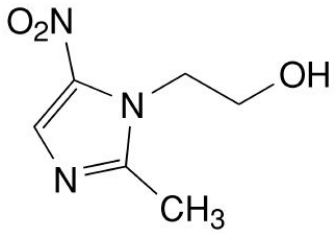
PRODUCT INFORMATION
METRONIDAZOLE SANDOZ® IV 500MG/100ML INJECTION SOLUTION BAG AND VIALS

NAME OF THE MEDICINE
Metronidazole
Chemical structure of metronidazole:



Chemical name: 2-(2-Methyl-5-nitro-1H-imidazol-1-yl)ethanol
Molecular Formula: $C_6H_9N_3O_3$
Molecular weight: 171.2
CAS: 443-48-1

DESCRIPTION
Active: metronidazole, concentration: 500 mg/100 mL
Inactive: citric acid monohydrate, sodium phosphate – dibasic anhydrous, sodium chloride and water for injections.
Metronidazole is a white or yellowish crystalline powder with melting point 159-162°C. Solubility in water at 20°C is 1 g/100 mL; in ethyl alcohol, 0.5 g/100 mL; in chloroform, 0.4 g/100 mL; slightly soluble in ether and soluble in dilute acids. When reconstituted as Metronidazole Sandoz IV, it has a pH of between 4.5 and 6.0. Each mL contains 0.139 mmol sodium.

PHARMACOLOGY
Metronidazole is a nitro-imidazole anti-infective agent which has specific activity against a number of obligate anaerobic organisms and protozoa.
Mode of Action: Metronidazole is bactericidal, amoebicidal and trichomonicidal. The exact mode of action has not been fully elucidated. Metronidazole is reduced by low-redox-potential electron transfer proteins (eg. nitro-reductases such as ferredoxin) to unidentified polar product(s) which lack the nitro group. The reduction product(s) appears to be responsible for the cytotoxic and antimicrobial effects of the drug which include disruption of DNA and inhibition of nucleic acid synthesis.
Microbiology: Metronidazole is bactericidal *in vitro* against many anaerobic Gram-negative bacilli including *Bacteroides fragilis*, and other *Bacteroides* species, also other species including *Fusobacterium*. The drug is effective against many anaerobic Gram-positive bacilli including *Clostridium* species, *Eubacterium*, and anaerobic *Streptococcus*. The MIC for most susceptible anaerobes is < 6.2 micrograms/mL. Serum levels higher than this are achieved at the recommended doses.

Metronidazole is also active against a wide range of pathogenic protozoa including *Trichomonas vaginalis* and other trichomonads, *Entamoeba histolytica*, *Giardia lamblia*, *Balatidium coli* and the causative organisms of acute ulcerative gingivitis.

Metronidazole is ineffective against both aerobic and facultative anaerobic bacteria.

Susceptibility tests: Dilution or diffusion techniques, either quantitative (MIC) or breakpoint, should be used following a regularly updated, recognised and standardised method (e.g. NCCLS). Standardised susceptibility test procedures require the use of laboratory control micro-organisms to control the technical aspects of the laboratory procedures.

A report of "Susceptible" indicates that the pathogen is likely to be inhibited if the antimicrobial compound in the blood reaches the concentrations usually achievable. A report of "Intermediate" indicates that the result should be considered equivocal, and if the micro-organism is not fully susceptible to alternative, clinically feasible drugs, the test should be repeated. This category implies possible clinical applicability in body sites where the drug is physiologically concentrated or in situations where high dosage of drug can be used. This category also provides a buffer zone, which prevents small- uncontrolled technical factors from causing major discrepancies in interpretation. A report of "Resistant" indicates that the pathogen is not likely to be inhibited if the antimicrobial compound in the blood reaches the concentrations usually achievable; other therapy should be selected.

Note: The prevalence of resistance may vary geographically for selected species and local information on resistance is desirable, particularly when treating severe infections.

