

- ▼ This medicinal product is subject to additional monitoring. This will allow quick identification of new safety information. Healthcare professionals are asked to report any suspected adverse reactions. See section 4.8 for how to report adverse reactions.

1. NAME OF THE MEDICINAL PRODUCT

Zerpidio 10 mg/ml concentrate for solution for infusion.

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml of concentrate for solution for infusion contains 10 mg of serplulimab. One vial of 10 ml of concentrate contains 100 mg of serplulimab.

Serplulimab is a humanised antibody (IgG4/kappa isotype with a stabilising sequence alteration in the hinge region) produced in Chinese hamster ovary cells by recombinant DNA technology.

Excipient with known effect

Each 10 ml vial contains 0.98 mmol (22.5 mg) sodium. For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Concentrate for solution for infusion (sterile concentrate).

Colourless to slightly yellow, clear to slightly opalescent solution, pH 5.2-5.8, osmolality of approximately 280-340 mOsm/kg.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Zerpidio in combination with carboplatin and etoposide is indicated for the first-line treatment of adult patients with extensive-stage small cell lung cancer (ES-SCLC).

4.2 Posology and method of administration

Treatment must be initiated and supervised by a physician experienced in the treatment of cancer.

Posology

The recommended dose of serplulimab is 4.5 mg/kg every 3 weeks until disease progression or unacceptable toxicity.

Dose delay or discontinuation (see also section 4.4)

Dose escalation or reduction of Zerpidio is not recommended. Dose withholding or discontinuation may be required based on individual safety and tolerability. Dose withholding for upto 12 weeks for tolerability is acceptable (see section 4.4)

Serplulimab should be withheld or discontinued to manage adverse reactions as described in Table 1.

Table 1. Recommended treatment modifications

Immune-related adverse reactions	Severity	Treatment modification*
Immune-related lung disease	Grade 2	Withhold until adverse reactions recover or improve to Grade 1
	Grade 3 or 4 or recurrent Grade 2	Permanently discontinue
Colitis	Grade 2 or 3	Withhold until adverse reactions recover or improve to Grade 1
	Grade 4 or recurrent Grade 3	Permanently discontinue
Hepatitis	Grade 2 with AST or ALT > 3 to 5 times ULN or total bilirubin > 1.5 to 3 times ULN	Withhold until adverse reactions recover or improve to Grade 1
	Grade 3 or 4 with AST or ALT > 5 times ULN, or total bilirubin > 3 times ULN	Permanently discontinue
Nephritis and renal dysfunction	Grade 2 elevation of serum creatinine	Withhold until adverse reactions recover or improve to Grade 1
	Grade 3 or 4 elevation of serum creatinine	Permanently discontinue
Endocrinopathies	Symptomatic Grade 2 or 3 hypothyroidism, Grade 2 or 3 hyperthyroidism, Grade 2 or 3 hypophysitis, Grade 2 adrenal insufficiency, Grade 3 hyperglycaemia or type 1 diabetes mellitus	Withhold until symptoms resolve and management with corticosteroids is complete. Treatment should be continued in the presence of hormone replacement therapy as long as no symptoms are present
	Grade 4 hypothyroidism Grade 4 hyperthyroidism Grade 4 hypophysitis Grade 3 or 4 adrenal insufficiency Grade 4 hyperglycaemia	Permanently discontinue
Skin adverse reactions	Grade 3	Withhold until adverse reactions recover or improve to Grade 1
	Grade 4, Stevens Johnson Syndrome (SJS) or toxic epidermal necrolysis (TEN)	Permanently discontinue
Other immune-related adverse reactions	Grade 3 or 4 elevation of serum amylase or lipase Grade 2 or 3 pancreatitis Grade 2 myocarditis* Grade 2 or 3 other immune-mediated adverse reactions occurred for the first time Grade 3 decreased platelet count (thrombocytopenia) or white blood cell count	Withhold until adverse reactions recover or improve to Grade 1
	Grade 4 pancreatitis or recurrent pancreatitis of any grade Grade 3 or 4 myocarditis Grade 3 or 4 encephalitis Grade 4 other immune-related adverse reactions occurred for the first time Grade 4 or recurrent Grade 3 decreased platelet count (thrombocytopenia) or white blood cell count	Permanently discontinue

Infusion-related reactions	Grade 2	Reduce infusion rate to half rate or interrupt. Treatment may be resumed when the event is resolved
	Grade 3 or 4	Permanently discontinue

Note: Toxicity grades are in accordance with National Cancer Institute Common Terminology Criteria for Adverse Events Version 5.0 (NCI-CTCAE v5.0).

ALT: alanine aminotransferase; AST: aspartate aminotransferase; ULN: upper limit of normal.

*: Serplulimab must be permanently discontinued for any Grade 3 immune-related adverse reaction that recurs and for any Grade 4 immune-mediated adverse reactions, except for endocrinopathies that are controlled with replacement hormones (see sections 4.4 and 4.8).

*: The safety of retreatment with serplulimab in patients who experienced immune-related myocarditis is not clear.

Special populations

Elderly

No dose adjustment is needed for elderly patients (≥ 65 years) (see section 5.1 and section 5.2).

Renal impairment

No dose adjustment is needed for patients with mild (CRCL=60-89 ml/min) or moderate (CRCL=30-59 ml/min) renal impairment. There are insufficient data and no dose recommendation can be made in patients with severe (CRCL=15-29 ml/min) renal impairment (see section 5.2).

Hepatic impairment

No dose adjustment is needed for patients with mild ($BIL \leq ULN$ and $AST > ULN$ or $BIL > 1$ to $1.5 \times ULN$ and any AST) hepatic impairment. There are insufficient data in patients with moderate ($BIL > 1.5$ to $3 \times ULN$ and any AST) hepatic impairments and no data are available in severe ($BIL > 3 \times ULN$ and any AST) hepatic impairments. No dose recommendation can be made for patients with moderate or severe hepatic impairment (see section 5.2).

Paediatric population

There is no relevant use of serplulimab in the paediatric population in the indication of small cell lung cancer.

Method of administration

Zerpidio is for intravenous use.

The initial infusion rate should be set up to 100 ml per hour. If the first infusion is well tolerated, all subsequent infusions may be shortened to 30 minutes (± 10 minutes).

When administered in combination with chemotherapy, Zerpidio should be given first followed by chemotherapy on the same day. Use separate infusion bags for each infusion.

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

The total dose of Zerpidio required should be diluted with sodium chloride 9 mg/ml (0.9%) solution for injection (see section 6.6)

For instructions on dilution and handling of the medicinal product before administration, see section 6.6.

4.3 Contraindications

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

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 product should be clearly recorded.

Immune-related adverse reactions

Immune-related adverse reactions, including severe and fatal cases, have occurred in patients receiving serplulimab (see section 4.8). Most immune-related adverse reactions occurring during treatment were reversible and managed by withholding treatment, administration of corticosteroids, and/or supportive care (see section 4.2). Immune-related adverse reactions have also occurred up to 3.6 months after the last dose. Immune-related adverse reactions affecting more than one body system can occur simultaneously.

