
SCHEDULING STATUS

S4

1. NAME OF THE MEDICINE

ONDANSETRON 4 mg/2 mL PHARMC, Solution for injection

ONDANSETRON 8 mg/4 mL PHARMC, Solution for injection

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

ONDANSETRON 4 mg/2 mL PHARMC: Each mL contains ondansetron hydrochloride equivalent to 2 mg ondansetron.

ONDANSETRON 8 mg/4 mL PHARMC: Each mL contains ondansetron hydrochloride equivalent to 2 mg ondansetron.

Sugar free.

Contains sodium as sodium citrate and sodium chloride. This is 3,61 mg/mL sodium.

For the full list of excipients see section 6.1.

3. PHARMACEUTICAL FORM

Solution for injection.

A colourless liquid free from particulate matter.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

ONDANSETRON 4 mg/2 mL PHARMC and **ONDANSETRON 8 mg/4 mL PHARMC**

(**ONDANSETRON PHARMC**) is indicated for the management of nausea and vomiting induced

by chemotherapy and radiotherapy.

ONDANSETRON PHARMC is also indicated for the prevention and treatment of post-operative nausea and vomiting.

Routine prophylaxis is not recommended for patients in whom there is little expectation that nausea and vomiting will occur.

4.2 Posology and method of administration

Posology

Chemotherapy and radiotherapy induced nausea and vomiting

The emetogenic potential of cancer treatment varies according to the doses and combinations of chemotherapy and radiotherapy regimens used.

Adults

Emetogenic chemotherapy and radiotherapy: For most patients receiving emetogenic chemotherapy or radiotherapy ONDANSETRON PHARMC, 8 mg should be administered as a slow IV infusion (not less than 2 – 3 minutes) or IM injection in not less than 30 seconds, immediately before treatment.

Highly Emetogenic Chemotherapy: A single dose of ONDANSETRON PHARMC, 8 mg by slow IV infusion (not less than 2 – 3 minutes) or IM injection in not less than 30 seconds immediately before chemotherapy, has been shown to be effective in many patients.

Higher doses may be required in some patients, particularly those on high dose cisplatin, and the doses should be adjusted according to severity of the emetogenic challenge.

In these patients the following dose schedules have been shown to be effective:

A dose of 8 mg by slow IV infusion or IM injection immediately before chemotherapy, followed by

two further IV or IM doses of 8 mg two to four hours apart, or by constant infusion of 1 mg/hour for up to 24 hours.

OR ALTERNATIVELY:

A single dose of 16 mg diluted in 50 – 100 mL of saline or other compatible infusion fluid, infused over not less than 15 minutes immediately before chemotherapy. A single dose greater than 16 mg should not be given due to dose-dependent increased risk of QT prolongation (see section 4.4).

The efficacy of ONDANSETRON PHARMC in highly emetogenic chemotherapy may be enhanced by the addition of a single intravenous dose of dexamethasone phosphate 20 mg administered 30 – 45 minutes prior to the first ONDANSETRON PHARMC dose prior to chemotherapy.

Children

Experience is currently limited, but ONDANSETRON PHARMC was effective and well tolerated in children over the age of 4 years, when given intravenously at a dose of 5 mg/m² over 15 minutes, immediately before chemotherapy. This dosage should be followed by an appropriate oral dosage form.

Elderly patients

A greater effect on QTcF is predicted in patients \geq 75 years of age compared to young adults. Specific dosing information for intravenous dosing is provided for patients over 65 years of age and over 75 years of age.

- *Elderly patients aged 75 years or older:* A single dose of intravenous ONDANSETRON PHARMC given for the prevention of chemotherapy induced nausea and vomiting (CINV) must not exceed 8 mg (infused over at least 15 minutes).
- *Adult patients aged less than 75 years:* A single dose of intravenous ONDANSETRON PHARMC given for the prevention of CINV in adults (aged less than 75 years) must not exceed 16 mg (infused over at least 5 minutes).

- *Elderly patients aged 65 years or older:* All intravenous doses should be diluted in 50 – 100 ml saline or other compatible fluid and infused over at least 15 minutes.

Repeat intravenous doses of ONDANSETRON PHARMC should be given no less than 4 hours apart.