Pharmacokinetics

Bioavailability: For both oral and intravenous administration, the area under the plasma clearance curve is equivalent.

Absorption: Maximum plasma concentrations occur at the conclusion of the infusion after intravenous administration. Traces are detected after 24 hours. The biological half-life of a single intravenously administered dose of metronidazole has been determined as 7.3 hours ± 1.0 hours.

Distribution: Metronidazole is widely distributed in body tissues and fluids. It diffuses across the blood-brain barrier, crosses the placenta and appears in the saliva and breast milk of nursing mothers in concentrations equivalent to those found in the plasma. It attains therapeutic concentrations in the bile and the CSF.

Plasma Protein Binding: Metronidazole is not significantly bound to plasma protein.

Metabolism: An oral or intravenous dose of metronidazole is partially metabolised in the liver by hydroxylation, acid side-chain oxidation and glucuronide conjugation. The major metabolite, 2-hydroxymethylmetronidazole, has some antiprotozoal activity *in vitro*.

Excretion: Approximately three-fourths of a single 750 mg oral dose is excreted as nitro-containing compounds (unchanged drug and its metabolites) in the urine within 5 days. Most of the remainder is excreted in the faeces. Urine may be dark or reddish brown in colour following oral and IV administration of the drug due to the presence of water-soluble pigments which result from its metabolism.

Note: Polarographic estimation of metronidazole in serum or urine tends to give higher values than microbiological assay because the former measures unchanged drug and metabolites, erroneously high serum values may be obtained in the presence of severe renal failure because of the retention of metabolites in the blood.

INDICATIONS

Metronidazole intravenous infusion is indicated:
(a) for treatment of anaerobic infections in patients for whom oral administration is not possible.
(b) where immediate anti-anaerobic chemotherapy is required.
(c) where prophylactic cover is required at lower abdominal surgical sites presumed contaminated or potentially contaminated by anaerobic micro-organisms. Procedures of this type include appendectomy, colonic surgery, vaginal hysterectomy, abdominal surgery in the presence of anaerobes in the peritoneal cavity and surgery performed in the presence of anaerobic septicaemia.
Note: Metronidazole is inactive against aerobic or facultative anaerobic bacteria.

CONTRAINDICATIONS

Metronidazole is contraindicated:
(a) in patients with evidence of or a history of blood dyscrasias. (Occasionally a mild leucopenia has been observed during administration; however no persistent haematological abnormalities have been observed in animals or clinical studies.).
(b) in the presence of active organic disease of the central nervous system.
(c) in patients who are hypersensitive to metronidazole, other nitro-imidazoles or any of the excipients.

PRECAUTIONS

Central and Peripheral Nervous System Effects: Metronidazole should be used with caution in patients with active or chronic severe peripheral or central nervous system diseases due to the risk of neurological damage. Patients should be warned about the potential for confusion, dizziness, hallucinations, convulsions or transient visual disorders. Cases of encephalopathy and peripheral neuropathy (including optic neuropathy) have been reported in patients being treated with metronidazole. Encephalopathy has been reported in association with cerebellar toxicity characterised by ataxia, dizziness and dysarthia. CNS lesions seen on MRI have been described in reports of encephalopathy. CNS systems are generally reversible within days to weeks upon discontinuation of metronidazole. CNS lesions seen on MRI have also been described as reversible.
Peripheral neuropathy, mainly of the sensory type has been reported and is characterised by numbness or paraesthesia of the extremities. The appearance of abnormal neurologic signs demands the prompt evaluation of the benefit/risk ratio of the continuation of therapy. Convulsive seizures have been reported in patients treated with metronidazole.
Aseptic meningitis: Cases of aseptic meningitis have been reported with metronidazole. Symptoms can occur within hours of dose administration and generally resolve after metronidazole therapy is discontinued. The appearance of abnormal neurological signs and symptoms demands the prompt evaluation of the benefit/risk ratio of the continuation of therapy.
Candidiasis: Fungal overgrowth of the gastrointestinal or genital tract may occur during metronidazole therapy and require treatment with a candicidal drug.
Long Term Therapy: If metronidazole is administered for more than ten days, it is recommended that haematological tests, especially total and differential leucocyte counts,

be carried out regularly and that patients be monitored for adverse reactions such as peripheral neuropathy. If leucopenia or abnormal neurological signs occur, the drug should be discontinued immediately.

