g. confusion, agitation, tachycardia, hyperreflexia). For more information link to TGA Medicines Safety Update
Vaccines	Diminished response to vaccines and increased risk of infection with live vaccines.	Live vaccines (e.g. BCG, MMR, zoster and varicella) are contraindicated in patients on immunosuppressive therapy. Use with caution in patients on non-immunosuppressive therapy. For more information; refer to the recommended schedule of vaccination for cancer patients, as outlined in the Australian Immunisation Handbook

Administration cycles 1 and 2

eviQ provides safe and effective instructions on how to administer cancer treatments. However, eviQ does not provide every treatment delivery option, and is unable to provide a comprehensive list of cancer treatment agents and their required IV line giving set/filter. There may be alternative methods of treatment administration, and alternative supportive treatments that are also appropriate. Please refer to the individual

product information monographs via the TGA website for further information.

Day 1

Approximate treatment time: initial infusion 7 hours, second infusion 5 hours and subsequent infusions 4 hours

General patient assessment prior to each day of treatment.

Peripheral neuropathy assessment tool

Any toxicity grade 2 or greater may require dose reduction, delay or omission of treatment and review by medical officer before commencing treatment.

Safe handling and waste management (reproductive risk only)

Safe administration

Prime required IV lines with sodium chloride 0.9%:

- low protein-binding polyethersulfone (PES) filter (pore size 0.22 or 0.2 micrometre), polyurethane (PU), polybutadiene (PBD), polyvinyl chloride (PVC), polypropylene (PP) or polyethylene (PE) administration sets must be used for daratumumab.
- attach a second IV line via a luer lock connector as close as possible to the site of injection
  - this may be required in case of a hypersensitivity reaction.

Insert IV cannula or access TIVAD or CVAD.

- baseline ECG and then as clinically indicated
- weigh patient on each visit

Dexamethasone

- administer intravenously for cycle 1, day 1 and orally ONCE a day in the morning for subsequent doses
- on the days of daratumumab administration, dexamethasone should be given as a pre-infusion medication 1 to 3 hours before treatment.

Treatment - Time out

Daratumumab

Prior to administration:

- check baseline observations
- verify premedication has been taken. If not, administer 1 to 3 hours prior to daratumumab administration:
  - paracetamol 1000 mg orally AND
  - loratadine 10 mg orally (or similar antihistamine)
  - a corticosteroid should be included as a premed according to local guidelines unless a regimen-specific corticosteroid is indicated

First infusion in 1,000 mL sodium chloride 0.9%:

- **commence daratumumab** infusion at 50 mL/hr for the first hour
- repeat observations prior to each rate increase
- **increase rate** by 50 mL/hr every hour, up to a maximum of 200 mL/hr if observations are stable
- flush with ~ 100 mL of sodium chloride 0.9%

Link to daratumumab infusion table

If an infusion reaction occurs, temporarily discontinue the infusion and notify medical officer

- when symptoms have completely resolved, recommence the infusion at half the rate prior to the reaction
- for severe reactions **stop** infusion and manage as per emergency

Second infusion in 500 mL sodium chloride 0.9%:

- check for any adverse events during previous infusion. If previous reaction occurred, please refer to the daratumumab infusion table .
- **commence daratumumab** infusion at 50 mL/hr for the first hour
- repeat observations prior to each rate increase

- **increase rate** by 50 mL/hr every hour, up to a maximum of 200 mL/hr if observations are stable
- flush with ~ 100 mL of sodium chloride 0.9%

Subsequent infusions in 500 mL sodium chloride 0.9%:

If previous reaction occurred, please refer to the daratumumab infusion table .

If **no** adverse event experienced with the first two infusions:

- **commence** daratumumab infusion at 100 mL/hr
- repeat observations prior to each rate increase
- **increase rate** by 50 mL/hr increments every hour to a maximum of 200 mL/hr if observations are stable
- flush with ~ 100 mL of sodium chloride 0.9%

If an infusion reaction occurs, temporarily discontinue the infusion and notify medical officer

- when symptoms have resolved, recommence the infusion at **half the rate** prior to the reaction
- for severe reactions **stop** infusion and manage as per emergency

Read more about daratumumab rapid infusion

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Remove IV cannula and/or deaccess TIVAD or CVAD.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Day 2

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Dexamethasone

- administer orally ONCE a day in the morning
- to be taken with or immediately after food.

Note: if a dose is forgotten or vomited, contact treating team.

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Days 3 to 7

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Day 8

Approximate treatment time: 4 to 5 hours

General patient assessment prior to each day of treatment.

Peripheral neuropathy assessment tool

Any toxicity grade 2 or greater may require dose reduction, delay or omission of treatment and review by medical officer before commencing treatment.

Safe handling and waste management (reproductive risk only)

Safe administration

Prime required IV lines with sodium chloride 0.9%:

- low protein-binding polyethersulfone (PES) filter (pore size 0.22 or 0.2 micrometre), polyurethane (PU), polybutadiene (PBD), polyvinyl chloride (PVC), polypropylene (PP) or polyethylene (PE) administration sets must be used for daratumumab.
- attach a second IV line via a luer lock connector as close as possible to the site of injection
  - this may be required in case of a hypersensitivity reaction.

Insert IV cannula or access TIVAD or CVAD.

- baseline ECG and then as clinically indicated
- weigh patient on each visit

Dexamethasone

- administer intravenously for cycle 1, day 1 and orally ONCE a day in the morning for subsequent doses
- on the days of daratumumab administration, dexamethasone should be given as a pre-infusion medication 1 to 3 hours before treatment.

Treatment - Time out

Daratumumab

Prior to administration:

- check for previous adverse events during previous infusions
- check baseline observations
- verify premedication has been taken. If not, administer 1 to 3 hours prior to daratumumab administration:
  - paracetamol 1000 mg orally AND
  - loratadine 10 mg orally (or similar antihistamine)
  - a corticosteroid should be included as a premed according to local guidelines unless a regimen-specific corticosteroid is indicated

Second infusion in 500 mL sodium chloride 0.9%:

- check for any adverse events during previous infusion. If previous reaction occurred, please refer to the daratumumab infusion table .
- **commence daratumumab** infusion at 50 mL/hr for the first hour
- repeat observations prior to each rate increase
- **increase rate** by 50 mL/hr every hour, up to a maximum of 200 mL/hr if observations are stable
- flush with ~ 100 mL of sodium chloride 0.9%

Subsequent infusions in 500 mL sodium chloride 0.9%:

If previous reaction occurred, please refer to the daratumumab infusion table .

If **no** adverse event experienced with previous infusions:

- **commence** daratumumab infusion at 100 mL/hr
- repeat observations prior to each rate increase
- **increase rate** by 50 mL/hr increments every hour to a maximum of 200 mL/hr if observations are stable
- flush with ~ 100 mL of sodium chloride 0.9%

If an infusion reaction occurs, temporarily discontinue the infusion and notify medical officer

- when symptoms have completely resolved, recommence the infusion at **half the rate** prior to the reaction
- for severe reactions **stop** infusion and manage as per emergency

Read more about daratumumab rapid infusion

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Remove IV cannula and/or deaccess TIVAD or CVAD.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Day 9

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Dexamethasone

- administer orally ONCE a day in the morning
- to be taken with or immediately after food.

Note: if a dose is forgotten or vomited, contact treating team.

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Days 10 to 14

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Day 15

Approximate treatment time: 4 hours

General patient assessment prior to each day of treatment.

Peripheral neuropathy assessment tool

Any toxicity grade 2 or greater may require dose reduction, delay or omission of treatment and review by medical officer before commencing treatment.

