

# Locally advanced or metastatic cemiplimab

ID: 4151 v.1 Endorsed

Treatment must be initiated and supervised by specialist physicians experienced in the treatment of cancer using immunological agents. Before commencing immunotherapy treatment in any patient, clinicians should have an understanding of the immune-related adverse events (irAEs) associated with immunotherapy treatment and their management.

Check for clinical trials in this patient group. Link to Australian Clinical Trials website

Some indications in this protocol are based on limited evidence; please refer to the individual evidence sections for more information.

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

International Consensus Guideline for Anticancer Drug Dosing in Kidney Dysfunction (ADDIKD)

Click here



2022

# **Treatment schedule - Overview**

#### **Cycle 1 and further cycles**

Drug	Dose	Route	Day
Cemiplimab	350 mg	IV infusion	1

Frequency: 21 days

**Cycles:** Continuous until disease progression or unacceptable toxicity (up to 2 years)

#### Notes:

In the first few months after the start of immunotherapy, some patients can experience transient tumour flare (termed "pseudo progression" or an immune response). This may manifest as growth of existing lesions or the development of new lesions prior to later tumour regression. While this is rare (~5%), continuing treatment and performing a second scan 4 to 6 weeks later to confirm progression may be considered, particularly if the patient remains well. In patients with clinical deterioration and radiographic progression treatment with cemiplimab should be discontinued.

Radiation recall has been observed with PD-L1 inhibitors, consideration should be given to the timing when starting this treatment after a prolonged course of radiation therapy.

Drug status: Cemiplimab is PBS authority

**Cost:** ~ \$7,380 per cycle

# Treatment schedule - Detail

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

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

#### **Cycle 1 and further cycles**

Day 1		
Cemiplimab	350 mg (IV infusion)	in 50 mL sodium chloride 0.9% over 30 minutes

Frequency: 21 days

Cycles: Continuous until disease progression or unacceptable toxicity (up to 2 years)

# Indications and patient population - Cutaneous squamous cell carcinoma

#### Indications:

 Monotherapy for treatment of patients with metastatic or locally advanced cutaneous squamous cell carcinoma (mCSCC or laCSCC) who are not candidates for curative surgery or curative radiation therapy.

#### **Precautions:**

If any of these conditions are present, clinical judgement should be used and individual cases discussed with an expert in the field as indicated:

- significant autoimmune disease (e.g. myasthenia gravis, inflammatory bowel disease, systemic lupus erythematosus, rheumatoid arthritis, autoimmune ocular disease)
- · organ transplantation
- · previous history of viral hepatitis
- HIV/acquired immune deficiency syndrome (AIDS)
- previous radiation to the lungs.

# Indications and patient population - Non small cell lung cancer

#### Indications:

- Monotherapy for first-line treatment of locally advanced or metastatic non-small cell lung cancer (NSCLC) in patients with PD-L1 tumour proportion score (TPS) ≥50% as determined by a validated test, without EGFR or ALK or ROS-1 genomic tumour aberrations where the disease is either not suitable for surgical resection or definitive chemoradiation.
- ECOG performance status 0-1.

#### **Precautions:**

If any of these conditions are present, clinical judgement should be used and individual cases discussed with an expert in the field as indicated:

- significant autoimmune disease (e.g. myasthenia gravis, inflammatory bowel disease, systemic lupus erythematosus, rheumatoid arthritis, autoimmune ocular disease)
- · organ transplantation
- · previous history of viral hepatitis
- HIV/acquired immune deficiency syndrome (AIDS)
- · previous radiation to the lungs.

