# **NEW ZEALAND DATA SHEET**

# 1. PRODUCT NAME

Jemperli 500 mg/10 mL concentrate for solution for infusion

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each mL of concentrate for solution for infusion contains 50 mg of dostarlimab.

One vial of 10 mL concentrate for solution for infusion contains 500 mg of dostarlimab (50 mg/mL).

Dostarlimab is produced in Chinese Hamster Ovary (CHO) cells by recombinant DNA technology.

For the full list of excipients, see section 6.1 List of excipients.

# 3. PHARMACEUTICAL FORM

Concentrate for solution for infusion (sterile concentrate).

Dostarlimab is a clear to slightly opalescent colourless to yellow solution, free from visible particles.

# 4. CLINICAL PARTICULARS

## 4.1 Therapeutic indications

Jemperli is indicated as monotherapy for the treatment of adult patients with recurrent or advanced mismatch repair deficient (dMMR) endometrial cancer (EC) that has progressed on or following prior treatment with a platinum-containing regimen.

## 4.2 Dose and method of administration

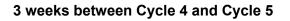
## Dose

The recommended dose as monotherapy is 500 mg dostarlimab administered as an intravenous infusion over 30 minutes every 3 weeks for 4 doses followed by 1,000 mg every 6 weeks for all cycles thereafter.

The dosage regimen is presented in Table 1.

500 mg once every 3 weeks (1 Cycle = 3 weeks)				se progre	-	6 weeks until unacceptable eeks)		
Cycle	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Continue dosing
Week	1	4	7	10	13	19	25	Q6W

## Table 1. Dosage regimen for patients treated with dostarlimab



Administration of dostarlimab should continue according to the recommended dose and schedule until disease progression or unacceptable toxicity.

## Dose modifications

Dose reduction is not recommended. Dosing delay or discontinuation may be required based on individual safety and tolerability. Recommended modifications to manage adverse reactions are provided in Table 2. Detailed guidelines for the management of immunerelated adverse reactions and infusion-related reactions are described in Section 4.4 Special Warnings and Precautions.

Table 2. Recommended dose modifications for dostarlimab				
Immune-related adverse reactions	Severity grade <sup>a</sup>	Dose modification		
Colitis	2 or 3	Withhold dose. Restart dosing when toxicity resolves to Grade 0 or 1.		
	4	Permanently discontinue.		
	Grade 2 (AST <sup>b</sup> or ALT <sup>c</sup> > 3 and up to 5 × ULN <sup>d</sup> or total bilirubin > 1.5 and up to 3 × ULN)	Withhold dose. Restart dosing when toxicity resolves to Grade 0 or 1.		
Hepatitis	Grade ≥3 (AST or ALT > 5 × ULN or total bilirubin > 3 × ULN)	Permanently discontinue (see exception below) <sup>e</sup>		

Immune-related adverse	Severity grade <sup>a</sup>	Dose modification	
reactions			
Type 1 diabetes mellitus (T1DM)	3 or 4 (hyperglycaemia)	Withhold dose. Restart dosing in appropriately managed, clinically and metabolically stable patients.	
Hypophysitis or adrenal insufficiency	2, 3 or 4	Withhold dose. Restart dosing when toxicity resolves to Grade 0 or 1. Permanently discontinue for recurrence or worsening while on adequate hormonal therapy.	
Hypothyroidism or hyperthyroidism	3 or 4	Withhold dose. Restart dosing when toxicity resolves to Grade 0 or 1.	
Pneumonitis	2	Withhold dose. Restart dosing when toxicity resolves to Grade 0 or 1. If Grade 2 recurs, permanently discontinue.	
	3 or 4	Permanently discontinue.	
Nephritis	2	Withhold dose. Restart dosing when toxicity resolves to Grade 0 or 1.	
	3 or 4	Permanently discontinue.	
Exfoliative dermatologic conditions (e.g. SJS, TEN,	Suspected	Withhold dose for any grade. Restart dosing if not confirmed and when toxicity resolves to Grade 0 or 1.	
DRESS)	Confirmed	Permanently discontinue.	
Myocarditis	2, 3 or 4	Permanently discontinue.	
Severe neurological toxicities (myasthenic syndrome/myasthenia gravis, Guillain-Barré syndrome, encephalitis, transverse myelitis)	2, 3 or 4	Permanently discontinue.	
Other immune-related adverse reactions involving a major organ	3	Withhold dose. Restart dosing when toxicity resolves to Grade 0 or 1.	

Table 2. Recommended dose modifications for dostarlimab					
Immune-related adverse reactions	Severity grade <sup>a</sup>	Dose modification			
	4	Permanently discontinue.			
Recurrence of immune- related adverse reactions after resolution to ≤ Grade 1	3 or 4	Permanently discontinue.			
Other adverse reactions	Severity grade <sup>a</sup>	Dose modification			
Infusion-related reactions	2	Withhold dose. If resolved within 1 hour of stopping, may be restarted at 50% of the original infusion rate, or restart when symptoms resolve with pre- medication. If Grade 2 recurs with adequate premedication, permanently discontinue.			
	3 or 4	Permanently discontinue.			

