MEROJECT

SCHEDULING STATUS S4

1. NAME OF THE MEDICINE
MEROJECT 500 mg sterile powder for injection
MEROJECT 1 g sterile powder for injection

2. QUALITATIVE AND QUANTITATIVE COMPOSITION
Active ingredients:
MEROJECT 500 mg: Each vial contains 500 mg meropenem anhydrous (as trihydrate).
MEROJECT 1 g: Each vial contains 1000 mg meropenem anhydrous (as trihydrate).

Sodium content:
MEROJECT 500 mg: 45 mg sodium/vial
MEROJECT 1 g: 90 mg sodium/vial
MEROJECT contains sodium which should be taken into consideration by patients on a controlled sodium diet.
MEROJECT is sugar free.
For the full list of excipients, see section 6.1

3. PHARMACEUTICAL FORM
White to light yellow crystalline sterile powder for injection. The reconstituted solution is a clear colourless solution practically free from particulate matter.

4. CLINICAL PARTICULARS
4.1 Therapeutic indications
MEROJECT is indicated for the treatment of the following infections, caused by single or multiple susceptible bacteria and as empiric therapy prior to the identification of the causative organisms:
- **Acute exacerbation of chronic bronchitis and pneumonia due to:** *Staphylococcus aureus* (methicillin-susceptible strains only), *Streptococcus pneumoniae*, *Streptococcus* spp., *Escherichia coli*, *Haemophilus influenzae*, *Haemophilus parainfluenzae*, *Pseudomonas aeruginosa*, *Moraxella (Branhamella) catarrhalis*, *Klebsiella* spp., *Enterobacter cloacae*, *Enterobacter* spp., *Acinetobacter* spp.
- **Pneumonia in children due to:** *Staphylococcus aureus* (methicillin-susceptible strains only), *Streptococcus pneumoniae*, *Haemophilus influenzae*, *Pseudomonas aeruginosa.*
- **Urinary tract infections in adults and children, including complicating infections due to:** *Enterobacter cloacae*, *Escherichia coli*, *Pseudomonas aeruginosa*, *Morganella morganii*, *Proteus mirabilis*, *Serratia marcescens*, *Citrobacter freundii.*
- **Pelvic Inflammatory Disease (including tubo-ovarian abscess) and endometritis due to:** *Staphylococcus aureus* (methicillin-susceptible strains only), *Staphylococcus epidermidis*, *Streptococcus haemolyticus*, *Staphylococcus* spp. (coagulase negative), *Streptococcus agalactiae* Group B, *Pseudomonas aeruginosa*, *Streptococcus beta-haemolytic*, *Streptococcus faecalis*, *Staphylococcus gamma haemolyticus*, Group D *Streptococcus* (enterococcus and non-enterocossus), *Streptococcus viridans, Acinetobacter anitratus*, *Acinetobacter lwoffii*, *Enterobacter aerogenes*, *Enterobacter cloacae*, *Escherichia coli*, *Gardnerella vaginalis*, *Klebsiella pneumoniae*, *Neisseria gonorrhoeae*, *Proteus mirabilis*, *Enterococcus faecalis*, *Bacteroides fragilis group*, *Peptostreptococcus anaerobius*, *Peptostreptococcus asaccharolyticus*, *Peptostreptococcus magnus.*
- **Skin and skin structure infections in adults due to:** *Escherichia coli*, *Klebsiella pneumoniae*, *Proteus mirabilis*, *Pseudomonas aeruginosa*, *Staphylococcus aureus* (methicillin-susceptible strains only), *Coagulase-negative Staphylococcus* spp. (methicillin-susceptible strains only), *Streptococcus agalactiae*, *Enterococcus faecalis*, (Group A) *Streptococcus*, *Streptococcus viridans*, *Bacteroides fragilis*, *Peptostreptococcus* spp.
- **Meningitis in adults and children due to:** *Streptococcus pneumoniae*, *Haemophilus influenzae*, *Neisseria meningitidis.*
- **Septicaemia in adults and children due to:** *Streptococcus pneumoniae*, *Escherichia coli*, *Klebsiella pneumoniae.*
- **Empiric treatment, including initial monotherapy, for presumed bacterial infections in host-compromised neutropenic patients due to:** *Staphylococcus aureus*, *Micrococcus* spp., *Streptococcus sanguis*, *Streptococcus epidermidis*, *Streptococcus mitis*, *Escherichia coli*, *Pseudomonas aeruginosa.*
- **Intra-abdominal abscess and peritonitis due to:** *Streptococcus milleri*, *Streptococcus mitior*, *Enterococcus faecalis*, *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, *Bacteroides fragilis*, *Bacteroides ovatus*, *Bacteroides distasonis*, *Bacteroides thetaiotaomicron*, *Bacteroides vulgatus*, *Klebsiella oxytoca*, *Clostridium perfringens.*
- **Polymicrobial infections**
  In the treatment of infections caused by *Pseudomonas aeruginosa*, an aminoglycoside should be administered concomitantly.

4.2 Posology and method of administration
Posology:
Adults:
Usual dose: Administration of 500 mg to 1 g by intravenous infusion every 8 hours.

