This medicinal product is subject to additional monitoring in Australia. This will allow quick identification of new safety information. Healthcare professionals are asked to report any suspected adverse events at <a href="https://www.tga.gov.au/reporting-problems">www.tga.gov.au/reporting-problems</a>.

# AUSTRALIAN PRODUCT INFORMATION – ELREXFIO<sup>TM</sup> (ELRANATAMAB) SOLUTION FOR INJECTION

WARNING: CYTOKINE RELEASE SYNDROME and NEUROLOGICAL TOXICITY including IMMUNE EFFECTOR CELL-ASSOCIATED NEUROTOXICITY SYNDROME

Cytokine release syndrome (CRS) can occur in patients receiving ELREXFIO.

Neurological toxicity, including Immune Effector Cell-Associated Neurotoxicity Syndrome (ICANS), and serious and life threatening reactions, can occur in patients receiving ELREXFIO.

Manage per Section **4.2 DOSE AND METHOD OF ADMINISTRATION**, *Management of CRS*, and *Management of neurological toxicities including ICANS*, in consultation with the patient's physician.

## 1. NAME OF THE MEDICINE

Elranatamab

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

ELREXFIO 40 mg/mL solution for injection

Each single-dose vial contains 44 mg of elranatamab in 1.1 mL (40 mg/mL).

Each single-dose vial contains 76 mg of elranatamab in 1.9 mL (40 mg/mL).

Elranatamab is an IgG2 kappa bispecific antibody derived from two monoclonal antibodies (mAbs), an anti-B cell maturation antigen (BCMA) mAb and an anti-Cluster of differentiation 3 (CD3) mAb. Elranatamab is produced using two recombinant Chinese Hamster Ovary (CHO) cell lines.

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

#### 3. PHARMACEUTICAL FORM

Solution for injection.

The solution is clear to slightly opalescent, colourless to pale brownish liquid solution with a pH of 5.8 and osmolarity of approximately 301 mOsm/L (40 mg/mL solution for injection).

#### 4. CLINICAL PARTICULARS

# 4.1 Therapeutic indications

ELREXFIO has **provisional approval** in Australia and is indicated for the treatment of adult patients with relapsed or refractory multiple myeloma who have received at least 3 prior therapies, including a proteasome inhibitor, an immunomodulatory agent, and an anti-CD38 monoclonal antibody and have demonstrated disease progression on the last therapy.

The decision to approve this indication has been made on the basis of the overall response rate in a single arm study. Continued approval of this indication depends on verification and description of benefit in confirmatory trials.

#### 4.2 Dose and method of administration

Treatment with ELREXFIO should be initiated and supervised by physicians experienced in the treatment of multiple myeloma.

ELREXFIO should be administered by a healthcare provider with adequately trained medical personnel and appropriate medical equipment to manage severe reactions, including cytokine release syndrome (CRS) and Immune effector cell-associated neurotoxicity syndrome (ICANS) (see Section 4.4 Special warnings and precautions for use).

#### **Dosage**

The recommended dosing schedule for ELREXFIO is provided in Table 1. The recommended doses of ELREXFIO subcutaneous injection are step-up doses of 12 mg on Day 1 and 32 mg on Day 4 followed by a full treatment dose of 76 mg weekly, from Week 2 to Week 24.

For patients who have received at least 24 weeks of treatment with ELREXFIO and have achieved a response, the dosing interval should transition to an every two-week schedule.

Treatment with ELREXFIO should be continued until disease progression or unacceptable toxicity.

#### **Hospitalisations**

Due to the risk of severe reactions, hospitalisation is recommended for 48 hours after administration of the first step-up dose, and for 24 hours after administration of the second step-up dose.

For subsequent re-initiations, supervision by a healthcare professional or hospitalisation is recommended.

#### Method of administration

ELREXFIO is for subcutaneous injection only.

For instructions on handling of the medicinal product before administration, see Section 4.2 Instructions for Use and Handling.

Pre-treatment medicinal products should be administered prior to the first three doses of ELREXFIO in the dosing schedule, which includes step-up dose 1 (12 mg), step-up dose 2 (32 mg), and the first full treatment dose (76 mg) as described in Table 1 (see below). See Section 4.2 Dose and method of administration - Recommended pre-treatment medicinal products.

ELREXFIO should be administered subcutaneously according to the step-up dosing schedule in Table 1 to reduce the incidence and severity of CRS and ICANS. Due to the risk of CRS and ICANS, patients should be monitored for signs and symptoms for 48 hours after administration of each of the 2 step-up doses within the ELREXFIO dosing schedule (see Table 3 and 4) (see Section 4.2 Dose and Method of administration – Hospitalisations and Section 4.4 Special warnings and precautions for use).

Table 1.ELREXFIO dosing schedule

Dosing schedule	Week/Day	Dose		
C4 docinosh	Week 1: Day 1	Step-up dose 1 12 mg SC		
Step-up dosing <sup>a,b</sup>	Week 1: Day 4	Step-up dose 2	32 mg SC	
Weekly dosing <sup>a,c,d</sup>	Week 2-24: Day 1	Full treatment dose	76 mg SC once weekly	
Every 2 weeks dosing <sup>d,e</sup>	Week 25 onward: Day 1	Full treatment dose	76 mg SC once every two weeks	

Abbreviation: SC=subcutaneous.

Note: See Table 2 for recommendations on restarting ELREXFIO after dose delays.

#### Missed doses

If a dose of ELREXFIO is missed, the dose should be administered as soon as possible, and the dosing schedule should be adjusted as needed to maintain the dosing interval (see Table 1).

<sup>&</sup>lt;sup>a</sup> Pre-treatment medicinal products should be administered prior to the first three doses of ELREXFIO.

<sup>&</sup>lt;sup>b</sup> A minimum of 2 days should be maintained between step-up dose 1 (12 mg) and step-up dose 2 (32 mg).

<sup>&</sup>lt;sup>c</sup> A minimum of 3 days should be maintained between step-up dose 2 (32 mg) and the first full treatment (76 mg) dose.

<sup>&</sup>lt;sup>d</sup> A minimum of 6 days should be maintained between doses.

<sup>&</sup>lt;sup>e</sup> For patients who have achieved a response.

## Recommended pre-treatment medicinal products

The following pre-treatment medicinal products should be administered approximately 1 hour prior to the first three doses of ELREXFIO in the dosing schedule, which includes step-up dose 1, step-up dose 2, and the first full treatment dose as described in Table 1 to reduce the risk of CRS (see Section 4.4 Special warnings and precautions for use):

- paracetamol 500 mg orally (or equivalent)
- dexamethasone 20 mg orally or intravenously (or equivalent)
- diphenhydramine 25 mg orally (or equivalent)

## Restarting ELREXFIO after dose delay

If a dose of ELREXFIO is delayed, therapy should be restarted based on the recommendations listed in Table 2, and ELREXFIO should be resumed according to the dosing schedule (see Table 1). Pre-treatment medicinal products should be administered as indicated in Table 2.