<sup>a</sup> Toxicity graded per National Cancer Institute Common Terminology Criteria for Adverse Events (CTCAE) version 5.0.

<sup>b</sup>AST = aspartate aminotransferase

<sup>c</sup> ALT = alanine aminotransferase

<sup>d</sup> ULN = upper limit of normal

<sup>e</sup> For patients with liver metastases who begin treatment with Grade 2 AST or ALT, if AST or ALT increases by ≥50% relative to baseline and lasts for at least 1 week, then treatment should be discontinued.

#### Special Populations

#### Elderly

No dose adjustment is recommended for patients who are aged 65 years of age or over. There are limited clinical data with dostarlimab in patients aged 75 years or over (see section 5.1 PHARMACODYNAMIC PROPERTIES).

#### Renal impairment

No dose adjustment is recommended for patients with mild or moderate renal impairment. There are limited data in patients with severe renal impairment or end-stage renal disease undergoing dialysis (see Section 5.2 PHARMACOKINETIC PROPERTIES).

#### Hepatic impairment

No dose adjustment is recommended for patients with mild hepatic impairment. There are limited data in patients with moderate or severe hepatic impairment (see Section 5.2 PHARMACOKINETIC PROPERTIES).

#### Paediatric Population

The safety and efficacy of dostarlimab in children and adolescents aged under 18 years have not been established. No data are available.

#### Method of administration

#### Preparation

Parenteral medicinal products should be inspected visually for particulate matter and discolouration prior to administration. Dostarlimab is a slightly opalescent colourless to yellow solution. Discard the vial if visible particles are observed.

#### Dilution

For instructions on dilution of the medicine before administration, see section 6.6.

#### Administration

Dostarlimab is for intravenous infusion only. Dostarlimab should be administered by intravenous infusion using an intravenous infusion pump over 30 minutes by a health care practitioner.

Dostarlimab must not be administered as an intravenous push or bolus injection.

Dostarlimab is compatible with an IV bag made of polyvinyl chloride (PVC) with or without di(2-ethylhexyl) phthalate (DEHP), ethylene vinyl acetate, polyethylene (PE), polypropylene (PP) or polyolefin blend (PP+PE), and a syringe made from PP. Infusion tubing should be made of PVC, platinum cured silicon or PP; fittings made from PVC or polycarbonate and needles made from stainless steel. A 0.2 or 0.22 micron in-line polyethersulfone (PES) filter must be used during administration of dostarlimab.

## 4.3 Contraindications

None

## 4.4 Special warnings and precautions for use

#### Traceability

In order to improve the traceability of biological medicinal products, the tradename and the batch number of the administered product should be clearly recorded.

#### Immune-related adverse reactions

Immune-related adverse reactions, which may be severe or fatal, can occur in patients treated with antibodies blocking the programmed cell death protein-1 / programmed deathligand 1 (PD-1/PD-L1) pathway, including dostarlimab. While immune-related adverse reactions usually occur during treatment with PD-1/PD-L1 blocking antibodies, symptoms can also manifest after discontinuation of treatment. Immune-related adverse reactions may occur in any organ or tissue and may affect more than one body system simultaneously. Important immune-related adverse reactions listed in this section are not inclusive of all possible severe and fatal immune-related reactions.

Early identification and management of immune-related adverse reactions are essential to ensure safe use of PD-1/PD-L1 blocking antibodies. Monitor for symptoms and signs of immune-related adverse reactions. Evaluate haematological and clinical chemistries, including liver, kidney and thyroid function tests, at baseline and periodically during treatment. For suspected immune-related adverse reactions, adequate evaluation including specialty consultation should be ensured.

Based on the severity of the adverse reaction, dostarlimab should be withheld or permanently discontinued and corticosteroids (1 to 2 mg/kg/day prednisone or equivalent) or other appropriate therapy administered (see below and section 4.2 DOSING AND ADMINISTRATION, Dose modification). Upon improvement to Grade 0 or 1, corticosteroid taper should be initiated and continued for 1 month or longer. Based on limited data from clinical studies in patients whose immune-related adverse reactions could not be controlled with corticosteroid use, administration of other systemic immunosuppressants can be considered. Institute hormone replacement therapy for endocrinopathies as warranted.

Dostarlimab should be permanently discontinued for any Grade 3 immune-related adverse reaction that recurs and for any Grade 4 immune-related adverse reaction toxicity, except for endocrinopathies that are controlled with replacement hormones and unless otherwise specified in Table 2.

#### Immune-related pneumonitis

Pneumonitis has been reported in patients receiving dostarlimab (see Section 4.8 ADVERSE EFFECTS). Patients should be monitored for signs and symptoms of pneumonitis. Suspected pneumonitis should be confirmed with radiographic imaging and other causes excluded. Patients should be managed with dostarlimab treatment modifications and corticosteroids (see Section 4.2 DOSING AND ADMINISTRATION).

#### Immune-related colitis

Dostarlimab can cause immune-related colitis (see Section 4.8 ADVERSE EFFECTS). Monitor patients for signs and symptoms of colitis and manage with dostarlimab treatment modifications, anti-diarrhoeal agents and corticosteroids (see Section 4.2 DOSING AND ADMINISTRATION).