Safe handling and waste management (reproductive risk only)

Safe administration

Prime required IV lines with sodium chloride 0.9%:

- low protein-binding polyethersulfone (PES) filter (pore size 0.22 or 0.2 micrometre), polyurethane (PU), polybutadiene (PBD), polyvinyl chloride (PVC), polypropylene (PP) or polyethylene (PE) administration sets must be used for daratumumab.
- attach a second IV line via a luer lock connector as close as possible to the site of injection
  - this may be required in case of a hypersensitivity reaction.

Insert IV cannula or access TIVAD or CVAD.

- baseline ECG and then as clinically indicated
- weigh patient on each visit

Dexamethasone

- administer intravenously for cycle 1, day 1 and orally ONCE a day in the morning for subsequent doses
- on the days of daratumumab administration, dexamethasone should be given as a pre-infusion medication 1 to 3 hours before treatment.

Treatment - Time out

Daratumumab

Prior to administration:

- check for any adverse events during previous infusion. If previous reaction occurred, please refer to the daratumumab infusion table .
- check baseline observations
- verify premedication has been taken. If not, administer 1 to 3 hours prior to daratumumab administration:
  - paracetamol 1000 mg orally AND
  - loratadine 10 mg orally (or similar antihistamine)
  - a corticosteroid should be included as a premed according to local guidelines unless a regimen-specific corticosteroid is indicated

Subsequent infusions in 500 mL sodium chloride 0.9%:

If previous reaction occurred, please refer to the daratumumab infusion table .

If **no** adverse event experienced with previous infusions:

- **commence** daratumumab infusion at 100 mL/hr
- repeat observations prior to each rate increase
- **increase rate** by 50 mL/hr increments every hour to a maximum of 200 mL/hr if observations are stable
- flush with ~ 100 mL of sodium chloride 0.9%

If an infusion reaction occurs, temporarily discontinue the infusion and notify medical officer

- when symptoms have resolved, recommence the infusion at **half the rate** prior to the reaction
- for severe reactions **stop** infusion and manage as per emergency

Read more about daratumumab rapid infusion

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Remove IV cannula and/or deaccess TIVAD or CVAD.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Day 16

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Dexamethasone

- administer orally ONCE a day in the morning
- to be taken with or immediately after food.

Note: if a dose is forgotten or vomited, contact treating team.

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Days 17 to 21

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Day 22

Approximate treatment time: 4 hours

General patient assessment prior to each day of treatment.

Peripheral neuropathy assessment tool

Any toxicity grade 2 or greater may require dose reduction, delay or omission of treatment and review by medical officer before

commencing treatment.

Safe handling and waste management (reproductive risk only)

Safe administration

Prime required IV lines with sodium chloride 0.9%:

- low protein-binding polyethersulfone (PES) filter (pore size 0.22 or 0.2 micrometre), polyurethane (PU), polybutadiene (PBD), polyvinyl chloride (PVC), polypropylene (PP) or polyethylene (PE) administration sets must be used for daratumumab.
- attach a second IV line via a luer lock connector as close as possible to the site of injection
  - this may be required in case of a hypersensitivity reaction.

Insert IV cannula or access TIVAD or CVAD.

- baseline ECG and then as clinically indicated
- weigh patient on each visit

Dexamethasone

- administer intravenously for cycle 1, day 1 and orally ONCE a day in the morning for subsequent doses
- on the days of daratumumab administration, dexamethasone should be given as a pre-infusion medication 1 to 3 hours before treatment.

Treatment - Time out

Daratumumab

Prior to administration:

- check for any adverse events during previous infusion. If previous reaction occurred, please refer to the daratumumab infusion table .
- check baseline observations
- verify premedication has been taken. If not, administer 1 to 3 hours prior to daratumumab administration:
  - paracetamol 1000 mg orally AND
  - loratadine 10 mg orally (or similar antihistamine)
  - a corticosteroid should be included as a premed according to local guidelines unless a regimen-specific corticosteroid is indicated

Subsequent infusions in 500 mL sodium chloride 0.9%:

If previous reaction occurred, please refer to the daratumumab infusion table .

If **no** adverse event experienced with previous infusions:

- **commence** daratumumab infusion at 100 mL/hr
- repeat observations prior to each rate increase
- **increase rate** by 50 mL/hr increments every hour to a maximum of 200 mL/hr if observations are stable
- flush with ~ 100 mL of sodium chloride 0.9%

If an infusion reaction occurs, temporarily discontinue the infusion and notify medical officer

- when symptoms have resolved, recommence the infusion at **half the rate** prior to the reaction
- for severe reactions **stop** infusion and manage as per emergency

Read more about daratumumab rapid infusion

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Remove IV cannula and/or deaccess TIVAD or CVAD.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Day 23

This is an oral treatment

Dexamethasone

- administer orally ONCE a day in the morning
- to be taken with or immediately after food.

Note: if a dose is forgotten or vomited, contact treating team.

Discharge information

Antiemetics

- Antiemetics as prescribed.

Dexamethasone tablets

- Dexamethasone tablets with written instructions on how to take them.

Thromboprophylaxis

- Low dose aspirin OR enoxaparin 40 mg subcut daily for the duration of treatment if prescribed.

Growth factor support

- Arrangements for administration if prescribed.

Prophylaxis medications

- Prophylaxis medications (if prescribed) i.e. tumour lysis prophylaxis, PJP prophylaxis, antivirals.

Patient information

- Ensure patient receives patient information sheet.

Administration cycles 3 to 6

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Day 1

Approximate treatment time: 4 hours

General patient assessment prior to each day of treatment.

Peripheral neuropathy assessment tool

Any toxicity grade 2 or greater may require dose reduction, delay or omission of treatment and review by medical officer before commencing treatment.

Safe handling and waste management (reproductive risk only)

Safe administration

Prime required IV lines with sodium chloride 0.9%:

- low protein-binding polyethersulfone (PES) filter (pore size 0.22 or 0.2 micrometre), polyurethane (PU), polybutadiene (PBD), polyvinyl chloride (PVC), polypropylene (PP) or polyethylene (PE) administration sets must be used for daratumumab.
- attach a second IV line via a luer lock connector as close as possible to the site of injection
  - this may be required in case of a hypersensitivity reaction.

Insert IV cannula or access TIVAD or CVAD.

- baseline ECG and then as clinically indicated

- weigh patient on each visit

Dexamethasone

- administer orally ONCE a day in the morning
- on the days of daratumumab administration, dexamethasone should be given as a pre-infusion medication 1 to 3 hours before treatment.

Treatment - Time out

Daratumumab

Prior to administration:

- check for any adverse events during previous infusion. If previous reaction occurred, please refer to the daratumumab infusion table .
- check baseline observations
- verify premedication has been taken. If not, administer 1 to 3 hours prior to daratumumab administration:
  - paracetamol 1000 mg orally AND
  - loratadine 10 mg orally (or similar antihistamine)
  - a corticosteroid should be included as a premed according to local guidelines unless a regimen-specific corticosteroid is indicated

Subsequent infusions in 500 mL sodium chloride 0.9%:

If previous reaction occurred, please refer to the daratumumab infusion table .

If **no** adverse event experienced with previous infusions:

- **commence** daratumumab infusion at 100 mL/hr
- repeat observations prior to each rate increase
- **increase rate** by 50 mL/hr increments every hour to a maximum of 200 mL/hr if observations are stable
- flush with ~ 100 mL of sodium chloride 0.9%

If an infusion reaction occurs, temporarily discontinue the infusion and notify medical officer

- when symptoms have resolved, recommence the infusion at **half the rate** prior to the reaction
- for severe reactions **stop** infusion and manage as per emergency

Read more about daratumumab rapid infusion

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Remove IV cannula and/or deaccess TIVAD or CVAD.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Day 2

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Dexamethasone

- administer orally ONCE a day in the morning
- to be taken with or immediately after food.