Clinical practice guidelines for the treatment of lung cancer

# **Clinical information**

Venous access required	IV cannula (IVC) or central venous access device (CVAD) is required to administer this treatment.
	Read more about central venous access device line selection
Emetogenicity MINIMAL	No antiemetics should be routinely administered before treatment in patients without a history of nausea and vomiting. If patients experience nausea and/or vomiting, consider using the low antiemetic prophylaxis regimen.  Read more about preventing anti-cancer therapy induced nausea and vomiting
Immune-related adverse	Immune-related adverse events (irAEs) can occur early and escalate quickly in patients
Immune-related adverse events (irAEs)	Immune-related adverse events (irAEs) can occur early and escalate quickly in patients receiving immune checkpoint inhibitors. irAEs can also occur after discontinuation of treatment. Fatalities have been reported. Management of irAEs is largely based on expert opinion and consensus guidelines.  Examples of irAEs with high risk of mortality include:  • cardiac toxicity: myocarditis  • musculoskeletal toxicity: myositis  • neurological toxicity: encephalitis, Guillain-Barré syndrome, myelitis, myasthenia gravis  • pulmonary toxicity: pneumonitis  • skin toxicity: Steven-Johnson syndrome, toxic epidermal necrolysis.  Examples of irAEs in order of frequency include:  • Common  • endocrinopathies: thyroid dysfunction  • gastrointestinal toxicity: diarrhoea  • musculoskeletal toxicity: arthralgia, myalgia  • skin toxicity: rash, erythema, pruritus  • Less common  • endocrinopathies: hypophysitis, type I diabetes mellitus  • gastrointestinal toxicity: colitis  • musculoskeletal toxicity: inflammatory arthritis  • ocular toxicity: dry eye  • renal toxicity: vitiligo  • Rare  • endocrinopathies: primary adrenal insufficiency  • gastrointestinal toxicity: pancreatitis  • haematological toxicity: vasculitis  • ocular toxicity: uveitis, iritis.
	Proactive monitoring, patient self-monitoring and early reporting of adverse events is critical.  Treatment interruptions/discontinuation, consultation with specialist and administration of corticosteroids and/or supportive care is required to minimise the risk of death.  Read more about the management of immune-related adverse events (irAEs)
Baseline investigations	Consider ECG and troponin at baseline. There is no clear evidence regarding the efficacy/value of baseline ECG or troponin in patients receiving immune checkpoint inhibitor therapy. Some cancer specialists obtain baseline testing, and others continue this through the initial period of therapy. Consider urinalysis at baseline, particularly in patients with additional risk factors for developing immune-related acute kidney injury.
Blood tests	FBC, EUC, eGFR, LFTs, serum cortisol, TFTs and BSL at baseline.
	Repeat FBC, EUC, eGFR, LFTs and BSL prior to each cycle and serum cortisol and TFTs alternate cycles. Check lipase and amylase if symptomatic of pancreatitis.
	In the absence of suspicion of immune-related adverse events less frequent monitoring may be applicable, according to institutional guidelines. Evidence for the frequency of routine blood testing with immunotherapies varies within published studies and guidelines.
	Read more about immunotherapy blood test monitoring recommendations.

Hepatitis and HIV	Hepatitis screening is recommended in all patients who are to receive immune checkpoint inhibitors.  Immunotherapy is associated with inflammatory adverse reactions resulting from increased or excessive immune activity and patients are at risk of developing autoimmune hepatitis. It should be used with caution in patients who have a history of chronic hepatic infections (hepatitis B and C), detectable human immunodeficiency virus (HIV) viral load or acquired immune deficiency syndrome (AIDS).
Vaccinations	The safety of having vaccinations during treatment is unknown. Patients in the clinical trials were typically allowed to receive inactivated and recombinant vaccines but not live vaccines. Read more about COVID-19 vaccines and cancer.
Effects of cancer treatment on fertility	Studies to evaluate the effects of immune checkpoint inhibitor therapy on fertility have not been performed. Therefore, the effect on male and female fertility is unknown. Limited evidence supports that immune checkpoint inhibitor-related hypogonadism due to orchitis and hypophysitis can impact fertility. Immune checkpoint inhibitors can cause fetal harm when given to pregnant women. A pregnancy test should be considered in females of reproductive potential if sexually active. It is important that all patients of reproductive potential use effective contraception whilst on therapy and after treatment finishes. There is very limited evidence to provide guidance regarding contraception timelines. Some studies have demonstrated PD-1 receptor occupancy for greater than 9 months after anti-PD-1 therapy (Brahmer et al., 2010). As a result, some cancer specialists advise using contraception for at least six months or even as long as two years after treatment finishes.
	Link to Brahmer et al., 2010

#### **Dose modifications**

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

- · Dose reduction is not recommended
- No dose adjustment is required in the elderly, mild or moderate renal impairment or mild hepatic impairment. Immune
  checkpoint inhibitors have not been studied in patients with severe renal impairment or moderate to severe hepatic impairment.

#### Management of immune-related adverse events (irAEs)

Link to Management of immune-related adverse events (irAEs)

# **Interactions**

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

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

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

#### Cemiplimab

	Interaction	Clinical management
Immunosuppressants (inc. corticosteroids)	Reduced efficacy of both immunosuppressants and cemiplimab possible due to pharmacodynamic interaction	It is recommended that patients requiring corticosteroids <b>prior</b> to treatment receive the lowest possible dose (preferably no greater than 10 mg prednisolone or equivalent steroid per day). <b>Once started</b> on cemiplimab the use of corticosteroids to treat immune related adverse events (irAEs) does not appear to impact the clinical response to cemiplimab. In patients requiring ongoing corticosteroids <b>post management</b> of an irAE, the dose should be as low as possible.  Monitor for signs of organ rejection in transplant recipients.

# **Administration**

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

#### Day 1

#### Approximate treatment time: 60 minutes

Handling of monoclonal antibodies and waste management

Safe administration

Immunotherapy patient assessment prior to each treatment.

Any toxicity may require delay of treatment and review by medical officer before commencing treatment.

Prime IV line(s).

Insert IV cannula or access TIVAD or CVAD.

# Pre treatment medication

Administer antiemetics if required

#### **②** Treatment - Time out

#### Cemiplimab

#### Administer cemiplimab:

- a low protein binding 0.2 micron or 5 micron in-line or add-on filter should be used
- · via IV infusion over 30 minutes
- observe for infusion-related reactions
- flush with 50 mL of sodium chloride 0.9%.