#### Immune-related hepatitis

Dostarlimab can cause immune-related hepatitis. Monitor patients for changes in liver function periodically as indicated based on clinical evaluation and manage with dostarlimab treatment modifications and corticosteroids (see Section 4.2 DOSING AND ADMINISTRATION).

#### Immune-related endocrinopathies

Immune-related endocrinopathies, including hypothyroidism, hyperthyroidism, thyroiditis, hypophysitis, type 1 diabetes mellitus, diabetic ketoacidosis and adrenal insufficiency, have been reported in patients receiving dostarlimab (see Section 4.8 ADVERSE EFFECTS).

#### Hypothyroidism and hyperthyroidism

Immune-related hypothyroidism and hyperthyroidism (including thyroiditis) occurred in patients receiving dostarlimab, and hypothyroidism may follow hyperthyroidism. Patients should be monitored for abnormal thyroid function tests prior to and periodically during treatment and as indicated based on clinical evaluation. Immune-related hypothyroidism and hyperthyroidism (including thyroiditis) should be managed as recommended in Section 4.2 DOSING AND ADMINISTRATION.

#### Adrenal insufficiency

Immune-related adrenal insufficiency occurred in patients receiving dostarlimab. Patients should be monitored for clinical signs and symptoms of adrenal insufficiency. For symptomatic adrenal insufficiency, patients should be managed as recommended in Section 4.2 DOSING AND ADMINISTRATION.

#### Immune-related nephritis

Dostarlimab can cause immune-related nephritis (see Section 4.8 ADVERSE EFFECTS). Monitor patients for changes in renal function and manage with dostarlimab treatment modifications and corticosteroids (see Section 4.2 DOSING AND ADMINISTRATION).

#### Immune-related rash

Immune-related rash has been reported in patients receiving dostarlimab, including pemphigoid (see Section 4.8 ADVERSE EFFECTS). Patients should be monitored for signs and symptoms of rash. Exfoliative dermatologic conditions should be managed as recommended (see 4.2 DOSING AND ADMINISTRATION). Events of Stevens-Johnson Syndrome (SJS), toxic epidermal necrolysis (TEN) or drug rash with eosinophilia and systemic symptoms (DRESS) have been reported in patients treated with PD-1 inhibitors.

Caution should be used when considering the use of dostarlimab in a patient who has previously experienced a severe or life-threatening skin adverse reaction on prior treatment with other immune-stimulatory anticancer agents.

#### Other immune-related adverse reactions

Given the mechanism of action of dostarlimab other potential immune-related adverse reactions may occur. Clinically significant immune-related adverse reactions reported in less than 1% of patients treated with dostarlimab as monotherapy in clinical trials include encephalitis, autoimmune haemolytic anaemia, uveitis, and iridocyclitis,. Patients should be monitored for signs and symptoms of immune-related adverse reactions and managed as described in Section 4.2 DOSING AND ADMINISTRATION.

#### Transplant-related adverse reactions

#### Solid organ transplant rejection

Solid organ transplant rejection has been reported in the postmarketing setting in patients treated with PD-1 inhibitors. Treatment with dostarlimab may increase the risk of rejection in solid organ transplant recipients. The benefit of treatment with dostarlimab versus the risk of possible organ rejection should be considered in these patients.

#### Complications of allogeneic Haematopoietic Stem Cell Transplant (HSCT)

Fatal and other serious complications can occur in patients who receive allogeneic haematopoietic stem cell transplantation (HSCT) before or after being treated with a PD-1/PD-L1–blocking antibody. Transplant-related complications include hyperacute graft-versus-host disease (GVHD), acute GVHD, chronic GVHD, hepatic veno-occlusive disease after reduced intensity conditioning, and steroid-requiring febrile syndrome (without an identified infectious cause). These complications may occur despite intervening therapy between PD-1/PD-L1 blockade and allogeneic HSCT. Follow patients closely for evidence of transplant-related complications and intervene promptly. Consider the benefit versus risks of treatment with a PD-1/PD-L1–blocking antibody prior to or after an allogeneic HSCT.

#### Infusion-related reactions

Dostarlimab can cause infusion-related reactions, which can be severe (see Section 4.8 ADVERSE EFFECTS). For severe (Grade 3) or life-threatening (Grade 4) infusion-related reactions, stop infusion and permanently discontinue Dostarlimab (see Section 4.2 DOSING AND ADMINISTRATION).

## 4.5 Interaction with other medicines and other forms of interaction

No drug-drug interaction studies have been conducted with dostarlimab. Monoclonal antibodies (mAbs) such as dostarlimab are not substrates for cytochrome P450 or drug transporters. Additionally, pharmacokinetic (PK) drug-drug interaction of dostarlimab with small molecule drugs is not expected.