Note: if a dose is forgotten or vomited, contact treating team.

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Days 3 to 7

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Day 8

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Dexamethasone

- administer orally ONCE a day in the morning
- to be taken with or immediately after food.

Note: if a dose is forgotten or vomited, contact treating team.

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Days 9 to 14

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Day 15

Approximate treatment time: 4 hours

General patient assessment prior to each day of treatment.

Peripheral neuropathy assessment tool

Any toxicity grade 2 or greater may require dose reduction, delay or omission of treatment and review by medical officer before commencing treatment.

Safe handling and waste management (reproductive risk only)

Safe administration

Prime required IV lines with sodium chloride 0.9%:

- low protein-binding polyethersulfone (PES) filter (pore size 0.22 or 0.2 micrometre), polyurethane (PU), polybutadiene (PBD), polyvinyl chloride (PVC), polypropylene (PP) or polyethylene (PE) administration sets must be used for daratumumab.
- attach a second IV line via a luer lock connector as close as possible to the site of injection
  - this may be required in case of a hypersensitivity reaction.

Insert IV cannula or access TIVAD or CVAD.

- baseline ECG and then as clinically indicated
- weigh patient on each visit

Dexamethasone

- administer orally ONCE a day in the morning
- on the days of daratumumab administration, dexamethasone should be given as a pre-infusion medication 1 to 3 hours before treatment.

Treatment - Time out

Daratumumab

Prior to administration:

- check for any adverse events during previous infusion. If previous reaction occurred, please refer to the daratumumab infusion table .
- check baseline observations
- verify premedication has been taken. If not, administer 1 to 3 hours prior to daratumumab administration:
  - paracetamol 1000 mg orally AND
  - loratadine 10 mg orally (or similar antihistamine)
  - a corticosteroid should be included as a premed according to local guidelines unless a regimen-specific corticosteroid is indicated

Subsequent infusions in 500 mL sodium chloride 0.9%:

If previous reaction occurred, please refer to the daratumumab infusion table .

If **no** adverse event experienced with previous infusions:

- **commence** daratumumab infusion at 100 mL/hr
- repeat observations prior to each rate increase
- **increase rate** by 50 mL/hr increments every hour to a maximum of 200 mL/hr if observations are stable
- flush with ~ 100 mL of sodium chloride 0.9%

If an infusion reaction occurs, temporarily discontinue the infusion and notify medical officer

- when symptoms have resolved, recommence the infusion at **half the rate** prior to the reaction
- for severe reactions **stop** infusion and manage as per emergency

Read more about daratumumab rapid infusion

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Remove IV cannula and/or deaccess TIVAD or CVAD.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Day 16

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Dexamethasone

- administer orally ONCE a day in the morning
- to be taken with or immediately after food.

Note: if a dose is forgotten or vomited, contact treating team.

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Days 17 to 21

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Days 22 and 23

This is an oral treatment

Dexamethasone

- administer orally ONCE a day in the morning
- to be taken with or immediately after food.

Note: if a dose is forgotten or vomited, contact treating team.

Discharge information

Antiemetics

- Antiemetics as prescribed.

Dexamethasone tablets

- Dexamethasone tablets with written instructions on how to take them.

Thromboprophylaxis

- Low dose aspirin OR enoxaparin 40 mg subcut daily for the duration of treatment if prescribed.

Growth factor support

- Arrangements for administration if prescribed.

Prophylaxis medications

- Prophylaxis medications (if prescribed) i.e. tumour lysis prophylaxis, PJP prophylaxis, antivirals.

Patient information

- Ensure patient receives patient information sheet.

Administration cycle 7 and further cycles

eviQ provides safe and effective instructions on how to administer cancer treatments. However, eviQ does not provide every treatment delivery option, and is unable to provide a comprehensive list of cancer treatment agents and their required IV line giving set/filter. There may be alternative methods of treatment administration, and alternative supportive treatments that are also appropriate. Please refer to the individual product information monographs via the TGA website for further information.

Day 1

Approximate treatment time: 4 hours

General patient assessment prior to each day of treatment.

Peripheral neuropathy assessment tool

Any toxicity grade 2 or greater may require dose reduction, delay or omission of treatment and review by medical officer before commencing treatment.

Safe handling and waste management (reproductive risk only)

Safe administration

Prime required IV lines with sodium chloride 0.9%:

- low protein-binding polyethersulfone (PES) filter (pore size 0.22 or 0.2 micrometre), polyurethane (PU), polybutadiene (PBD), polyvinyl chloride (PVC), polypropylene (PP) or polyethylene (PE) administration sets must be used for daratumumab.
- attach a second IV line via a luer lock connector as close as possible to the site of injection
  - this may be required in case of a hypersensitivity reaction.

Insert IV cannula or access TIVAD or CVAD.

Dexamethasone

- administer orally ONCE a day in the morning
- on the days of daratumumab administration, dexamethasone should be given as a pre-infusion medication 1 to 3 hours before treatment.

Treatment - Time out

Daratumumab

Prior to administration:

- check for any adverse events during previous infusion. If previous reaction occurred, please refer to the daratumumab infusion table .
- check baseline observations
- verify premedication has been taken. If not, administer 1 to 3 hours prior to daratumumab administration:
  - paracetamol 1000 mg orally AND
  - loratadine 10 mg orally (or similar antihistamine)
  - a corticosteroid should be included as a premed according to local guidelines unless a regimen-specific corticosteroid is indicated

Subsequent infusions in 500 mL sodium chloride 0.9%:

If previous reaction occurred, please refer to the daratumumab infusion table .

If **no** adverse event experienced with previous infusions:

- **commence** daratumumab infusion at 100 mL/hr
- repeat observations prior to each rate increase
- **increase rate** by 50 mL/hr increments every hour to a maximum of 200 mL/hr if observations are stable
- flush with ~ 100 mL of sodium chloride 0.9%

If an infusion reaction occurs, temporarily discontinue the infusion and notify medical officer

- when symptoms have resolved, recommence the infusion at **half the rate** prior to the reaction
- for severe reactions **stop** infusion and manage as per emergency

Read more about daratumumab rapid infusion

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Remove IV cannula and/or deaccess TIVAD or CVAD.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Day 2

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Dexamethasone

- administer orally ONCE a day in the morning
- to be taken with or immediately after food.

Note: if a dose is forgotten or vomited, contact treating team.

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Days 3 to 7

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Day 8

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Dexamethasone

- administer orally ONCE a day in the morning
- to be taken with or immediately after food.

Note: if a dose is forgotten or vomited, contact treating team.

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Days 9 to 14

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Day 15

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Dexamethasone

- administer orally ONCE a day in the morning
- to be taken with or immediately after food.

Note: if a dose is forgotten or vomited, contact treating team.

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Days 16 to 21

This is an oral treatment

Safe handling and waste management (reproductive risk only)

Safe administration

Treatment - Time out

Lenalidomide

- administer orally ONCE a day, at the same time each day, on **days 1 to 21** every 28 days
- to be swallowed whole with a glass of water; do not break, crush or chew
- can be taken either with or without food

Note: missed doses should not be taken if it is less than 12 hours until the next dose.

Continue safe handling precautions (reproductive risk only) for 7 days after completion of drug(s).

Days 22 and 23

This is an oral treatment

Dexamethasone

- administer orally ONCE a day in the morning
- to be taken with or immediately after food.

Note: if a dose is forgotten or vomited, contact treating team.

Discharge information

Antiemetics

- Antiemetics as prescribed.

Dexamethasone tablets

- Dexamethasone tablets with written instructions on how to take them.