Prevention and Treatment of post-operative nausea and vomiting

Adults

Immediately before induction of anaesthesia, or post-operatively if the patient experiences nausea and/or vomiting occurring shortly after surgery, administer 4 mg undiluted intramuscularly or intravenously. If given intravenously, it must be administered by IV infusion over not less than 2 – 5 minutes or longer.

Repeat dosing for patients who continue to experience nausea and/or vomiting post-operatively has not been studied. While recommended as a fixed dose for all, few patients above 80 kg or below 40 kg have been studied.

Children

For prevention of post-operative nausea and vomiting in paediatric patients two years and older having surgery performed under general anaesthesia, ONDANSETRON PHARMC may be administered by slow intravenous infusion over 2 to 5 minutes or longer at a dose of 0,1 mg/kg up to a maximum of 4 mg either prior to, at or after induction of anaesthesia.

For the treatment of established post-operative nausea and vomiting in paediatric patients two years and older, ONDANSETRON PHARMC may be administered by slow intravenous infusion at a dose of 0,1 mg/kg up to a maximum of 4 mg over not less than 2 – 5 minutes or preferably longer.

Repeat dosing for paediatric patients who continue to experience nausea and/or vomiting has not been studied and should thus not be given.

Elderly

A slight age-related decrease in clearance, and in increase in the half-life of ondansetron is

anticipated, presenting as slight, clinically insignificant age-related increases in both oral bioavailability and a prolonged elimination half-life (5 hours) of ondansetron.

Patients with renal/hepatic impairment

Patients with renal impairment: No alteration of daily dosage or frequency of dosing, or route of administration is required for mild to moderate renal impairment. There is limited information available on severe renal impairment.

Patients with hepatic impairment: Clearance of ONDANSETRON PHARMC is significantly reduced and serum half-life significantly prolonged in patients with moderate or severe impairment of hepatic function. In such patients, a total daily dose of 8 mg should not be exceeded.

Method of administration

Precaution should be taken before manipulating or administering ONDANSETRON PHARMC, see section 6.6.

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

4.3 Contraindications

- Hypersensitivity to ondansetron or to any of the excipients listed in section 6.1.
- Post operative nausea in pregnancy (see section 4.6).
- Pregnancy.
- Concomitant use with apomorphine (see section 4.5).
- Congenital long QT syndrome.

4.4 Special warnings and precautions for use

Hepatic impairment

In patients with moderate or severe impairment of hepatic function, clearance of

ONDANSETRON PHARMC is significantly reduced and serum half-life significantly prolonged. In such patients, a total daily dose of 8 mg should not be exceeded (see section 4.2).

ONDANSETRON PHARMC prolongs the QT interval in a dose-dependent manner

Transient ECG changes including QT interval prolongation have been reported in patients receiving ONDANSETRON PHARMC. In addition, post-marketing cases of Torsade de Pointes have been reported in patients using ondansetron. ONDANSETRON PHARMC should be administered with caution to patients who have or may develop prolongation of QTc. These conditions include patients with electrolyte abnormalities, with congenital long QT syndrome, or patients taking other medicinal products that lead to QT prolongation. Therefore, caution should be exercised in patients with cardiac rhythm or conduction disturbances, in patients treated with anti-dysrhythmic agents or beta-adrenergic blocking agents and in patients with significant electrolyte disturbances.

Cases of myocardial ischaemia have been reported in patients treated with ondansetron. In some patients, especially in the case of intravenous administration, symptoms appeared immediately after administration of ondansetron. Patients should be alerted to the signs and symptoms of myocardial ischaemia.

Hypocalcaemia and hypomagnesaemia

Hypocalcaemia and hypomagnesaemia should be corrected before ONDANSETRON PHARMC administration.

Selective 5-HT₃ receptor antagonists

Hypersensitivity reactions have been reported in patients who have exhibited hypersensitivity to other selective 5-HT₃ receptor antagonists.

Subacute intestinal obstructions

Patients with subacute intestinal obstructions should be monitored following administration, as ONDANSETRON PHARMC is known to increase large bowel transit time.

Dizziness and transient visual disturbances

Dizziness and transient visual disturbances (e.g., blurred vision) have been reported during or shortly after rapid intravenous administration of ONDANSETRON PHARMC (see section 4.7 and 4.8).