#### Mild or moderate infusion-related reaction:

- · decrease the rate of infusion and monitor closely
- · give any further doses with close monitoring
- premedication with paracetamol and an antihistamine should be considered for further doses.

#### Severe infusion reaction:

- · stop infusion immediately
- · medical officer review
- · permanently discontinue cemiplimab.

Remove IV cannula and/or deaccess TIVAD or CVAD.

#### **Discharge information**

#### **Patient information**

• Ensure patient receives patient information sheet.

# **Side effects**

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

The most common side effects with this treatment are immune-related adverse events (irAEs). irAEs can escalate quickly and close monitoring of the patient is required. Symptoms should improve promptly after the introduction of immunosuppressive therapy. If this does not occur review the diagnosis and seek further specialist advice. Refer to the Management of immune related adverse events document for further information.

Immune related adverse even	nts
Cardiotoxicity	Cardiotoxicity is a rare but serious side effect, which may manifest as asymptomatic reduction in left ventricular ejection fraction (LVEF), arrhythmia, cardiomyopathy, myocarditis, pericarditis, cardiac fibrosis, hypertension, cardiac ischaemia, congestive heart failure (CHF) and cardiac arrest.  Read more about Management of immune related adverse events.
Gastrointestinal toxicity	Colitis, diarrhoea or more bowel movements than usual; blood or mucous in stools; dark, tarry, sticky stools; abdominal pain or tenderness.  Read more about Management of immune related adverse events
Haematological toxicity	Autoimmune haemolytic anaemia (AIHA), acquired thrombotic thrombocytopenic purpura (TTP), aplastic anaemia (AA), immune thrombocytopenia (ITP), acquired haemophilia (AH), haemolytic uremic syndrome (HUS) and lymphopenia are rare but potentially serious immune-related adverse events associated with immunotherapy treatment.  Read more about Management of immune related adverse events.
Hepatotoxicity	Transaminase and total bilirubin elevation, jaundice, severe nausea or vomiting, pain on the right side of the abdomen, drowsiness, dark urine, bleeding or bruising more easily than normal, anorexia.  Read more about Management of immune related adverse events.
Musculoskeletal toxicity	Inflammatory arthritis, temporal arteritis, arthralgia, myalgia, synovitis, vasculitis, polymyalgia- like syndrome and myositis.  Read more about Management of immune related adverse events.
Neurological toxicity	Aseptic meningitis, myasthenia gravis, Guillain-Barre syndrome, encephalitis, meningeal symptoms, optic neuritis, neuropathy and acute inflammatory demyelinating polyneuropathy are infrequent but potentially serious immune-related adverse events associated with immunotherapy treatment.  Read more about Management of immune related adverse events.
Ocular toxicity	Eye pain, blurred vision, Uveitis/iritis, episcleritis, blepharitis, optic neuritis, tear duct stenosis, conjunctivitis, hyperlacrimation, watery or dry eyes and photophobia.  Read more about Management of immune related adverse events.
Other endocrinopathies	Type 1 diabetes mellitus, hypophysitis, hypopituitarism and adrenal insufficiency are infrequent but potentially serious immune-related adverse events associated with immunotherapy treatment.  Read more about Management of immune related adverse events
Pulmonary toxicity	Radiographic changes, dyspnoea, new or worsening cough, hypoxia, tachycardia, chest pain or fever.  Read more about Management of immune related adverse events.
Renal toxicity	Increase in serum creatinine, oliguria, haematuria, peripheral oedema and anorexia.  Read more about Management of immune related adverse events.
Skin toxicity	Rash including full thickness, pruritus, skin blisters, ulceration and necrosis. Radiation recall can occur at site of previous radiation therapy. Symptoms include vesiculation, desquamation and ulceration of the skin.  Read more about Management of immune related adverse events
Thyroid toxicity	Thyroid toxicity is common with immune checkpoint inhibitors. Hypothyroidism is most frequent however hyperthyroidism can also occur.  Read more about Management of immune related adverse events

Non-immune related adverse events		
Nausea and vomiting	Read more about prevention of treatment induced nausea and vomiting	
Fatigue	Read more about fatigue	

# Evidence - Cutaneous squamous cell carcinoma

A search of the literature did not find strong evidence to support the use of cemiplimab for the treatment of locally advanced or metastatic cutaneous squamous cell carcinoma (laCSCC or mCSCC). The expert reference panel supported publication of the protocol on the basis of the information summarised below. The committee was most strongly influenced by the phase I/II open label, non-randomised, multicentre, international trial by Migden et al. The phase II follow-up results were presented at ASCO 2020 and are yet to be peer reviewed. 1, 2, 3