For suspected immune-related adverse reactions, adequate evaluation to confirm aetiology or exclude other causes should be ensured. Based on the severity of the adverse reaction, treatment should be withheld, and corticosteroid administered. For most Grade 2 and some specific Grade 3 or 4 immune-related adverse reactions, administration should be withheld until recover or improve to Grade 1. Serplulimab must be permanently discontinued for any Grade 4 and some specific Grade 3 immune-related adverse reactions. For Grade 3, 4 and some specific Grade 2 immune-related adverse reactions (e.g., immune-related pneumonitis, immune-related myocarditis), corticosteroid (1-2 mg/kg/day prednisone or equivalent) and other symptomatic treatments should be given according to the clinical symptoms until recover or improve to Grade 1. Upon improvement to Grade $\leq$ 1, corticosteroid taper should be initiated and continued over at least 1 month. Rapid tapering may lead to worsening or recurrence of the adverse reaction. Non-corticosteroid immunosuppressive therapy (e.g., infliximab) should be added if there is worsening or no improvement despite corticosteroid use.

Immune-related lung disease

Immune-related pneumonitis, including fatal cases, has been reported in patients receiving Zerpidio (see section 4.8). Patients should be monitored for signs and symptoms of immune-related pneumonitis such as radiographic changes (e.g., focal ground glass opacities, patchy infiltrates), dyspnoea, and hypoxia. Suspected immune-related pneumonitis should be confirmed with radiographic imaging, and other causes excluded. For treatment modification, see section 4.2

Immune-related colitis

Immune-related colitis, including fatal cases, has been reported in patients receiving serplulimab (see section 4.8). Patients should be monitored for signs and symptoms of immune-related colitis, such as abdominal pain, diarrhoea, mucus, or blood in stool. Infection and other disease-related aetiologies should be ruled out. For treatment modification, see section 4.2. The potential risk of gastrointestinal perforation should be taken into consideration and confirmed by radiographic imaging and/or endoscopy if necessary.

Immune-related hepatitis

Immune-related hepatitis, including fatal cases, has been reported in patients receiving serplulimab (see section 4.8). Patients should be monitored for changes in liver function and clinical signs and symptoms of immune-related hepatitis such as transaminase and total bilirubin elevations periodically (every month). Infection and diseases-related aetiologies should be ruled out. The frequency of liver function test should be increased, if immune-related hepatitis occurs. For treatment modification, see section 4.2.

Immune-related nephritis and renal dysfunction

Immune-related nephritis and renal dysfunction has been reported in patients receiving serplulimab (see section 4.8). Patients should be monitored for changes in renal function and clinical signs and symptoms of immune-related nephritis and renal dysfunction periodically (every month). The frequency of renal function test should be increased, if immune-related nephritis occurs. Most patients present with asymptomatic increases in serum creatinine. Disease-related aetiologies should be ruled out. For treatment modification, see section 4.2.

Immune-related endocrinopathies

Thyroid diseases

Thyroid disorders, including hyperthyroidism, hypothyroidism, and thyroiditis have been reported in patients receiving serplulimab (see section 4.8). Patients should be monitored for changes in thyroid function and clinical signs and symptoms of thyroid disorders. For Grade 2 or 3 symptomatic hypothyroidism, serplulimab should be withheld and thyroid hormone replacement should be initiated as needed. For Grade 2 or 3 symptomatic hyperthyroidism, serplulimab should be withheld and anti-thyroid medicinal product should be initiated as needed. If acute inflammation of the thyroid is suspected, serplulimab should be withheld and initiate hormone therapy. Treatment may be resumed when symptoms of hypothyroidism or hyperthyroidism are controlled, and thyroid function is improved. For life-threatening hyperthyroidism or hypothyroidism, serplulimab must be permanently discontinued. Thyroid function should be monitored continuously to ensure appropriate hormone replacement (see section 4.2).

Pituitary disorders

Hypophysitis has been reported in patients receiving serplulimab (see section 4.8). Patients should be monitored for signs and symptoms of hypophysitis, and other causes should be ruled out. For Grade 2 or 3 symptomatic hypophysitis, serplulimab should be withheld, and hormone replacement should be initiated as needed. If acute hypophysitis is suspected, corticosteroids should be initiated. For life-threatening Grade 4 hypophysitis, serplulimab must be permanently discontinued (see section 4.2).

Adrenal insufficiency

Adrenal insufficiency has been reported in patients receiving serplulimab (see section 4.8). Patients should be monitored for signs and symptoms, and other causes should be ruled out. For Grade 2 adrenal insufficiency, serplulimab should be withheld and hormone replacement should be initiated as needed. For life-threatening Grade 3 or 4 adrenal insufficiency, serplulimab must be permanently discontinued. Adrenal gland function and hormone levels should be monitored continuously to ensure appropriate hormone replacement (see section 4.2).

Hyperglycaemia

Hyperglycaemia or type 1 diabetes mellitus has been reported in patients receiving serplulimab (see section 4.8). Patients should be monitored for blood glucose level and related clinical signs and symptoms. Insulin replacement therapy should be initiated as needed. For type 1 diabetes mellitus with poor blood glucose control, serplulimab should be withheld, and insulin replacement therapy should be initiated until the symptoms are improved. For life-threatening Grade 4 type 1 diabetes, serplulimab must be permanently discontinued. Blood glucose levels should be monitored continuously to ensure appropriate insulin replacement (see section 4.2).

Immune-related adverse skin reactions

Immune-related skin adverse reactions have been reported in patients receiving serplulimab (see section 4.8). For Grade 1 or 2 rash, serplulimab can be continued, and symptomatic treatment or local corticosteroids treatment can be given. For Grade 3 rash, serplulimab should be withheld, and symptomatic treatment or local corticosteroids treatment should be given. For Grade 4 rash, Stevens-Johnson syndrome (SJS), or toxic epidermal necrolysis (TEN), serplulimab should be permanently discontinued (see section 4.2).

Immune-related pancreatitis

Immune-related pancreatitis, including increases in serum amylase and lipase levels and fatal cases, has been reported in patients receiving serplulimab (see section 4.8). Patients should be monitored for changes in serum lipase and amylase (at the beginning of treatment, periodically during treatment, and as indicated based on clinical evaluation), and clinical signs and symptoms of pancreatitis. Serplulimab should be withheld for Grade 3 or 4 increase in serum amylase or lipase levels, and Grade 2 or 3 pancreatitis. For Grade 4 pancreatitis or recurrent pancreatitis of any grade, serplulimab should be permanently discontinued (see section 4.2).

Immune-related myocarditis

Immune-related myocarditis, including fatal cases, has been reported in patients receiving serplulimab (see section 4.8). Patients should be monitored for clinical signs and symptoms of myocarditis. Suspected immune-mediated myocarditis should be confirmed with myocardial enzyme examinations, and other causes excluded. For Grade 2 myocarditis, serplulimab should be withheld, and corticosteroid treatment should be given. The safety of restarting serplulimab treatment in patients previously experiencing immune-related myocarditis is unclear. A multidisciplinary discussion is recommended before restarting serplulimab in patients with previous Grade 2 myocarditis, and the decision should be based on various clinical factors, including the degree of cardiac recovery, oncological response to the treatment, availability of alternative oncology treatments and prognosis. For Grade 3 or 4 myocarditis, serplulimab must be permanently discontinued and corticosteroids therapy should be initiated. Once a diagnosis of myocarditis is established, serplulimab should be withheld or permanently discontinued. Myocardial enzymes and cardiac function should be monitored closely for any grade myocarditis (see section 4.2).