Serotonin syndrome

Post-marketing reports describe patients with serotonin syndrome (including altered mental status, autonomic instability and neuromuscular abnormalities) following the concomitant use of ONDANSETRON PHARMC and other serotonergic medicines (including selective serotonin reuptake inhibitors (SSRI) and serotonin noradrenaline reuptake inhibitors (SNRIs)). If concomitant treatment with ONDANSETRON PHARMC and other serotonergic medicines is clinically warranted, appropriate close observation of the patient is advised (see section 4.8).

Adenotonsillar surgery

In patients with adenotonsillar surgery prevention of nausea and vomiting with ONDANSETRON PHARMC may mask occult bleeding. Therefore, such patients should be carefully monitored after ONDANSETRON PHARMC.

Paediatric population

The daily dose should not exceed 4 mg in patients with hepatic impairment.

Paediatric patients receiving ONDANSETRON PHARMC with hepatotoxic chemotherapeutic agents should be closely monitored for impaired hepatic function.

Excipients with known effects

ONDANSETRON PHARMC contains 3,61 mg sodium per 1 mL which is less than 1 mmol sodium (23 mg) per 1 mL, that is to say essentially 'sodium free'. At maximum dose (16 mL) ONDANSETRON PHARMC contains 57 mg of sodium. This is equivalent to approximately 2,85 % of the recommended maximum daily dietary intake of sodium for an adult.

4.5 Interactions with other medicines and other forms of interaction

The cytochrome P450 isoenzyme system

ONDANSETRON PHARMC does not appear to induce or inhibit the cytochrome P450 isoenzyme system, but it is itself metabolised by multiple hepatic isoenzymes, including CYP3A4, CYP2D6, and CYP1A2. Inducers or inhibitors of these isoenzymes may change the clearance and half-life of ondansetron, but on the basis of available data, no dose adjustments are recommended.

Potent inducers of CYP3A4, such as phenytoin, carbamazepine, and rifampicin, have been reported to increase ondansetron clearance and reduce ondansetron plasma concentrations.

QT prolonging medicines

Use of ONDANSETRON PHARMC with QT prolonging medicines may result in additional QT prolongation. Concomitant use of ONDANSETRON PHARMC with cardiotoxic medicines (e.g., anthracyclines (such as doxorubicin, daunorubicin) or trastuzumab), antibiotics (such as erythromycin), antifungals (such as ketoconazole), antidysrhythmics (such as amiodarone) and beta blockers (such as atenolol or timolol) may increase the risk of dysrhythmias.

Apomorphine

Cases of profound hypotension and loss of consciousness when ondansetron was administered concomitantly with apomorphine have been reported. Concomitant use of ONDANSETRON PHARMC and apomorphine may intensify QT prolongation. Concomitant administration of ONDANSETRON PHARMC and apomorphine is contraindicated (see section 4.3).

Tramadol

ONDANSETRON PHARMC may reduce the analgesic effect of tramadol.

Serotonergic Medicines (e.g., SSRIs and SNRIs)

There have been post-marketing reports describing patients with serotonin syndrome (including

altered mental status, autonomic instability and neuromuscular abnormalities) following the concomitant use of ONDANSETRON PHARMC and other serotonergic medicines (including SSRIs and SNRIs) (see section 4.4).

Other medicines

There is no evidence that ONDANSETRON PHARMC either induces or inhibits the metabolism of other medicines commonly co-administered with it. Specific studies have shown that there are no interactions when ONDANSETRON PHARMC is administered with alcohol, temazepam, furosemide, alfentanil, morphine, lidocaine, thiopental, or propofol.

4.6 Fertility, pregnancy and lactation

Women of childbearing potential / Contraception in males and females

Women of childbearing potential being treated with ONDANSETRON PHARMC should not become pregnant as ONDANSETRON PHARMC is contraindicated in pregnancy, irrespective of the cause of the nausea and vomiting (see section 4.3). Women of childbearing potential to use contraception while taking ONDANSETRON PHARMC and for 2 days after stopping treatment.

Pregnancy

ONDANSETRON PHARMC is contraindicated in pregnancy (see section 4.3).

The use of ONDANSETRON PHARMC during the first 12 weeks of pregnancy can be associated with an increased risk of developing oral cleft palate and/or lip to the foetus.