Dose Exceptions:
a) Dose of 1 g every 8 hours for febrile episodes in neutropenic patients.
b) Dose of 2 g every 8 hours for meningitis.
In critically ill patients with known or suspected *Pseudomonas aeruginosa* lower respiratory tract infections, concomitant use of an aminoglycoside is recommended, and regular sensitivity testing is recommended.

Impaired renal function – Adult dosage schedule:
In adult patients with creatinine clearance below 51 mL/min the dosage of MEROJECT should be reduced as follows:

Creatinine Clearance (mL/min)	Dose
26 - 50	1 g every 12 hours
10 - 25	500 mg every 12 hours
< 10	500 mg every 24 hours

Meropenem is cleared by haemodialysis. If continued use with MEROJECT is necessary, the unit dose based on the infection type and severity is recommended at the completion of the haemodialysis procedure to re-institute effective treatment.
There is no experience with peritoneal dialysis.

Impaired hepatic function:
MEROJECT dosage need not be adjusted in patients with impaired hepatic function.

Elderly:
MEROJECT dosage need not be adjusted for the elderly with normal renal function or creatinine clearance values above 50 mL/min.

Children:
No data on meropenem is available for children.
In children over 50 kg weight, the adult dosage schedule should be used.
Children older than three months and up to 12 years are to be administered an intravenous dose of 10 to 40 mg/kg every 8 hours, depending on the type and severity of the infection, the condition of the patient and known susceptibility of the organism(s).

Exceptions:
Meningitis: An 8 hourly 40 mg/kg dose should be given.
There is no experience in children with renal impairment.

Preparation of MEROJECT:
Rapid intravenous injection:
Water for injection (5 mL/250 mg: 10 mL for 500 mg and 20 mL for 1 g MEROJECT respectively). This provides an approximate available concentration of 50 mg/mL. Constituted solutions are clear or pale yellow.

Intravenous infusion:
The MEROJECT vial may be reconstituted as above or with a compatible infusion fluid (see section 6.3) and the resultant solution added to an infusion container.
Solutions of MEROJECT should not be frozen.

Method of administration:
MEROJECT is intended for intravenous injection administered by intravenous infusion over 15 to 30 minutes or by rapid intravenous injection of 3 to 5 minutes every 8 hours.
In the treatment of beta-haemolytic streptococcal infections, a therapeutic dose should be administered for at least 10 days.

4.3 Contraindications
MEROJECT is contraindicated in:
- patients with hypersensitivity to meropenem or any of the other ingredients of MEROJECT
- patients hypersensitive (allergic) to carbapenems, penicillins or other beta-lactam antibacterials (e.g. cephalosporins, imipenem) may be hypersensitive to meropenem
- pregnancy and lactation (see section 4.6).

4.4 Special warnings and special precautions use
Safety and efficacy have not been established in children less than 3 months old and MEROJECT is not recommended for children younger than 3 months (see section 4.2).
Antibiotic-associated colitis and pseudomembranous colitis have been reported with MEROJECT and may range in severity from mild to life threatening. Therefore, it is important to consider this diagnosis in patients who present with diarrhoea during or subsequent to the administration of meropenem. Discontinuation of therapy with MEROJECT and the administration of specific treatment for *Clostridium difficile* should be considered.
Serious and occasionally fatal hypersensitivity reactions have been reported (see sections 4.3 and 4.8).
Patients who have a history of hypersensitivity to carbapenems, penicillins or other beta-lactam antibiotics may also be hypersensitive to MEROJECT.
Before initiating therapy with MEROJECT, careful inquiry should be made concerning previous hypersensitivity reactions to beta-lactam antibiotics.
If a severe allergic reaction occurs, MEROJECT should be discontinued, and appropriate measures taken.
MEROJECT should be given with caution to patients with renal impairment, and the dose reduced appropriately.
Care is necessary in patients with CNS disorders such as epilepsy as seizures have been reported during the treatment with carbapenems, although MEROJECT may have less potential to induce seizures than imipenem.
Liver function monitoring is essential in patients with pre-existing liver disorders during treatment with MEROJECT due to the risk of hepatic toxicity (hepatic dysfunction with cholestasis and cytolysis) and vanishing bile duct syndrome. There is no dose adjustment necessary.
A positive direct or indirect antiglobulin (Coombs) test may develop.
The concomitant use of MEROJECT (powder for injection) and valproic acid/sodium valproate/valpromide is not recommended (see section 4.5).

4.5 Interaction with other medicines and other forms of interaction
Probenecid inhibits the renal excretion of MEROJECT thereby increasing its plasma concentrations and prolonging the elimination half-life.
As the potency and duration of action of MEROJECT dosed without probenecid are adequate, the co-administration of probenecid with MEROJECT is not recommended.
Valproic acid plasma levels may be reduced by meropenem when it is co-administered with carbapenem agents resulting in a 60 - 100 % decrease in valproic acid levels in about two days. Due to the rapid onset and the extent of the decrease, co-administration of valproic acid/sodium valproate/valpromide with carbapenem agents is not considered to be manageable and therefore should be avoided (see section 4.4).
Simultaneous administration of MEROJECT with warfarin may augment its anti-coagulant effects. It is recommended that the INR should be monitored frequently during and shortly after co-administration of MEROJECT with an oral anti-coagulant agent such as warfarin.