## 4.6 Fertility, pregnancy and lactation

#### Pregnancy

There are no available data on the use of dostarlimab in pregnant women. Animal reproduction studies have not been conducted with dostarlimab to evaluate its effect on reproduction and fetal development. Based on its mechanism of action, dostarlimab can cause fetal harm when administered to a pregnant woman. Animal models link the PD-1/PD-L1 signalling pathway with maintenance of pregnancy through induction of maternal immune tolerance to fetal tissue. Human IgG4 immunoglobulins (IgG4) are known to cross the placental barrier; therefore, dostarlimab has the potential to be transmitted from the mother to the developing fetus. Advise women of the potential risk to a fetus.

Dostarlimab is not recommended during pregnancy. Women of childbearing potential should use highly effective contraception during treatment with dostarlimab and for 4 months after the last dose.

#### **Breast-feeding**

There is no information regarding the presence of dostarlimab in human milk, or its effects on the breastfed child or on milk production. Because of the potential for serious adverse reactions in breastfed children, advise women not to breastfeed during treatment and for 4 months after the last dose of dostarlimab.

## Fertility

Fertility studies have not been conducted with dostarlimab. No effects on male and female reproductive organs were observed in a 3-month repeat dose toxicity study in cynomolgus monkeys at ≤100 mg/kg/week IV, resulting in exposures (AUC) at least 28 times that expected in patients; however, these results may not be predictive of clinical risk because of the immaturity of the reproductive system of animals used in the study.

## 4.7 Effects on ability to drive and use machines

Dostarlimab has no or negligible influence on the ability to drive and use machines.

## 4.8 Undesirable effects

#### Summary of the safety profile

Adverse reactions observed in 605 patients with recurrent or advanced solid tumours, including 314 patients with endometrial cancer and 291 patients with other advanced solid tumours who received dostarlimab monotherapy in the open-label, multicohort GARNET study are listed in Table 3. Additional immune-related adverse reactions identified based on pooled data generated from other clinical trials in patients with solid tumors receiving dostarlimab in combination with various types of anticancer therapies are also shown in Table 3. Patients generally received dostarlimab doses of 500 mg every 3 weeks (Q3W) for 4 doses followed by 1,000 mg every 6 weeks (Q6W) for all cycles.

#### Tabulated list of adverse reactions

These reactions are presented by system organ class and by frequency. Frequencies are defined as: very common ( $\geq$  1/10); common ( $\geq$  1/100 to < 1/10); uncommon ( $\geq$  1/1,000 to < 1/1,000); rare ( $\geq$  1/10,000 to < 1/1,000); very rare (< 1/10,000); and not known (cannot be estimated from the available data).

System Organ	Frequency	All Grades	Grades 3-4
<b>Class/Adverse Reaction</b>	(all grades)	n (%)	n (%)
Blood and lymphatic			
system disorders			
Anaemia	Very common	173 (28.6)	54 (9.8)
Autoimmune haemolytic	Uncommon	1 (0.2)	1 (0.2)
anaemia			
Endocrine disorders			
Hypothyroidism	Very common	68 (11.2) <sup>a</sup>	-
Hyperthyroidism	Common	32 (5.3)	1 (0.2)
Adrenal insufficiency	Common	8 (1.3)	4 (0.7)
Hypophysitis	Uncommon	3 (0.5) <sup>b</sup>	-
Thyroiditis	Uncommon	4 (0.7) <sup>c</sup>	-

## Table 3: Adverse reactions in patients with solid tumours treated with dostarlimab

System Organ	Frequency	All Grades	Grades 3-4
Class/Adverse Reaction	(all grades)	n (%)	n (%)
Metabolism and			
nutrition disorders			
Type 1 diabetes mellitus	Uncommon	1 (0.2)	1 (0.2)
Diabetic ketoacidosis	Uncommon	1 (0.2)	1 (0.2)
Nervous system			
disorders	Uncommon		
Myasthenia gravis	Uncommon	1 (0.2)	-
Myasthenic syndrome	Uncommon	1 (0.1) <sup>d</sup>	1 (0.1) <sup>d</sup>
Encephalitis		2 (0.3)	2 (0.3)
Eye disorders			
Uveitis	Uncommon	2 (0.3) <sup>e</sup>	-
Cardiac disorders			
Myocarditis	Uncommon	2 (0.2) <sup>d, f</sup>	2 (0.2) <sup>d, f</sup>
Respiratory, thoracic			
and mediastinal			
disorders			
Pneumonitis	Common	25 (4.1) <sup>g</sup>	7 (1.2) <sup>h</sup>
Gastrointestinal			
disorders	Very common		
Nausea	Very common	156 (25.8)	13 (2.1)
Diarrhoea	Very common	157 (26)	8 (1.3)
Vomiting	Common	115 (19.0)	10 (1.7)
Colitis	Common	14 (2.0) <sup>i</sup>	6 (0.9) <sup>j</sup>
Pancreatitis	Uncommon	7 (1.2) <sup>k</sup>	6 (1.0) <sup>k</sup>
Oesophagitis	Common	1 (0.2)	1 (0.2)
Gastritis		8 (0.6) <sup>i</sup>	3 (0.2) <sup>i</sup>
Hepatobiliary disorders			
Hepatitis	Common	7 (1.2) <sup>m</sup>	4 (0.7) <sup>m</sup>
Skin and subcutaneous			
tissue disorders	Very common		
Pruritus	Very common	86 (14.2)	2 (0.3)
Rash		126 (20.8) <sup>n</sup>	9 (1.5)°
Musculoskeletal and			
connective tissue			
disorders	Common		
Myalgia	Uncommon	46 (7.6)	-
Immune-mediated arthritis	Uncommon	3 (0.5)	1 (0.2)
Polymyalgia rheumatica	Uncommon	2 (0.3)	-
Myositis		3 (0.3) <sup>p</sup>	2 (0.2) <sup>q</sup>
Renal and urinary disorders			
Nephritis	Uncommon	4 (0.7) <sup>r</sup>	-