Source	Study & Year Published	Supports Use	Is the dose and regimen consistent with the protocol?	Comments
	Migden et al 2020 <sup>2, 3</sup>	Yes	Yes	Group 1: mCSCC, cemiplimab 3 mg/kg q14d
Phase II trials				Group 2: laCSCC, cemiplimab 3 mg/kg q14d
				Group 3: mCSCC, cemiplimab 350 mg q21d
Phase I trials	Migden et al 2018 <sup>1</sup>	Yes	No	laCSCC or mCSCC, cemiplimab 3 mg/kg q14d
Guidelines	Date published/revised	Supports Use	Is the dose and regimen consistent with the protocol?	Comments
NCCN	V.2 2020	Yes	No doses stated	-
ссо	September 2019	Yes	Yes	Regimen in abstract form
				Cemiplimab 3 mg/kg q14d or 350 mg q21d
BCCA	N/A	N/A	N/A	-
ESMO	N/A	N/A	N/A	-

# **Efficacy**

A summary of the evidence supporting the effect of this protocol is below:

Outcome	Phase I - dose expansion cohort <sup>1</sup>	Phase II - mCSCC cohort (Group 1) <sup>3</sup>	Phase II - laCSCC cohort (Group 2) <sup>3</sup>	Phase II - mCSCC cohort (Group 3) <sup>3</sup>	Phase II - total <sup>3</sup>
	n = 26	n = 59	n = 78	n = 56	n = 193
Median age (years)	73 (range, 55 to 88)		74 (range	, 65 to 81)	
Median follow up (months)	11	18.5	15.5	17.3	15.7
Objective response rate (ORR) (%, 95% CI)	50 (30 to 70)	50.8 (37.5 to 64.1)	56.4 (44.7 to 67.6)	55.4 (41.5 to 68.7)	54.4 (47.1 to 61.6)
Median observed time to response (months, range)	2.3 (1.7 to 7.3)	-	-	-	-

Outcome	Phase I - dose expansion cohort <sup>1</sup>	Phase II - mCSCC cohort (Group 1) <sup>3</sup>	Phase II - laCSCC cohort (Group 2) <sup>3</sup>	Phase II - mCSCC cohort (Group 3) <sup>3</sup>	Phase II - total <sup>3</sup>
	n = 26	n = 59	n = 78	n = 56	n = 193
Median duration of response (DOR) (months, range)	NR (54% of responding patients had a DOR ≥ 6 months)	-	-	-	NR (1.8 to 34.2)
Kaplan-Meier 24- month estimate of patients with ongoing response (%, 95% CI)	-	-	-	-	76.0 (64.1 to 84.4)

NR = not reached NF = not evaluable

#### **Toxicity**

A summary of the toxicities associated with this protocol are included in the table below. The most clinically significant toxicities for this treatment are fatigue and diarrhoea.<sup>3</sup>

Treatment emergent adverse events (TEAEs)<sup>3</sup>

Any grade TEAEs	%	Grade ≥3 TEAEs	%
Fatigue	34.7	Hypertension	4.7
Diarrhoea	27.5	Anaemia	4.1
Nausea	23.8	Cellulitis	4.1

# Evidence - Non small cell lung cancer

The evidence supporting this protocol is provided by a phase 3 multicentre, open-label, international randomised trial (EMPOWER-Lung 1) involving 710 patients comparing cemiplimab monotherapy with investigator's choice platinum-doublet chemotherapy in patients with locally advanced (not suitable for surgery or definitive chemotherapy) and metastatic non-small cell lung cancer with PD-L1 of at least 50%.<sup>4</sup>

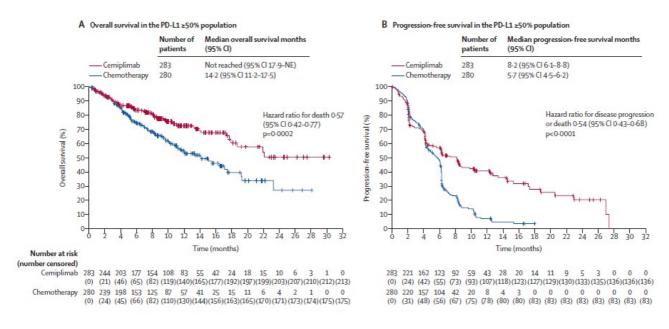
Between June 2017 and February 2020, 356 patients were randomised to receive cemiplimab 350 mg intravenously every 3 weeks (up to 36 treatment cycles) and 354 patients were randomised to receive investigator's choice platinum doublet chemotherapy (maintenance pemetrexed permitted as per standard of care). Randomisation was stratified by tumour histology. Crossover was allowed.<sup>4</sup>

The primary end point was overall survival (OS) and progression-free survival (PFS) and secondary end points were objective response rate (ORR), duration of response (DoR), health related quality of life (HRQoL) and safety.<sup>4</sup>

#### **Efficacy**

In the PD-L1 of at least 50% population (n=563), the overall median duration of follow-up was 10.8 months (IQR 7.6–15.8) for cemiplimab and 10.9 months (IQR 7.8 to 15.6) for chemotherapy. The median OS was not reached (95% CI, 17.9 to not evaluable) with cemiplimab versus 14.2 months (95% CI, 11.2 to 17.5) with chemotherapy (HR 0.57, 95% CI, 0.42 to 0.77; p=0.0002). The median PFS was 8.2 months (95% CI, 6.1 to 8.8) with cemiplimab compared to 5.7 months (95% CI 4.5 to 6.2) with chemotherapy (HR 0.54, 95% CI, 0.43 to 0.68; p<0.0001). Cemiplimab monotherapy significantly improved the OS and PFS compared with chemotherapy in this population. $^4$ 