4.6 Fertility, pregnancy and lactation
The safety of MEROJECT has not been established during pregnancy and the use of MEROJECT is not recommended (see section 4.3).
The use of MEROJECT is not recommended during breastfeeding.

4.7 Effects on ability to drive and use machines
Although no data is available, MEROJECT is not expected to affect the ability to drive or operate machinery.

4.8 Undesirable effects
Tabulated list of adverse effects

System Organ Class	Frequency	Side effects
Infections and Infestations	*Less frequent*	Oral and vaginal candidiasis, pharyngitis
Blood and the lymphatic system disorders	*Frequent* *Less frequent*	Thrombocythaemia Eosinophilia, neutropenia, leukopenia, agranulocytosis thrombocytopenia lymphadenopathy, haemolytic anaemia, positive direct or indirect antiglobulin test may develop
Immune system disorders	*Less frequent*	Angioedema, manifestations of anaphylaxis
Metabolism and nutrition disorders	*Less frequent*	Hypoglycaemia
Nervous system disorders	*Less frequent*	Headache, paraesthesia, convulsions
Vascular disorders	*Frequency unknown*	Peripheral vascular disorder
Respiratory, thoracic and mediastinal disorders	*Less frequent*	Epistaxis, apnoea
Gastrointestinal disorders	*Frequent* *Less frequent*	Nausea, vomiting, constipation, diarrhoea, abdominal pain Pseudomembranous colitis
Hepato-biliary disorders	*Frequent*	Increases in serum transaminases, bilirubin, alkaline phosphatase, lactic dehydrogenase
Skin and subcutaneous tissue disorders	*Less frequent*	Rash, pruritus, urticarial, erythema multiforme, Stevens-Johnson syndrome, toxic epidermal necrolysis
Renal and urinary disorders	*Less frequent*	Increased blood creatinine, increased blood urea
General disorders and administrative site conditions	*Frequent*	Inflammation, pain, thrombophlebitis

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 online service for adverse drug reaction reporting by following the link: https://www.sahpra.org.za/Publications/Index/8. An email can be sent directly to the company, pharmacovigilance@pharmadynamics.co.za to ensure safety of the product.

4.9 Overdose
Renal impairment may lead to accidental overdosage of MEROJECT if the dose is not adjusted as described in Section 4.2. The treatment is symptomatic and supportive and haemodialysis is to be implemented in patients with renal impairment to remove meropenem and its metabolite.

5. PHARMACOLOGICAL PROPERTIES
5.1 Pharmacodynamic properties
Pharmacotherapeutic group: Systemic antibiotic
ATC code: J01DH02
Pharmacological classification: A20.1.1 Broad spectrum antibiotics

Mechanism of action:
Meropenem is a carbapenem antibiotic which interferes with vital bacterial cell wall synthesis through binding to penicillin-binding proteins (PBPs) to exert its bacterial action. Meropenem has a high degree of stability to hydrolysis by almost all beta-latamases produced by gram-positive and gram-negative bacteria.
Meropenem has been shown *in vitro* to act synergistically with various antibiotics. A post-antibiotic effect has been demonstrated for meropenem *in vitro* and *in vivo.*
In vitro sensitivity does not necessarily imply clinical sensitivity.

Inherently resistant organisms:
Gram-negative aerobes:
Stenotrophomonas maltophilia, Legionella species

Other micro-organisms:
Chlamydophila pneumoniae, *Chlamydophila psittaci*, *Coxiella burnetii*
Mycoplasma pneumoniae

5.2 Pharmacokinetic properties
Absorption
Meropenem is well distributed in most body fluids and tissues with a low (2 %) protein binding. Peak serum concentration after a 30 minute intravenous infusion of a single-dose of meropenem in normal volunteers reaches 23 µg/mL for the 500 mg dose, 49 µg/mL for the 1 g dose.
Peak serum concentration after a 5 minute intravenous bolus injection of meropenem in normal volunteer results' reaches of approximately 52 µg/mL for the 500 mg dose and 112 µg/mL for the 1 g dose.
When multiple doses are administered at 8 hourly intervals to subjects with normal renal function accumulation of meropenem dose do not occur.

Metabolism
Meropenem is metabolised by hydrolysis of the beta-lactam ring generating a microbiologically inactive metabolite.

Elimination
Approximately 70 % of an administered dose is recovered in the urine as unchanged meropenem over 12 hours. A further 28 % is recovered as the microbiologically inactive metabolite. Faecal elimination represents only approximately 2 % of the dose. The measured renal clearance and the effect of probenecid show that meropenem undergoes both filtration and tubular secretion.
Urinary concentrations of meropenem in excess of 10 µg/mL are maintained for up to 5 hours at the 500 mg dose.
The plasma elimination half-life of meropenem may be prolonged in patients with renal impairment.
Meropenem is primarily excreted unchanged, with one inactive metabolite having been identified.