System Organ	Frequency	All Grades	Grades 3-4	
<b>Class/Adverse Reaction</b>	(all grades)	n (%)	n (%)	
General disorders and administration site conditions				
Pyrexia	Very common	75 (12.4)	1 (0.2)	
Chills	Common	24 (4.0)	1 (0.2)	
Systemic inflammatory response syndrome	Uncommon	2 (0.4) <sup>p</sup>	2 (0.4) <sup>q</sup>	
Investigations				
Transaminases increased	Very common	90(14.9) <sup>s, t</sup>	20 (3.3) <sup>s, t</sup>	
Injury, poisoning and procedural complications				
Infusion-related reaction	Common	8 (1.3) <sup>u</sup>	1 (0.2)	

<sup>a</sup> Includes hypothyroidism and autoimmune hypothyroidism

<sup>b</sup> Includes hypophysitis and lymphocytic hypophysitis

° Includes thyroiditis and autoimmune thyroiditis

<sup>d</sup> Adverse reaction reported from ongoing trials of dostarlimab in combination with other anticancer agents; estimated frequency category. No events reported in monotherapy population.

<sup>e</sup> Includes uveitis and iridocyclitis

<sup>f</sup> Includes myocarditis and immune-mediated myocarditis

<sup>g</sup> Includes pneumonitis, interstitial lung disease and immune-mediated lung disease

<sup>h</sup> Includes pneumonitis and interstitial lung disease. Does not include immune-mediated lung disease

<sup>i</sup> Includes colitis, enterocolitis and immune-mediated enterocolitis (monotherapy) and enteritis reported from ongoing trials of dostarlimab in combination; estimated frequency category

<sup>j</sup> Includes colitis and immune-mediated enterocolitis (monotherapy pool), and enteritis reported from ongoing trials of dostarlimab in combination; estimated frequency category

<sup>k</sup> Includes pancreatitis and pancreatitis acute

<sup>1</sup>Includes gastritis (monotherapy pool), and immune-mediated gastritis and vasculitis gastrointestinal reported from ongoing trials of dostarlimab in combination; estimated frequency category.

<sup>m</sup> Includes hepatitis, autoimmune hepatitis and hepatic cytolysis

- <sup>n</sup> Includes rash, rash maculopapular, erythema, rash macular, rash pruritic, rash erythematous, rash papular, erythema multiforme, skin toxicity, drug eruption, toxic skin eruption, exfoliative rash and pemphigoid
- <sup>o</sup> Includes rash, rash maculopapular and drug eruption

<sup>p</sup> Includes myositis and immune mediated myositis; reported from monotherapy and pooled data from studies of dostarlimab in combination with various types of anticancer therapies; estimated frequency category

<sup>q</sup> Reported from ongoing trials of dostarlimab in combination; estimated frequency category.

r Includes nephritis and tubulointerstitial nephritis

<sup>s</sup> Includes alanine aminotransferase increased, aspartate aminotransferase increased, transaminases increased and hypertransaminasaemia

<sup>t</sup>Includes PT of alanine aminotransferase increased, aspartate aminotransferase increased, transaminases increased. Does not include hypertransaminasaemia which is included in 'all grades'

<sup>u</sup> Includes infusion-related reaction and hypersensitivity.

#### Description of selected adverse reactions

#### Other adverse events

Table 4 summarises other adverse events that occurred in 10% or more of patients with solid tumours treated with dostarlimab monotherapy in the GARNET study. Fatigue and asthenia are the only adverse events reported in at least 20% of patients. Grade 4 events included asthenia (N=1 patient, 0.2%) and dyspnoea (N=2 patients, 0.3%).

# Table 4: Other adverse events in ≥10% of patients with solid tumours treated with dostarlimab monotherapy

System Organ Class/Adverse	All Grades	Grades 3-4
Reaction	n (%)	n (%)
Gastrointestinal disorders		
Constipation	109 (18.0)	4 (0.7)
Abdominal pain	106 (17.5)	21 (3.5)
General disorders and administration site conditions		
Fatigue	155 (25.6)	17 (2.8)
Asthenia	126 (20.8)	13 (2.1)
Infections and infestations		
Urinary tract infection	86 (14.2)	9 (1.5)
Musculoskeletal and connective tissue disorders		
Arthralgia	103 (17.0)	5 (0.8)
Back pain	78 (12.9)	10 (1.7)
Metabolism and nutrition disorders		
Decreased appetite	108 (17.9)	6 (1.0)
Nervous system disorders		
Headache	61 (10.1)	0
Respiratory, thoracic and mediastinal disorders		
Cough	96 (15.9)	1 (0.2)