Surgical Drainage: Use of metronidazole does not obviate the need for drainage of pus whenever indicated such as in amoebic liver abscess or abscess in other accessible positions.

Sodium Retention: Administration of solutions containing sodium ions may result in sodium retention. Care should be taken when administrating Metronidazole Sandoz IV to patients receiving corticosteroids or patients predisposed to oedema. (Refer to INTERACTION WITH OTHER MEDICINES).

Cardiac Function Impairment: Care should be taken because of the sodium content (0.14 mmol/mL) in this dosage form.

Impaired Renal Function: In patients being haemodialysed twice weekly, metronidazole and its major metabolite are rapidly removed during an eight hour period of dialysis, so that the plasma concentration quickly falls below the therapeutic range. Hence a further dose of metronidazole would be needed after dialysis to restore an adequate plasma concentration. In patients with renal failure, the half-life of metronidazole is unchanged, but those of its major metabolites are prolonged 4-fold or greater. The accumulation of the 2-hydroxymethyl metabolite could be associated with side effects and measurement of its plasma concentration by high pressure liquid chromatography (HPLC) has been recommended.

In the absence of haemodialysis, the plasma clearance and elimination half-life of metronidazole are equivalent to those in patients with normal renal clearance so dosage adjustment is not necessary.

While the pharmacokinetics of metronidazole are little changed in the anuric patient, the metabolites are retained; the clinical significance of this is unknown.

Impaired Hepatic Function: Since metronidazole is mainly metabolised by hepatic oxidation, accumulation of metronidazole and its metabolites in plasma is likely in patients with severely impaired hepatic function. Significant accumulation may occur in patients with hepatic encephalopathy and the resulting high plasma concentrations of metronidazole may contribute to the symptoms of the encephalopathy. Metronidazole should therefore be administered with caution and at reduced doses to patients with hepatic encephalopathy and severe hepatic impairment. Close monitoring of plasma metronidazole levels and toxicity is recommended.

Laboratory tests: Metronidazole is a nitroimidazole, and should be used with care in patients with evidence of or history of blood dyscrasia. A mild leukopenia has been observed during its administration; however, no persistent haematological abnormalities attributable to metronidazole have been observed in clinical studies. Total and differential leukocyte counts are recommended before and after therapy.

Pseudomembranous Colitis: Pseudomembranous colitis associated with the administration of metronidazole has been reported.

Ototoxicity: A number of cases of deafness associated with the use of metronidazole have been reported.

Use in Pregnancy: *(*Category B2). Metronidazole should not be given in the first trimester of pregnancy since it crosses the placenta and rapidly enters the fetal circulation. Although it has not been shown to be teratogenic in either human or animal studies, such a possibility cannot be excluded.

Use of metronidazole for trichomoniasis in the second and third trimesters should be restricted to those in whom local palliative treatment has been inadequate to control symptoms. In life threatening situations the benefit/risk ratio should be carefully considered; in these circumstances the short, high-dosage regimens are not recommended.

There is some evidence that the fetal alcohol syndrome may be due to small quantities of acetaldehyde rather than alcohol. If this is the case then metronidazole should not be taken in association with alcohol by pregnant women. Metronidazole inhibits aldehyde dehydrogenase thereby permitting accumulation of acetaldehyde which is one of the breakdown products of ethanol.