Special Populations
Renal insufficiency
Renal impairment results in higher plasma AUC and longer half-life for meropenem. The AUC of the microbiologically inactive metabolite considerably increased in patients with renal impairment. Dose adjustment is recommended for patients with renal impairment (see Section 4.2).
Meropenem is cleared by haemodialysis with clearance during haemodialysis being approximately 4 times higher than in anuric patients.

Hepatic insufficiency
A study in patients with alcoholic cirrhosis shows no effect of liver disease on the pharmacokinetics of meropenem after repeated doses.

Elderly:
Pharmacokinetic studies in the elderly have shown a reduction in plasma clearance of meropenem which correlated with age-associated reduction in creatinine clearance.

5.3 Preclinical safety data
Animal studies indicate that meropenem is well tolerated by the kidney. Histological evidence of renal tubular damage was seen in mice and dogs only at doses of 2000 mg/kg and above after a single administration and above and in monkeys at 500 mg/kg in a 7-day study.
Meropenem is generally well tolerated by the central nervous system. Effects were seen in acute toxicity studies in rodents at doses exceeding 1000 mg/kg.
The IV LD_{50} of meropenem in rodents is greater than 2000 mg/kg.
In repeat dose studies of up to 6 months duration only minor effects were seen including a decrease in red cell parameters in dogs.
There was no evidence of mutagenic potential in a conventional test battery and no evidence of reproductive toxicity including teratogenic potential in studies in rats up to 750 mg/kg and in monkeys up to 360 mg/kg.
There was no evidence of increased sensitivity to meropenem in juveniles compared to adult animals. The intravenous formulation was well tolerated in animal studies.
The sole metabolite of meropenem had a similar profile of toxicity in animal studies.

6. PHARMACEUTICAL PARTICULARS
6.1 List of excipients
Anhydrous sodium carbonate

6.2 Incompatibilities
Compatibility of MEROJECT with other medicines has not been established and should not be mixed with other medicines except those mentioned in section 6.3.

6.3 Shelf life
Powder:
48 months

Reconstituted solution:

Diluent	Storage temperature 25 °C	Storage temperature 4 °C
Water for injection	2 h	12 h
Sodium chloride 0,9 %	4 h	24 h
Dextrose 5 %	1 h	4 h
Dextrose 10 %	1 h	2 h
Dextrose 5 % and Sodium chloride 0,225 %	2 h	4 h
Dextrose 5 % and Sodium chloride 0,9 %	1 h	4 h
Dextrose 5 % and Potassium chloride 0,15%	1 h	6 h
Mannitol 2,5 %	2 h	16 h
Mannitol 10 %	1 h	8 h
Normosol M in Dextrose 5 %	1 h	8 h
Dextrose 5 % and Sodium bicarbonate 0,02 %	1 h	6 h

Do not freeze the reconstituted solution.

6.4 Special precautions for storage
Powder:
Store at or below 25 °C.
Keep in the outer carton until required for use.
For storage conditions after reconstitution of the medicinal product, see section 6.3.

6.5 Nature and contents of container
MEROJECT 500 mg: 20 mL clear colourless Type I glass vials with Type I grey bromobutyl rubber closures and aluminium secure caps with a green plastic flip-top cover, available in pack size of one vial.
MEROJECT 1 g: 30 mL clear colourless Type I glass vials with Type I grey bromobutyl rubber closures and aluminium secure caps with a grey plastic flip-top cover, available in pack size of one and ten vials.

6.6 Special precautions for disposal and other handling
Single use only. Discard any unused portion.

7. HOLDER OF THE CERTIFICATE OF REGISTRATION
Pharma Dynamics (Pty) Ltd
1st Floor Grapevine House, Steenberg Office Park
Silverwood Close
Westlake, Cape Town
7945, South Africa
Tel: 021 707 7000

8. REGISTRATION NUMBERS
MEROJECT 500 mg: A42/20.1.1/0280
MEROJECT 1 g: A42/20.1.1/0281

9. DATE OF FIRST AUTHORISATION
07 December 2012

10. DATE OF REVISION OF THE TEXT
16 February 2022

Namibia:
MEROJECT 500 mg: NS2 13/20.1.1/0238
MEROJECT 1 g: NS2 13/20.1.1/0239

Mozambique:
MEROJECT 500: J5669
MEROJECT 1000: J5668

PATIENT INFORMATION LEAFLET

SCHEDULING STATUS: S4

MEROJECT 500 mg (sterile powder for injection)
MEROJECT 1g (sterile powder for injection)
Meropenem anhydrous
MEROJECT is sugar free.

Read all of this leaflet carefully before you are given MEROJECT
- Keep this leaflet. You may need to read it again.
- If you have further questions, please ask your doctor or your pharmacist.
- MEROJECT has been prescribed for you personally and you should not share your medicine with other people. It may harm them, even if their symptoms are the same as yours.

What is in this leaflet

1. What MEROJECT is and what it is used for
MEROJECT contains the active substance meropenem and belongs to a group of antibiotics called one carbapenems.
MEROJECT is an antibiotic, and it works by killing bacteria, which can cause serious infections. MEROJECT is prescribed by doctors to treat various bacterial infections in adults and children.
MEROJECT has antibacterial activity against a wide variety of organisms for different infections in various areas of the body.