Table 2. Recommendations for restarting therapy with ELREXFIO after dose delay

Last administered dose	Duration of delay from the last administered dose	Action	
Step-up dose 1 (12 mg)	2 weeks or less (≤ 14 days)	Restart at step-up dose 2 (32 mg). <sup>a</sup> If tolerated, increase to 76 mg 4 days later.	
	Greater than 2 weeks (> 14 days)	Restart step-up dosing schedule at step-up dose 1 (12 mg). <sup>a</sup>	
Step-up dose 2 (32 mg)	2 weeks or less (≤ 14 days)	Restart at 76 mg. <sup>a</sup>	
(32 mg)	Greater than 2 weeks to less than or equal to 4 weeks (15 days and ≤ 28 days)	Restart at step-up dose 2 (32 mg). <sup>a</sup> If tolerated, increase to 76 mg 1 week later.	
	Greater than 4 weeks (> 28 days)	Restart step-up dosing schedule at step-up dose 1 (12 mg). <sup>a</sup>	
Any full treatment dose (76 mg)	6 weeks or less (≤ 42 days)	Restart at 76 mg.	
dose (70 mg)	Greater than 6 weeks to less or equal to 12 weeks (43 days to ≤ 84 days)	Restart at step-up dose 2 (32 mg). <sup>a</sup> If tolerated, increase to 76 mg 1 week later.	
	Greater than 12 weeks (> 84 days)	Restart step-up dosing schedule at step-up dose 1 (12 mg). <sup>a</sup>	

## Dosage modifications for ELREXFIO

Dose reductions of ELREXFIO are not recommended.

Dose delays may be required to manage toxicities related to ELREXFIO (see Section 4.4 Special warnings and precautions for use). Recommendations on restarting ELREXFIO after a dose delay are provided in Table 2.

See Tables 3 and 4 for recommended actions for adverse reactions of CRS and ICANS, respectively. See Table 5 for recommended actions for other adverse reactions following administration of ELREXFIO.

Table 3. Recommendations for management of CRS

Gradea	Presenting symptoms	Actions
Grade 1	Temperature ≥38°C <sup>b</sup>	Withhold ELREXFIO until CRS resolves <sup>c</sup>
Grade 2	<ul> <li>Temperature ≥38°C with either:</li> <li>Hypotension responsive to fluid and not requiring vasopressors, and/or</li> <li>Oxygen requirement of low-flow nasal cannula<sup>d</sup> or blow-by</li> </ul>	<ul> <li>Withhold ELREXFIO until CRS resolves<sup>c</sup></li> <li>Monitor patients daily for 48 hours following the next dose of ELREXFIO. Instruct patients to remain within proximity of a healthcare facility and consider hospitalisation.</li> </ul>
Grade 3 (First occurrence)	Temperature ≥38°C with either:  • Hypotension requiring one vasopressor with or without vasopressin, and/or  • Oxygen requirement of high-flow nasal cannula <sup>d</sup> , facemask, nonrebreather mask, or Venturi mask	<ul> <li>Withhold ELREXFIO until CRS resolves<sup>c</sup></li> <li>Provide supportive therapy, which may include intensive care</li> <li>Patients should be hospitalised for 48 hours following the next dose of ELREXFIO.</li> </ul>
Grade 3 (Recurrent)	<ul> <li>Temperature ≥38°C with either:</li> <li>Hypotension requiring one vasopressor with or without vasopressin, and/or</li> <li>Oxygen requirement of high-flow nasal cannula<sup>d</sup>, facemask, nonrebreather mask, or Venturi mask</li> </ul>	<ul> <li>Permanently discontinue therapy with ELREXFIO</li> <li>Provide supportive therapy, which may include intensive care</li> </ul>

<sup>&</sup>lt;sup>a.</sup> Administer pre-treatment medicinal products prior to the ELREXFIO dose.

Table 3. Recommendations for management of CRS

Grade 4	Temperature ≥38°C with either:  • Hypotension requiring multiple vasopressors (excluding vasopressin), and/or	<ul> <li>Permanently discontinue therapy with ELREXFIO</li> <li>Provide supportive therapy, which may include intensive care</li> </ul>
	Oxygen requirement of positive pressure (e.g., continuous positive airway pressure [CPAP], bilevel positive airway pressure [BiPAP], intubation, and mechanical ventilation)	

<sup>&</sup>lt;sup>a</sup> Based on American Society for Transplantation and Cellular Therapy (ASTCT) 2019 grading for CRS.

Table 4. Recommendations for management of ICANS

Grade <sup>a</sup>	Presenting symptoms <sup>b</sup>	Actions
Grade 1	ICE score 7-9° Or depressed level of consciousness <sup>d</sup> : awakens spontaneously.	<ul> <li>Withhold ELREXFIO until ICANS resolves<sup>e</sup></li> <li>Monitor neurological symptoms and consider consultation with a neurologist and other specialists for further evaluation and management</li> <li>Consider non-sedating, anti-seizure medicinal products (e.g., levetiracetam) for seizure prophylaxis</li> </ul>
Grade 2	ICE score 3-6 <sup>c</sup> Or depressed level of consciousness <sup>d</sup> : awakens to voice.	<ul> <li>Withhold ELREXFIO until ICANS resolves<sup>e</sup></li> <li>Administer dexamethasone<sup>f</sup> 10 mg intravenously every 6 hours. Continue dexamethasone use until resolution to Grade 1 or less, then taper</li> <li>Monitor neurological symptoms and consider consultation with a neurologist and other specialists for further evaluation and management</li> <li>Consider non-sedating, anti-seizure medicinal products (e.g., levetiracetam) for seizure prophylaxis</li> <li>Monitor patients daily for 48 hours following the next dose of ELREXFIO<sup>e</sup>. Instruct patients to remain within proximity of a healthcare facility, and consider hospitalisation.</li> </ul>

<sup>&</sup>lt;sup>b</sup> Attributed to CRS. Fever may not always be present concurrently with hypotension or hypoxia as it may be masked by interventions such as antipyretics or anti-cytokine therapy.

<sup>&</sup>lt;sup>c</sup> See Table 2 for recommendations on restarting ELREXFIO after dose delays.

<sup>&</sup>lt;sup>d</sup>Low-flow nasal cannula is ≤6 L/min, and high-flow nasal cannula is >6 L/min.