Thromboprophylaxis

- Low dose aspirin OR enoxaparin 40 mg subcut daily for the duration of treatment if prescribed.

Growth factor support

- Arrangements for administration if prescribed.

Prophylaxis medications

- Prophylaxis medications (if prescribed) i.e. tumour lysis prophylaxis, PJP prophylaxis, antivirals.

Patient information

- Ensure patient receives patient information sheet.

Side effects

The side effects listed below are not a complete list of all possible side effects for this treatment. Side effects are categorised into the approximate onset of presentation and should only be used as a guide.

Immediate (onset hours to days)	
Hypersensitivity reaction	Anaphylaxis and infusion related reactions can occur with this treatment. Read more about hypersensitivity reaction
Taste and smell alteration	Read more about taste and smell changes

Early (onset days to weeks)	
Neutropenia	Abnormally low levels of neutrophils in the blood. This increases the risk of infection. Any fever or suspicion of infection should be investigated immediately and managed aggressively. Read more about immediate management of neutropenic fever
Thrombocytopenia	A reduction in the normal levels of functional platelets, increasing the risk of abnormal bleeding. Read more about thrombocytopenia
Arthralgia and myalgia	Generalised joint pain or and/or stiffness and muscle aches, often worse upon waking or after long periods of inactivity. Can improve with movement. May be mild or severe, intermittent or constant and accompanied by inflammation. Read more about arthralgia and myalgia
Constipation	
Cough	
Diarrhoea	Read more about treatment induced diarrhoea
Fatigue	Read more about fatigue
Nausea and vomiting	Read more about prevention of treatment induced nausea and vomiting
Respiratory tract infection	
Skin rash	Anti-cancer drugs can cause a number of changes in the skin with maculo-papular rash the most common type of drug-induced skin reaction. Read more about skin rash
Side effects of corticosteroids	Insomnia, oedema, increased risk of infection e.g. oral thrush, gastric irritation, worsening of peptic ulcer disease, increased blood sugar levels, loss of diabetic control, mood and behavioural changes - including anxiety, euphoria, depression, mood swings, increased appetite and weight gain, osteoporosis and fractures (long term use), bruising and skin fragility are associated with corticosteroid use.
Thromboembolism	Venous thromboembolism (VTE), including deep vein thrombosis (DVT) and pulmonary embolism (PE) is significantly increased in multiple myeloma patients treated with thalidomide in combination with other therapies including doxorubicin, melphalan and prednisolone or dexamethasone; and lenalidomide and pomalidomide in combination with dexamethasone. Read more about management of thromboembolism (VTE) in multiple myeloma

Late (onset weeks to months)	
Anaemia	Abnormally low levels of red blood cells (RBCs) or haemoglobin in the blood. Read more about anaemia
Anorexia	Loss of appetite accompanied by decreased food intake. Read more about anorexia
Diarrhoea (late onset)	Chronic loose stools due to bile acid malabsorption has been observed in patients receiving lenalidomide. Referral to Gastroenterology should be considered. An empiric trial of cholestyramine (a bile-acid binding resin) is reasonable for these patients. Read more about treatment induced diarrhoea
Hypothyroidism	
Muscle cramps	Cramping in the hands, calves and/or thighs associated with hypomagnesaemia (low magnesium) and/or hypocalcaemia (low calcium).
Stevens-Johnson syndrome (SJS)	Stevens-Johnson syndrome (SJS) or toxic epidermal necrolysis (TEN) is characterised by fever, malaise, a painful rash, erythematous macules, targetoid lesions, or diffuse erythema progressing to vesicles and bullae, and oral, ocular and/or genital mucositis with painful mucosal erosion. Patients who develop SJS/TEN should never be re-exposed to the causative agent.

Delayed (onset months to years)	
Cataract	A disorder characterised by partial or complete opacity of the crystalline lens of one or both eyes. This results in a decrease in visual acuity and eventual blindness if untreated.

Evidence

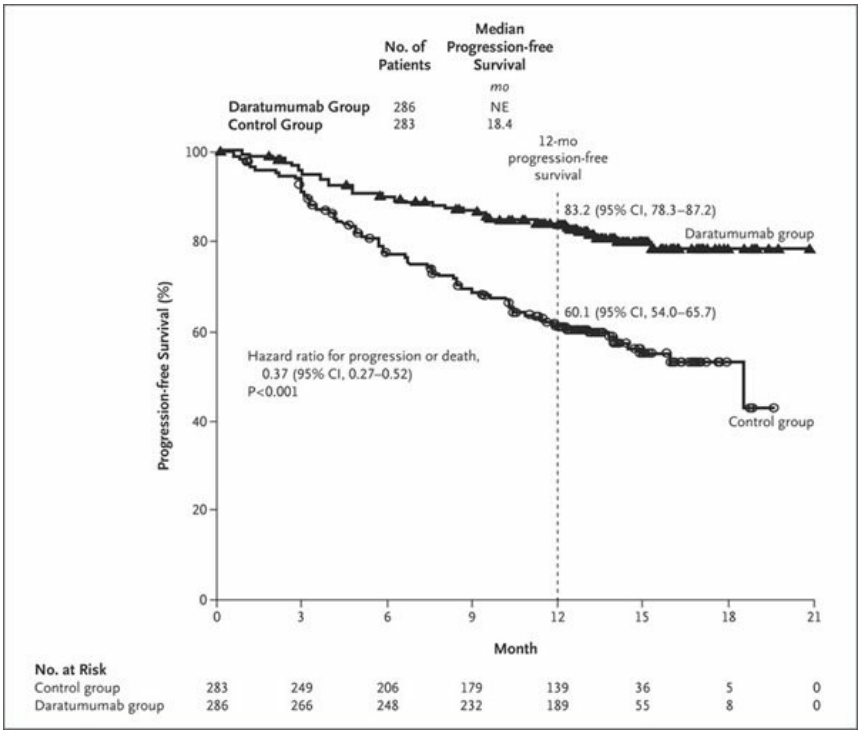
The role of daratumumab administered in combination with lenalidomide and dexamethasone was studied in the phase III POLLUX study.[9] In this randomised, open-label study, patients with relapsed / refractory plasma cell myeloma who had received at least one prior line of therapy received lenalidomide 25mg daily days 1-21 of a 28-day cycle in combination with dexamethasone 40mg once weekly. Patients randomised to the experimental arm further received daratumumab 16mg/kg administered weekly for 8 weeks, fortnightly for 16 weeks, then monthly thereafter. Patients with creatinine clearance between 20 and 60ml/min received lenalidomide at a 10mg dose. Patients greater than 75 were able to receive a reduced dose of dexamethasone (20mg). Patients may have received prior lenalidomide but could not be refractory to it or have discontinued due to an adverse event. The primary end-point of the study was progression-free survival (PFS).

Efficacy

286 patients were randomised to receive daratumumab, with 283 patients assigned to the control group. Median age was 65 years in each arm; 63.3% of patients had undergone at least one stem cell transplant. 19.2% of patients had received at least 3 prior lines of therapy; 27.4% of patients had disease refractory to the last line of therapy.[9]

In the initial analysis, at a median follow-up of 13.5 months, the median PFS was not reached in the daratumumab arm, compared with 18.4 months in the control group. 12 month PFS was 83.2% in the daratumumab arm versus 60.1% in the control group (hazard ratio (HR) 0.37, p<0.001). Overall response rate (ORR) was higher in the daratumumab arm (92.9% v 76.4%, p<0.001), as was the rate of complete response (CR) (43.1% v 19.2%, p<0.001). Patients with deeper responses had longer PFS.[9]

In the most recent update presented at ASH2018[10], at more than 3 years of median follow-up, the benefit of daratumumab is maintained, with median PFS of not reached (NR) v 17.5 months (HR 0.44, p<0.0001). The benefit was maintained across all cytogenetic risk strata, regardless of number of prior lines of therapy. Minimal residual disease (MRD) negativity at 10-5 level was achieved more frequently in the daratumumab arm (30% v 5%, p<0.00001)



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Toxicity

The addition of daratumumab was generally well-tolerated. Adverse events that occurred at greater than 10% frequency in the treatment arm versus control group were neutropenia, diarrhoea, upper respiratory tract infection and cough, felt to be related to longer exposure to treatment in the daratumumab arm. Serious adverse events occurred at similar frequency in the 2 arms (48.8% v 42.0%). No haemolysis was seen amongst daratumumab-treated patients who received red cell transfusions.