2. What you need to know before you use MEROJECT
MEROJECT should not be administered to you:
- if you are allergic (hypersensitive) to meropenem or any of the other ingredients of MEROJECT (see Section 6)
- if you are allergic (hypersensitive) to other antibiotics such as penicillins, cephalosporins, or carbapenems as you may also be allergic to MEROJECT
- if you are pregnant or breastfeeding (see Pregnancy and Breastfeeding).

Warnings and precautions
Take special care with MEROJECT:
- if severe diarrhoea develops during treatment, consult your doctor immediately as this may be a symptom of a condition called pseudomembranous colitis that could be life threatening (see Possible side effects)
- if you have ever had an allergic reaction to any other antibiotics
- if you have kidney problems as your dose of MEROJECT may need to be adjusted
- if you have liver problems as your doctor will need to closely monitor your condition
- if you have epilepsy and are taking valpromide (valproic acid) as MEROJECT should not be administered at the same time (see MEROJECT should not be administered to you).

You may develop a positive test (antiglobulin, or Coombs test) which indicates the presence of antibodies that may destroy red blood cells. Your doctor will discuss this with you.
Your doctor may request tests to monitor your condition before and/or during treatment.

Children and adolescents
Safety and efficacy have not been established in children less than 3 months old and MEROJECT is not recommended for children younger than 3 months.

Other medicines and MEROJECT
Always tell your healthcare provider if you are taking any other medicine. (This includes complementary or traditional medicines.)

MEROJECT may interact with the following medicines:
- probenecid (used to treat gout) and should not be used whilst being treated with MEROJECT
- valproic acid/sodium valproate/valpromide (used to treat epilepsy). MEROJECT should not be used because it may decrease the effect of sodium valproate
- warfarin (used to prevent blood from clotting) as MEROJECT may increase the effects of warfarin and your doctor may want to monitor your blood clotting time.

Pregnancy and breastfeeding
If you are pregnant or breastfeeding, think you may be pregnant or are planning to have a baby, please consult your doctor, pharmacist or other healthcare provider for advice before using MEROJECT.
Do not use MEROJECT if you are pregnant.
Do not use MEROJECT if you are breastfeeding.

Driving and using machines
MEROJECT is not expected to interfere with your ability to drive or using machines, however you should exercise caution before performing these tasks until you know how MEROJECT affects you.

Important information about some of the ingredients of MEROJECT:
MEROJECT contains sodium.
MEROJECT 500 mg: 45 mg sodium/vial
MEROJECT 1 g: 90 mg sodium/vial

Your doctor will take this into account if you are on a sodium-controlled diet.

3. How to use MEROJECT
You will not be expected to give yourself MEROJECT. It will be given to you by a person qualified to do so.

If you are administered more MEROJECT than you should
Since a healthcare professional will administer MEROJECT, he/she will control the dosage. However, in the event of overdosage your doctor will manage the overdosage.

If you missed a dose of MEROJECT
Your doctor will ensure you receive your injection at the correct time interval and will manage your treatment with MEROJECT.

4. Possible side effects
MEROJECT can have side effects.
Not all side effects reported for MEROJECT are included in this leaflet. Should your general health worsen, or if you experience any untoward effects while using MEROJECT, please consult your doctor, pharmacist or other healthcare provider for advice.

If any of the following happens, you should stop receiving MEROJECT injections and tell your doctor:
- swelling of the hands, feet, ankles, lips, mouth or throat which may cause difficulty in breathing
- rash or itching.

These are all very serious side effects. If you have them, you may have had a serious allergic reaction to MEROJECT. You may need urgent medical attention.

Tell your doctor immediately if you notice any of the following:
- apnoea (stopping of breathing especially when asleep)
- bruising easily (thrombocytopenia)
- Stevens-Johnson syndrome (a life-threatening skin disorder with symptoms such as a red-purplish rash and blisters)
- swelling in any part of the body
- convulsions/fits
- low blood sugar (hypoglycaemia manifestations)
- thrush in the mouth, throat or vagina
- watery diarrhoea, bloody stools and fever (a serious condition called pseudomembranous colitis).

These are all serious side effects. You may need urgent medical attention.

Tell your doctor if you notice any of the following:
Frequent side effects:
- diarrhoea, constipation, nausea, vomiting, abdominal pain
- blood tests showing that your liver is not functioning well
- abnormal blood clotting
- redness and inflammation of the skin along a vein, warmth of the skin and tissue around the vein, pain in the limb, darkening of the skin over the vein, pain and swelling of the veins (thrombophlebitis)
- sore veins where MEROJECT is injected.

Less frequent side effects:
- anaemia, swelling of the lymph glands, abnormal blood test results
- nose bleeds, headache
- tingling sensation in hands, feet or lips ("pins and needles")
- skin rashes or other skin conditions, such as flushing, hives, itching, dry skin to serious skin conditions causing blisters and peeling
- blood tests showing that kidneys are not functioning well.

The following side effects have been reported but the frequency for them to occur is not known:
- reduced sense of touch or sensation (numbness), cold/blue/aching feet when resting, sore legs or feet (symptoms of a blood circulation disorder).

If you notice any side effects not mentioned in this leaflet, please inform your doctor or pharmacist.