**Table 4. Recommendations for management of ICANS** 

a	1.00	
Grade 3 (First occurrence)	ICE score 0-2 <sup>c</sup> or depressed level of consciousness <sup>d</sup> : awakens only to tactile stimulus, or seizures <sup>d</sup> , either:  • any clinical seizure, focal or generalised, that resolves rapidly, or • non-convulsive seizures on electroencephalogram (EEG) that resolve with intervention, or raised intracranial pressure: focal/local oedema on neuroimaging <sup>d</sup>	<ul> <li>Withhold ELREXFIO until ICANS resolves<sup>e</sup></li> <li>Administer dexamethasone<sup>f</sup> 10 mg intravenously every 6 hours. Continue dexamethasone use until resolution to Grade 1 or less, then taper</li> <li>Monitor neurological symptoms and consider consultation with a neurologist and other specialists for further evaluation and management</li> <li>Consider non-sedating, anti-seizure medicinal products (e.g., levetiracetam) for seizure prophylaxis</li> <li>Provide supportive therapy, which may include intensive care</li> <li>Patients should be hospitalised for 48 hours following the next dose of ELREXFIO<sup>e</sup>.</li> </ul>
Grade 3 (Recurrent)	ICE score 0-2c or depressed level of consciousnessd: awakens only to tactile stimulus, or seizuresd, either: • any clinical seizure, focal or generalised, that resolves rapidly, or • non-convulsive seizures on electroencephalogram (EEG) that resolve with intervention, or raised intracranial pressure: focal/local oedema on neuroimagingd	<ul> <li>Permanently discontinue ELREXFIO</li> <li>Administer dexamethasone<sup>f</sup> 10 mg intravenously every 6 hours. Continue dexamethasone use until resolution to Grade 1 or less, then taper</li> <li>Monitor neurological symptoms and consider consultation with a neurologist and other specialists for further evaluation and management</li> <li>Consider non-sedating, anti-seizure medicinal products (e.g., levetiracetam) for seizure prophylaxis</li> <li>Provide supportive therapy, which may include intensive care</li> </ul>
Grade 4	ICE score 0° Or, depressed level of consciousnessd either:  • patient is unarousable or requires vigorous or repetitive tactile stimuli to arouse, or  • stupor or coma,  or seizuresd, either:  • life-threatening prolonged seizure (>5 minutes), or  • repetitive clinical or electrical seizures without return to baseline in between,	<ul> <li>Permanently discontinue ELREXFIO</li> <li>Administer dexamethasone<sup>f</sup> 10 mg intravenously every 6 hours. Continue dexamethasone use until resolution to Grade 1 or less, then taper</li> <li>Alternatively, consider administration of methylprednisolone 1,000 mg per day intravenously for 3 days</li> <li>Monitor neurological symptoms and consider consultation with a neurologist and other specialists for further evaluation and management</li> <li>Consider non-sedating, anti-seizure medicinal products (e.g., levetiracetam) for seizure prophylaxis</li> </ul>

Table 4. Recommendations for management of ICANS

or motor findings <sup>d</sup> :  • deep focal motor weakness such as hemiparesis or paraparesis, or raised intracranial pressure/cerebral oedema <sup>d</sup> , with signs/symptoms such as: • diffuse cerebral oedema on neuroimaging, or • decerebrate or decorticate posturing, or • cranial nerve VI palsy, or • papilloedema, or • Cushing's triad	Provide supportive therapy, which may include intensive care
--	--

<sup>&</sup>lt;sup>a</sup> Based on American Society for Transplantation and Cellular Therapy (ASTCT) 2019 grading for ICANS.

Orientation (oriented to year, month, city, hospital=4 points); Naming (name 3 objects, e.g., point to clock, pen, button=3 points); Following Commands (e.g., "show me 2 fingers" or "close your eyes and stick out your tongue"=1 point); Writing (ability to write a standard sentence=1 point); and Attention (count backwards from 100 by ten=1 point). If patient is unarousable and unable to perform ICE Assessment (Grade 4 ICANS)=0 points.

Table 5. Recommended dose modifications for other adverse reactions

Adverse reactions <sup>c</sup>	Severity	Actions
Haematologic Adverse Reactions	Absolute neutrophil count less than 0.5 x 10 <sup>9</sup> /L	Withhold ELREXFIO until absolute neutrophil count is 0.5 x 10 <sup>9</sup> /L or higher <sup>b</sup>
	Febrile neutropenia	Withhold ELREXFIO until absolute neutrophil count is 1 x 10 <sup>9</sup> /L or higher and fever resolves <sup>b</sup>
	Haemoglobin less than 8 g/dL	Withhold ELREXFIO until haemoglobin is 8 g/dL or higher <sup>b</sup>
	Platelet count less than 25 x 10°/L Platelet count between 25 x 10°/L and 50 x 10°/L with bleeding	Withhold ELREXFIO until platelet count is 25 x 10 <sup>9</sup> /L or higher and no evidence of bleeding <sup>b</sup>
Other Non-haematologic Adverse Reactions <sup>a</sup>	Grade 3 or 4	Withhold ELREXFIO until recovery to Grade 1 or less or baseline <sup>b</sup> Permanently discontinue if recovery does not occur

<sup>&</sup>lt;sup>b</sup> Management is determined by the most severe event, not attributable to any other cause.

<sup>&</sup>lt;sup>c</sup> If patient is arousable and able to perform Immune Effector Cell-Associated Encephalopathy (ICE) Assessment, assess:

<sup>&</sup>lt;sup>d</sup> Not attributable any other cause.

<sup>&</sup>lt;sup>e</sup> See Table 2 for recommendations on restarting ELREXFIO after dose delays.

<sup>&</sup>lt;sup>f</sup> All references to dexamethasone administration are dexamethasone or equivalent medicinal products.

#### Table 5. Recommended dose modifications for other adverse reactions

#### **Special populations**

## Elderly (65 years of age and older)

No dose adjustment is necessary (see Section 5.1 Pharmacodynamic properties and Section 5.2 Pharmacokinetic properties).

#### Renal impairment

No dose adjustment is recommended in patients with mild to moderate renal impairment. ELREXFIO has not been studied in patients with severe renal impairment (see Section 5.2 Pharmacokinetic properties).

#### Hepatic impairment

No dose adjustments are required for mild hepatic impairment. The effects of moderate to severe hepatic impairment on the pharmacokinetics of elranatamab have not been studied (see Section 5.2 Pharmacokinetic properties).

## Paediatric population

There is no relevant use of ELREXFIO in the paediatric population (below 18 years of age) for the treatment of multiple myeloma.

#### Instructions for use and handling

ELREXFIO 76 mg/1.9 mL (40 mg/mL) vial and 44 mg/1.1 mL (40 mg/mL) vial are supplied as ready-to-use solution. ELREXFIO vials do not need dilution prior to administration.

ELREXFIO is a clear to slightly opalescent, and colourless to pale brown liquid solution. ELREXFIO should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit. The solution should not be administered if it is discoloured or contains particulate matter.

Aseptic technique should be used to prepare and administer ELREXFIO.

## Preparation instructions

ELREXFIO is for single use in one patient only. Discard any residue.

ELREXFIO should be prepared following the instructions below (see Table 6) depending on the required dose.

It is suggested to use a 44 mg/1.1 mL single-dose vial for step-up dose 1 or step-up dose 2.

<sup>&</sup>lt;sup>a</sup> Based on National Cancer Institute Common Terminology Criteria for Adverse Events (NCI-CTCAE), Version 5.0.

<sup>&</sup>lt;sup>b</sup> See Table 2 for recommendations on restarting ELREXFIO after dose delays (see Section 4.2 Dose and method of administration).

<sup>&</sup>lt;sup>c</sup> See Section 4.8 Adverse effects (undesirable effects)

Table 6. Preparation instructions for ELREXFIO

Dose schedule	Required dose	Dose volume
Step-up dose 1	12 mg	0.3 mL
Step-up dose 2	32 mg	0.8 mL
Full treatment dose	76 mg	1.9 mL

Once punctured, the vial and dosing syringe should be used immediately. If the prepared dosing syringe is not used immediately, store syringe at between 2°C to 8°C for a maximum of 24 hours, or at below 30°C for a maximum of 6 hours.