Kaplan Meier curve of OS and PFS in the PD-L1 ≥ 50% population<sup>4</sup>



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HRQoL data was collected and showed only modest improvement in the cemiplimab group and no clinically meaningful change in the chemotherapy group.<sup>4</sup>

# **Toxicity**

Treatment-related adverse events (TRAE) occurred in 57% of patients who received cemiplimab and 89% of patients who received chemotherapy.<sup>4</sup>

In the cemiplimab group, events leading to death occurred in 9 (3%) patients including autoimmune cardiac events, nephritis and respiratory failure. Overall, immune-related adverse events occurred in 62 (17%) of patients in the cemiplimab group.

Most common treatment-related adverse events<sup>4</sup>

Adverse event	All	grades	Grade 3-4	
	Cemiplimab n=355	Chemotherapy n=342	Cemiplimab n=355	Chemotherapy n=342
Any	204 (57%)	303 (89%)	41 (11%)	127 (37%)
Increased transaminases	43 (12%)	24 (7%)	8 (2%)	1 (<1%)
Decreased appetite	18 (5%)	49 (14%)	1 (<1%)	1 (<1%)
Anaemia	18 (6%)	152 (45%)	2 (1%)	51 (15%)
Rash	18 (5%)	8 (2%)	3 (1%)	0
Diarrhoea	15 (4%)	23 (7%)	1 (<1%)	6 (2%)
Arthralgia	13 (4%)	21 (6%)	0	1 (<1%)
Fatigue	15 (4%)	42 (12%)	3 (1%)	4 (1%)
Nausea/vomiting	25 (7%)	136 (39%)	0	8 (2%)
Increased amylase	11 (3%)	2 (<1%)	1 (<1%)	1 (<1%)
Pneumonitis	11 (3%)	1 (<1%)	1 (<1%)	0

# References

- 1 Migden, M. R., D. Rischin, C. D. Schmults, et al. 2018. "PD-1 Blockade with Cemiplimab in Advanced Cutaneous Squamous-Cell Carcinoma." N Engl J Med 379(4):341-351.
- 2 Migden, M. R., N. I. Khushalani, A. L. S. Chang, et al. 2020. "Cemiplimab in locally advanced cutaneous squamous cell carcinoma: results from an open-label, phase 2, single-arm trial." Lancet Oncol 21(2):294-305.

- 3 Rischin, D., N. I. Khushalani, C. D. Schmults, et al. 2020. "Phase II study of cemiplimab in patients (pts) with advanced cutaneous squamous cell carcinoma (CSCC): Longer follow-up." J Clin Oncol 38(15\_suppl):10018-10018.
- 4 Sezer, A., S. Kilickap, M. Gümüş, et al. 2021. "Cemiplimab monotherapy for first-line treatment of advanced non-small-cell lung cancer with PD-L1 of at least 50%: a multicentre, open-label, global, phase 3, randomised, controlled trial." Lancet 397(10274):592-604.

# History

#### Version 1

ID 4151 Locally advanced or metastatic cemiplimab				
Date	Summary of changes			
30/09/2022	New multi-indication protocol approved electronically by Medical Oncology reference committee. Non-small cell lung cancer added to drug status, indications, evidence and patient information. Note that this protocol replaces existing approved protocol ID 3876.			
04/10/2022	Approved and published on eviQ. Next review in 1 year.			
01/11/2022	Drug status updated to PBS authority.			
19/06/2023	Non-small cell lung cancer indication reviewed at Medical Oncology reference committee meeting on 19/05/2023. No changes. Next review for this indication in 2 years.			

As ID 4151 Locally advanced or metastatic cemiplimab replaces an existing approved protocol, the History section for ID 3876 is included below for consistency in documentation.

ID 3876 Cutaneous squamous cell carcinoma locally advanced or metastatic cemiplimab version 2				
Date	Summary of changes			
12/03/2021	New protocol presented at Medical Oncology reference committee meeting.			
30/03/2021	Approved and published on eviQ. Next review in 1 year.			
13/04/2022	Protocol updated based on the consensus gained at the immunotherapy reference committee meeting held on 4 <sup>th</sup> of March 2022. The following changes have been made across all immune checkpoint inhibitor protocols:  Indications and patient populations- previous radiation to the lungs added to precautions.  Clinical information- general irAEs, hepatitis and HIV, and fertility blocks updated. Individual irAE-related blocks removed. New block (baseline investigations) added.  Patient information- pregnancy and breastfeeding block in general advice section updated.  Version number increased to V.2.			

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

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The currency of this information is guaranteed only up until the date of printing, for any updates please check:

https://www.eviq.org.au/p/4151

09 Aug 2023

# Patient information - Locally advanced or metastatic - Cemiplimab



Patient's name:

#### Your treatment

It is important to understand that cemiplimab is not a traditional chemotherapy drug and has a different way of working. It is an immunotherapy treatment (also called anti-cancer drug) that works with your immune system to detect and destroy cancer cells.