Immune-related uveitis

If uveitis and other immune-mediated adverse reactions occur at the same time, such as Vogt-Koyanagi-Harada syndrome, systemic corticosteroids should be given to prevent permanent blindness.

Other Immune-related adverse reactions

Given the mechanism of action of serplulimab, other potential immune-related adverse reactions may occur. Other fatal and life-threatening immune-mediated adverse reactions have been observed in patients treated with serplulimab in clinical trials across doses and tumour types: thrombocytopenia, acute coronary syndrome, myocardial infarction and immune-mediated encephalitis (see section 4.8). For other suspected immune-related adverse reactions, adequate evaluation should be performed to confirm aetiology and exclude other causes. Based on the severity of adverse reactions, serplulimab should be withheld for Grade 2 or 3 immune-related adverse reactions which occur for the first time. For recurrent Grade 3 immune-related adverse reactions (except endocrinopathies) and Grade 4 immune-related adverse reactions, serplulimab must be permanently discontinued. Corticosteroids can be initiated as clinically indicated (see section 4.2).

Infusion-related reactions

Infusion-related reactions have been reported in patients receiving serplulimab. Patients should be monitored for clinical signs and symptoms of infusion-related reactions. Patients with Grade 1 infusion-related reactions may continue administration under close monitoring. The rate of infusion should be reduced, or treatment should be interrupted in patients with Grade 2 infusion-related reactions. Antipyretic and antihistamines may be considered. Treatment with serplulimab may be resumed under close monitoring when Grade 2 infusion-related reactions are controlled. For Grade ≥ 3 infusion-related reactions, infusion should be stopped immediately, treatment should be permanently discontinued, and appropriate treatment should be given (see section 4.2).

Patients excluded from clinical trials

Patients with the following conditions were excluded from clinical trials: a history of active or prior documented autoimmune disease, patients with active tuberculosis or hepatitis B or C or HIV infection or patients receiving live attenuated vaccine within 28 days prior to serplulimab administration, patients with any active infection requiring systemic anti-infective therapy within 14 days prior to the first dose, history of pneumonitis or interstitial lung disease, patients with active brain metastases, history of significant cardiovascular disease (e.g. myocardial infarction within half a year), a history of hypersensitivity to another monoclonal antibody, systemic immunosuppressive medicinal products within 2 weeks prior to receiving serplulimab.

Excipients with known effect

This medicinal product contains 0.98 mmol (or 22.5 mg) sodium per 10 ml vial, equivalent to 1.1% of the WHO recommended maximum daily intake of 2 g sodium for an adult.

4.5 Interaction with other medicinal products and other forms of interaction

Drug-drug interaction studies have not been conducted. As monoclonal antibodies are not metabolized by cytochrome P450 (CYP) enzymes or other drug metabolising enzymes, inhibition, or induction of these enzymes by co-administered medicinal products is not anticipated to affect the pharmacokinetics of Zerpidio.

The use of systemic corticosteroids or immunosuppressants before starting serplulimab should be avoided because of their potential interference with the pharmacodynamic activity and efficacy. However, systemic corticosteroids or other immunosuppressants can be used to treat immune-related adverse reactions after starting serplulimab (see section 4.4).

4.6 Fertility, pregnancy and lactation

Women of childbearing potential/contraception

Women of childbearing potential should use effective contraception during treatment and for at least 6 months after the last dose of serplulimab.

Pregnancy

There is no data on the use of serplulimab in pregnant women. Animal studies have demonstrated that inhibition of the PD-1 pathway causes embryofetal toxicity (see section 5.3). Human IgG is known to cross the placental barrier and serplulimab is an IgG4; therefore, it has the potential to be transmitted from the mother to the developing foetus. Serplulimab is not recommended during pregnancy and in women of childbearing potential not using contraception.

Breast-feeding

It is unknown whether serplulimab is excreted in human milk. Human IgGs are known to be excreted in breast milk during the first few days after birth, which is decreasing to low concentrations soon; consequently, a risk to the breast-fed infant cannot be excluded during this short period. Afterwards, serplulimab could be used during breast-feeding if clinically needed.

Fertility

Studies to evaluate fertility have not been performed. Thus, the effect of serplulimab on male and female fertility is unknown.

4.7 Effects on ability to drive and use machines

Serplulimab has minor influence on the ability to drive and use machines. Because of potential adverse reactions such as fatigue (see section 4.8), patients should be advised to use caution when driving or operating machinery until they are certain that serplulimab does not adversely affect them.

4.8 Undesirable effects

Summary of the safety profile

The safety of serplulimab in combination with chemotherapy is based on data in 389 patients with ES-SCLC. The most common adverse reactions were neutropenia (82.8%), leukopenia (74.0%), anaemia (72.8%), thrombocytopenia (56.0%), alopecia (54.2%), nausea (36.2%), hyperlipidaemia (32.1%), decreased appetite (28.3%), hypoproteinaemia (25.4%), and hyponatraemia (25.4%). The most common Grade ≥ 3 adverse reactions were neutropenia (65.3%), leukopenia (33.7%), thrombocytopenia (23.1%), anaemia (19.8%), hyponatraemia (10.0%), and lymphopenia (5.1%). The most common serious adverse reactions were thrombocytopenia (9.3%), neutropenia (7.7%), leukopenia (6.7%), pneumonia (3.3%), and hyperglycaemia or diabetes mellitus (2.3%). The most common immune-related adverse reactions were hypothyroidism (13.1%), hyperthyroidism (10.8%), immune-related skin adverse reactions (7.5%),

abnormal liver function (4.1%), immune-related lung disease (3.1%), anaemia (2.8%), malaise (2.1%), hyperglycaemia or diabetes mellitus (1.8%), immune-related colitis (1.8%), and platelet count decreased (1.5%).

Serplulimab was discontinued due to adverse reactions in 5.4% of patients.

Tabulated list of adverse reactions

Adverse reactions reported in clinical trial and in post-marketing experience are listed by system organ class and frequency (see Table 2). Unless otherwise stated, the frequencies of adverse reactions are based on all-cause adverse event frequencies identified in ASTRUM-005 trial, in which 389 patients were exposed to serplulimab in combination with chemotherapy for a median duration of 22 weeks. See section 5.1 for information about the main characteristics of patients in the pivotal clinical trial. Frequencies are defined as: very common ($\geq 1/10$); common ($\geq 1/100$ to $< 1/10$); uncommon ($\geq 1/1\,000$ to $< 1/100$); rare ($\geq 1/10\,000$ to $< 1/1\,000$); very rare ($< 1/10\,000$); not known (cannot be estimated from the available data). Within each frequency grouping, adverse reactions are presented in the order of decreasing seriousness.