No late safety signals were identified in the extended follow-up.

Table 3. Most Common Adverse Events during Treatment in the Safety Population.*

Event	Daratumumab Group (N=283)		Control Group (N=281)	
	Any Grade	Grade 3 or 4	Any Grade	Grade 3 or 4
	number of patients (percent)			
Hematologic adverse event				
Neutropenia	168 (59.4)	147 (51.9)	121 (43.1)	104 (37.0)
Anemia	88 (31.1)	35 (12.4)	98 (34.9)	55 (19.6)
Thrombocytopenia	76 (26.9)	36 (12.7)	77 (27.4)	38 (13.5)
Febrile neutropenia	16 (5.7)	16 (5.7)	7 (2.5)	7 (2.5)
Lymphopenia	17 (6.0)	15 (5.3)	15 (5.3)	10 (3.6)
Nonhematologic adverse event				
Diarrhea	121 (42.8)	15 (5.3)	69 (24.6)	9 (3.2)
Fatigue	100 (35.3)	18 (6.4)	78 (27.8)	7 (2.5)
Upper respiratory tract infection	90 (31.8)	3 (1.1)	58 (20.6)	3 (1.1)
Constipation	83 (29.3)	3 (1.1)	71 (25.3)	2 (0.7)
Cough	82 (29.0)	0	35 (12.5)	0
Muscle spasms	73 (25.8)	2 (0.7)	52 (18.5)	5 (1.8)
Nasopharyngitis	68 (24.0)	0	43 (15.3)	0
Nausea	68 (24.0)	4 (1.4)	40 (14.2)	0
Pyrexia	57 (20.1)	5 (1.8)	31 (11.0)	4 (1.4)
Insomnia	55 (19.4)	1 (0.4)	55 (19.6)	2 (0.7)
Dyspnea	52 (18.4)	9 (3.2)	32 (11.4)	2 (0.7)
Back pain	50 (17.7)	4 (1.4)	48 (17.1)	4 (1.4)
Vomiting	47 (16.6)	3 (1.1)	15 (5.3)	2 (0.7)
Asthenia	45 (15.9)	8 (2.8)	36 (12.8)	7 (2.5)
Peripheral edema	43 (15.2)	2 (0.7)	37 (13.2)	3 (1.1)
Pneumonia	40 (14.1)	22 (7.8)	37 (13.2)	23 (8.2)

* The safety population included all patients who received at least one dose of trial treatment. Adverse events of any grade that are listed are those that occurred in more than 15% of the patients in either group. Adverse events of grade 3 or 4 that are listed are those that occurred in more than 5% of the patients in either group.

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of most recent amendment 03 March 2016

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History

Version 2

Date	Summary of changes
13/04/2023	The following changes have been made with the consensus agreement of the Haematology Reference Committee: • Link to Medical Scientific Advisory Group (MSAG) guidelines updated • Changed all references of ‘i-Access™ program’ to ‘pregnancy prevention risk management program’ • Bone modifying agents block added to "Clinical information" section, related note removed from treatment schedule and linked pages removed • Lenalidomide administration details updated in treatment schedule, administration and patient information The following changes have been made to ensure consistency across eviQ protocols: • Specific medications removed from G-CSF note in 'Dose modifications' section • Dose modifications for rash updated to align with product information • Cataract, cough and respiratory tract infection added to side effects Changed to Version 2
03/05/2023	Notes regarding SC daratumumab added to treatment schedule

Version 1

Date	Summary of changes
24/05/2019	New eviQ protocol presented at Haematology Reference Group meeting.
10/07/2019	New protocol published on eviQ v.1. Review in 1 year.
10/10/2019	Clinical information updated with PBS expanded indications for G-CSF.
01/06/2020	New indication added for patients with multiple myeloma who are ineligible for autologous stem cell transplantation.
23/04/2021	Daratumumab rapid infusion link added to clinical information and administration, first daratumumab infusion split dose note added to treatment schedule.
30/04/2021	Protocol reviewed at Haematology Reference Committee meeting: • Late onset diarrhoea block added to side effects • Administration section updated to include all days of treatment • Next review in 2 years.
29/11/2021	Interactions updated.
21/12/2021	Changed antiemetic clinical information block to minimal or low, to align with new categories. See ID 7

Date	Summary of changes
	Prevention of anti-cancer therapy induced nausea and vomiting (AINV) v5.
20/01/2022	Interactions updated.

The information contained in this protocol is based on the highest level of available evidence and consensus of the eviQ reference committee regarding their views of currently accepted approaches to treatment. Any clinician (medical oncologist, haematologist, radiation oncologist, medical physicist, radiation therapist, pharmacist or nurse) seeking to apply or consult this protocol is expected to use independent clinical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. While eviQ endeavours to link to reliable sources that provide accurate information, eviQ and the Cancer Institute NSW do not endorse or accept responsibility for the accuracy, currency, reliability or correctness of the content of linked external information sources. Use is subject to eviQ's disclaimer available at www.eviQ.org.au

First approved: 24 May 2019
Last reviewed: 30 April 2021
Review due: 30 June 2023

The currency of this information is guaranteed only up until the date of printing, for any updates please check:
https://www.eviq.org.au/p/3613
13 Jun 2023

Patient information - Multiple myeloma - DRd (daratumumab lenalidomide dexamethasone)

Patient's name:

Your treatment

The treatment schedule below explains how the drugs for this treatment are given.

DRd (daratumumab lenalidomide dexamethasone)			
This treatment cycle is repeated every 28 days. Your doctor will advise you of the number of treatments you will have.			
Cycle 1			
Day	**Treatment**	**How it is given**	**How long it takes**
1, 8, 15 and 22	**Daratumumab** *(dara-toom-oo-mab)*	By a drip into a vein	About 7 to 8 hours
1 and 2, 8 and 9, 15 and 16, 22 and 23	**Dexamethasone** *(dex-a-meth-a-sone)*	Take orally ONCE a day in the morning with food on days 1 and 2, 8 and 9, 15 and 16, 22 and 23 only. **Please note:** on cycle 1 day 1 your dexamethasone dose will be given by a drip into the vein prior to daratumumab administration	
1 to 21	**Lenalidomide** *(len-a-lid-o-mide)*	Take orally ONCE a day on days 1 to 21 at the same time every day. Take either with or without food. Swallow whole, do not break, open, chew or crush capsules.	
Cycle 2			
Day	**Treatment**	**How it is given**	**How long it takes**
1, 8, 15 and 22	**Daratumumab**	By a drip into a vein	About 4 to 5 hours
1 and 2, 8 and 9, 15 and 16, 22 and 23	**Dexamethasone**	Take orally ONCE a day in the morning with food on days 1 and 2, 8 and 9, 15 and 16, 22 and 23 only.	
1 to 21	**Lenalidomide**	Take orally ONCE a day on days 1 to 21 at the same time every day. Take either with or without food. Swallow whole, do not break, open, chew or crush capsules.	
Cycles 3 to 6			
Day	**Treatment**	**How it is given**	**How long it takes**
1 and 15	**Daratumumab**	By a drip into a vein	About 4 to 5 hours
1 and 2, 8 and 9, 15 and 16, 22 and 23	**Dexamethasone**	Take orally ONCE a day in the morning with food on days 1 and 2, 8 and 9, 15 and 16, 22 and 23 only.	