System Organ Class/Adverse	All Grades	Grades 3-4
Reaction	n (%)	n (%)
Dyspnoea	79 (13.1)	20 (3.3)

#### **Immunogenicity**

As with all therapeutic proteins, there is potential for immunogenicity. The detection of antibody formation is highly dependent on the sensitivity and specificity of the assay. Additionally, the observed incidence of antibody (including neutralising antibody) positivity in an assay may be influenced by several factors including assay methodology, sample handling, timing of sample collection, concomitant medications, and underlying disease. For these reasons, comparison of the incidence of antibodies to dostarlimab in the studies described below with the incidence of antibodies in other studies or to other products may be misleading.

In the GARNET study, anti-drug antibodies (ADA) were tested in 384 patients who received dostarlimab and the incidence of dostarlimab treatment-emergent ADAs was 2.1%. Neutralising antibodies were detected in 1.0% of patients. In the patients who developed anti-dostarlimab antibodies, there was no evidence of altered pharmacokinetics, efficacy or safety of dostarlimab. Because of the small number of patients who developed ADAs, the impact of immunogenicity on the efficacy and safety of dostarlimab is inconclusive.

#### Paediatric population

The safety and efficacy of dostarlimab in children and adolescents aged under 18 years have not been established. No data are available.

#### Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicine is important. It allows continued monitoring of the benefit/risk balance of the medicine. Healthcare professionals are asked to report any suspected adverse reactions via: <u>https://pophealth.my.site.com/carmreportnz/s/</u>

## 4.9 Overdose

If overdose is suspected, the patient should be monitored for any signs or symptoms of adverse reactions or effects, and appropriate standard of care measures should be instituted immediately.

For advice on the management of overdose please contact the National Poisons Centre on 0800 POISON (0800 764766).

## 5. PHARMACOLOGICAL PROPERTIES

## 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Anti-neoplastic agents, monoclonal antibodies, ATC code: L01FF07

#### Mechanism of action

Dostarlimab is an anti-programmed cell death protein-1 (PD-1) immunoglobulin G4 (IgG4) humanised monoclonal antibody (mAb), derived from a stable Chinese hamster ovary (CHO) cell line.

Binding of the PD-1 ligands, PD-L1 and PD-L2, to the PD-1 receptor found on T cells inhibits T-cell proliferation and cytokine production. Upregulation of PD-1 ligands occurs in some tumours and signalling through this pathway can contribute to inhibition of active T-cell immune surveillance of tumours. Dostarlimab is a humanised mAb of IgG4 isotype that binds to PD 1, resulting in inhibition of binding to PD-L1 and PD-L2, releasing inhibition of PD-1 pathway-mediated immune response, including the anti-tumour immune response. In syngeneic mouse tumour models, blocking PD-1 activity resulted in decreased tumour growth.

#### Pharmacodynamic effects

Based on exposure efficacy and safety relationships, there are no clinically significant differences in efficacy and safety within the exposure range attained under the recommended therapeutic dosing regimen (500 mg administered intravenously every 3 weeks for 4 doses, followed by 1,000 mg every 6 weeks thereafter). Full receptor occupancy as measured by both the direct PD-1 binding and IL-2 production functional assay was maintained throughout the dosing interval at the recommended therapeutic dosing regimen.

#### Clinical efficacy and safety

This medicine has been given provisional consent under Section 23 of the Act. This means that further evidence on this medicine is awaited regarding the endometrial cancer (EC) indication, specifically additional data to support clinical benefit from confirmatory trials.

#### Mismatch repair deficient endometrial cancer

The efficacy and safety of dostarlimab were investigated in GARNET, a multicentre, openlabel, Phase 1 dose escalation study conducted in patients with recurrent or advanced endometrial cancer (EC) that has progressed on or after treatment with a platinumcontaining regimen.

The GARNET study included expansion cohorts in subjects with recurrent or advanced solid tumours who have limited available treatment options. Cohort A1 enrolled patients with mismatch repair deficient (dMMR) EC that has progressed on or after a platinum-containing regimen.

Patients received dostarlimab 500 mg every 3 weeks for 4 cycles followed by 1,000 mg every 6 weeks. Treatment continued until unacceptable toxicity or disease progression for up to two years. The major efficacy outcome measures were objective response rate (ORR) and duration of response (DOR) as assessed by blinded independent central radiologists' (BICR) review according to RECIST v1.1. The secondary endpoints included disease control rate (DCR) and progression-free survival (PFS) both assessed by BICR review according to RECIST v1.1; and overall survival (OS).

All patients included in both the primary and secondary efficacy analysis set had a minimum follow-up period of 24 weeks from first dose, regardless of whether they had a post-treatment scan.