Table 2. Adverse reactions in patients treated with Zerpidio* in ASTRUM-005

	Serplulimab with carboplatin and etoposide
Infections and infestations	
Very common	pneumonia ^a
Common	urinary tract infection ^b , respiratory tract infection ^c
Uncommon	septic shock, skin infection, enteritis infectious, lip infection, meningoencephalitis herpetic
Blood and lymphatic system disorders	
Very common	neutropenia, leukopenia, anaemia, thrombocytopenia, lymphopenia
Common	coagulation function test abnormal ^d , granulocytopenia
Uncommon	lymphadenitis
Immune system disorders	
Common	infusion-related reaction ^e
Uncommon	anaphylactic reaction
Endocrine disorders	
Very common	hypothyroidism ^f , hyperthyroidism, hyperglycaemia or diabetes mellitus ^g
Common	thyroid function test abnormal ^h , thyroiditis ⁱ
Uncommon	adrenal insufficiency ^j , other thyroid disorder ^k , hyperadrenocorticism ^l , hypophysitis
Metabolism and nutrition disorders	
Very common	hyperlipidaemia, decreased appetite, hypoproteinaemia, hyperuricaemia, electrolyte imbalance ^m
Common	weight decreased, hypoglycaemia
Uncommon	lipoprotein abnormal
Psychiatric disorders	
Very common	insomnia
Nervous system disorders	
Common	paraesthesia, headache, dizziness, neuropathy peripheral ⁿ
Uncommon	immune-mediated encephalitis ^o , vertigo, neurotoxicity, motor dysfunction

Eye disorders	
Uncommon	vision blurred
Cardiac disorders	
Very common	arrhythmia ^p
Common	sinus tachycardia, conduction defects ^q , sinus bradycardia, cardiac failure ^r , N-terminal prohormone brain natriuretic peptide increased
Uncommon	cardiomyopathy ^s , myocardial ischaemia, pericardial effusion, myocardial necrosis marker increased, myocarditis
Vascular disorders	
Common	hypertension, vasculitis ^t
Respiratory, thoracic and mediastinal disorders	
Very common	cough
Common	pneumonitis ^u , dyspnoea, chest pain
Gastrointestinal disorders	
Very common	nausea, constipation, abdominal pain, diarrhoea, vomiting
Common	dysphagia, flatulence, gastrointestinal disorder ^v , stomatitis, dyspepsia
Uncommon	dry mouth, enteritis ^w , gastritis, immune-mediated pancreatitis, gingival bleeding
Hepatobiliary disorders	
Very common	alanine aminotransferase increased, aspartate aminotransferase increased, gamma-glutamyltransferase increased
Common	hyperbilirubinaemia, liver injury ^x
Skin and subcutaneous tissue disorders	
Very common	rash ^y , alopecia
Common	pruritus, dermatitis ^z , hyperhidrosis
Uncommon	pigmentation disorder, psoriasis, dry skin
Musculoskeletal and connective tissue disorders	
Very common	musculoskeletal pain ^{aa}
Common	arthralgia, pain in extremity, musculoskeletal discomfort ^{bb}
Uncommon	autoimmune myositis, arthritis
Not known	myositis ^{cc}
Renal and urinary disorders	
Common	blood urea increased, protein urine present, haematuria, renal injury ^{dd} , blood creatinine increased, glycosuria, white blood cells urine positive
General disorders and administration site conditions	
Very common	pyrexia, asthenia
Common	fatigue, malaise, oedema ^{ee}
Uncommon	chills
Investigations	
Very common	blood alkaline phosphatase increased

Common	myoglobin blood increased, blood creatine phosphokinase increased, troponin increased
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*Adverse reaction frequencies presented in Table 2 may not be fully attributable to ZERPIDIO alone but may contain contributions from the underlying disease or from other medicinal products used in a combination.

The following terms represent a group of related events that describe a medical condition rather than a single event:

- a. Includes pneumonia, pneumonia fungal.
- b. Includes urinary tract infection, asymptomatic bacteriuria.
- c. Includes upper respiratory tract infection, pharyngotonsillitis, tonsillitis.
- d. Includes activated partial thromboplastin time prolonged, activated partial thromboplastin time, activated partial thromboplastin time shortened, international normalised ratio decreased, prothrombin level increased.
- e. Includes drug hypersensitivity, infusion-related reaction.
- f. Includes hypothyroidism, blood thyroid stimulating hormone increased, thyroxine free decreased, central hypothyroidism, tri-iodothyronine decreased.
- g. Includes hyperglycaemia, diabetes mellitus, diabetic ketoacidosis, blood ketone body increased, glucose tolerance impaired, ketoacidosis.
- h. Includes blood thyroid stimulating hormone decreased, tri-iodothyronine increased, anti-thyroid antibody positive, thyroglobulin increased, thyroxine increased.
- i. Includes thyroid disorder, thyroiditis.
- j. Includes adrenal insufficiency, cortisol decreased.
- k. Includes euthyroid sick syndrome, ultrasound thyroid abnormal.
- l. Includes cortisol increased, hyperadrenocorticism.
- m. Includes hyponatraemia, hypocalcaemia, hypokalaemia, hypomagnesaemia, hypophosphataemia, hypochloraemia, hyperphosphataemia, hyperkalaemia, hypermagnesaemia, hypercalcaemia.
- n. Includes neuropathy peripheral, peripheral sensorimotor neuropathy, immune-mediated neuropathy **.
- o. Includes immune-mediated encephalitis, encephalitis autoimmune.
- p. Includes supraventricular extrasystoles, supraventricular tachycardia, arrhythmia, ventricular extrasystoles, arrhythmia supraventricular, atrial fibrillation, atrial tachycardia, bradyarrhythmia, early repolarisation syndrome, ventricular arrhythmia, electrocardiogram QT prolonged, electrocardiogram repolarisation abnormality, electrocardiogram T wave abnormal.
- q. Includes atrioventricular block first degree, bundle branch block right, atrial conduction time prolongation, bundle branch block left, defect conduction intraventricular.
- r. Includes cardiac failure, cardiac failure acute, left ventricular failure.
- s. Includes cardiomyopathy, metabolic cardiomyopathy.
- t. Includes phlebitis, phlebitis superficial.
- u. Includes immune-mediated lung disease, pneumonitis, interstitial lung disease.
- v. Includes gastrointestinal haemorrhage, gastrointestinal disorder, lower gastrointestinal haemorrhage.
- w. Includes enteritis, immune-mediated enterocolitis **.
- x. Includes hepatic function abnormal, drug-induced liver injury, liver injury, immune-mediated hepatitis, immune-mediated hepatic disorder **, hepatic failure **.
- y. Includes rash, rash maculo-papular, eczema, drug eruption, erythema, skin toxicity.
- z. Includes autoimmune dermatitis, dermatitis, dermatitis allergic, dermatitis bullous, seborrhoeic dermatitis.
- aa. Includes back pain, myalgia, musculoskeletal chest pain, spinal pain, neck pain.
- bb. Includes muscular weakness, musculoskeletal discomfort.
- cc. Includes myositis **, immune-mediated myositis **.
- dd. Includes acute kidney injury, renal failure, renal impairment, renal injury.
- ee. Includes face oedema, oedema peripheral, peripheral swelling, swelling, swelling face.