Australian categorisation definition of Category B2:

Drugs which have been taken by only a limited number of pregnant women and women of childbearing age, without an increase in the frequency of malformation or other direct or indirect harmful effects on the human fetus having been observed. Studies in animals are inadequate or may be lacking, but available data show no evidence of an increased occurrence of fetal damage.

Use in Lactation: Metronidazole is secreted in breast milk. In view of the drug's tumorigenic and mutagenic potential, breast-feeding is not recommended.

Genotoxicity: In studies on the mutagenic potential of metronidazole, the Ames mutagenicity test was positive, while several non-bacterial tests in animals were negative. In patients suffering from Crohn's Disease, metronidazole increased chromosome abnormalities. The benefit/risks should, therefore, be carefully assessed in each case particularly in relation to the severity of the disease and the age of the patient.

Carcinogenicity: Metronidazole has shown evidence of tumorigenic activity in a number of studies involving chronic oral administration in mice and rats. Most prominent among the effects in the mouse was the promotion of pulmonary tumorigenesis. This has been observed in multiple studies, including one in which the animals were dosed on an intermittent schedule (every fourth week only). The results of one of the mouse studies indicates a statistically significant increase in the incidence of malignant lymphomas as well as pulmonary neoplasms associated with lifetime feeding.

In the rat, there was a statistically significant increase in the incidence of various neoplasms, particularly mammary tumours, among females fed metronidazole on a lifetime basis, over that observed in concurrent female control groups.

Two lifetime tumorigenicity studies have been performed in hamsters; in both cases the results were negative.

A retrospective study of 771 women treated with metronidazole for *Trichomonas vaginalis* has revealed no statistically significant increase in cancer incidence over that expected in the normal population. An apparent increase in the incidence of cervical carcinoma observed in the metronidazole-treated group was no different from the incidence observed in women documented to have had trichomoniasis not treated by metronidazole.

Effects on ability to drive or use machinery: Patients should be warned about the potential for drowsiness, dizziness, confusion, hallucinations, convulsions or transient visual disorders, and advised not to drive or operate machinery if these symptoms occur.

Interference with Laboratory Tests:
Metronidazole may interfere with AST (SGOT), ALT (SGPT), LDH, triglycerides, or glucose determinations when these are based on the decrease in ultraviolet absorbance which occurs when NADH is oxidised to NAD. Metronidazole interferes with these assays because the drug has an absorbance peak of 322 nm at pH 7 which is close to the 340 nm absorbance peak of NADH; this causes an increase in absorbance at 340 nm resulting in falsely decreased values.

INTERACTIONS WITH OTHER MEDICINES*:*
Warfarin and other coumarin anticoagulants: Oral or IV metronidazole potentiates the effects of oral anticoagulants resulting in prolongation of prothrombin time; concurrent administration should be avoided if possible. If metronidazole is used in patients receiving an oral anticoagulant, prothrombin times should be monitored and the dosage of the anticoagulant adjusted accordingly. There is no interaction with heparin.
Alcohol: Metronidazole appears to inhibit alcohol dehydrogenase and other alcohol oxidising enzymes. Mild disulfiram-like reactions including flushing, headache, nausea, vomiting, abdominal cramps and sweating have occurred in patients ingesting alcohol while being treated with metronidazole.
Patients should be advised not to take alcohol during therapy or for at least 48 hours afterwards because of the possibility of a disulfiram-like (antabuse effect) reaction.
Disulfiram: Administration of disulfiram with metronidazole has been associated with acute psychoses and confusion in some patients; therefore, the two drugs should not be administered concurrently. Metronidazole should not be given to patients who have taken disulfiram in the previous two weeks.
Phenobarbital and Phenytoin: The simultaneous administration of drugs which induce microsomal liver enzyme activity, such as phenobarbital, pentobarbital and phenytoin may accelerate the elimination of metronidazole, resulting in reduced plasma concentrations and increased concentrations of its 2-hydroxymethyl metabolite. Impaired clearance of phenytoin has also been reported. Patients receiving phenobarbital or phenytoin metabolise metronidazole at a much greater rate than normally, reducing the half- life to approximately 3 hours.
Lithium: Initiation of short-term metronidazole therapy in patients stabilised on relatively high dosage of lithium has been reported to increase serum lithium concentrations, resulting in signs of lithium toxicity in several patients. Serum lithium and serum creatinine levels should be obtained several days after commencing metronidazole therapy to detect any increase that may precede clinical symptoms of lithium intoxication.
Cimetidine: Simultaneous administration of drugs that decrease microsomal liver enzyme activity, such as cimetidine, may prolong the half-life and decrease the plasma clearance of metronidazole. It is not clear if ranitidine exerts a similar effect.
Corticosteroids: Care should be taken when administering metronidazole infusion to patients receiving corticosteroid therapy or to patients predisposed to oedema since administration of solutions containing sodium ions may result in sodium retention.
Cyclophosphamide and Carmustine (BCNU): Metronidazole should be used with caution in patients who are receiving cyclophosphamide or carmustine as a drug interaction demonstrated in mice leads to increased toxicity.