Reporting of side effects
If you get side effects, talk to your doctor, pharmacist or nurse. You can also report any side effects to SAHPRA via the online service for adverse drug reaction reporting by following the link:
https://www.sahpra.org.za/Publications/Index/8
By reporting side effects, you can help provide more information on the safety of MEROJECT. You can also send an email directly to the company, pharmacovigilance@pharmadynamics.co.za to ensure safety of the product.

5. How to store MEROJECT
Store all medicines out of reach of children.
Store at or below 25 °C in original container.

Storage after reconstitution by your healthcare provider:

Diluent	Storage temperature 25 °C	Storage temperature 4 °C
Water for injection	2 h	12 h
Sodium chloride 0,9 %	4 h	24 h
Dextrose 5 %	1 h	4 h
Dextrose 10 %	1 h	2 h
Dextrose 5 % and Sodium chloride 0,225 %	2 h	4 h
Dextrose 5 % and Sodium chloride 0,9 %	1 h	4 h
Dextrose 5 % and Potassium chloride 0,15%	1 h	6 h
Mannitol 2,5 %	2 h	16 h
Mannitol 10 %	1 h	8 h
Normosol M in Dextrose 5 %	1 h	8 h
Dextrose 5 % and Sodium bicarbonate 0,02 %	1 h	6 h

Do not freeze the reconstituted solution.

Single use only. Discard any unused portion.
Do not use after the expiry date stated on the carton.
Do not dispose of unused medicine in drains or sewerage systems (e.g., toilets).

6. Contents of the pack and other information
What MEROJECT contains
The active substance is meropenem.
MEROJECT 500 mg: Each vial contains 500 mg meropenem anhydrous (as trihydrate).
MEROJECT 1 g: Each vial contains 1000 mg meropenem anhydrous (as trihydrate).

The other ingredients are:
The other ingredients are anhydrous sodium carbonate.

What MEROJECT looks like and contents of the pack
MEROJECT is white to light yellow crystalline sterile powder for injection. The reconstituted solution is a clear colourless solution practically free from particulate matter.

MEROJECT 500 mg: 20 mL clear colourless Type I glass vials with Type I grey bromobutyl rubber closures and aluminium secure caps with a green plastic flip-top cover, available in pack size of one vial.
MEROJECT 1 g: 30 mL clear colourless Type I glass vials with Type I grey bromobutyl rubber closures and aluminium secure caps with a grey plastic flip-top cover, available in pack size of one and ten vials.

Holder of Certificate of Registration
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This leaflet was last revised in
16 February 2022

Registration numbers
MEROJECT 500 mg: A42/20.1.1/0280
MEROJECT 1 g: A42/20.1.1/0281

Namibia:
MEROJECT 500 mg: NS2 13/20.1.1/0238

MEROJECT 1 g: NS2 13/20.1.1/0239

Mozambique:
MEROJECT 500: J5669
MEROJECT 1000: J5668

pharma dynamics

PASIËNTINLIGTINGSBLAD

SKEDULERINGSTATUS: S4

MEROJECT 500 mg (steriele poeier vir inspuiting)
MEROJECT 1g (steriele poeier vir inspuiting)
Watervrye meropenem
MEROJECT is suikervry.

Lees hierdie hele inligtingsblad deeglik deur, voordat MEROJECT aan u toegedien word
- Hou hierdie inligtingsblad. Dit mag nodig wees vir u om dit weer te lees.
- Indien u verdere vrae het, vra asseblief u dokter, of u apteker.
- MEROJECT is vir u persoonlik voorgeskryf en u moet nie u medisyne met ander mense deel nie. Dit mag skadelik wees vir hulle, selfs al is hulle simptome dieselfde as u eie.

Wat hierdie inligtingsblad bevat

1. Wat MEROJECT is en waarvoor dit gebruik word
MEROJECT bevat die aktiewe bestanddeel meropenem en behoort aan 'n groep antibiotika, wat karbapenems genoem word.
MEROJECT is 'n antibiotikum wat werk deur bakterieë, wat ernstige infeksies mag veroorsaak, uit te wis. MEROJECT word deur dokters voorgeskryf, om verskeie bakteriële infeksies by volwassenes en kinders, te behandel.
MEROJECT toon 'n antibakteriële werking teen 'n wye verskeidenheid organismes, vir verskillende infeksies, in verskeie gedeeltes van die liggaam.

2. Wat u nodig het om te weet, voordat u MEROJECT gebruik
MEROJECT moet nie aan u toegedien word:
- indien u allergies (hipersensitief) is vir meropenem, of vir enige van die ander bestanddele van MEROJECT nie (kyk afdeling 6)
- indien u allergies (hipersensitief) is vir ander antibiotika, soos penisilliene, kefalosporiene, of karbapenems nie, aangesien u ook allergies mag wees vir MEROJECT.
- indien u swanger is of borsvoed nie (kyk Swangerskap en Borsvoeding).

