SUMMARY OF PRODUCT CHARACTERISTICS
Teicoplanine

4.2 Posology and method of administration

Method of administration
TARGOCID® is administered intravenously or intramuscularly, generally once a day; in the case of severe infections, it is recommended that a loading dose should be administered every 12 hours for the first 1-4 days.
The I.V. dose must be administered in the form of a fast injection over 3 to 5 minutes or as an infusion over 30 minutes.
Only the infusion method must be used in neonates.
The administration of teicoplanin by the intraventricular route is not indicated (see sections 4.4; 4.8)

Duration of the treatment
The duration of the treatment depends on the severity of the infection, and the clinical and bacteriological progression. Basically, the treatment must be continued for at least 3 days after the fever and/or clinical symptoms disappear.
In the case of endocarditis or osteomyelitis, it is recommended that the treatment should last for at least 3 weeks.
TARGOCID® must not be administered for more than 4 months.

Posology
In general, the recommended dose is as follows:

Adults:
In mild or moderate infections: the initial dose is 400 mg of I.V. teicoplanin (6 mg/kg body mass), and 200 mg I.V. or I.M. (3 mg/kg body mass) thereafter.

For severe infections (e.g. sepsis and endocarditis, osteomyelitis and septic arthritis, infections in immunocompromised hosts): it must begin with 400 mg I.V. of teicoplanin (or 6 mg/kg body mass) every 12 hours for 1 to 4 days, followed by 400 mg I.V. or I.M. (6 mg/kg body mass) per day thereafter.

In some cases, such as severely infected burns or endocarditis caused by *Staphylococcus aureus*, an I.V. maintenance dose of up to 12 mg/kg body mass may be administered. In endocarditis caused by *Staphylococcus aureus*, satisfactory results have been achieved with teicoplanin in polytherapy. When serum concentrations are controlled in severe infections, the trough levels must be 10 times higher than the MIC or, generally, at least 10 mg/l.

In the treatment of antibiotic-associated diarrhoea caused by *Clostridium difficile*: one oral dose of 200 mg twice a day.

Elderly people:
Basically the same posology as for adults is recommended. In the case of impaired kidney function the relevant recommendations for this case must be followed (See below).

Children:
Above the age of 2 months, in severe infections and in neutropenic children the recommended dose is 10 mg/kg every 12 hours for the first 3 doses (0.12 and 24 h); a single I.V. or I.M. dose of 10 mg/kg/day is administered thereafter.

In moderate infections, the recommended dose is 10 mg/kg every 12 hours for the first 3 doses; a single I.V. or I.M. dose of 6 mg/kg/day is administered thereafter.

Newborns:
The recommended dose for the treatment of infections caused by gram-positives is 16 mg/kg the first day and 8 mg/kg/day thereafter.
The I.V. dose must be infused over 30 minutes.

Patients with kidney disease:
Generally, it is not necessary to reduce the dose until the five doses have been given. Therefore, from this dose onwards:

In moderate kidney failure, with a creatinine clearance of between 40 and 60 ml/min, the dose of teicoplanin must be reduced to half, either administering a full dose every 2 days or administering half of said dose each day.

In cases of severe kidney failure, with a creatinine clearance of less than 40 ml/min, or in haemodialysed patients, the dose of teicoplanin must be reduced to one third of the dose, either administering a full dose every three days or administering a third of the dose each day. Teicoplanin is not eliminated by haemodialysis.

Intraperitoneal administration due to peritonitis in patients in continuous ambulatory peritoneal dialysis (CAPD):
In peritonitis due to gram-positives in CAPD patients, the recommended dose is 20 mg/l per bag during the first week, 20 mg/l in alternate bags during the second week and 20 mg/l in the night-time bag during the third week; feverish patients must also take an I.V. loading dose of 400 mg of teicoplanin.

Teicoplanin remains stable in solutions for peritoneal dialysis (1.36% or 3.86% dextrose). These solutions must not be kept for more than 24 hours.

Combined treatment:
It is recommended that the treatment be combined with an appropriate antibacterial agent when the infection requires a maximum antibacterial activity (e.g. staphylococcal endocarditis) and when it cannot be ruled out that there is a mixed infection with gram-negatives (e.g. empirical treatment of fever in a neutropenic patient).

Prophylaxis of endocarditis caused by gram-positives in dental surgery and in patients with heart valve disease:
To induce anaesthesia, 400 mg (6 mg/kg) of I.V. teicoplanin.

4.3 Contraindications

TARGOCID® must not be used if there is known hypersensitivity to the active substance.

4.4 Special warnings and precautions for use

Teicoplanin must be administered with caution in patients with known hypersensitivity to vancomycin, as crossed hypersensitivity reactions may occur. However, a prior history of "red man syndrome" with vancomycin is not a contraindication to the use of teicoplanin.