Fluorouracil and Azathioprine: Metronidazole reduces the clearance of 5 fluorouracil and can therefore result in increased toxicity of 5 fluorouracil. Transient neutropenia has been reported in 12 patients who received oral and IV metronidazole in conjunction with IV fluorouracil and in at least 1 patient who received oral metronidazole in conjunction with azathioprine.

Cyclosporin: Patients receiving cyclosporin are at risk of elevated cyclosporin serum levels. Serum cyclosporin and serum creatinine should be closely monitored when coadministration is necessary.

Busulfan: Plasma levels of busulfan may be increased by metronidazole which may lead to severe busulfan toxicity**.**

Compatibility with Intravenous Infusions and Other Drugs:

Metronidazole infusion may be diluted to 1 in 5 or greater with appropriate volumes of Sodium Chloride 0.9%, Glucose-Saline combinations, Glucose 5% or Potassium Chloride injections 20 mmol/L and 40 mmol/L. While physically compatible with Compound Sodium Lactate Infusion (Hartmann's Solution) and Compound Sodium Chloride Infusion (Ringer's Solution), metronidazole is not chemically compatible with them over extended periods of time. Therefore addition of metronidazole infusion to these solutions is not recommended. However, it may be delivered through the administration set Y-site of fast-running infusions of Hartmann's or Ringer's Solutions. While Glucose 10% is compatible with metronidazole infusion, its use as a diluent and vehicle is not recommended because of the high osmolarity of the resulting solution.

If dilution is necessary, the resultant solution should be held at 2° to 8° for no longer than 24 hours.

Metronidazole infusion is incompatible with aluminium; do not use equipment containing aluminium components (e.g. needle or cannula hubs). Other drugs should not be added directly to metronidazole infusion.

ADVERSE EFFECTS

Serious adverse reactions occur rarely with standard recommended regimens. Clinicians who contemplate continuous therapy for the relief of chronic conditions, for periods longer than those recommended, are advised to consider the possible therapeutic benefit against the risk of peripheral neuropathy.

Skin and subcutaneous tissue disorders:

More common:	Skin rashes.
Less common:	Mild erythematous eruption, erythematous rash, pustular eruptions, pruritis, flushing. Stevens-Johnson Syndrome and Toxic Epidermal Necrolysis have been reported.

Gastrointestinal disorders:

More common:	Nausea, anorexia, dry mouth, abdominal discomfort. Furry tongue, glossitis and stomatitis have occurred, which may be associated with *Candida* overgrowth. Proliferation of *Candida* may also occur in the vagina (see PRECAUTIONS).