#### Administration instructions

ELREXFIO should be administered by a healthcare provider.

The required dose of ELREXFIO should be injected into the subcutaneous tissue of the abdomen (preferred injection site). Alternatively, ELREXFIO may be injected into the subcutaneous tissue at other sites (e.g. thigh).

#### 4.3 Contraindications

Hypersensitivity to the active substance or to any of the excipients listed in Section 6.1 List of excipients.

## 4.4 Special warnings and precautions for use

#### **Traceability**

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

#### Cytokine release syndrome (CRS)

CRS, including life-threatening or fatal reactions, may occur in patients receiving ELREXFIO.

Clinical signs and symptoms of CRS may include, but are not limited to, fever, hypoxia, chills, hypotension, tachycardia, headache and elevated liver enzymes.

Therapy should be initiated according to ELREXFIO step-up dosing schedule (see Table 1) to reduce risk of CRS and patients should be monitored following administration of ELREXFIO accordingly (see Section 4.2 Dose and method of administration -Hospitalisations). Pre-treatment medicinal products should be administered prior to the first three doses of ELREXFIO in the dosing schedule to reduce risk of CRS (see Section 4.2 Dose and method of administration).

Patients should be counselled to seek medical attention should signs or symptoms of CRS occur. Patients should also be provided with the Patient Card.

#### Management of cytokine release syndrome

CRS should be identified based on clinical presentation. Patients should be evaluated and treated for other causes of fever, hypoxia, and hypotension.

At the first sign of CRS, ELREXFIO should be withheld and patients should be immediately evaluated for hospitalisation. CRS should be managed according to the recommendations in Table 3 and further management should be considered per local institutional guidelines (see Section 4.2 Dose and method of administration). Supportive therapy for CRS (including but not limited to anti-pyretic agents, intravenous fluid support, vasopressors, IL-6 or IL-6 receptor inhibitors, supplemental oxygen, etc.) should be administered as appropriate. Laboratory testing to monitor for disseminated intravascular coagulation (DIC), haematology parameters, as well as pulmonary, cardiac, renal, and hepatic function should be considered.

General management for CRS is summarised in Table 3 (see Section 4.2 Dose and method of administration). Patients who experience Grade 2 or higher CRS with the previous dose of ELREXFIO should be instructed to remain within proximity of a healthcare facility and hospitalisation should be considered for 48 hours following the next dose.

#### **Neurological toxicities, including ICANS**

Serious or life-threatening neurological toxicities, including ICANS, may occur following treatment with ELREXFIO.

Therapy should be initiated according to ELREXFIO step-up dosing schedule (see Table 1) to reduce risk of ICANS and patients should be monitored following administration of ELREXFIO accordingly (see Section 4.2 Dose and method of administration - Hospitalisations).

Patients should be monitored for signs and symptoms of neurological toxicities during treatment with ELREXFIO.

Patients should be counselled to seek medical attention should signs or symptoms of neurological toxicity occur. Patients should also be provided with the Patient Card.

Due to the potential for ICANS, patients should be advised not to drive or operate heavy or potential dangerous machinery during the ELREXFIO step-up dosing schedule and for 48 hours after completing each of the 2 step-up doses within the ELREXFIO dosing schedule and in the event of new onset of any neurological symptoms (see Section 4.2 Dose and method of administration and Section 4.7 Effects on ability to drive and use machines).

# Management of neurological toxicities, including ICANS

At the first sign of neurological toxicity, including ICANS, ELREXFIO should be withheld and neurology evaluation should be considered. Other causes of neurological symptoms should be ruled out. Patients should be immediately evaluated and treated based on severity. Supportive therapy, which may include intensive care, for severe or life-threatening neurological toxicities, should be provided.

General management for neurological toxicity (e.g., ICANS) is summarised in Table 4 (see Section 4.2 Dose and method of administration). Patients who experience Grade 2 or

higher ICANS with the previous dose of ELREXFIO should be instructed to remain within proximity of a healthcare facility and hospitalisation should be considered for 48 hours following the next dose.

#### **Infections**

Severe, life-threatening, or fatal infections have been reported in patients receiving ELREXFIO (see Section 4.8 Adverse effects (undesirable effects)).

Treatment with ELREXFIO should not be initiated in patients with active infections. Patients should be monitored for signs and symptoms of infection prior to and during treatment with ELREXFIO and treated appropriately. ELREXFIO should be withheld based on severity as indicated in Table 5 (see Section 4.2 Dose and method of administration). Prophylactic antimicrobials and anti-virals should be administered according to local institutional guidelines. Treatment with subcutaneous or intravenous immunoglobulin (IVIG) should be considered, as appropriate.

## Neutropenia

Neutropenia and febrile neutropenia have been reported in patients receiving ELREXFIO (see Section 4.8 Adverse effects (undesirable effects)).

Complete blood cell counts should be monitored at baseline and periodically during treatment. Supportive therapy should be provided according to local institutional guidelines. Patients with neutropenia should be monitored for signs of infection.

Treatment with ELREXFIO should be withheld as indicated in Table 5 (See Section 4.2 Dose and method of administration).

#### Hypogammaglobulinaemia

Hypogammaglobulinaemia has been reported in patients receiving ELREXFIO (see Section 4.8 Adverse effects (undesirable effects)).

Immunoglobulin levels should be monitored during treatment with ELREXFIO. Subcutaneous or intravenous or immunoglobulin (IVIG) therapy should be considered if IgG levels fall below 400 mg/dL and patients should be treated according to local institutional guidelines, including infection precautions and antimicrobial prophylaxis.

#### Concomitant use of live viral vaccines

The safety of immunisation with live viral vaccines during or following treatment with ELREXFIO has not been studied. Vaccination with live virus vaccines is not recommended within 4 weeks prior to the first dose of ELREXFIO and during treatment with ELREXFIO.

#### Use in hepatic impairment

No formal studies of ELREXFIO in patients with hepatic impairment have been conducted. See Section 5.2 Pharmacokinetic properties.

#### Use in renal impairment

No formal studies of ELREXFIO in patients with renal impairment have been conducted. See Section 5.2 Pharmacokinetic properties.

## Use in the elderly

Of the 183 patients with relapsed or refractory multiple myeloma treated with ELREXFIO in MagnetisMM-3 at the recommended dosage, 62.0% were 65 years of age or older, and 19.3% were 75 years of age or older. No overall differences in safety or effectiveness were observed between patients  $\geq$ 65 and  $\geq$ 75 years of age compared to younger patients.

#### Paediatric use

The safety and effectiveness of ELREXFIO in paediatric patients have not been established.

#### **Effects on laboratory tests**

See Section 4.8 Adverse effects (undesirable effects).

#### 4.5 Interactions with other medicines and other forms of interactions

No interaction studies have been performed with ELREXFIO.

The initial release of cytokines associated with the start of ELREXFIO may suppress cytochrome P450 (CYP) enzymes. The highest risk of interaction is expected to occur during the step-up dosing schedule for ELREXFIO and up to 7 days after CRS. During this time period, toxicity or medicinal product concentrations (e.g. cyclosporine) should be monitored in patients who are receiving concomitant sensitive CYP substrates with a narrow therapeutic index. The dose of the concomitant medicinal product should be adjusted as needed.