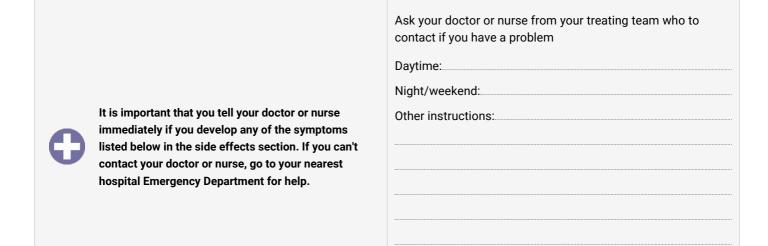
This treatment may be used to treat different types of cancer. Your doctor will advise you why you are receiving this treatment.

The treatment schedule below explains how the immunotherapy drug for this treatment is given.

Cemiplimab							
This treatment cycle is repeated every 21 days. Your doctor will advise you of the number of treatments you will have.							
Day	Treatment	How it is given	How long it takes				
1	Cemiplimab	By a drip into a vein	About 60 minutes				
	(se-MIP-li-mab)						

**Prior to your treatment** tell your doctor if you are taking any other medicines (e.g. corticosteroids, immunosuppressive therapy), have or ever had chronic liver infections e.g. hepatitis B (HBV) or C (HCV), human immunodeficiency virus (HIV) or an organ transplant.

# When to get help



**Emergency contact details** 

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

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

# Other information about your treatment

#### **Treatment delays**

There may be times when your treatment is delayed. This can happen if your doctor thinks you are likely to have severe side effects, if you get severe side effects, if your blood counts are affected and causing delays in treatment, or if you are finding it hard to cope with the treatment. Your doctor will explain if you need any delays to your treatment and the reason why.

#### **Blood tests and monitoring**

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

# Other medications given during this treatment

• Steroids: you may be given some steroid tablets to help reduce immune-related side effects. Your doctor or nurse will tell you how and when to take the steroids. You may need to monitor your blood sugar levels closely while you are taking steroids. If you have diabetes, your diabetic medication may need to be adjusted because of the effects of steroids. Speak to your diabetes advisor.

# Side effects

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

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

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

Immunotherapy may cause serious immune reactions against your own body. These are called immune-related adverse events. They may occur during your treatment, or after your treatment has ended. Immunotherapy can affect many parts of your body. Some side effects can cause severe or life threatening conditions, so even mild side effects must be reported immediately. Do not try to treat these symptoms yourself without talking to your doctor or nurse first. You will be given an information pack at the start of your treatment. This contains an alert card which you should carry with you at all times. Bring this alert card with you to hospital, especially if you are unwell or attending the emergency department.

#### Immune related side effects

#### **Heart problems**

- You may get:
  - chest pain or tightness
  - o shortness of breath
  - swelling of your ankles
  - o an abnormal heartbeat.
- Heart problems are uncommon but potentially fatal. If heart problems were to occur, symptoms usually start within the first 3 months of treatment, but can happen at any time even after the treatment has finished.
- Tell your doctor if you have a history of heart problems or high blood pressure.
- Before or during treatment, you may be asked to have a test to see how well your heart is working.
- Tell your doctor or nurse immediately, or go to the nearest hospital Emergency Department if you get any of the symptoms listed above.

# Bowel and stomach inflammation

- · You may get:
  - bowel motions (stools, poo) that are more frequent or more liquid (diarrhoea)
  - blood or mucous in your stool
  - o dark, tarry, or sticky bowel motions
  - bloating, cramping, pain or tenderness in your stomach area.
- Inform your doctor or nurse immediately if you get diarrhoea
- Take your anti-diarrhoeal or steroid medication as directed by your doctor.
- Drink plenty of fluids (unless you are on a fluid restriction).
- · Eat and drink small amounts more often.
- Avoid spicy foods, dairy products, high fibre foods, and coffee.
- Tell your doctor or nurse immediately, or go to your nearest hospital Emergency Department if your diarrhoea is not controlled despite taking anti-diarrhoea medicine, severe stomach pains and bloating, and/or if you feel dizzy or light-headed.

#### **Blood problems**

- Blood problems are infrequent but can be serious.
- You may feel dizzy, light-headed, tired, weak and appear more pale than usual.
- · You may get:
- dark, tarry bowel motions (stools, poo)
- · blood in your urine or not urinating as often
- · dark-coloured urine
- · yellowing of the whites of your eyes, and/or your skin
- pinpoint red spots on your skin
- unexplained bleeding
- major bruising
- · a fever
- · shortness of breath
- a severe headache
- confusion
- · faster heartbeat than normal
- Tell your doctor or nurse immediately or go to the nearest hospital Emergency
  Department if it has been longer than 12 hours since you have emptied your bladder or if
  you get any of the symptoms listed above.