Breastfeeding

Tests have shown that ondansetron as in ONDANSETRON PHARMC passes into the milk of lactating animals. It is therefore recommended that mothers receiving ONDANSETRON PHARMC should not breast feed their babies.

4.7 Effects on ability to drive and use machines

It is not always possible to predict to what extent ONDANSETRON PHARMC may interfere with

the daily activities of a patient.

Patients should ensure that they do not engage in the above activities until they are aware of the measure to which ONDANSETRON PHARMC affects them.

4.8 Undesirable effects

a. Summary of the safety profile

The following frequencies are estimated at the standard recommended doses of ONDANSETRON PHARMC.

b. Tabulated summary of adverse reactions

System Organ Class	Frequency	Adverse reactions
Immune system disorders	Less frequent	Immediate hypersensitivity reactions, sometimes severe (e.g., anaphylaxis, bronchospasm, shortness of breath, hypotension, shock, angioedema, urticaria)
Nervous system disorders	Frequent	Headache
	Less frequent	Movement disorders (including extrapyramidal reactions such as oculogyric crisis, dystonic reactions and dyskinesia have been observed without definitive evidence of persistent clinical sequelae), seizures, dizziness
Eye disorders	Less frequent	Transient visual disturbances (e.g., blurred vision), transient blindness
Cardiac disorders	Less frequent	Dysrhythmias, hypotension, bradycardia, chest pain, QTc prolongation (including Torsade de Pointes)

System Organ Class	Frequency	Adverse reactions
	Frequency unknown	Myocardial ischaemia (see section 4.4)
Vascular disorders	Less frequent	A sensation of warmth or flushing, hypotension
Respiratory, thoracic and mediastinal disorders	Less frequent	Hiccups
Gastrointestinal disorders	Frequent	Increase in large bowel transit time, constipation
Hepato-biliary disorders	Less frequent	Transient, asymptomatic increases in aminotransferases.
General disorders and administrative site conditions	Frequent	Pain, redness and burning at site of injection

c. Description of selected adverse reactions

Blindness

The majority of the blindness cases reported resolved within 20 minutes. Most patients had received chemotherapeutic agents which included cisplatin. Some cases of transient blindness were reported as cortical in origin.

Hepatobiliary disorders

These events were commonly observed in patients receiving cancer chemotherapy with cisplatin.

d. Paediatric population

The adverse event profiles in children and adolescents were comparable to those seen in adults.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicine is important. It allows continued monitoring of the benefit/risk balance of the medicine. Healthcare professionals are

asked to report any suspected adverse reactions to SAHPRA via the “6.04 Adverse Drug Reaction Reporting Form”, found online under SAHPRA’s publications:

<https://www.sahpra.org.za/Publications/Index/8>

4.9 Overdose

See section 4.8. Manifestations that have been reported include severe constipation, visual disturbances, hypotension, and vasovagal episode with transient second-degree AV block, in cases of suspected overdose, symptomatic and supportive therapy should be given as appropriate, as there is no specific antidote for ondansetron.

Ondansetron prolongs QT interval in a dose dependent manner.

ECG monitoring is recommended in cases of overdose.

Treatment

There is no specific antidote for ondansetron. In all cases of suspected overdose, treatment is symptomatic and supportive as appropriate. Further management should be as clinically indicated or as recommended by the national 378 poisons centre, where available.

Additional information on special populations

Paediatric population

Paediatric cases consistent with serotonin syndrome have been reported after inadvertent oral overdoses of ondansetron (exceeded estimated ingestion of 4 mg/kg) in infants and children aged 12 months to 2 years.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacological classification: A 5.10 Medicines affecting autonomic functions. Serotonin antagonists

Pharmacotherapeutic group: Serotonin (5HT₃) antagonist

ATC code: A04AA01

Mechanism of action

Ondansetron is a selective 5-HT₃ receptor – antagonist. Chemotherapeutic agents and radiotherapy may cause release of 5-HT in the small intestine initiating a vomiting reflex by activating vagal afferents via 5-HT₃ receptors. The initiation of this reflex is blocked by ondansetron. Activation of vagal afferents may also cause a release of 5-HT in the area postrema, located on the floor of the fourth ventricle, and this may also promote emesis through a central mechanism.

Thus, the effect of ondansetron in the management of the nausea and vomiting induced by chemotherapy and radiotherapy may be due to the antagonism of 5-HT₃ receptors on neurons located both in the peripheral and central nervous system.