Waarskuwings en voorsorgmaatreëls
Neem spesiale sorg met MEROJECT:
- indien u erge diarree tydens behandeling ontwikkel, raadpleeg u dokter onmiddellik, aangesien dit 'n simptoom van 'n toestand wat pseudomembraneuse kolitis genoem word en lewensgevaarlik is, mag wees (kyk Moontlike newe-effekte)
- indien u ooit 'n allergiese reaksie vir enige antibiotika ervaar het
- indien u nierprobleme het, aangesien dit nodig mag wees om u MEROJECT dosis aan te pas
- indien u lewerprobleme het, aangesien u dokter dit nodig mag ag, om u toestand noukeurig te monitor
- indien u aan epilepsie ly en valpromied neem (valproïensuur), aangesien MEROJECT nie op dieselfde tydstip toegedien moet word nie (kyk MEROJECT moet nie aan u toegedien word).

U mag positief toets (antiglobulien, of Coombs toets), wat die teenwoordigheid van teenliggaampies wat rooibloedselle mag vernietig, aandui. U dokter sal dit met u bespreek.
U dokter mag toetse aanvra, om u toestand te monitor voor en/of tydens behandeling.

Kinders en adolessente
Veiligheid en doeltreffendheid is nie vasgestel by kinders jonger as 3 maande oud nie. MEROJECT word nie aanbeveel vir kinders jonger as 3 maande oud nie.

Ander medisyne en MEROJECT
Vertel altyd u gesondheidsorgverskaffer indien u enige ander medisyne neem (Dit sluit aanvullende, of tradisionele medisyne in).

MEROJECT mag wisselwerkings met die volgende medisyne toon:
- probenesied (gebruik om jig te behandel) en moet nie gebruik word terwyl u behandel word met MEROJECT nie
- valproïensuur/natriumvalproaat (gebruik om epilepsie te behandel). MEROJECT moet nie gebruik word nie, aangesien dit die werking van natriumvalproaat mag verswak
- warfarien (gebruik om bloedstolling te voorkom), aangesien MEROJECT die werking van warfarien mag versterk en u dokter dit nodig mag ag om u bloedstollingstyd te monitor.

Swangerskap en Borsvoeding
Indien u swanger is, of u baba borsvoed, vermoed dat u swanger is, of 'n baba beplan, raadpleeg asseblief u dokter, apteker, of ander gesondheidsorgverskaffer, voordat u MEROJECT gebruik.
Moet nie MEROJECT ontvang indien u swanger is nie.
Moet nie MEROJECT ontvang, indien u borsvoed nie.

Bestuur en die hantering van masjiene
Daar word nie verwag dat MEROJECT met u vermoë om te bestuur, of masjiene te hanteer, sal inmeng nie. U moet egter omsigtigheid uitoefen voordat hierdie take verrig word, totdat u seker is hoe MEROJECT u aantas.

Belangrike inligting aangaande sommige van die bestanddele van MEROJECT
MEROJECT bevat natrium.
MEROJECT 500 mg: 45 mg natrium/flessie
MEROJECT 1 g: 90 mg natrium/flessie

U dokter sal dit in ag neem indien u op 'n natriumbeperkende dieet is.

3. Hoe om MEROJECT te gebruik
Daar sal nie van u verwag om MEROJECT aan uself toe te dien nie. Dit sal aan u toegedien word deur 'n gekwalifiseerde persoon.

Indien u meer MEROJECT ontvang as wat u behoort
Aangesien 'n gesondheidsorgverskaffer MEROJECT aan u sal toedien, sal hy/sy die dosis beheer. In die geval van oordosering, sal u dokter die oordosering hanteer.

Indien u 'n dosis MEROJECT oorgeslaan het
U dokter sal verseker dat u inspuiting op die aangewese tydsinerval ontvang en behandeling met MEROJECT beheer.

4. Moontlike newe-effekte
MEROJECT kan newe-effekte hê.
Nie alle newe-effekte wat vir MEROJECT aangemeld is, word in hierdie inligtingsblad ingesluit nie. Sou u algemene gesondheid versleg, of indien u enige ongewenste effekte ervaar, terwyl u MEROJECT ontvang, raadpleeg asseblief u dokter, apteker, of gesondheidsorgverskaffer vir advies.

Indien enige van die volgende gebeur, staak die toediening van MEROJECT inspuitings en vertel u dokter:
- swelling van die hande, voete, enkels, lippe, mond, of keel, wat asemhaling mag bemoeilik
- uitslag, of gejeuk.

Hierdie is alles baie ernstige newe-effekte. Indien u dit het, kon u 'n ernstige allergiese reaksie vir MEROJECT gehad het. U mag dringende mediese aandag benodig.

Vertel u dokter onmiddellik, indien u enige van die volgende opmerk:
- apnee (hou op asemhaal, veral wanneer u slaap)
- kneus maklik (trombositopenie)
- Stevens-Johnson-sindroom ('n lewensbedreigende velversteuring, soos 'n rooi-pers uitslag en blase)
- swelling in enige gedeelte van die liggaam
- konvulsies/stuipe
- lae bloedsuiker (hipoglisemie manifestasies)
- sproei in die mond, keel, of vagina
- waterige diarree, bloederige stoelgang en koors ('n ernstige toestand, wat pseudomembraneuse kolitis genoem word).

Hierdie is alles ernstige newe-effekte. U mag dringende mediese aandag benodig.