# 4.6 Fertility, pregnancy and lactation

#### **Effects on fertility**

There are no data on the effect of elranatamab on human fertility and no animal fertility studies have been conducted. In a general toxicity study in cynomolgus monkeys, no changes in the male and female reproductive tract to suggest potential impairment of fertility were observed with elranatamab at subcutaneous doses up to 6 mg/kg/week (yielding exposure 6.5 times greater than in patients at the maximum recommended human dose, based on serum AUC).

#### Women of child-bearing potential/Contraception in females

Women of child-bearing potential should use effective contraception during treatment with ELREXFIO and for 5 months after the last dose.

#### Use in pregnancy - Pregnancy Category C

There are no data on the use of ELREXFIO in pregnant women. No embryofetal development studies have been conducted with elranatamab in animals.

ELREXFIO is not recommended for use during pregnancy. The pregnancy status of women of child-bearing potential should be verified prior to initiating treatment with ELREXFIO.

Human immunoglobulin (IgG) is known to cross the placenta after the first trimester of pregnancy. Based on the mechanism of action, elranatamab may cause fetal harm, including B-cell lymphocytopenia, when administered to a pregnant woman. Fetal B-cell depletion poses a risk of opportunistic infections in the neonate. Elranatamab-induced cytokine release may also pose a risk for embryofetal loss.

ELREXFIO is associated with hypogammaglobulinaemia, therefore, assessment of immunoglobulin levels in newborns of mothers treated with ELREXFIO should be considered. Postponing vaccination with live or live-attenuated vaccines is recommended for neonates and infants who have been exposed to elranatamab *in utero* until B-cell levels have recovered.

#### Use in lactation

It is not known whether elranatamab is excreted in human or animal milk, affects breastfed infants or affects milk production. Human IgGs are known to be excreted in breast milk. A risk to the breastfed child cannot be excluded and therefore breast-feeding is not recommended during treatment with ELREXFIO and for 5 months after the last dose.

## 4.7 Effects on ability to drive and use machines

ELREXFIO may have major influence on the ability to drive and use machines.

Due to the potential for ICANS, patients receiving ELREXFIO are at risk of depressed level of consciousness (see Section 4.8 Adverse effects (undesirable effects)). Patients should be instructed to refrain from driving or operating heavy or potential dangerous machinery during and for 48 hours after completing each of the 2 step-up doses within the ELREXFIO dosing schedule and in the event of new onset of neurological toxicity until resolution of any neurological symptoms (see Section 4.2 Dose and method of administration and Section 4.4 Special warnings and precautions for use).

## 4.8 Adverse effects (undesirable effects)

#### **Summary of the safety profile**

The safety of ELREXFIO was evaluated in MagnetisMM-3 (see Section 5.1 Clinical trials), which included 183 adult patients with multiple myeloma who received the recommended dosing regimen of ELREXFIO. The median duration of ELREXFIO treatment was 4.1 (range: 0.03 to 20.3) months.

The most frequent adverse reactions of any grade in patients were CRS (57.9%), anaemia (54.1%), neutropenia (44.8%), fatigue (44.3%), upper respiratory tract infection (38.8%), injection site reaction (38.3%), diarrhoea (37.7%), pneumonia (37.2%), thrombocytopenia (36.1%), lymphopenia (30.1%), decreased appetite (26.8%), pyrexia (27.3%), rash (26.2%), arthralgia (25.1%), hypokalaemia (23.0%), nausea (21.3%) and dry skin (21.3%).

Serious adverse reactions included pneumonia (30.6%), sepsis (15.3%), CRS (12.6%), anaemia (5.5%), upper respiratory tract infection (4.9%), urinary tract infection (3.3%), febrile neutropenia (2.7%), dyspnoea (2.2%) and pyrexia (2.2%).

#### **Tabulated list of adverse reactions**

Table 7 summarises adverse reactions reported in patients who received ELREXFIO at the recommended dosing regimen. The safety data of ELREXFIO was also evaluated in the alltreated population (N=265) with no additional adverse reactions identified.

Adverse reactions observed during clinical studies are listed by frequency category. Frequency categories are defined as very common ( $\geq 1/10$ ), common ( $\geq 1/100$  to < 1/10), uncommon ( $\ge 1/1\ 000\ \text{to}\ < 1/100$ ), rare ( $\ge 1/10\ 000\ \text{to}\ < 1/1\ 000$ ) and very rare ( $< 1/10\ 000$ ).

Within each frequency grouping, where relevant, adverse reactions are presented in order of decreasing seriousness.

Table 7. Adverse reactions in multiple myeloma patients treated with ELREXFIO in MagnetisMM-3 at the recommended dose

System organ class	Adverse reaction	Frequency	N=183	
		(All grades)	Any grade (%)	Grade 3 or 4 (%)
Infections and	Pneumonia <sup>a</sup>	Very common	37.2	24.6
infestations	Sepsis <sup>b</sup>	Very common	18.0	12.6
	Upper respiratory tract infection <sup>c</sup>	Very common	38.8	5.5
	Urinary tract infection <sup>d</sup>	Very common	12.6	4.4
Blood and	Neutropeniae	Very common	44.8	43.2
lymphatic system disorders	Anaemia <sup>f</sup>	Very common	54.1	42.6
uisoruers	Thrombocytopeniag	Very common	36.1	26.2
	Lymphopenia <sup>h</sup>	Very common	30.1	27.9
	Leucopeniai	Very common	17.5	12.6
	Febrile neutropenia	Common	2.7	2.7
Immune system	Cytokine release syndrome	Very common	57.9	0.5
disorders	Hypogammaglobulinaemia <sup>j</sup>	Very common	14.2	2.7
Metabolism and	Decreased appetite	Very common	26.8	1.1
nutrition disorders	Hypokalaemia	Very common	23.0	8.7
	Hypophosphataemia	Common	6.6	0.5
Nervous system disorders	Immune effector cell-associated neurotoxicity syndrome	Common	3.3	1.1
	Peripheral neuropathy <sup>k</sup>	Very common	15.8	1.1
	Headache	Very common	19.1	0

Table 7. Adverse reactions in multiple myeloma patients treated with ELREXFIO in MagnetisMM-3 at the recommended dose

System organ class	Adverse reaction Frequency		N=183	N=183	
		(All grades)	Any grade (%)	Grade 3 or 4 (%)	
Respiratory, thoracic and mediastinal disorders	Dyspnoea <sup>1</sup>	Very common	19.1	4.9	
Gastrointestinal	Diarrhoea	Very common	37.7	1.1	
disorders	Nausea	Very common	21.3	0	
Skin and	Rash <sup>m</sup>	Very common	26.2	0	
subcutaneous tissue disorders	Dry skin <sup>n</sup>	Very common	21.3	0	
Musculoskeletal and connective tissue disorders	Arthralgia <sup>o</sup>	Very common	25.1	1.6	
General disorders	Injection site reaction <sup>p</sup>	Very common	38.3	0	
and administration site conditions	Pyrexia	Very common	27.3	3.3	
	Fatigue <sup>q</sup>	Very common	44.3	6.0	
Investigations	Transaminases increased <sup>r</sup>	Very common	16.9	5.5	

# Table 7. Adverse reactions in multiple myeloma patients treated with ELREXFIO in MagnetisMM-3 at the recommended dose

System organ class	Adverse reaction	Frequency	N=183	
		(All grades)	Any grade (%)	Grade 3 or 4 (%)

Adverse events are coded using MedDRA Version 25.0.