** Post-marketing event.

Description of selected adverse reactions

Serplulimab is associated with immune-related adverse reactions. The data for the following immune-related adverse reactions are based on 1 172 patients who received serplulimab monotherapy (n=263) or in combination with other medicinal products (n=909) across eight doses (0.3, 1, 3, 10 mg/kg every 2 weeks, 4.5 mg/kg every 3 weeks, 200 mg every 2 weeks, 300 mg every 3 weeks, or 400 mg every 4 weeks) in eight clinical trials. The management guidelines for these adverse reactions are described in sections 4.2 and 4.4.

Immune-related lung disease

Immune-related lung disease occurred in 3.5% of patients, including Grade 3, 4 or 5 in 0.9%, 0.1%, and 0.3% of patients, respectively. The median time to onset was 3.25 months (range: 0.03-34.53 months). The median duration was 1.91 months (range: 0.26-13.34 months). 1.6% of patients received high-dose corticosteroid treatment. Immune-related lung disease led to discontinuation in 1.0% of patients.

Immune-related colitis

Immune-related colitis occurred in 2.4% of patients, including Grade 3 in 0.6% of patients and Grade 5 in 0.1% of patients. The median time to onset was 3.01 months (range: 0.03-20.11 months). The median duration was 0.43 months (range: 0.03-4.40 months). 0.5% of patients received high-dose corticosteroid treatment. Immune-related colitis led to discontinuation in 0.3% of patients.

Immune-related hepatitis

Hepatitis occurred in 0.7% of patients, including Grade 3 in 0.3% of patients, Grade 4 in 0.2% of patients, and Grade 5 in 0.2% of patients. The median time to onset was 2.48 months (range: 0.43-6.60 months). The median duration was 0.95 months (range: 0.53-1.51 months). 0.2% of patients received high-dose corticosteroid treatment. Hepatitis led to discontinuation in 0.3% of patients. Abnormal liver function occurred in 4.5% of patients, including Grade 3 in 1.0% of patients. The median time to onset was 1.51 months (range: 0.07-29.73 months). The median duration was 1.41 months (range: 0.26-17.54 months). 0.3% of patients received high-dose corticosteroid treatment. Abnormal liver function led to discontinuation in 0.3% of patients.

Immune-related nephritis and renal dysfunction

Immune-related nephritis and renal dysfunction occurred in 2.4% of patients, including Grade 3 in 0.3% of patients and Grade 4 in 0.1% of patients. The median time to onset was 2.78 months (range: 0.23-17.28 months). The median duration was 1.12 months (range: 0.13-5.32 months). 0.2% of patients received high-dose corticosteroid treatment. Immune-related nephritis and renal dysfunction led to discontinuation in 0.2% of patients.

Immune-related endocrinopathies Hypothyroidism

Hypothyroidism occurred in 11.2% of patients, including Grade 3 in 0.1% of patients. The median time to onset was 3.84 months (range: 0.62-34.10 months). The median duration was 2.76 months (range: 0.53-7.49 months). 5.9% of patients received thyroid hormone replacement therapy. No patients discontinued serplulimab due to hypothyroidism.

Hyperthyroidism

Hyperthyroidism occurred in 6.3% of patients, and there were no Grade ≥ 3 hyperthyroidism. The median time to onset was 1.79 months (range: 0.69-31.18 months). The median duration was 1.41 months (range: 0.07-4.21 months). No patients discontinued serplulimab due to hyperthyroidism.

Thyroiditis

Thyroiditis occurred in 0.7% of patients, and there were no Grade ≥ 3 thyroiditis. The median time to onset was 5.65 months (range: 1.94-13.50 months). The median duration was 5.93 months (range: 0.56-

11.30 months). 0.2% of patients received thyroid hormone replacement therapy. No patients discontinued serplulimab due to thyroiditis.

Adrenal gland disorders

Adrenal gland disorders occurred in 0.3% of patients, all of which were Grade 2. The median time to onset was 5.78 months (range: 5.75-6.93 months). No patients discontinued serplulimab due to adrenal gland disorders.

Pituitary disorders

Pituitary disorders occurred in 0.9% of patients, including Grade 3 in 0.2% of patients. The median time to onset was 6.97 months (range: 1.41-20.53 months). The median duration was 2.43 months. 0.3% of patients received high-dose corticosteroid treatment. Pituitary disorders led to discontinuation in 0.2% of patients.

Diabetes mellitus/hyperglycaemia

Diabetes mellitus/hyperglycaemia occurred in 1.0% of patients, including Grade 3 in 0.5% of patients and Grade 4 in 0.1% of patients. The median time to onset was 4.09 months (range: 0.69-11.10 months). The median duration was 2.96 months. 0.6% of patients received insulin replacement therapy. Diabetes mellitus/hyperglycaemia led to discontinuation in 0.1% of patients.

Immune-related skin adverse reactions

Immune-related skin adverse reactions occurred in 8.7% of patients, including Grade 3 in 0.8% of patients. The median time to onset was 2.10 months (range: 0.03-30.52 months). The median duration was 0.82 months (range: 0.07-12.39 months). 1.4% of patients received high-dose corticosteroid treatment. Immune-related skin adverse reactions led to discontinuation in 0.4% of patients.

Immune-related pancreatitis

Immune-related pancreatitis occurred in 1.1% of patients, including Grade 3 in 0.3% of patients, Grade 4 in 0.2% of patients and Grade 5 in 0.1% of patients. The median time to onset was 2.30 months (range: 0.23-12.42 months). The median duration was 0.76 months (range: 0.16-10.12 months). 0.2% of patients received high-dose corticosteroid treatment. Immune-related pancreatitis led to discontinuation in 0.2% of patients.

Immune-related myocarditis

Immune-related myocarditis occurred in 0.6% of patients, including Grade 3 in 0.2% of patients and Grade 5 in 0.1% of patients. The median time to onset was 1.87 months (range: 0.26-25.36 months). The median duration was 0.89 months (range: 0.72-4.57 months). 0.3% of patients received high-dose corticosteroid treatment. Immune-related myocarditis led to discontinuation in 0.2% of patients.

Immune-related uveitis

Immune-related uveitis occurred in 0.1% of patients, which was Grade 1. The time to onset was 6.90 months. The duration of immune-related uveitis was 1.35 months. The event resolved for the patient.

Other immune-related adverse reactions

Other clinically significant immune-related adverse reactions reported in patients who received serplulimab were as follows. Severe or fatal cases have been reported for some of these adverse reactions.

Blood and lymphatic system: anaemia, leukopenia, thrombocytopenia, neutropenia.

Nervous system: dizziness, immune-mediated encephalitis, neuropathy peripheral.

Eye disorders: vision blurred.

Cardiac/vascular: acute coronary syndrome, myocardial infarction, cardiac failure acute, cardiotoxicity,

troponin increased.

Respiratory, thoracic and mediastinal: dyspnoea, chronic obstructive pulmonary disease, respiratory failure.

Gastrointestinal: mouth ulceration, vomiting, proctitis.

General disorders and administration site conditions: asthenia, fatigue, pyrexia.