Less common: Vomiting, diarrhoea, epigastric distress and abdominal cramping, constipation, oral mucositis, taste disorder, dyspepsia in patients with anaerobic infections.
If patients receiving metronidazole drink alcohol beverages, they may experience abdominal distress, nausea, vomiting, flushing or headache. A modification of the taste of alcoholic beverages has also been reported.
Patients with Crohn's disease are known to have an increased incidence of gastrointestinal and certain extraintestinal cancers.
Rare cases of pancreatitis, which abated on withdrawal of the drug, have been reported.
There have been a number of reports both in Australia and in overseas literature of cases of pseudomembranous colitis whilst on metronidazole therapy.

Nervous System disorder:

More common: Metallic or unpleasant taste in the mouth, headaches.

Less common: Lack of coordination, hallucinations, ataxia, dysathria, gait impairment, nystagmus, tremor, convulsive seizures, encephalopathy, aseptic meningitis, optic and peripheral neuropathy, confusion, irritability, drowsiness, dizziness, syncope, depression, weakness, insomnia, disorientation, light sensitivity, stiff neck. Transient vision disorders such as diplopia and myopia have been reported.
During intensive and/or prolonged metronidazole therapy, peripheral sensory neuropathy (characterised mainly by numbness or paraesthesia of an extremity, see PRECAUTIONS) or transient epileptiform seizures have been reported. In most cases neuropathy disappeared after treatment was stopped or when dosage was reduced. Such subjects should be specifically warned about these reports and told to stop the drug and report immediately if any neurological symptoms occur.
Psychotic reactions have been reported in alcoholic patients receiving metronidazole and disulfiram concurrently. Metronidazole should not be given to patients who have taken disulfiram in the previous two weeks.

Immune System disorder:

Rare: Anaphylaxis.

Not known: Angioedema, urticaria, fever.

Auditory and vestibular:

Less common: Vertigo, tinnitus.

Biochemical Abnormalities:

Less common: Jaundice has been reported in one patient being treated for anaerobic infection. Severely elevated liver enzyme values, consistent with the drug induced hepatitis; pancreatitis.
Very rare cases of reversible abnormal liver function tests and cholestatic hepatitis have been reported.

Cardiovascular:

Less common: Flattening of the T wave, prolongation of the QT interval, thrombophlebitis.

Genito-Urinary Tract:

Less common: Dysuria, dryness of vagina or vulva, cystitis, a sense of pelvic pressure, very rarely dyspareunia, polyuria, incontinence, decrease in libido, proctitis and pyuria have been reported during metronidazole therapy (although all of these may be attributable to underlying pathology).
Instances of darkened urine have been reported and this manifestation has been the subject of investigation. Although the pigment which is probably responsible for this phenomenon has not been positively identified, it almost certainly is a metabolite of metronidazole. It seems certain that it is of no clinical significance and may be encountered only when metronidazole is administered in higher than recommended doses.

Blood and lymphatic system disorders:

Less common: Leucopenia (usually moderate and transient- see PRECAUTIONS).
Leucopenia is usually transient and disappears on withdrawal of the drug. If paraesthesia occurs, the drug should be discontinued and the symptoms usually disappear.
One case of bone marrow aplasia attributable to metronidazole has been reported. If profound bone marrow suppression occurs, use of metronidazole should be ceased and appropriate supportive therapy instituted.

Rare: Reversible thrombocytopenia, agranulocytosis, neutropenia, pancytopenia.
Thrombophlebitis has been reported after intravenous infusion. This reaction can be minimised or avoided by limiting the duration of infusion and frequent resiting of the indwelling IV cannula.

Musculoskeletal, connective tissue and bone disorder:

Less Common: Arthralgia (Joint pains, sometimes resembling "serum sickness"); myalgia.

Respiratory:

Less common: Nasal congestion.

DOSAGE AND ADMINISTRATION

A maximum of 4 g should not be exceeded in a 24 hour period. For prophylactic use, the appropriate dose should be infused shortly before surgery and repeated every eight hours for the next 24 hours. Dosages should be decreased in patients with severe hepatic disease; plasma metronidazole levels should be monitored. In elderly patients, the pharmacokinetics of metronidazole may be altered; therefore monitoring of serum levels may be necessary to adjust metronidazole dosage accordingly.