DRd (daratumumab lenalidomide dexamethasone)			
1 to 21	**Lenalidomide**	Take orally ONCE a day on days 1 to 21 at the same time every day. Take either with or without food. Swallow whole, do not break, open, chew or crush capsules.	
Cycle 7 and further cycles			
Day	**Treatment**	**How it is given**	**How long it takes**
1	**Daratumumab**	By a drip into a vein	About 4 to 5 hours
1 and 2, 8 and 9, 15 and 16, 22 and 23	**Dexamethasone**	Take orally ONCE a day in the morning with food on days 1 and 2, 8 and 9, 15 and 16, 22 and 23 only.	
1 to 21	**Lenalidomide**	Take orally ONCE a day on days 1 to 21 at the same time every day. Take either with or without food. Swallow whole, do not break, open, chew or crush capsules.	

Missed doses:

- **Dexamethasone:** if you forget to take your tablets or vomit your tablets, contact your treating team.
- **Lenalidomide:** if you forget to take a capsule and there are less than 12 hours before your next dose, skip that dose and take your normal dose at the next time it is due. Do not take an extra dose.

When to get help

Anticancer drugs (drugs used to treat cancer) can sometimes cause serious problems. It is important to get medical help immediately if you become unwell.

IMMEDIATELY go to your nearest hospital Emergency Department, or contact your doctor or nurse if you have any of the following at any time:	**Emergency contact details** Ask your doctor or nurse from your treating team who to contact if you have a problem
• a temperature of 38°C or higher • chills, sweats, shivers or shakes • shortness of breath • uncontrolled vomiting or diarrhoea • pain, tingling or discomfort in your chest or arms • you become unwell.	Daytime:..... Night/weekend:..... Other instructions:..... ....

Before starting daratumumab, my blood test results collected on (date) _____ were:

Blood type: ☐ A ☐ B ☐ AB ☐ O ☐ Rh+ ☐ Rh-

Indirect Coombs test (antibody screen) was: ☐ Negative ☐ Positive for the following antibodies:.....

Other:.....

Contact details of institution where the blood tests were performed:.....

During your treatment immediately tell the doctor or nurse looking after you if you get any of the following problems:

- leaking from the area where the drugs are being given

- pain, stinging, swelling or redness in the area where the drugs are being given or at any injection sites
- a skin rash, itching, feeling short of breath, wheezing, fever, shivers, or feeling dizzy or unwell in any way (allergic reaction).

Important information about taking lenalidomide

Lenalidomide is only available under a restricted distribution pregnancy prevention risk management program. You, your doctor and your pharmacist must be registered and comply with conditions of the pregnancy prevention risk management program.

Lenalidomide can cause major birth defects to an unborn baby. Lenalidomide must not be taken if you are pregnant. Contraception **must** be used while you are being treated with lenalidomide.

- **If you are a male patient and your female partner is of child-bearing potential** you **must** use a barrier method of contraception (e.g. condoms) while taking lenalidomide and for one week after finishing lenalidomide treatment.
- **If you are a woman of child-bearing potential (a patient or a partner of a patient)** you **must** use at least one effective method of contraception during treatment with lenalidomide. You should start using contraception four weeks before taking lenalidomide and continue for four weeks after finishing lenalidomide treatment. It is important that you discuss appropriate contraception with your doctor.

If you become pregnant while taking lenalidomide you must stop the treatment and tell your doctor immediately. If you are a male patient and your female partner becomes pregnant during your treatment you must inform your doctor immediately.

Other information about your treatment

Changes to your dose or treatment delays

Sometimes a treatment may be started at a lower dose or the dose needs to be changed during treatment. There may also be times when your treatment is delayed. This can happen if your doctor thinks you are likely to have severe side effects, if you get severe side effects, if your blood counts are affected and causing delays in treatment, or if you are finding it hard to cope with the treatment. This is called a dose reduction, dose change or treatment delay. Your doctor will explain if you need any changes or delays to your treatment and the reason why.

Blood tests and monitoring

You will need to have a blood test before you start treatment and regularly throughout your treatment. Your doctor or nurse will tell you when to have these blood tests.

Central venous access devices (CVADs)

This treatment may involve having chemotherapy through a central venous access device (CVAD). Your doctor or nurse will explain this to you. For more information, see the eviQ patient information sheets on CVADs.

Other medications given during this treatment

- **Anti-sickness (anti-nausea) medication:** you may be given some anti-sickness medication. Make sure you take this medication as your doctor or nurse tells you, even if you don't feel sick. This can help to prevent the sickness starting.
- **Prophylaxis medication:** you may need to take some medications to prevent infection and to help prevent or reduce some of the side effects of the chemotherapy. Your doctor or nurse will tell you how and when to take these medications.
- **G-CSF:** you may be given injection(s) of a drug called G-CSF (also called filgrastim, lipegfilgrastim or pegfilgrastim) under your skin. This helps to boost your white blood cell count. Your white blood cells help to fight infection. Lipegfilgrastim and pegfilgrastim are given once. Filgrastim is given for several days until your white blood cells recover. Your doctor will decide if you need this medication.
- **Daratumumab pre and post-treatment medication:** before your treatment with daratumumab you will need to take some tablets called a premedication to help prevent you from having a reaction. After your daratumumab infusion or injection you may be given some additional corticosteroid tablets called post-treatment medication to prevent further reactions.

Side effects

Cancer treatments can cause damage to normal cells in your body, which can cause side effects. Everyone gets different side effects, and some people will have more problems than others.

The table below shows some of the side effects you may get with this treatment. You are unlikely to get all of those listed and you may also get some side effects that have not been listed.

Tell your doctor or nurse about any side effects that worry you. Follow the instructions below and those given to you by your doctor or nurse.

Immediate (onset hours to days)	

Allergic reaction	• Allergic reactions are uncommon but can be life threatening.
	• **If you feel unwell during the infusion or shortly after it, or:**
	  ◦ **get a fever, shivers or shakes**
	  ◦ **feel dizzy, faint, confused or anxious**
	  ◦ **start wheezing or have difficulty breathing**
	  ◦ **have a rash, itch or redness of the face**
	
	<u>While you are in hospital:</u> Tell your doctor or nurse immediately.
	<u>After you leave:</u> Contact your doctor or nurse immediately, or go to the nearest hospital Emergency Department.

Taste and smell changes	• You may find that food loses its taste or tastes different. • These changes are likely to go away with time. • Do your mouth care regularly. • Chew on sugar-free gum or eat sugar-free mints. • Add flavour to your food with sauces and herbs. • Ask your doctor or nurse for eviQ patient information - Taste and smell changes during cancer treatment.