A total of 141 patients with dMMR EC were evaluated for efficacy in the GARNET study. Among these 141 patients, the baseline characteristics were: median age 65.0 years (50% age 65 or older); 76.6% White, 3.5% Asian, 2.8% Black; and Eastern Cooperative Oncology Group (ECOG) PS 0 (38.3%) or 1 (61.7%). The median number of prior therapies for recurrent or advanced endometrial cancer was one: 63% of patients had one prior line, 37% had two or more prior lines. Forty-eight patients (34%) received treatment only in the neoadjuvant or adjuvant setting before participating in the study.

The identification of dMMR/MSI-H tumour status was prospectively determined based on local testing.

Local diagnostic assays (IHC, PCR or NGS) available at the sites were used for the detection of the dMMR/MSI-H expression in tumour material. Most of the sites used IHC as it was the most common assay available.

Efficacy results are shown in Table 5 and Figure 1.

## Table 5 Efficacy results in GARNET for patients with dMMR endometrial cancer

Endpoint	Dostarlimab	
	(N=141)ª	
Primary endpoints		
Objective response rate (ORR)		
ORR n (%)	64 (45.4)	
(95% CI)	(37.0, 54.0)	
Complete response rate, n (%)	22 (15.6)	
Partial response rate, n (%)	42 (29.8)	
Duration of response (DOR) <sup>b</sup>		
Median in months	Not reached	
Patients with duration $\geq$ 12 months, n (%)	51 (79.7)	
Patients with duration $\geq$ 24 months, n (%)	28 (43.8)	
Secondary endpoints		
Progression free Survival (PFS)		
Median in months (95% CI) <sup>c</sup>	5.6 (4.1, 16.6)	
Number (%) of patients with event	83 (58.9)	
Probability of PFS at 6-months, (95% CI) <sup>c</sup>	49.2% (40.6, 57.2)	
Probability of PFS at 9-months, (95% CI) <sup>c</sup>	47.6% (39.0, 55.7)	
Probability of PFS at 12-months, (95% CI) <sup>c</sup>	46.0% (37.4, 54.1)	
Overall Survival (OS)		
Median in months	Not reached	
Number (%) of patients with event	55 (39.0)	
Disease control rate (DCR) <sup>d</sup>		

DCR n (%)	86 (60.3)
(95% CI)	(51.7, 68.4)

CI: Confidence interval

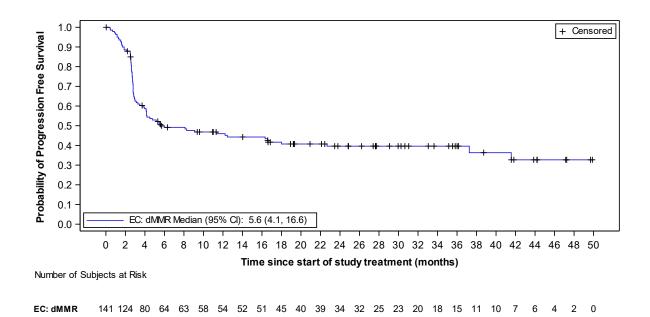
<sup>a</sup> Efficacy data with a median follow-up of 27.6 months (cut-off date 01 Nov 2021)

<sup>b</sup> For patients with a partial or complete response

<sup>c</sup> by Kaplan-Meier method

<sup>d</sup> includes patient with complete response, partial response and stable disease for at least 12 weeks

Figure 1. Kaplan-Meier Plot for Progression Free Survival per RECIST 1.1 - Based on BICR Assessment (Primary Efficacy Analysis Set) in patients with dMMR EC (N = 141)



#### Elderly patients

Of the 515 patients treated with dostarlimab monotherapy (IA1 GARNET population at time of data cut-off 01 March 2020), 51% were under 65 years, 38% were 65 75 years, and 12% were 75 years or older. Safety risks were not observed to be increased in older subjects compared to younger subjects.

In the 72 patients with dMMR/MSI-H EC (IA1 population at time of data cut-off 01 March 2020) in the efficacy analysis, the ORR by BICR (95 % CI) was 43.2 % (27.1 %, 60.5 %) in patients under 65 years and 48.6 % (31.4 %, 66.0 %) in patients 65 years and older.

In the 105 patients with dMMR/MSI-H EC (IA2 population at time of data cut-off 01 March 2020) in the efficacy analysis, the ORR by BICR (95 % CI) was 45.3 % (31.6 %, 59.6%) in patients under 65 years and 44.2% (30.5 %, 58.7 %) in patients 65 years and older.

#### Paediatric population

The safety and efficacy of dostarlimab in children and adolescents below 18 years of age have not been established.

## 5.2 Pharmacokinetic properties

Dostarlimab pharmacokinetic (PK) properties were characterised using population PK analysis from 546 patients with various solid tumours, including 288 patients with EC. The PK of dostarlimab is approximately dose proportional. When dosed at the recommended therapeutic dose (500 mg administered intravenously every 3 weeks for 4 doses, followed by 1,000 mg every 6 weeks), dostarlimab shows an approximate two-fold accumulation ( $C_{min}$ ) starting cycle 4 through cycle 12, consistent with the terminal half-life.

#### **Absorption**

Dostarlimab is administered via the intravenous route and therefore estimates of absorption are not applicable.

#### **Distribution**

The geometric mean volume of distribution of dostarlimab at steady state is approximately 5.26 L (CV% of 14.2%).