Vertel u dokter indien u enige van die volgende opmerk:
Newe-effekte wat dikwels voorkom:
- diarree, hardlywigheid, naarheid, braking, abdominale pyn
- bloedtoetse wat toon dat u lewer nie goed funksioneer nie
- abnormale bloedstolling
- rooiheid en inflammasie van die vel, langs 'n aar, warm vel en weefsel rondom die aar, pyn in die ledemate, verdonkering van die vel rondom die aar, pyn en swelling van die are (tromboflebitis)
- seer are wanneer MEROJECT ingespuit word.

Minder algemene newe-effekte:
- anemie, swelling van die limfkliere, abnormale bloedtoetsresultate
- neusbloeding, hoofpyn
- tintelende sensasie in die hande, voete, of lippe ("spelde en naalde")
- veluitslae, of ander veltoestande, soos blosing, galbulte, gejeuk, droë vel tot ernstige veltoestande wat blase en afskilfering veroorsaak
- bloedtoetse wat toon dat die niere nie goed funksioneer nie.

Die volgende newe-effekte is aangemeld, maar die frekwensie van voorkoms is onbekend:
- verminderde tassensasie (gevoelloosheid), koue/blou/seer voete wanneer u rus, seer bene, of voete (simptome van 'n bloedsirkulasie versteuring).

Indien u enige newe-effekte opmerk, wat nie in hierdie inligtingsblad genoem is nie, raadpleeg asseblief u dokter, of apteker.

Aanmelding van newe-effekte
Indien u newe-effekte ervaar, praat met u dokter, apteker of verpleegkundige. U kan ook newe-effekte by SAHPRA via die aanlyn skakel rapporteer: https://www.sahpra.org.za/Publications/Index/8
Deur die aanmelding van newe-effekte, kan u help om meer inligting aangaande die veiligheid van MEROJECT in te win. U kan ook 'n epos direk na die maatskappy stuur, pharmacovigilance@pharmadynamics.co.za om veiligheid van die produk te verseker.

5. Hoe om MEROJECT te bewaar
Bewaar alle medisyne buite die bereik van kinders.
Bewaar teen of benede 25 °C in die oorspronklike houer.

Bewaring na hersamestelling deur u gesondheidsorgverskaffer:

Verdunningsmiddel	Bewaringstemperatuur 25 °C	Bewaringstemperatuur 4 °C
Water vir inspuiting	2 h	12 h
Natriumchloried 0,9 %	4 h	24 h
Dekstrose 5 %	1 h	4 h
Dekstrose 10 %	1 h	2 h
Dekstrose 5 % en Natriumchloried 0,225 %	2 h	4 h
Dekstrose 5 % en Natriumchloried 0,9 %	1 h	4 h
Dekstrose 5 % en Kaliumchloried 0,15%	1 h	6 h
Mannitol 2,5 %	2 h	16 h
Mannitol 10 %	1 h	8 h
Normosol M in Dekstrose 5 %	1 h	8 h
Dekstrose 5 % en Natriumbikarbonaat 0,02 %	1 h	6 h

Moenie die gerekonstitueerde oplossing vries nie.

Alleenlik vir enkelgebruik. Gooi enige ongebruikte gedeelte weg.
Moet nie gebruik na die vervaldatum, wat op die kartonhouer aangedui word, gebruik nie.
Moet nie ongebruikte medisyne in dreine, of rioolstelsels (bv. toilette), weggooi nie.

6. Verpakkingsinhoud en ander inligting
Wat MEROJECT bevat
Die aktiewe bestanddeel is meropenem.
MEROJECT 500 mg: Elke flessie bevat 500 mg watervrye meropenem (as trihidraat).
MEROJECT 1 g: Elke flessie bevat 1000 mg watervrye meropenem (as trihidraat).

Die ander bestanddele is:
De ander bestanddeel is watervrye natriumkarbonaat.

Hoe MEROJECT lyk en die verpakkingsinhoud
MEROJECT is 'n wit tot ligeel kristallyne, steriele poeier vir inspuiting. Die hersaamgestelde oplossing is 'n helder, kleurlose oplossing, feitlik vry van vreemde deeltjies.

MEROJECT 500 mg: 20 mL helder, kleurlose, Tipe I glasflessies met Tipe I grys bromobutiel-rubberstoppers en aluminiumdeksel met 'n groen plastiese opskietprop. Beskikbaar in 'n verpakking wat een flessie bevat.
MEROJECT 1 g: 30 mL helder, kleurlose, Tipe I glasflessies met Tipe I grys bromobutiel-rubberstoppers en aluminiumdeksel met 'n grys plastiese opskietprop. Beskikbaar in 'n verpakking wat een of tien flessies bevat.

Houer van die Registrasiesertifikaat
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Hierdie inligtingsblad was voorheen hersien
16 Februarie 2022

Registrasienommers
MEROJECT 500 mg: A42/20.1.1/0280
MEROJECT 1 g: A42/20.1.1/0281

Namibië:
MEROJECT 500 mg: NS2 13/20.1.1/0238

MEROJECT 1 g: NS2 13/20.1.1/0239

Mosambiek:
MEROJECT 500: J5669
MEROJECT 1000: J5668

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