Other: panic disorder, tinnitus, cholangitis acute, sepsis, cortisol decreased, blood alkaline phosphatase increased, electrolyte imbalance.

Infusion-related reactions

Infusion-related reactions occurred in 1.4% of patients, including Grade 3 in 0.2% of patients and Grade 4 in 0.1% of patients. The median time to onset was 1.02 months (range: 0.03-9.86 months). The median duration was 0.07 months (range: 0.03-0.53 months). No patients discontinued serplulimab due to infusion-related reactions.

Laboratory abnormalities

The proportions of patients who experienced a shift from baseline to a Grade ≥ 3 laboratory abnormality were as follows: 0.6% for platelet count decreased, 0.4% for neutrophil count decreased, 0.3% for blood creatine phosphokinase increased, 0.2% for white blood cell count decreased, 0.1% for blood lactate dehydrogenase increased, and 0.1% for blood cholesterol increased.

Elderly

No overall differences in safety were reported between elderly (≥ 65 years) and younger patients. Data for patients ≥ 75 years of age are too limited to draw conclusions on this population.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation 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 via the national reporting system.

4.9 Overdose

In case of overdose, patients must be closely monitored for signs or symptoms of adverse reactions, and appropriate symptomatic treatment instituted immediately.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: antineoplastic agents, monoclonal antibodies and antibody drug conjugates, PD-1/PD-L1 (Programmed cell death-1/ death ligand 1) inhibitors.
ATC code: L01FF12.

Mechanism of action

Serplulimab (HLX10) is a humanised monoclonal IgG4 antibody, which binds to the programmed cell death-1 (PD-1) receptor and blocks its interaction with ligands PD-L1 and PD-L2. The PD-1 receptor is a negative regulator of T-cell activity that has been shown to be involved in the control of T-cell immune responses. Engagement of PD-1 with the ligands PD-L1 and PD-L2, which are expressed in antigen presenting cells and may be expressed by tumours or other cells in the tumour microenvironment, results in inhibition of T-cell proliferation and cytokine secretion. Serplulimab potentiates T-cell responses, including anti-tumour responses, through blockade of PD-1 binding to PD-L1 and PD-L2 ligands.

The PD-1 receptor occupation of peripheral T cells and interleukin-2 (IL-2) release ability in vitro were

studied in the phase 1 trial involving 29 Chinese patients with advanced solid tumour that were injected with single and multiple doses (0.3 mg/kg, 1 mg/kg, 3 mg/kg, 10 mg/kg) of serplulimab. The result showed that serplulimab could stably maintain the saturation state of receptor occupation and sustained functional blockage at the dosage from 0.3 mg/kg to 10 mg/kg every 2 weeks interval.

Clinical efficacy and safety

The efficacy of serplulimab in combination with chemotherapy (carboplatin plus etoposide) for the first-line treatment of ES-SCLC was evaluated in ASTRUM-005 trial (NCT04063163), a phase 3, randomised, double-blind, multiregional clinical trial. The primary efficacy endpoint was overall survival (OS). Secondary efficacy endpoints were progression free survival (PFS), objective response rate (ORR) and duration of response (DOR) as assessed by independent radiology review committee (IRRC) and investigator based on RECIST 1.1. Analysis for the primary endpoint was performed at 25 and 33 months since the start of the clinical trial. The study treatment regimens were unblinded after the primary analysis.

The trial included adult patients (18 years or older) with ES-SCLC (according to the Veterans Administration Lung Study Group [VALG] staging system) who had not been treated with systemic therapy and with an ECOG performance-status score of 0 or 1. Patients were excluded if they had active or untreated central nervous system metastases; active autoimmune disease; administration of systemic immunosuppressive medicinal products within 14 days prior to the first dose.

A total of 585 patients were enrolled and randomised (2:1) to receive one of the treatment regimens described in Table 3. Randomisation was stratified by PD-L1 expression level (negative: tumour proportion scores [TPS] < 1%, positive: TPS ≥ 1%, or not evaluable/not available, measured by PD-L1 IHC 22C3 pharmDx kit), brain metastasis (yes versus no), and age (≥ 65 years versus < 65 years).

Table 3. Intravenous treatment regimens

Treatment regimen	Induction (Four 21-Day Cycles)	Maintenance (21-Day Cycles)
A	Serplulimab (4.5 mg/kg) ^a + carboplatin (AUC=5, up to 750 mg) ^b + etoposide (100 mg/m ²) ^{b,c}	Serplulimab (4.5 mg/kg) ^a
B	Placebo + carboplatin (AUC=5, up to 750 mg) ^b + etoposide (100 mg/m ²) ^{b,c}	Placebo

a. Serplulimab was administered until disease progression or unacceptable toxicity.

b. Carboplatin and etoposide were administered until completion of 4 cycles, or progressive disease or unacceptable toxicity, whichever occurred first.

c. Etoposide was administered on day 1, 2 and 3 of each cycle.

Baseline characteristics were balanced between the treatment arms. Among the patients enrolled, 68.5% were Asian (401 patients), and 31.5% were non-Asian (184 patients), all of which were White. The median age was 62 years (range: 28-83) with 39.3% of patients ≥ 65 years of age, and 1.9% of patients ≥ 75 years of age. 82.2% of patients were men. Baseline ECOG performance-status score was 0 (17.6%) or 1 (82.4%). 16.9% of patients were PD-L1 positive (TPS ≥ 1%). 13.3% of patients had a history of brain metastases.

At the time of the interim analysis cut-off on 22 October 2021 when 66% of predefined OS events were observed (defined approximately 226, actual 246 OS events), patients had a median survival follow-up time of 12.3 months. OS, PFS and ORR results from the interim analysis are summarised in Table 4.

Table 4. Efficacy data at the primary analysis (data cut-off date: 22 October 2021)

		Arm A (Serplulimab + carboplatin + etoposide)	Arm B (Placebo + carboplatin + etoposide)
Number of patients		389	196
Primary endpoint			
OS	Number of patients with events, n (%)	146 (37.5%)	100 (51.0%)
	Median OS (months)	15.4	10.9
	Hazard ratio (95% CI)	0.63 (0.49-0.82)	
	p-value	< 0.001	
Secondary endpoints			
PFS -IRRC per RECIST 1.1	Median PFS (months)	5.7	4.3
	Hazard ratio (95% CI)	0.48 (0.38-0.59)	
Confirmed ORR	(%)	67.4%	58.7%
Median DOR	Months (95% CI)	5.8 (5.2-7.5)	4.1 (3.0-4.2)

Updated analysis after unblinding with longer follow-up duration (median: 19.7 months) was conducted by the cut-off date 13 June 2022 when 100% of predefined OS events were observed (defined approximately 342, actual 363 OS events). The median OS was 15.8 months in the serplulimab group and 11.1 months in the placebo group. The stratified HR (95% CI) was 0.62 (0.50, 0.76). The median PFS by IRRC assessment per RECIST 1.1 was 5.7 months and 4.3 months, respectively, with a stratified HR (95% CI) of 0.47 (0.38, 0.58). The efficacy results of final analysis were consistent with the primary analysis. Kaplan-Meier curves for OS and PFS of final analysis are presented in Figures 1 and 2.