In psychomotor testing, ondansetron does not cause sedation nor impair performance.

Plasma prolactin concentrations are not altered by ondansetron.

5.2 Pharmacokinetic properties

Absorption

Ondansetron is rapidly absorbed following oral administration, with maximum plasma concentrations of about 30 ng/mL being attained approximately 1,6 hours after an 8 mg dose.

Distribution

The disposition of ondansetron following both intravenous and oral dosing is similar with a terminal elimination half-life of about 3 hours and a steady-state volume of distribution of about 140 L.

Biotransformation and elimination

Plasma protein binding is 70 – 76 %. Ondansetron is cleared from the systemic circulation predominantly by metabolism with less than 5 % of a dose excreted unchanged in the urine.

Studies in healthy elderly volunteers have shown a prolonged elimination half-life (5 hours) and slightly increased bioavailability (65 %) for ondansetron.

As a result of reduced pre-systemic metabolism in patients with severe hepatic impairment, the systemic clearance of ondansetron is markedly reduced with prolonged elimination half-lives (15 – 32 hours) and an oral bioavailability approaching 100 %.

Special Patient Populations

Gender

Gender differences were shown in the disposition of ondansetron, with females having a greater rate and extent of absorption following an oral dose and reduced systemic clearance and volume of distribution (adjusted for weight).

Children and Adolescents (aged 1 month to 17 years)

In paediatric patients aged 3 to 12 years undergoing elective surgery with general anaesthesia, the absolute values for both the clearance and volume of distribution of ondansetron were reduced in comparison to values with adult patients. Both parameters increased in a linear fashion with weight and by 12 years of age, the values were approaching those of young adults. When clearance and volume of distribution values were normalised by body weight, the values for these parameters were similar between the different age group populations. Use of weight-based dosing compensates for age-related changes and is effective in normalising systemic exposure in paediatric patients.

Population pharmacokinetic analysis was performed on 428 subjects (cancer patients, surgery patients and healthy volunteers) aged 1 month to 44 years following intravenous administration of ondansetron. Based on this analysis, systemic exposure (AUC) of ondansetron following oral or IV dosing in children and adolescents was comparable to adults, with the exception of infants aged 1 to 4 months. Volume was related to age and was lower in adults than in infants and children. Clearance was related to weight but not to age with the exception of infants aged 1 to 4 months. It is difficult to conclude whether there was an additional reduction in clearance related to age in infants 1 to 4 months or simply inherent variability due to the low number of subjects studied in this age group. Since patients less than 6 months of age will only receive a single dose

in post-operative nausea and vomiting a decreased clearance is not likely to be clinically relevant.

Elderly

It is documented that based on ondansetron plasma concentrations and exposure-response modelling, a greater effect on QTcF is predicted in patients ≥ 75 years of age compared to young adults. Specific dosing information is provided for patients over 65 years of age and over 75 years of age for IV dosing (see section 4.2).

Renal impairment

In patients with renal impairment (creatinine clearance 15 – 60 mL/min), both systemic clearance and volume of distribution are reduced following IV administration of ondansetron, resulting in a slight, but clinically insignificant, increase in elimination half-life (5,4 hours). A study in patients with severe renal impairment who required regular haemodialysis (studied between dialyses) showed ondansetron's pharmacokinetics to be essentially unchanged following intravenous administration.

Hepatic impairment

In patients with severe hepatic impairment, ondansetron's systemic clearance is markedly reduced with prolonged elimination half-lives (15 to 32 hours) and an oral bioavailability approaching 100 % due to reduced pre-systemic metabolism.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Citric acid anhydrous (E 330)

Sodium citrate (E 331)

Sodium chloride

Water for Injections.

6.2 Incompatibilities

This medicine must not be mixed with other medicines except those mentioned in section 6.6.

6.3 Shelf life

36 months (unopened).

24 hours (dilutions stored at room temperature).

72 hours (dilutions stored in a refrigerator).

6.4 Special precautions for storage

Store at or below 25 °C. Protect from light.

ONDANSETRON PHARMC when diluted with the recommended IV solutions should be used within 24 hours if stored at room temperature or used within 72 hours if stored in a refrigerator, due to possible microbial contamination during preparation (see sections 6.2 and 6.6).