Early (onset days to weeks)	

Infection risk (neutropenia)	• This treatment lowers the amount of white blood cells in your body. The type of white blood cells that help to fight infection are called neutrophils. Having low level of neutrophils is called neutropenia. If you have neutropenia, you are at greater risk of getting an infection. It also means that your body can't fight infections as well as usual. This is a serious side effect, and can be life threatening.
	• Wash your hands often.
	• Keep a thermometer at home and take your temperature regularly, and if you feel unwell.
	• Do your mouth care regularly.
	• Inspect your central line site (if you have one) daily for any redness, pus or swelling.
	• Limit contact with people who are sick.
	• Learn how to recognise the signs of infection.
	• Ask your doctor or nurse for eviQ patient information - Infection during cancer treatment.
	• **Tell your doctor or nurse immediately, or go to the nearest hospital Emergency Department if you get any of the following signs or symptoms:**
	  ◦ **a temperature of 38°C or higher**
	  ◦ **chills, shivers, sweats or shakes**
	  ◦ **a sore throat or cough**
	  ◦ **uncontrolled diarrhoea**
	  ◦ **shortness of breath**
	  ◦ **a fast heartbeat**
	  ◦ **become unwell even without a temperature.**

Low platelets (thrombocytopenia)	• This treatment lowers the amount of platelets in your blood. Platelets help your blood to clot. When they are low, you are at an increased risk of bleeding and bruising. • Try not to bruise or cut yourself. • Avoid contact sport or vigorous exercise. • Clear your nose by blowing gently. • Avoid constipation. • Brush your teeth with a soft toothbrush. • Don't take aspirin, ibuprofen or other similar anti-inflammatory medications unless your doctor tells you to. • Tell your doctor or nurse if you have any bruising or bleeding. • **Tell your doctor or nurse immediately, or go to your nearest hospital Emergency Department if you have any uncontrolled bleeding.**
Joint and muscle pain and stiffness	• You may get muscle, joint or general body pain and stiffness. • Applying a heat pack to affected areas may help. • Talk to your doctor or nurse about other ways to manage these symptoms. You may need medication to help with any pain.

Constipation	• You may have bowel motions (stools, poo) that are less frequent, harder, smaller, painful or difficult to pass.
	• You may also get:
	  ◦ bloating, cramping or pain
	  ◦ a loss of appetite
	  ◦ nausea or vomiting.
	• Drink plenty of fluids (unless you are fluid restricted).
	• Eat plenty of fibre-containing foods such as fruit, vegetables and bran.
	• Take laxatives as directed by your doctor.
	• Try some gentle exercise daily.
	• **Tell your doctor or nurse if you have not opened your bowels for more than 3 days.**

Cough	• Some people who receive this treatment develop a cough • Tell your doctor or nurse if you develop a cough
Diarrhoea	• You may get bowel motions (stools, poo) that are more frequent or more liquid. • You may also get bloating, cramping or pain. • Take your antidiarrhoeal medication as directed by your doctor. • Drink plenty of fluids (unless you are fluid restricted). • Eat and drink small amounts more often. • Avoid spicy foods, dairy products, high fibre foods, and coffee. • Ask your doctor or nurse for eviQ patient information - Diarrhoea during cancer treatment. • **Tell your doctor or nurse immediately, or go to your nearest hospital Emergency Department if your diarrhoea is not controlled, you have 4 or more loose bowel motions per day, and if you feel dizzy or light-headed.**
Tiredness and lack of energy (fatigue)	• You may feel very tired, have no energy, sleep a lot, and not be able to do normal activities or things you enjoy. • Do not drive or operate machinery if you are feeling tired. • Nap for short periods (only 1 hour at a time) • Prioritise your tasks to ensure the best use of your energy. • Eat a well balanced diet and drink plenty of fluids (unless you are fluid restricted). • Try some gentle exercise daily. • Allow your friends and family to help. • **Tell your doctor or nurse if you get any of the symptoms listed above.**

Nausea and vomiting	• You may feel sick (nausea) or be sick (vomit). • Take your anti-sickness medication as directed even if you don't feel sick. • Drink plenty of fluids (unless you are fluid restricted). • Eat small meals more frequently. • Try food that does not require much preparation. • Try bland foods like dry biscuits or toast. • Gentle exercise may help with nausea. • Ask your doctor or nurse for eviQ patient information - Nausea and vomiting during cancer treatment. • **Tell your doctor or nurse immediately, or go to the nearest hospital Emergency Department if you have uncontrolled vomiting or feel dizzy or light-headed.**
Chest infection	• You can develop a chest infection whilst receiving this treatment. • **Tell your doctor or nurse as soon as possible if you get any of the following symptoms:** ◦ **shortness of breath** ◦ **difficulty breathing** ◦ **wheezing** ◦ **coughing up mucus**
Skin rash	• You may get a red, bumpy rash and dry, itchy skin. • Moisturise your skin with a gentle non-perfumed moisturising cream like sorbolene or aqueous cream. • Do not scratch your skin. • Protect your skin from the sun by wearing sun-protective clothing, a wide-brimmed hat, sunglasses and sunscreen of SPF 50 or higher. • **Talk to your doctor or nurse about other ways to manage your skin rash.**
Side effects from steroid medication	• Steroid medication may cause: ◦ mood swings and behaviour changes ◦ an increased appetite ◦ weight gain ◦ swelling in your hands and feet ◦ stomach upsets ◦ trouble sleeping ◦ fragile skin and bruising ◦ an increase in your blood sugar level ◦ weak and brittle bones (osteoporosis) • Take your steroid medication with food to reduce stomach upset • If you have diabetes, your blood sugar levels may be tested more often. • Tell your doctor or nurse if you get any of the symptoms listed above.
Blood clots (thromboembolism)	• Blood clots can occur with this treatment. • **Tell your doctor or nurse immediately, or go to the nearest hospital Emergency Department if you get any of the following signs or symptoms:** ◦ **redness, heat or pain in your leg(s)** ◦ **numbness or weakness in your face, arm or leg** ◦ **chest pain** ◦ **sudden shortness of breath** ◦ **dizziness** ◦ **trouble speaking** ◦ **blurred vision** ◦ **severe headache** ◦ **unexplained falls or loss of balance.**

Late (onset weeks to months)	
Low red blood cells (anaemia)	• You may feel dizzy, light-headed, tired and appear more pale than usual. • Tell your doctor or nurse if you have any of these signs or symptoms. You might need a blood transfusion. • **Tell your doctor or nurse immediately, or go to the nearest hospital Emergency Department if you have any chest pain, trouble breathing, or feel like your heart is racing.**
Appetite loss (anorexia)	• You may not feel like eating. • Try to avoid drinking fluids at meal times. • Try to eat small meals or snacks regularly throughout the day. • Try to eat food that is high in protein and calories. • If you are worried about how much food you can eat, or if you are losing weight, ask to speak to a dietitian.
Diarrhoea (late onset)	• Whilst usually mild and easily manageable, bowel motions (stools, poo) that are more frequent or more liquid may persist during treatment with lenalidomide. • Bile acid malabsorption (BAM), a condition in which patients do not absorb bile acids properly from their intestines, can be a cause of persistent diarrhoea in patients taking lenalidomide. • It can be treated by making some dietary changes such as making sure that fat does not make up more than 20% of the diet. • Your doctor will recommend if treatment is necessary for your diarrhoea • Drink plenty of fluids (unless you are fluid restricted). • Ask your doctor or nurse for eviQ patient information - Diarrhoea during cancer treatment. • **Tell your doctor or nurse immediately, or go to your nearest hospital Emergency Department if your diarrhoea is not controlled, you have 4 or more loose bowel motions per day, and if you feel dizzy or light-headed.**
Slow thyroid gland (hypothyroidism)	• You may: ◦ fatigue and low energy levels ◦ depression ◦ slow heart rate ◦ unexplained weight gain ◦ intolerance to cold temperatures ◦ fatigued and aching muscles ◦ dry, coarse skin ◦ puffy face ◦ hair loss ◦ constipation ◦ problems with concentration • You will have regular blood tests to check how well your thyroid is working • **Tell your doctor or nurse if you get any of the symptoms listed above.**
Muscle cramps	• You may get muscle cramps, usually in the hands, calves and thighs. • Tell your doctor or nurse if you get any of these symptoms. Your doctor may prescribe you medication for this.
Stevens-Johnson syndrome (SJS)	• This side effect is rare, but can be very serious. • **Tell your doctor or nurse immediately, or go to the nearest hospital Emergency Department if you get any of the following symptoms:** ◦ **flu-like symptoms, then a painful red or purple rash that spreads** ◦ **swelling of the face or tongue** ◦ **painful or peeling skin** ◦ **blisters on the skin, mouth, nose, eyes and genitals.**

Delayed (onset months to years)	
Cataract	• Tell your doctor or nurse if you notice any changes to your eyes, including blurred vision.