- <sup>a</sup> Pneumonia includes pneumonia, COVID-19 pneumonia, bronchopulmonary aspergillosis, lower respiratory tract infection bacterial, lower respiratory tract infection viral, pneumocystis jirovecii pneumonia, pneumonia adenoviral, pneumonia bacterial, pneumonia cytomegaloviral, pneumonia fungal, pneumonia influenzal, pneumonia pseudomonal, pneumonia viral, atypical pneumonia, coronavirus pneumonia, pneumonia haemophilus, pneumonia pneumococcal, pneumonia respiratory syncytial viral.
- <sup>b</sup> Sepsis includes sepsis, bacteraemia, device related bacteraemia, device related sepsis, escherichia bacteraemia, escherichia sepsis, klebsiella sepsis, pseudomonal sepsis, septic shock, staphylococcal bacteraemia, staphylococcal sepsis, streptococcal sepsis, urosepsis, campylobacter bacteraemia.
- <sup>c</sup> Upper respiratory tract infection includes upper respiratory tract infection, sinusitis, acute sinusitis, pharyngitis, rhinitis, rhinovirus infection, viral upper respiratory tract infection, bronchitis viral, chronic sinusitis, nasopharyngitis, sinusitis bacterial, bronchitis, respiratory tract infection viral.
- <sup>d</sup> Urinary tract infection includes urinary tract infection, cystitis, urinary tract infection bacterial, escherichia urinary tract infection, urinary tract infection enterococcalurinary.
- <sup>e</sup> Neutropenia includes neutropenia, neutrophil count decreased, neutrophil percentage decreased, cyclic neutropenia, agranulocytosis, granulocytopenia, granulocyte count decreased.
- <sup>f</sup> Anaemia includes anaemia, haemoglobin decreased, red blood cell count decreased, haematocrit decreased, normochromic anaemia, normocytic anaemia, normocytic anaemia, aplasia pure red cell.
- <sup>g</sup> Thrombocytopenia includes thrombocytopenia, platelet count decreased.
- <sup>h</sup> Lymphopenia includes lymphopenia, lymphocyte count decreased, lymphocyte percentage decreased, CD4 lymphocytes decreased, CD4 lymphocyte percentage decreased.
- <sup>i</sup> Leucopenia includes leucopenia, white blood cell count decreased.
- <sup>j</sup> Hypogammaglobulinemia includes participants with adverse events of blood immunoglobulin G decreased, hypogammaglobulinaemia, immunoglobulins decreased.
- <sup>k</sup> Peripheral neuropathy includes peripheral sensory neuropathy, paraesthesia, peripheral sensorimotor neuropathy, dysaesthesia, neuropathy peripheral, peripheral motor neuropathy, Guillain-Barre syndrome, hypoaesthesia, neuralgia, polyneuropathy.
- <sup>1</sup>Dyspnoea includes dyspnoea, dyspnoea exertional, respiratory distress.
- <sup>m</sup> Rash incudes dermatitis exfoliative, dermatitis exfoliative generalised, erythema, palmar-plantar erythrodysaesthesia syndrome, rash, rash erythematous, rash macular, rash maculo-papular, rash pustular, symmetrical drug-related intertriginous and flexural exanthema, epidermolysis.
- <sup>n</sup> Dry skin includes dry skin, skin exfoliation.
- ° Arthralgia includes arthralgia, pain in extremity.
- <sup>p</sup> Injection site reaction includes injection site reaction, injection site erythema, injection site pruritus, injection site rash, injection site induration, injection site pain, injection site urticaria, injection site dryness, injection site haemorrhage, injection site inflammation.
- <sup>q</sup> Fatigue includes fatigue, asthenia, malaise.
- <sup>r</sup> Transaminases increased includes alanine aminotransferase increased and aspartate aminotransferase increased.

#### **Description of selected adverse reactions**

#### Cytokine release syndrome (CRS)

CRS occurred in 57.9% of patients who received ELREXFIO at the recommended dosing schedule (see Section 4.2 Dose and method of administration), with Grade 1 CRS in 43.7% of patients, Grade 2 CRS in 13.7% of patients and Grade 3 CRS in 0.5% of patients. Most patients experienced CRS after the first step-up dose (43.2%) or the second step-up dose (19.1%), with 7.1% of patients having CRS after the first full treatment dose and 1.6% of patients after a subsequent dose. Recurrent CRS occurred in 13.1% of patients. The median

time to onset of CRS was 2 (range: 1 to 9) days after the most recent dose, with a median duration of 2 (range: 1 to 19 days) days.

Among patients who developed CRS, associated symptoms included fever (99.0%), hypoxia (11.4%), and hypotension (21.0%). Among patients who developed CRS, 33% received tocilizumab (or siltuximab) and 15.1% received corticosteroids for treatment of CRS.

#### Immune effector cell-associated neurotoxicity syndrome (ICANS)

ICANS occurred in 3.3% of patients following treatment with ELREXFIO at the recommended dosing schedule (see Section 4.2 Dose and method of administration), with Grade 1 ICANS in 0.5%, Grade 2 in 1.6% and Grade 3 in 1.1% of patients. The majority of patients had ICANS after the first step-up dose (2.7%), 1 (0.5%) patient had ICANS after the second step-up dose and 1 (0.5%) patient had ICANS after a subsequent dose. Recurrent ICANS occurred in 1.1% of patients. The median time to onset was 3 (range: 1 to 4) days after the most recent dose with a median duration of 2 (range: 1 to 18) days.

The onset of ICANS can be concurrent with CRS, following resolution of CRS, or in the absence of CRS. The most frequent symptoms of ICANS included a depressed level of consciousness and Grade 1 or Grade 2 Immune Effector Cell-Associated Encephalopathy (ICE) scores. Among patients who developed ICANS, 66.7% received corticosteroids, 33.3% received tocilizumab (or siltuximab), 33.3% received levetiracetam and 16.7% received anakinra for treatment of ICANS.

#### **Immunogenicity**

During treatment in the pooled safety data (up to 24 months), 20 out of 240 participants evaluable for immunogenicity (8.3%) treated with ELREXFIO at the recommended dose developed anti-elranatamab antibodies. There was no identified clinically significant effect of anti-drug antibodies (ADA) on pharmacokinetics, safety, or effectiveness of elranatamab.

#### **Reporting suspected adverse effects**

Reporting suspected adverse reactions after registration of the medicinal product is important. It allows continued monitoring of the benefit-risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions at www.tga.gov.au/reporting-problems.

#### 4.9 Overdose

No participant reported an elranatamab overdose in the clinical trial program and the maximum tolerated dose has not been determined. In clinical studies, doses up to 76 mg QW have been administered.