**Figure 1. Kaplan-Meier curve of OS in overall population at the updated analysis (ITT)
(data cut-off date: 13 June 2022)**

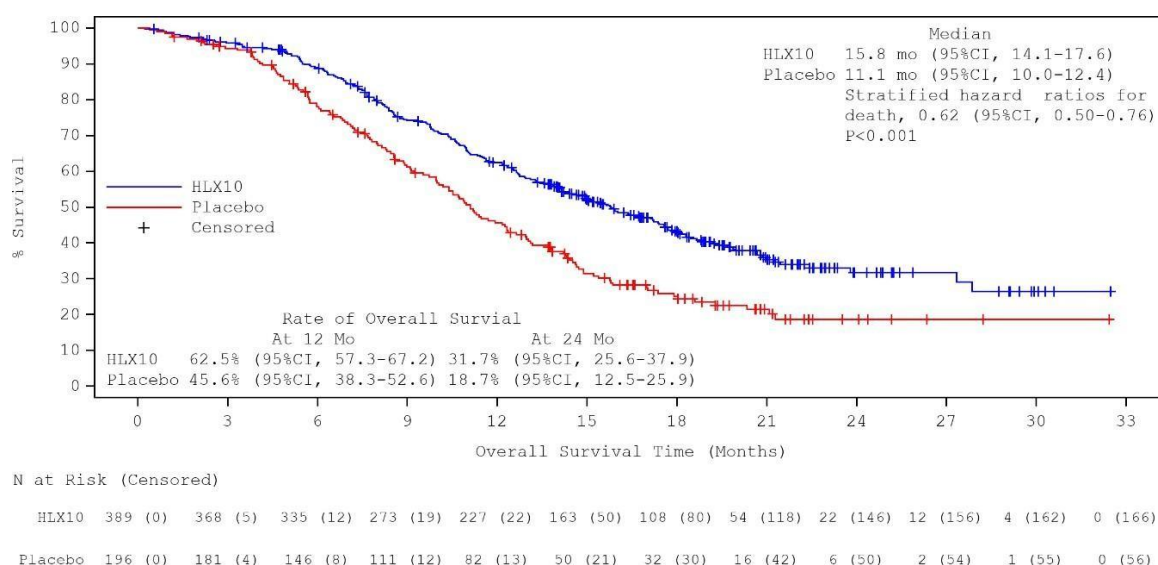
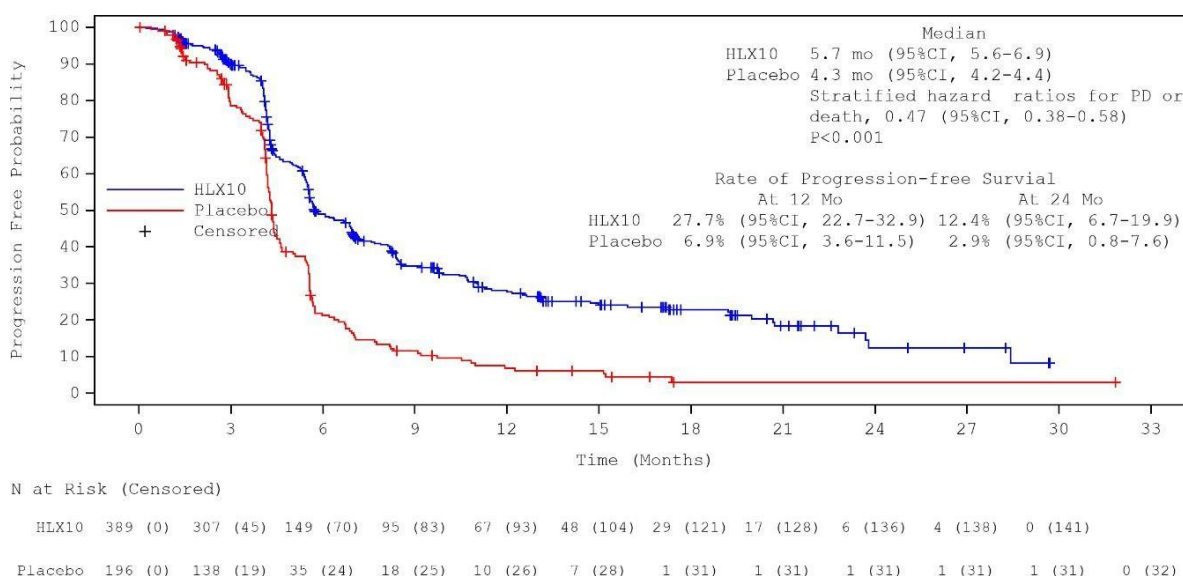


Figure 2. Kaplan-Meier curve of PFS (RECIST 1.1) by IRRC in overall population at the updated analysis (ITT) (data cut-off date: 13 June 2022)



Immunogenicity

The immunogenicity of serplulimab was evaluated in 389 patients treated with serplulimab at 4.5 mg/kg Q3W in the ASTRUM-005 trial. Seven patients (1.8%) were ADA positive at any visit, of whom 6 patients (1.5%) were treatment-emergent ADA positive, defined as at least one post-baseline ADA positive.

In dose escalation and dose expansion study HLX10-001, ADAs were observed in 13 out of 66 patients (19.7%).

Neutralising antibodies were not observed in either of the key studies. No evidence of ADA impact on pharmacokinetics, efficacy or safety was observed. However, data are still limited.

Elderly patients

In the ASTRUM-005 trial, of the 389 patients in the serplulimab group in the overall population, 153 (39.3%) were ≥ 65 years. No overall differences in efficacy were observed between elderly patients and younger patients.

5.2 Pharmacokinetic properties

Serplulimab pharmacokinetics has been investigated in a population pharmacokinetic (popPK) analysis that included 1 144 patients with lung cancer (including ES-SCLC) and other solid cancer types from 8 studies. The patients received serplulimab intravenously as monotherapy or combination therapy in the dose range of 0.3 to 10 mg/kg Q2W, 4.5 mg/kg Q3W, 200 mg Q2W, 300 mg Q3W and 400 mg Q4W. The PK was described by a two-compartment model with time-dependent clearance (CL). Inter-individual variability (coefficient of variation, CV) in base CL and central volume of distribution (V_c) was 25.8% and 15.4%. The mean (CV) observed trough concentration at steady state in the ASTRUM-005 trial was 62.5 $\mu\text{g/mL}$ (36.3%).

Absorption

Serplulimab is administered by intravenous infusion and is therefore immediately and completely bioavailable. Other routes of administration have not been investigated.

Distribution

Based on a popPK analysis the volume of distribution of serplulimab is approximately 5.73 L.

Biotransformation

The metabolic pathway of serplulimab has not been characterised. Serplulimab is expected to be catabolised into small peptides and amino acids by general protein degradation processes.

Elimination

Based on a popPK analysis, serplulimab clearance (CL) after the first dose is 0.225 L/day. The clearance decreases over time by a maximum of 30.5% (CV 26.3%) with 106 days to reach half of the maximum effect. The half-life at steady state is approximately 24.3 days.