Special precautions must be taken when administering teicoplanin in: long term treatments, patients with kidney failure; patients who require concomitant treatment with ototoxic and/or nephrotoxic drugs in whom it is recommended that regular haematology, liver and kidney function tests are carried out.

Serial auditory function tests should be undertaken in the following circumstances:
•Prolonged treatment in patients with renal insufficiency.
•Concurrent and sequential use of other medicinal products which may have neurotoxic and/or nephrotoxic and/or ototoxic properties. These include aminoglycosides, colistin, amphotericin B, ciclosporin, cisplatin,

furosemide and ethacrynic acid. However, there is no evidence of synergistic toxicity in combinations with teicoplanin.
Dosage must be adapted in patients with renal impairment (see 4.2).

Superinfection: As with other antibiotics, the use of teicoplanin, especially if prolonged, may result in overgrowth of non-susceptible organisms. Repeated evaluation of the patient's condition is essential. If superinfection occurs during therapy, appropriate measures should be taken.

In some cases of intraventricular use, seizures have been reported (see sections 4.2;4.8)

4.5 Interaction with other medicinal products and other forms of interaction

Teicoplanin and aminoglycoside solutions are incompatible and must not be mixed for injection; however, they are compatible in dialysis fluid and may be freely used in the treatment of CAPD-related peritonitis. Teicoplanin should be used with care in conjunction with or sequentially with other drugs with known nephrotoxic or ototoxic potential. These include aminoglycosides, amphotericin B, ciclosporin, and furosemide (see section 4.4).

4.6 Pregnancy and lactation

There are no adequate data from the use of teicoplanin in pregnant women. Studies in animals have shown reproductive toxicity at high doses (see section 5.3). At high doses in rats there was an increased incidence of stillbirths and neonatal mortality. The potential risk for humans is unknown. Teicoplanin should not be used during pregnancy unless clearly necessary.

It is not known whether teicoplanin is excreted in human breast milk. The excretion of teicoplanin in milk has not been studied in animals. A decision on whether to continue/discontinue breast-feeding or to continue/discontinue therapy with teicoplanin should be made taking into account the benefit of breast-feeding to the child and the benefit of teicoplanin therapy to the mother.

4.7 Effects on ability to drive and use machines

Teicoplanin can cause dizziness and headaches. The ability to drive or use machines may be affected. Patients experiencing these undesirable effects should not drive or use machines.

4.8 Undesirable effects

Although causal relationships have not been established in every case, the following undesirable effects have been reported with the administration of teicoplanin:

System organ class	**Very common (≥1/10)**	**Common (≥1/100 to <1/10)**	**Uncommon (≥1/1,000 to <1/100)**	**Rare (≥1/10,000 to <1/1,000)**	**Very rare (<1/10,000)**	**Frequency not known (cannot be estimated from available data)***
Infections and infestations				Abscess		Injection site abscess, superinfection (overgrowth of non-susceptible organisms)
Blood and the lymphatic system disorders			Eosinophilia, thrombocytopenia, leucopenia			Agranulocytosis, neutropenia

System organ class	Very common (≥1/10)	Common (≥1/100 to <1/10)	Uncommon (≥1/1,000 to <1/100)	Rare (≥1/10,000 to <1/1,000)	Very rare (<1/10,000)	Frequency not known (cannot be estimated from available data)*
Immune system disorders			Anaphylactic reaction (anaphylaxis)			Anaphylactic shock
Nervous system disorders			Dizziness, headache			Seizures with interventricular use
Ear and labyrinth disorders			Deafness (mild hearing loss), tinnitus, vestibular disorder			
Vascular disorders			Phlebitis			Thrombophelebitis
Respiratory, thoracic and mediastinal disorders			Bronchospasm			
Gastrointestinal disorders			Nausea, vomiting, diarrhoea			
Skin and subcutaneous tissue disorders		Erythema (redness), rash (skin rash), pruritus				Uritcaria, angiodema, dermatitis exfoliative (exfoliative dermatitis), toxic epidermal necrolysis, erythema multiforme, Stevens-Johnson syndrome
Renal and urinary disorders						Renal failure
General disorders and administration site conditions		Pain, pyrexia (fever),				Chills (rigors)
Investigations			Transaminases abnormal (transient abnormality of transaminases), blood alkaline phosphatase abnormal (transient abnormality of alkaline phosphatase), blood creatinine increased (transient rise of serum creatinine)			

* postmarketing experience.

4.9 Overdose

Cases have been reported of accidental administration of excessive doses to paediatric patients. In one case agitation occurred in a 29-day-old newborn who had been administered 400 mg I.V. (95 mg/kg).

Management:

Treatment of an overdose should be symptom-specific.

Teicoplanin is not removed by haemodialysis and only slowly by peritoneal dialysis.