#### Liver damage

- You may get:
  - fatigue
  - severe nausea and vomiting
  - weight loss
  - bruising or bleeding more easily
  - o pain or tenderness on the right side of your stomach area
  - o dark coloured urine
  - yellowing of the whites of your eyes and/or your skin
  - o itchy skin
  - drowsiness
- You will have regular blood tests to check how well your liver is working.
- · Take your steroid medication as directed by your doctor.
- Tell your doctor or nurse as soon as possible if you notice that your urine is a dark colour, the whites of your eyes or skin look yellow, if you have unexplained bruising or bleeding or if you have severe stomach pain.

#### Muscle and joint problems

- · You may get:
- · muscle or joint stiffness, especially after a period of rest
- muscle weakness
- · pain in your muscles or joints
- · joint swelling
- tiredness
- headaches
- Take your pain relief or steroid medication as directed by your doctor.
- Tell your doctor or nurse as soon as possible if you get any of the symptoms listed above.

# · Nervous system changes are rare, but can be serious. **Nervous system problems** · You may get: headaches fever stiff neck confusion or difficulty concentrating o dizziness or drowsiness loss of consciousness muscle weakness or pain o numbness or tingling in your hands or feet o jerky movements. • Take your steroid medication as directed by your doctor. . Tell your doctor or nurse immediately, or go to the nearest hospital Emergency Department if you get any of the symptoms listed above. · You may get: Eye problems o eye pain itchy eyes red or swollen eyes blurred or change in vision change in colour vision o watery or gritty eyes dry eyes o sensitivity to light. • Protect your eyes from the weather (sun and wind) by wearing sunglasses. • Use your eye drops or take your steroid medication as directed by your doctor. • Tell your doctor or nurse as soon as possible if you get any of the symptoms listed above. Hormone changes are infrequent, but can be serious. Hormone problems · You may get: headaches tiredness, dizziness or fainting o abnormal heartbeat (faster than usual) o a feeling of being hot or cold more easily excessive sweating weight changes a deepened voice irregular or absent periods nausea and vomiting o thirsty and need to urinate more often than normal high blood sugar levels o pain in your stomach area muscle pain or weakness difficulty sleeping o agitated more easily

o changes in your mood or behaviour, such as decreased sex drive or irritability.

Tell your doctor or nurse immediately, or go to the nearest hospital Emergency Department if you feel confused, weak, dizzy, or faint, or get sudden pain in your lower

• Take your hormone or steroid medication as directed by your doctor.

back or legs.

# · You may get: Lung problems shortness of breath · difficulty breathing o faster heartbeat than normal chest pain o new or worsening cough fever. Your doctor will monitor how well your lungs are working during your treatment. Take your steroid medication as directed by your doctor. • Tell your doctor or nurse immediately, or go to the nearest hospital Emergency Department if you have chest pain or become short of breath. This treatment can cause changes to how your kidneys work. Kidney damage · You may get: o a feeling of needing to urinate less often than normal blood in your urine · swollen hands and feet o loss of appetite. • You will have regular blood tests to check how well your kidneys are working. · You may need to drink more fluids while you are having treatment. Your doctor or nurse will tell you if you need to do this. • Take your steroid medication as directed by your doctor. • Tell your doctor or nurse as soon as possible if you notice that your urine changes colour or you don't need to empty your bladder as often. · You may get Skin rash a red rash o a bumpy rash o dry and itchy skin o skin peeling or blisters. o if you have had previous radiation therapy to an area this effect may be worse • Moisturise your skin with a gentle non-perfumed moisturising cream like sorbolene or aqueous cream. · Avoid scratching your skin. Avoid wearing tight fitting clothing Protect your skin from the sun by wearing sun-protective clothing, a wide-brimmed hat, sunglasses and sunscreen of SPF 50 or higher. • Take your antihistamine medication or apply your steroid cream as directed by your doctor. . Tell your doctor or nurse as soon as possible if you notice any changes to the rash like pain or pus forming.

#### Thyroid problems

Thyroid problems are common with this treatment. The most common problem is an underactive thyroid gland (hypothyroidism), occasionally you may get an overactive thyroid gland (hyperthyroidism).

- If you have an underactive thyroid, you may get:
  - fatigue and low energy levels
  - depression
  - o slow heart rate
  - o unexplained weight gain
  - intolerance to cold temperatures
  - o fatigued and aching muscles
  - o dry, coarse skin
  - puffy face
  - hair loss
  - constipation
  - o problems with concentration
  - o changes in your periods
- If you have an overactive thyroid, you may get
  - abnormal heartbeat (faster than usual)
  - a feeling of being hot or cold more easily
  - · excessive sweating
  - o difficulty sleeping
  - o anxiety, nervousness or agitated more easily
  - diarrhoea
  - changes in your periods
- You will have regular blood tests to check how well your thyroid is working.
- Take your hormone or steroid medication as directed by your doctor.
- Tell your doctor or nurse if you get any of the symptoms listed above.