#### **Treatment**

In the event of an overdose, the patient should be monitored for any signs or symptoms of adverse reactions and appropriate supportive treatment should be instituted immediately.

For information on the management of overdose, contact the Poisons Information Centre on 13 11 26 (Australia).

## 5. PHARMACOLOGICAL PROPERTIES

# 5.1 Pharmacodynamic properties

#### Mechanism of action

Elranatamab is a bispecific antibody that binds B-cell maturation antigen (BCMA) expressed on plasma cells, plasmablasts, and multiple myeloma cells and CD3 expressed on T cells . Simultaneous binding of BCMA and CD3 by elranatamab leads to T-cell activation and proliferation and the release of pro-inflammatory cytokines, resulting in the lysis of BCMA-expressing tumour and normal cells.

## Pharmacodynamic effects

#### Exposure-response relationships

Serum concentrations of cytokines (IL-2, IL-6, IL-8, IL-10, TNF- $\alpha$ , and IFN- $\gamma$ ) were measured before and after administration of step-up dose 1, step-up dose 2, and the first three full treatment doses of ELREXFIO. Time of the maximum cytokine concentration generally occurred during the step-up dosing and concentrations continue to decrease over the course of the first month of treatment.

#### Clinical trials

## Relapsed or refractory multiple myeloma

The efficacy of ELREXFIO monotherapy was evaluated in patients with relapsed or refractory multiple myeloma in an open-label, non-randomised, multi-centre, Phase 2 study (MagnetisMM-3). The study included patients who were refractory to at least one proteasome inhibitor (PI), one immunomodulatory agent (IMiD), and one anti-CD38 monoclonal antibody. MagnetisMM-3 included 123 patients naïve to prior BCMA-directed therapy (pivotal Cohort A) and 64 patients with prior BCMA-directed antibody drug conjugate (ADC) or chimeric antigen receptor (CAR) T cell therapy (supportive Cohort B). Patients had measurable disease by International Myeloma Working Group (IMWG) criteria at enrollment. The study included patients with an ECOG score of  $\leq$ 2, adequate baseline bone marrow (absolute neutrophil count  $\geq$ 1.0 x 109/L, platelet count  $\geq$ 25 x 109/L, haemoglobin level  $\geq$ 8 g/dL), renal (CrCL  $\geq$ 30 mL/min), and hepatic (AST and ALT  $\leq$ 2.5 x ULN, total bilirubin  $\leq$ 2 x ULN) function, and left-ventricular ejection fraction  $\geq$ 40%. Patients with a stem cell transplant within 12 weeks prior to enrollment and active infections were excluded from the study.

Eligible patients received subcutaneous administration of ELREXFIO at step-up doses of 12 mg on Day 1 and 32 mg on Day 4 of treatment, followed by the first full treatment dose of ELREXFIO (76 mg) on Day 8 of treatment. Thereafter, patients received 76 mg once weekly. After 24 weeks, in patients who achieved an IMWG response category of partial response (PR) or better with responses persisting for at least 2 months, the dosing interval was changed from every week to every 2 weeks (see Section 4.2 Dose and method of administration).

Among the 123 patients treated in pivotal Cohort A, the median age was 68 (range: 36 to 89) years with 20% of patients ≥75 years of age. 44.7% were female; 58.5% were White, 13.0% were Asian, 8.9% were Hispanic/Latino, and 7.3% were Black. Disease stage (R-ISS) at study entry was 22.8% in Stage I, 55.3% in Stage II, and 15.4% in Stage III. The median time since initial diagnosis of multiple myeloma to enrolment was 72.9 (range: 16 to 228) months. Patients had received a median of 5 prior lines of therapy (range: 2 to 22); with 96.0% who had received ≥3 prior lines of therapy. 96.7% were triple-class refractory, and 95.9% refractory to their last line of therapy. 68.3% received prior autologous stem cell transplantation, and 5.7% received prior allogenic stem cell transplantation. High-risk cytogenetics (t(4;14), t(14;16),or del(17p)) were present in 25.2% of patients. 31.7% of patients had extramedullary disease (presence of any plasmacytoma (extramedullary and/or paramedullary)) with a soft-tissue component at baseline by Blinded Independent Central Review (BICR).

Efficacy results were based on response rate and duration of response (DOR), as assessed by BICR based on the IMWG criteria. Efficacy results from pivotal Cohort A are shown in Table 8. The median (range) follow-up for responders was 16.62 (3.61, 26.18) months.

Table 8. Efficacy results for MagnetisMM-3 in pivotal Cohort A

BCMA-directed therapy naïve patients	
(pivotal Cohort A)	
	All treated (N=123)
Objective Response Rate (ORR: sCR+CR+VGPR+PR), n (%)	75 (61.0%)
(95% CI)	(51.8, 69.6)
Stringent complete response (sCR)	19 (15.4%)
Complete response (CR)	25 (20.3%)
Very good partial response (VGPR)	25 (20.3%)
Partial response (PR)	6 (4.9%)
Complete Response Rate (sCR+CR), n (%)	44 (35.8%)
(95% CI)	(27.3, 44.9)
Time to First Response (months)	
Number of responders	75
Median	1.22
Range	(0.9, 7.4)
Duration of Response (DOR) (months)	
Number of responders	75
Median (95% CI)	NE (NE, NE)
MRD-negativity rate <sup>a</sup> in patients achieving CR or sCR and	
evaluable for MRD (29 of the 44 patients who reached CR/sCR were	
evaluable for MRD)	
n (%)	26 (89.7%)
95% CI (%)	(72.7, 97.8)

Abbreviations: CI=Confidence interval; NE=Not estimable; MRD=Minimal residual disease.

<sup>&</sup>lt;sup>a</sup> By threshold 10<sup>-5</sup>, Next Generation Sequencing clonoSEQ assay (Adaptive Biotechnologies).

Among the 64 patients treated in supportive Cohort B (BCMA-exposed patients: BCMA-directed ADC and/or CAR T cell therapy), the median age was 67 (range: 41 to 84) years with 18.8% of patients ≥75 years of age. 53.1% were female; 68.8% were White, 10.9% were Hispanic/Latino, 3.1% were Black, and 1.6% were Asian. Disease stage (R-ISS) at study entry was 17.2% in Stage I, 56.3% in Stage II and 23.4% in Stage III. The median time since initial diagnosis of multiple myeloma to enrolment was 102.6 (range: 23 to 219) months. Patients had received a median of 7.5 prior lines of therapy (range: 3 to 19); 96.9% were triple-class refractory and 51.6% were penta-drug refractory (refractory to at least 2 PIs, 2 IMiDs, and 1 anti-CD38 antibody); 87.5% were refractory to their last line of therapy. 71.9% and 32.8% received prior ADC and CAR T cell therapy, respectively. 82.8% received prior autologous stem cell transplantation, and 3.1% received prior allogenic stem cell transplantation. High-risk cytogenetics (t(4;14), t(14;16),or del(17p)) were present in 20.3% of patients. 57.8% of patients had extramedullary disease at baseline by BICR.