Metronidazole should be infused intravenously at a rate of 5 mL (25 mg) per minute. Metronidazole infusion may be administered alone or concurrently (but separately) with other bacteriologically appropriate parenteral antibacterial agents. Other IV drugs or infusions should, if possible, be discontinued during its administration. While the solution should be protected from direct sunlight during administration, exposure to fluorescent light for short periods will not result in its degradation.

Adults and children over 12 years: 100 mL containing 500 mg metronidazole by intravenous infusion every eight hours.

Children under 12 years: As for adults, but a single intravenous dose is based on 1.5 mL (7.5 mg metronidazole)/kg body weight.

Elderly: Use the adult dose with care. As some degree of hepatic or renal impairment may be present, see the appropriate sections above.

If dilution is necessary, hold at 2° to 8°C for not more than 24 hours to reduce microbiological hazard.

Contains no antimicrobial preservative. Product is for single use in one patient only. Discard any residue.

Duration of therapy: Treatment for seven days should be satisfactory for most patients but, depending upon clinical and bacteriological assessment, the clinician may decide to prolong treatment, e.g. for the eradication of infection from sites which cannot be drained or are prone to endogenous recontamination by anaerobic pathogens from the gut, nasopharynx or the female genital tract. Oral metronidazole should be substituted as soon as possible.

Administration: One dose in one patient only. Discard any remaining contents

Notes: Prevention of infection at the surgical site requires adequate tissue concentration of the drug being attained at the time of surgery. The dose and route of administration should be selected in each case to achieve this objective.

Although metronidazole has been used in children for some years, recent evidence concerning mutagenicity and tumorigenicity suggests caution be exercised when using metronidazole in this age group.

In infants and other patients maintained on intravenous infusions, metronidazole may be diluted 1 in 5 or greater with isotonic intravenous infusions (Sodium Chloride 0.9%, Glucose-saline combinations, Glucose 5%) but not Sodium Lactate Compound (Hartmann's) Infusion or Sodium Chloride Compound (Ringer's) Infusion (see *COMPATIBILITY WITH INTRAVENOUS INFUSIONS AND OTHER DRUGS* above).

Instructions to be given to the Patient:
1. Patients, especially pregnant women, should be warned to refrain from alcohol whilst taking metronidazole.
2. Patients should be advised to report any signs of toxicity, especially neurological disturbances, to their doctor.
3. Patients should be warned about the possibility of their urine darkening in colour.

OVERDOSAGE
Overdosage with metronidazole appears to be associated with very few abnormal signs or symptoms. Disorientation, ataxia and vomiting may occur, especially after ingestion of large amounts. There is no specific antidote for metronidazole overdosage. In case of suspected massive overdosages, symptomatic and supportive treatment should be instituted. Single oral doses of metronidazole, up to 12 g, have been reported in suicide attempts and accidental overdoses.

PRESENTATION AND STORAGE CONDITIONS
Presentation
Metronidazole Sandoz IV, 500 mg/100 mL is an almost colourless to pale yellow, ready to use solution, available in the following pack sizes:
Vials*, 100 mL (1s, 5s and 10s): AUST R 118335
Bags, 100 mL (1s, 5s and 10s): AUST R 118321
Storage
Bags:
Store below 25°C. Do not freeze. Protect from light.
Vials*:
Store below 30°C. Do not freeze. Protect from light.

*Not currently marketed in Australia

NAME AND ADDRESS OF THE SPONSOR
Sandoz Pty Ltd
ABN 60 075 449 553
54 Waterloo Road
Macquarie Park NSW 2113
Australia
Tel: 1800 634 500

POISON SCHEDULE OF THE MEDICINE
S4

Date of first inclusion in the Australian Register of Therapeutic Goods (the ARTG):
11 October 2006

Date of most recent amendment: 25 June 2015