#### Non-immune related side effects

#### Nausea and vomiting

- You may feel sick (nausea) or be sick (vomit).
- Drink plenty of fluids (unless you are fluid restricted).
- Eat small meals more frequently.
- Try food that does not require much preparation.
- Try bland foods like dry biscuits or toast.
- Gentle exercise may help with nausea.
- Anti-sickness medication is usually not needed but may help in some people.
- Ask your doctor or nurse for eviQ patient information Nausea and vomiting during cancer treatment
- Tell your doctor or nurse immediately, or go to the nearest hospital Emergency Department if you have uncontrolled vomiting or feel dizzy or light-headed.

# Tiredness and lack of energy (fatigue)

- You may feel very tired, have no energy, sleep a lot, and not be able to do normal activities or things you enjoy.
- Do not drive or operate machinery if you are feeling tired.
- Nap for short periods (only 1 hour at a time)
- Prioritise your tasks to ensure the best use of your energy.
- Eat a well balanced diet and drink plenty of fluids (unless you are fluid restricted).
- Try some gentle exercise daily.
- · Allow your friends and family to help.
- Tell your doctor or nurse if you get any of the symptoms listed above.

# General advice for people having cancer treatment

#### **Blood clot risk**

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

#### Medications and vaccinations

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

#### Other medical and dental treatment

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

#### Diet

- · While you are receiving this treatment it is important that you try to maintain a healthy diet.
- Speak to your doctor or nurse about whether drinking alcohol is safe with your treatment.
- If you have any concerns about recent weight loss or weight gain or questions about your diet, ask to speak to a dietitian.

#### **Fertility**

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

#### Pregnancy and breastfeeding

- Some cancer treatments can be dangerous to unborn babies. Talk to your doctor or nurse if you think there is any chance that you could be pregnant.
- Do not try to get pregnant or father a child during this treatment. Contraception should be used during treatment and after stopping treatment. Ask your doctor or nurse about what type of contraception you should use.
- If you are planning pregnancy/fatherhood after completing this treatment, talk to your doctor. Some doctors advise waiting between 6 months and 2 years after treatment.
- Do not breastfeed if you are on this treatment, as anti-cancer medications can also pass into breast milk.

#### Sex life and sexuality

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

#### **Quitting smoking**

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

#### Staying active

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

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

# Where to get more information - Non small cell lung cancer

#### Telephone support

- Call Cancer Council on 13 11 20 for cancer information and support
- Call the Lung Foundation Australia on 1800 654 301

#### **Lung cancer information**

- Lung Foundation Australia lungfoundation.com.au
- Lungevity lungevity.org

#### **General cancer information and support**

- Australian Rare Cancer (ARC) Portal arcportal.org.au/
- Beyondblue beyondblue.org.au
- Cancer Australia canceraustralia.gov.au
- Cancer Council Australia cancer.org.au
- Cancer Voices Australia cancervoicesaustralia.org
- CanTeen canteen.org.au
- Carers Australia carersaustralia.com.au
- Carer Help carerhelp.com.au
- CHILL Cancer related hair loss scalpcooling.org
- eviQ Cancer Treatments Online eviQ.org.au
- LGBTQI+ People and Cancer cancercouncil.com.au/cancer-information/lgbtqi
- Look Good Feel Better lgfb.org.au
- Patient Information patients.cancer.nsw.gov.au
- Radiation Oncology Targeting Cancer targetingcancer.com.au
- Redkite redkite.org.au
- Return Unwanted Medicines returnmed.com.au
- Staying active during cancer treatment patients.cancer.nsw.gov.au/coping-with-cancer/physical-wellbeing/staying-active

#### **Quit smoking information and support**

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

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

# Where to get more information - Skin cancer

#### **Telephone support**

Call Cancer Council on 13 11 20 for cancer information and support.

#### Skin cancer information

• Australasian Foundation for Plastic Surgery - plasticsurgeryfoundation.org.au

#### General cancer information and support

- Australian Rare Cancer (ARC) Portal arcportal.org.au/
- Beyondblue beyondblue.org.au
- Cancer Australia canceraustralia.gov.au
- Cancer Council Australia cancer.org.au
- Cancer Voices Australia cancervoicesaustralia.org
- CanTeen canteen.org.au
- Carers Australia carersaustralia.com.au
- Carer Help carerhelp.com.au
- CHILL Cancer related hair loss scalpcooling.org

- eviQ Cancer Treatments Online eviQ.org.au
- LGBTQI+ People and Cancer cancercouncil.com.au/cancer-information/lgbtqi
- Look Good Feel Better lgfb.org.au
- Patient Information -- patients.cancer.nsw.gov.au
- Radiation Oncology Targeting Cancer targetingcancer.com.au
- Redkite redkite.org.au
- Return Unwanted Medicines returnmed.com.au
- Staying active during cancer treatment patients.cancer.nsw.gov.au/coping-with-cancer/physical-wellbeing/staying-active

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- Patient Information patients.cancer.nsw.gov.au/coping-with-cancer/physical-wellbeing/quitting-smoking
- Quitnow quitnow.gov.au

Additional notes:		

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

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