6.5 Nature and contents of container

ONDANSETRON 4 mg/2 mL PHARMC: Clear, colourless 2 mL glass ampoules with ceramic print, placed in a plastic rondo tray covered with a rondo tray sponge, packed into a carton. Each carton contains 5 ampoules.

ONDANSETRON 8 mg/4 mL PHARMC Clear, colourless 5 mL glass ampoules with ceramic print, placed in a plastic rondo tray covered with a rondo tray sponge, packed into a carton. Each carton contains 5 ampoules.

Not all packs and pack sizes are necessarily marketed.

6.6 Special precautions for disposal and other handling

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

ONDANSETRON PHARMC injection should not be administered in the same syringe or infusion as any other medication.

ONDANSETRON PHARMC injection ampoules should not be autoclaved.

Compatibility with intravenous fluids

Compatibility studies have been undertaken. ONDANSETRON PHARMC is stable in the following infusion solutions:

- Sodium chloride 0,9 % *m/v* intravenous infusion.
- Glucose 5 % *m/v* intravenous infusion.
- Ringers' intravenous infusion.
- Potassium chloride 0,3 % *m/v* and sodium chloride 0,9 % *m/v* intravenous infusion.
- Potassium chloride 0,3 % *m/v* and glucose 5 % *m/v* intravenous infusion.

Intravenous solutions should be prepared at the time of infusion (see section 6.4).

Compatibility with other medicines

Cisplatin: concentrations of up to 0,48 mg/mL (e.g., 240 mg in 500 mL) administered over one to eight hours.

Dexamethasone: Dexamethasone sodium phosphate 20 mg may be administered as a slow intravenous injection over 2 – 5 minutes via the Y-site of an infusion set delivering 8 mg of ONDANSETRON PHARMC diluted in 50 – 100 mL of a compatible infusion fluid over approximately 15 minutes. Compatibility between dexamethasone sodium phosphate and ONDANSETRON PHARMC has been demonstrated supporting administration of these drugs through the same giving set, with resulting in-line concentrations in the ranges of 32 µg – 2,5 mg/mL for dexamethasone sodium phosphate and 8 µg–1 mg/mL for ONDANSETRON 4 mg/2 mL PHARMC and ONDANSETRON 8 mg/4 mL PHARMC.

5-Fluorouracil: Concentrations up to 0,8 mg/mL (e.g., 2,4 g in 3 liters, or 400 mg in 500 mL)

administered at a rate of at least 20 mL per hour (500 mL per 24 hours). Higher concentrations of 5-Fluorouracil may contain up to 0,045 % *m/v* magnesium chloride in addition to other excipients shown to be compatible.

Carboplatin: Concentrations in the range 0,18 mg/mL to 9,9 mg/mL (e.g., 90 mg in 500 mL to 990 in 100 mL), administered over 10 minutes to one hour.

Etoposide: Concentrations in the range of 0,14 mg/mL to 0,25 mg/mL (e.g., 72 mg in 500 mL to 250 mg in 1 litre), administered over 30 minutes to one hour.

Ceftazidime: Doses in the range 250 mg to 2000 mg reconstituted with Water for Injection BP, as recommended by the manufacturer (e.g., 2,5 mL for 250 mg and 10 mL for 2 g ceftazidime) and given as an intravenous bolus injection over approximately five minutes.

Cyclophosphamide: Doses in the range 100 mg to 1 g reconstituted with Water for Injection BP, 5 mL per 100 mg cyclophosphamide, as recommended by the manufacturer, and given as an intravenous bolus injection over approximately five minutes.

Doxorubicin: Doses in the range 10 to 100 mg, reconstituted with Water for Injection BP, 5 mL per 10 mg doxorubicin, as recommended by the manufacturer, and given as an intravenous bolus injection over approximately five minutes.

7. HOLDER OF CERTIFICATE OF REGISTRATION

PHARMACORP (PTY) LTD

29 Victoria Link

Route 21 Corporate Park

Irene, 0178, RSA

8. REGISTRATION NUMBERS

ONDANSETRON 4 mg/2 mL PHARMC: A39/5.10/0062

ONDANSETRON 8 mg/4 mL PHARMC: A39/5.10/0063

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

25 November 2005

10. DATE OF REVISION OF THE TEXT : 13 March 2023