Efficacy results in supportive Cohort B include confirmed ORR by BICR of 34.4% (95% CI: 22.9, 47.3); 10.9% of patients achieved CR or better, and 32.8% achieved VGPR or better. Median TTR was 1.92 (range: 0.92, 6.74) months. After a median (range) follow-up of 16.07 (6.41, 18.00) months in responders, median DOR was not reached and the Kaplan-Meier DOR rate was 85.9% (95% CI: 62.4, 95.2) at 6 months, 85.9% (95% CI: 62.4, 95.2) at 9 months, 67.5% (95% CI: 40.9, 84.1) at 12 months and 67.5% (95% CI: 40.9, 84.1) at 15 months.

# 5.2 Pharmacokinetic properties

The  $C_{max}$  and  $AUC_{tau}$  of elranatamab after the first subcutaneous dose increased in a dose proportional manner over the evaluated dose range via SC administration (~ 6 to 76 mg). The mean accumulation ratio after 24 weeks of weekly dosing relative to the first subcutaneous dose of elranatamab 76 mg for  $C_{max}$  and  $AUC_{tau}$  was 4.8-fold and 8.0-fold, respectively. The  $C_{max}$ ,  $C_{trough}$ , and  $AUC_{tau}$  of elranatamab are presented in Table 9.

Table 9. Pharmacokinetic parameters of elranatamab at the end of the weekly dosing (week 24) at 76 mg

Pharmacokinetic parameter	Geometric mean (CV%)
C <sub>max</sub> (mcg/mL)	25.8 (67%)
C <sub>trough</sub> (mcg/mL)	23.9 (72%)
AUC <sub>tau</sub> (mcg*day/mL)	173 (69%)

#### **Absorption**

The mean bioavailability of elranatamab was 56.2% when administered subcutaneously. The median  $T_{max}$  after elranatamab SC administration across all dose levels ranged from 3 to 7 days for both total and free serum concentrations.

#### **Distribution**

The mean (coefficient of variation [CV]%) central volume of distribution of elranatamab was 4.78 L (69%).

#### Metabolism

Elranatamab is expected to be metabolised via normal protein degradation pathways for IgG molecules.

#### Elimination

The half-life of elranatamab is 22 (64%) days at the 76 mg dosage. The geometric mean (CV%) of elranatamab apparent clearance was 0.44 L/day (69%). Patients who discontinue elranatamab after Week 24 are expected to have a 50% reduction from  $C_{max}$  at a median (5th to 95th percentile) time of 25 (9.6 to 70) days after  $T_{max}$  and a 97% reduction from  $C_{max}$  at a median time of 130 (43 to 275) days after  $T_{max}$ .

#### **Special populations**

No clinically relevant differences in the pharmacokinetics of elranatamab were observed for age (36 to 89 years), sex (167 male, 154 female), race (193 White, 49 Asian, 29 Black), and body weight (37 to 160 kg).

## Renal impairment

No formal studies of ELREXFIO in patients with renal impairment have been conducted. Results of population pharmacokinetic analyses indicate that mild renal impairment (60 mL/min/1.73 m $^2$  ≤estimated glomerular filtration rate (eGFR) <90 mL/min/1.73 m $^2$ ) or moderate renal impairment (30 mL/min/1.73 m $^2$  ≤eGFR <60 mL/min/1.73 m $^2$ ) did not significantly influence the pharmacokinetics of elranatamab. Limited data are available from patients with severe (eGFR less than 30 mL/min/1.73 m $^2$ ) renal impairment.

# Hepatic impairment

No formal studies of ELREXFIO in patients with hepatic impairment have been conducted. Results of population pharmacokinetic analyses indicate that mild hepatic impairment (total bilirubin >1 to 1.5 times upper limit of normal (ULN) and any aspartate aminotransferase (AST), or total bilirubin  $\leq$ ULN and AST $\geq$ ULN) did not significantly influence the pharmacokinetics of elranatamab. No data are available in patients with moderate (total bilirubin  $\geq$ 1.5 to 3.0 x ULN and any AST) or severe (total bilirubin  $\geq$ 3.0 x ULN and any AST) hepatic impairment.

# 5.3 Preclinical safety data

#### Genotoxicity

No genotoxicity studies have been performed with elranatamab. As a large protein molecule, elranatamab is not expected to interact directly with DNA or other chromosomal material.

#### Carcinogenicity

No animal studies have been performed to assess the carcinogenic potential of elranatamab.

## 6. PHARMACEUTICAL PARTICULARS

# 6.1 List of excipients

Histidine Histidine hydrochloride monohydrate Disodium edetate Polysorbate 80 Sucrose Water for Injections

## **6.2 Incompatibilities**

In the absence of compatibility studies, this medicinal product must not be mixed with other medicinal products.

## 6.3 Shelf life

## **Unopened vial**

In Australia, information on the shelf life can be found on the public summary of the Australian Register of Therapeutic Goods (ARTG). The expiry date can be found on the packaging.

#### **Prepared syringe**

The prepared syringe should be administered immediately. If the prepared dosing syringe is not used immediately, store syringe at between 2°C to 8°C for a maximum of 24 hours, or at below 30°C for a maximum of 6 hours.

## 6.4 Special precautions for storage

Store in a refrigerator (2°C to 8°C).

Do not freeze. Do not shake.

Store in the original carton in order to protect from light.

For storage conditions after first opening of the medicinal product, see Section 6.3 Shelf life.

#### 6.5 Nature and contents of container

1.1 mL solution in a single-dose vial (Type 1 glass) with a stopper (butyl rubber) and an aluminium seal with a flip-off cap containing 44 mg of elranatamab.

Pack size of 1 vial.

1.9 mL solution in a single-dose vial (Type 1 glass) with a stopper (butyl rubber) and an aluminium seal with a flip-off cap containing 76 mg of elranatamab.

Pack size of 1 vial.

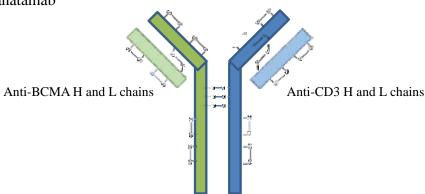
## 6.6 Special precautions for disposal

The vial and any remaining contents after withdrawal of a single-dose should be discarded. In Australia, any unused medicine or waste material should be disposed of by taking to your local pharmacy.

# **6.7 Physicochemical properties**

#### **Chemical structure**

Elranatamab



Elranatamab is a bispecific IgG2 kappa antibody derived from two monoclonal antibodies (mAbs), the anti-BCMA mAb and the anti-CD3 mAb. Each of these mAbs contributes one distinct heavy (H) chain and one distinct light (L) chain to the bispecific elranatamab. The resulting 4-chain bispecific antibody is covalently linked via five inter-chain disulfide bonds.

#### **CAS** number

2408850-14-4

## 7. MEDICINE SCHEDULE (POISONS STANDARD)

Schedule 4 (Prescription Only Medicine)

#### 8. SPONSOR

Pfizer Australia Pty Ltd Level 17, 151 Clarence Street SYDNEY NSW 2000

Toll Free Number: 1800 675 229 www.pfizermedicalinformation.com.au

## 9. DATE OF FIRST APPROVAL

28 June 2024

## 10. DATE OF REVISION

Not applicable

## **Summary Table of Changes**

Section changed	Summary of new information
Not applicable	