Linearity/non-linearity

Serplulimab exhibited linear pharmacokinetics over the dose range of 0.3 to 10 mg/kg Q2W (including flat doses of 200 mg Q2W, 300 mg Q3W and 400 mg Q4W) both after single and multiple doses.

Special populations

No dedicated studies have been performed in special populations. A popPK analysis suggested no difference in the total systemic clearance of serplulimab based on age (23-83 years), race (n=247 Whites and n=895 Asians), and ECOG performance-status score (0 or 1). Serplulimab clearance increased with increasing body weight.

Renal impairment

No effect of creatinine or creatinine clearance (CRCL) (Cockcroft-Gault) was found on serplulimab CL based on a popPK analysis in patients with mild (CRCL=60-89 ml/min; n=448), moderate (CRCL=30-59 ml/min; n=102), and severe (CRCL=15-29 ml/min; n=1) renal impairment, and normal renal function (CRCL ≥ 90 ml/min, n=591). There are insufficient data in patients with severe renal impairment for dosing recommendations (see section 4.2).

Hepatic impairment

No effect of ALT, AST or total bilirubin was found on serplulimab CL based on a popPK analysis in patients with mild (BIL ≤ ULN and AST > ULN or BIL > 1 to 1.5 × ULN and any AST; n=176) and moderate (BIL > 1.5 to 3 × ULN and any AST; n=2) hepatic impairment, and normal (BIL ≤ ULN and AST ≤ ULN; n=956) hepatic function. There are insufficient data in patients with moderate hepatic impairment for dosing recommendations. Serplulimab has not been studied in patients with severe (BIL > 3 × ULN and any AST) hepatic impairment (see section 4.2).

5.3 Preclinical safety data

Repeat-dose toxicity

In the repeat-dose toxicity study in cynomolgus monkeys dosed for up to 31 weeks, a high incidence of pharmacology-related perivascular mononuclear cell infiltration in the brain choroid plexus was observed at 100 mg/kg. The no observed adverse effect level (NOAEL) in the 31-weeks toxicity study was 50 mg/kg/week, which produced exposure 36 times (calculated by AUC_{0-t}) the exposure in humans at dose of 3 mg/kg every two weeks.

Reproductive Toxicity

Reproductive toxicity studies have not been performed. The PD-1/PD-L1 pathway is thought to be involved in maintaining tolerance to the foetus throughout pregnancy. Blockade of PD-L1 signalling has been shown in murine models of pregnancy to disrupt tolerance to the foetus and to result in an increase in foetal loss. Two anti-PD-L1 monoclonal antibodies were evaluated in cynomolgus monkeys for reproductive and developmental toxicity and were shown to cause premature delivery, foetal loss and premature neonatal death when administered to pregnant monkeys. Therefore, potential risks of administering serplulimab during pregnancy include increased rates of abortion or

stillbirth. Based on its mechanism of action, foetal exposure to serplulimab may increase the risk of developing immune-mediated disorders or altering the normal immune response and immune-related disorders that have been reported in PD-1 knockout mice.

Genotoxicity and carcinogenicity

No studies have been performed to assess the genotoxic or carcinogenic potential of serplulimab.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Citric acid monohydrate
Sodium citrate (E331)
Sodium chloride
Mannitol (E421)
Polysorbate 80 (E433)
Water for injections

6.2 Incompatibilities

In the absence of compatibility studies, this medicinal product must not be mixed with other medicinal products, except those mentioned in section 6.6. Zerpidio should not be infused concomitantly in the same intravenous line with other medicinal products.

6.3 Shelf life

Unopened vial

3 years.

Diluted solution

From a microbiological point of view, the product, once diluted, should be used immediately. The diluted solution must not be frozen. If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user and should not be longer than 24 hours at 2°C to 8°C. This 24-hour hold may include up to 6 hours at room temperature ($\leq 25^{\circ}\text{C}$). If refrigerated, the vials and/or intravenous bags must be allowed to come to room temperature prior to use.

6.4 Special precautions for storage

Store in a refrigerator (2 °C-8 °C). Do not freeze.

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

For storage conditions after dilution of the medicinal product, see section 6.3.

6.5 Nature and contents of container

10 ml of concentrate in a 10 ml Type I clear glass vial with chlorobutyl rubber stopper and aluminium-plastic combination caps containing 100 mg of serplulimab.

Pack of 1 vial.

6.6 Special precautions for disposal and other handling

Preparation and administration

- Aseptic handling should be ensured during the preparation of infusion.
- Do not shake the vial.

- Equilibrate the vial to room temperature (at or below 25°C).
- The product should be inspected visually for the particulate matters and discoloration prior to administration. The concentrate is a colourless to slightly yellow, clear to slightly opalescent solution. Discard the vial if visible particles are observed.
- Confirm the dose of the product and calculate the required volume of Zerpidio.
- Withdraw a volume of sodium chloride 9 mg/ml (0.9%) solution for injection corresponding to the volume of infused product from the target intravenous bag using a sterile syringe and discard.
- Use a syringe to withdraw the required volume of Zerpidio from the vial and inject it into the sodium chloride 9 mg/ml (0.9%) solution for injection to prepare a diluted solution with a final concentration range from 1.0 to 8.0 mg/ml. Mix the diluted solution by gentle inversion.
- Administer the infusion solution intravenously using a sterile, non-pyrogenic, low-protein binding 0.2 to 5.0 µm in-line or add-on filter.
- Set the initial infusion rate to 100 ml per hour (25 drops per minute is recommended). The infusion rate can be adjusted if infusion-related reactions occur (see section 4.2). If there is no infusion-related adverse reaction in the first infusion, the duration of subsequent administration can be shortened to 30 minutes (± 10 minutes).
- From a microbiological point of view, the product, once diluted, should be used immediately. The diluted solution must not be frozen. If not used immediately, the diluted solution can be stored for 24 hours at 2°C to 8°C. This 24- hour hold may include up to 6 hours at room temperature (≤ 25°C). If refrigerated, the vials and/or intravenous bags must be allowed to come to room temperature prior to use (see section 6.3).
- At the end of infusion, the infusion tube is flushed with sodium chloride 9 mg/ml (0.9%) solution according to the routine operation procedure of the hospital.
- Do not co-administer other medical products through the same infusion line.
- In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded in the patient file.

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7. MANUFACTURER

Shanghai Henlius Biopharmaceutical Co., Ltd.
Building D, No. 1298, Yishan Road, Xuhui District
Shanghai – China

8. PRODUCT REGISTRATION HOLDER

Kalbe Malaysia Sdn. Bhd.
Suite 2A-3-2, Block 2A. Plaza Sentral
Jalan Stesen Sentral 5,
Kuala Lumpur Sentral
50470 Kuala Lumpur

9. MARKETING AUTHORISATION NUMBER

Reg No. MAL25056016AZ

10. DATE OF REVISION OF THE TEXT

Date of revision : April 03rd, 2025

11. PACKAGING

Box, 1 vial @ 10 mL

KEEP OUT OF REACH OF CHILDREN
JAUHI DARI KANAK-KANAK

CONTROLLED MEDICINE
UBAT TERKAWAL