#### **Biotransformation**

Dostarlimab is a therapeutic mAb IgG4 that is expected to be catabolised into small peptides, amino acids, and small carbohydrates by lysosome through fluid-phase or receptor-mediated endocytosis. The degradation products are eliminated by renal excretion or returned to the nutrient pool without biological effects.

#### Elimination

The geometric mean clearance is 0.00682 L/h (CV% of 30.2%) at steady state. The geometric mean terminal half-life ( $t_{1/2}$ ) at steady state is 23.5 days (CV% of 22.4%).

#### Linearity/non-linearity

Exposure (both maximum concentration [Cmax] and the area under the concentration-time curve, [AUC0-tau] and [AUC0-inf]) was approximately dose proportional.

#### Special patient populations

A population PK analysis of the patient data indicates that there are no clinically important effects of age (range: 24 to 86 years), sex or race, ethnicity, or tumour type on the clearance of dostarlimab. This population PK model also indicates that alterations in renal function (normal to moderate) and hepatic function (normal to mild impairment) do not alter the disposition of dostarlimab.

## 5.3 Preclinical safety data

#### Genotoxicity

No studies have been performed to assess the potential of dostarlimab for genotoxicity.

#### Carcinogenicity

No studies have been performed to assess the potential of dostarlimab for carcinogenicity.

# 6. PHARMACEUTICAL PARTICULARS

## 6.1 List of excipients

Sodium citrate dihydrate Citric acid monohydrate Arginine hydrochloride Sodium chloride Polysorbate 80 Water for injection

## 6.2 Incompatibilities

Incompatibilities were either not assessed or not identified as part of the registration of this medicine.

## 6.3 Shelf life

36 months.

## 6.4 Special precautions for storage

Store in a refrigerator 2°C to 8°C.

Do not freeze.

Store in the original carton until time of preparation in order to protect from light. The prepared dose may be stored either:

- At room temperature up to 25°C for no more than 6 hours from the time of dilution until the end of infusion.
- Under refrigeration at 2°C to 8°C for no more than 24 hours from time of dilution until end of infusion. If refrigerated, allow the diluted solution to come to room temperature prior to administration.

## After preparation of infusion

To reduce microbiological hazard, use as soon as practicable after reconstitution/preparation. If not used immediately, and infusion dilution was performed aseptically, in-use chemical and physical stability have been demonstrated for up to 24 hours at 2°C to 8°C and up to 6 hours at room temperature (up to 25°C) from time of vial puncture to the end of administration.

Due to the lack of preservative, the product must not be used beyond these storage times.

Product is for single use in one patient only, discard any residue.

# 6.5 Nature and contents of container and special equipment for use, administration or implantation

10 mL Type I borosilicate clear glass vial, with a grey chlorobutyl elastomer stopper laminated with fluoropolymer, sealed with an aluminium flip-off cap containing 500 mg dostarlimab.

## 6.6 Special precautions for disposal

Any unused medicine or waste material should be disposed of by taking to your local pharmacy.

#### Dilution

For the 500-mg dose, withdraw 10 mL of dostarlimab from a vial and transfer into an intravenous (IV) bag containing sodium chloride 9 mg/mL (0.9%) solution for injection, or glucose 50 mg/mL (5%) solution for injection. The final concentration of the diluted solution should be between 2 mg/mL and 10 mg/mL. This may require withdrawing a volume of diluent from the IV bag prior to adding a volume of dostarlimab into the IV bag.

- For example, if preparing a 500 mg dose in a 250 mL diluent IV bag, to achieve a 2 mg/mL concentration would require withdrawing 10 mL of diluent from the 250 mL IV bag. Then, 10 mL of dostarlimab would be withdrawn from the vial and transferred into the IV bag.

For the 1,000-mg dose, withdraw 10 mL of dostarlimab from each of two vials (withdraw 20 mL total) and transfer into an IV bag containing sodium chloride 9 mg/mL (0.9%) solution for injection or glucose 50 mg/mL (5%) solution for injection. The final concentration of the diluted solution should be between 2 mg/mL and 10 mg/mL. This may require withdrawing a volume of diluent from the IV bag prior to adding a volume of dostarlimab into the IV bag.

For example, if preparing a 1,000 mg dose in a 500 mL diluent IV bag, to achieve a 2 mg/mL concentration would require withdrawing 20 mL of diluent from the 500 mL IV bag. Then, 10 mL of dostarlimab would be withdrawn from each of two vials, totaling 20 mL, and transferred into the IV bag.

Mix diluted solution by gentle inversion. Do not shake the final infusion bag. Discard any unused portion left in the vial.

## 7. MEDICINE SCHEDULE

**Prescription Medicine** 

## 8. SPONSOR

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# 9. DATE OF FIRST APPROVAL

Date of publication in the New Zealand Gazette of consent to distribute the medicine: 6 July 2023

# 10. DATE OF REVISION OF THE TEXT

16 February 2024

Summary table of changes:

Section changed	Summary of new information
4.8	Updated adverse reactions website address
6.3	Increase shelf life
6.5, 6.6	Editorial

Version 2.0

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