General advice for people having cancer treatment

Blood clot risk

- Cancer and anticancer drugs can increase the risk of a blood clot (thrombosis).
- Tell your doctor if you have a family history of blood clots.
- A blood clot can cause pain, redness, swelling in your arms or legs, shortness of breath or chest pain.
- If you have any of these symptoms go to your nearest hospital Emergency Department.

Medications and vaccinations

- Before you start treatment, tell your doctor about any medications you are taking, including vitamins or herbal supplements.
- Don't stop or start any medications during treatment without talking to your doctor and pharmacist first.
- Paracetamol is safe to take if you have a headache or other mild aches and pains. It is recommended that you avoid taking aspirin, ibuprofen and other anti-inflammatory type medications for pain while you are having treatment. However, if these medications have been prescribed by your doctor, do not stop taking them without speaking with your doctor.
- Vaccinations such as flu and tetanus vaccines are safe to receive while having treatment. Do not have any live vaccines during your treatment or for 6 months after it finishes. If you are unsure, check with your doctor before you have any vaccinations.
- People you live with should be fully vaccinated, including having live vaccines according to the current vaccination schedule. Extra care needs to be taken with hand washing and careful disposal of soiled nappies for infants who have recently received the rotavirus vaccine.

Other medical and dental treatment

- If you go to hospital or any other medical appointment (including dental appointments), always tell the person treating you that you are receiving anticancer drugs.
- Before you have any dental treatment, talk to your doctor.

Diet and food safety

- While you are receiving this treatment it is important that you try to maintain a healthy diet.
- Speak to your doctor or nurse about whether drinking alcohol is safe with your treatment.
- If you have any concerns about recent weight loss or weight gain or questions about your diet, ask to speak to a dietitian.
- There are some foods that may cause infection in high risk individuals and should be avoided. For more information on foods to avoid and food hygiene please ask for a copy of the Listeria and food brochure.

Fertility

- Some cancer treatments can reduce your fertility. This can make it difficult or impossible to get pregnant or father a child.
- Talk to your doctor or nurse before you start any treatment. Depending on your situation there may be fertility sparing options available to you and/or your partner, discuss these with your doctor or nurse.

Pregnancy and breastfeeding

- This treatment can cause major congenital disabilities or death to unborn babies. Talk to your doctor or nurse if you think there is any chance that you could be pregnant.
- Do not try to get pregnant or father a child during this treatment. You must use contraception while having this treatment and after stopping treatment, see the "Important information" section above for more information. Ask your doctor or nurse about what type of contraception you should use.
- If you are planning pregnancy/fatherhood after completing this treatment, talk to your doctor. Some doctors advise waiting between 6 months and 2 years after treatment.
- Do not breastfeed if you are on this treatment, as anti-cancer medications can also pass into breast milk.

Sex life and sexuality

- The desire to have sex may decrease as a result of this treatment or its side effects.
- Your emotions and the way you feel about yourself may also be affected by this treatment.
- It may help to discuss your concerns with your partner and doctor or nurse.

Quitting smoking

- It is never too late to quit smoking. Quitting smoking is one of the best things you can do to help your treatment work better.
- There are many effective tools to improve your chances of quitting.
- Talk to your treating team for more information and referral to a smoking cessation support service.

Staying active

- Research shows that exercise, no matter how small, has many benefits for people during and after cancer treatment.
- Talk to your doctor before starting an exercise program. Your doctor can advise whether you need a modified exercise program.

For more information about cancer treatment, side effects and side effect management see our Patient and carers section.

Where to get more information

Telephone support

- Call Cancer Council on 13 11 20 for cancer information and support
- Call the Leukaemia Foundation on 1800 620 420 (Mon to Fri 9am – 5pm)
- Call the Lymphoma Nurse Support Line on 1800 953 081 (Mon to Fri 9am - 5pm)

Haematology, transplant and cellular therapy information

- Arrow bone marrow transplant foundation – arrow.org.au
- Australasian Menopause Society – menopause.org.au
- Chris O'Brien Lifehouse - Total Body Irradiation - mylifehouse.org.au/departments/radiation-oncology/total-body-irradiation/
- Healthy Male Andrology Australia – healthymale.org.au/
- International Myeloma Foundation – myeloma.org
- Leukaemia Foundation – leukaemia.org.au
- Lymphoma Australia – lymphoma.org.au
- Myeloma Australia – myeloma.org.au
- NSW Agency for Clinical Innovation, Blood & Marrow Transplant Network – aci.health.nsw.gov.au/resources/blood-and-marrow-transplant
- NSW Agency for Clinical Innovation - aci.health.nsw.gov.au/projects/immune-effector-cell-service
- NCCN Guidelines for Patients Immunotherapy Side Effects: CAR T-Cell Therapy - nccn.org/patientresources/patient-resources/guidelines-for-patients
- Talk Blood Cancer – cmlsupport.org.uk/organisation-type/social-media-groups

General cancer information and support

- Australian Rare Cancer (ARC) Portal – arcportal.org.au/
- Beyondblue – beyondblue.org.au
- Cancer Australia – canceraustralia.gov.au
- Cancer Council Australia – cancer.org.au
- Cancer Voices Australia – cancervoicesaustralia.org
- CanTeen – canteen.org.au
- Carers Australia – carersaustralia.com.au
- eviQ Cancer Treatments Online – eviQ.org.au
- Food Standards Australia New Zealand: Listeria & Food Safety – foodstandards.gov.au/publications/pages/listeriabrochuretext.aspx
- LGBTQI+ People and Cancer - cancercouncil.com.au/cancer-information/lgbtqi
- Look Good Feel Better – lgfb.org.au
- Patient Information - patients.cancer.nsw.gov.au
- Radiation Oncology Targeting Cancer - targetingcancer.com.au
- Redkite – redkite.org.au
- Return Unwanted Medicines – returnmed.com.au
- Staying active during cancer treatment – patients.cancer.nsw.gov.au/coping-with-cancer/physical-wellbeing/staying-active

Quit smoking information and support

Quitting smoking is helpful even after you have been diagnosed with cancer. The following resources provide useful information and support to help you quit smoking. Talk to your treating team about any other questions you may have.

- Call Quitline on 13 QUIT (13 78 48)
- iCanQuit – iCanQuit.com.au
- Patient Information - patients.cancer.nsw.gov.au/coping-with-cancer/physical-wellbeing/quitting-smoking
- Quitnow – quitnow.gov.au

Additional notes:

This document is a guide only and cannot cover every possible situation. The health professionals caring for you should always consider your individual situation when making decisions about your care. Contact your cancer clinic staff or doctor if you have any questions or concerns about your treatment, or you are having problems coping with side effects. While eviQ endeavours to link to reliable sources that provide accurate information, eviQ and the Cancer Institute NSW do not endorse or accept responsibility for the accuracy, currency, reliability or correctness of the content of linked external information sources. Use of this document is subject to eviQ's disclaimer available at www.eviQ.org.au

First approved: 24 May 2019
Last reviewed: 30 April 2021
Review due: 30 June 2023

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13 Jun 2023