Tigetral Injection

ٹائی جیٹرال انجکشن

(ٹائیجی سائیکلین فار انجکشن یو ایس پی)

(Tigecycline for Injection USP)

WARNING

An increase in all-cause mortality has been observed in Tigecycline-treated patients versus comparator. The cause of this mortality risk difference of 0.6% (95% CI 0.1, 1.2) has not been established. Tigecycline should be reserved for use in situations when alternative treatments are not suitable.

COMPOSITION:
Each Lyophilized Vial contains:
Tigecycline USP ... 50mg. [USP Specs.]

DESCRIPTION: Tigecycline for Injection, USP is a tetracycline class antibacterial for intravenous infusion. The chemical name of Tigecycline is (4S,4aS,5aR,12aS)-9-[2-(tert-butylamino)acetamido]4,7-bis(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11dioxo-2-naphthacenecarboxamide.

CLINICAL PHARMACOLOGY:
Mechanism of Action: Tigecycline is a tetracycline class antibacterial. It inhibits protein translation in bacteria by binding to the 30S ribosomal subunit and blocking entry of amino-acyl tRNA molecules into the A site of the ribosome. This prevents incorporation of amino acid residues into elongating peptide chains.

PHARMACOKINETICS: Intravenous infusions of Tigecycline were administered over approximately 30 to 60 minutes. C_{max} and AUC 0-24h for 50 mg every 12 h as a 30 min infusion are 0.87mcg/ml and 4.7mcg•h/ml, respectively.
Distribution: The steady-state volume of distribution of Tigecycline averaged 500 to 700 L (7 to 9 L/kg), indicating Tigecycline is extensively distributed beyond the plasma volume and into the tissues. Following the administration of Tigecycline 100 mg followed by 50mg every 12 hours to 33 healthy volunteers, the Tigecycline AUC0-12h (134mcg•h/ml) in alveolar cells was approximately 78-fold higher than the AUC0-12h in the serum, and the AUC0-12h (2.28 mcg•h/mL) in epithelial lining fluid was approximately 32% higher than the AUC0-12h in serum.
Metabolism: Tigecycline is not extensively metabolized.
Excretion: The recovery of total radioactivity in feces and urine following administration of ^{14}C-Tigecycline indicates that 59% of the dose is eliminated by biliary/fecal excretion, and 33% is excreted in urine. Approximately 22% of the total dose is excreted as unchanged Tigecycline in urine.

INDICATIONS:
Complicated Skin and Skin Structure Infections: Tigetral IV Injection is indicated in patients 18 years of age and older for the treatment of complicated skin and skin structure infections.
Complicated Intra-abdominal Infections: Tigetral IV Injection is indicated in patients 18 years of age and older for the treatment of complicated intra-abdominal infections.
Community-Acquired Bacterial Pneumonia: Tigetral IV Injection is indicated in patients 18 years of age and older for the treatment of community-acquired bacterial pneumonia.

DOSAGE AND ADMINISTRATION:
Recommended Adult Dosage: The recommended dosage regimen for **Tigetral IV Injection** is an initial dose of 100mg, followed by 50mg every 12 hours. Intravenous infusions of **Tigetral IV Injection** should be administered over approximately 30 to 60 minutes every 12 hours.
The recommended duration of treatment with **Tigetral IV Injection** for complicated skin and skin structure infections or for complicated intra-abdominal infections is 5 to 14 days. The recommended duration of treatment with **Tigetral IV Injection** for community-acquired bacterial pneumonia is 7 to 14 days.
Dosage In Patients With Hepatic Impairment: In patients with severe hepatic impairment (Child Pugh C), the initial dose of **Tigetral IV Injection** should be 100mg followed by a reduced maintenance dose of 25mg every 12 hours.
Dosage In Pediatric Patients: Avoid use of **Tigetral IV Injection** in pediatric patients unless no alternative antibacterial drugs are available. Under these circumstances, the following doses are suggested:
- Pediatric patients aged 8 to 11 years should receive 1.2mg/kg of **Tigetral IV Injection** every 12 hours intravenously to a maximum dose of 50mg of **Tigetral IV Injection** every 12 hours.
- Pediatric patients aged 12 to 17 years should receive 50mg of **Tigetral IV Injection** every 12 hours.

DIRECTIONS FOR RECONSTITUTION:
Each vial of Tigecycline for injection should be reconstituted with 5ml of 0.9% Sodium Chloride Injection, USP, 5% Dextrose Injection, USP, or Lactated Ringer's Injection, USP to achieve a concentration of 10mg/ml of Tigecycline. (Note: Each vial contains a 6% overage.

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Thus, 5ml of reconstituted solution is equivalent to 50mg of the drug.) The vial should be gently swirled until the drug dissolves.
Reconstituted solution must be transferred and further diluted for intravenous infusion. Withdraw 5ml of the reconstituted solution from the vial and add to a 100ml intravenous bag for infusion (for a 100mg dose, reconstitute two vials; for a 50mg dose, reconstitute one vial). The maximum concentration in the intravenous bag should be 1mg/ml. The reconstituted solution should be yellow to orange in color; if not, the solution should be discarded. Once reconstituted, Tigecycline for injection may be stored at room temperature (not to exceed 25°C/77°F) for up to 24 hours (up to 6 hours in the vial and the remaining time in the intravenous bag). If the storage conditions exceed 25°C (77°F) after reconstitution, Tigecycline should be used immediately. Alternatively, Tigecycline for injection mixed with 0.9% Sodium Chloride Injection, USP or 5% Dextrose Injection, USP may be stored refrigerated at 2° to 8°C (36° to 46°F) for up to 48 hours following immediate transfer of the reconstituted solution into the intravenous bag.

CONTRAINDICATIONS: Tigecycline for injection is contraindicated for use in patients who have known hypersensitivity to Tigecycline. Reactions have included anaphylactic reactions.

WARNINGS AND PRECAUTIONS:
All-Cause Mortality: An increase in all-cause mortality has been observed.
Anaphylactic Reactions: Anaphylactic reactions have been reported with nearly all antibacterial agents, including Tigecycline, and may be life-threatening. Tigecycline is structurally similar to Tetracycline class antibiotics and should be avoided in patients with known hypersensitivity to Tetracycline-class antibiotics.
Hepatic Adverse Effects: Increases in total bilirubin concentration, prothrombin time and transaminases have been seen in patients treated with Tigecycline. Isolated cases of significant hepatic dysfunction and hepatic failure have been reported in patients being treated with Tigecycline.
Pancreatitis: Acute pancreatitis, including fatal cases, has occurred in association with Tigecycline treatment. The diagnosis of acute pancreatitis should be considered in patients taking Tigecycline who develop clinical symptoms, signs, or laboratory abnormalities suggestive of acute pancreatitis.
Clostridium difficile Associated Diarrhea: *Clostridium difficile* associated diarrhea (CDAD) has been reported with use of nearly all antibacterial agents, including Tigecycline, and may range in severity from mild diarrhea to fatal colitis.
Tooth Discoloration: The use of Tigecycline during tooth development (last half of pregnancy, infancy, and childhood to the age of 8 years) may cause permanent discoloration of the teeth (yellow-gray-brown).
Fetal Harm: Tigecycline may cause fetal harm when administered to a pregnant woman. If the patient becomes pregnant while taking Tigecycline, the patient should be apprised of the potential hazard to the fetus.

PREGNANCY AND LACTATION:
Pregnancy: There are no adequate and well-controlled studies of Tigecycline in pregnant women. Tigecycline should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.
Lactation: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when Tigecycline is administered to a nursing woman.

SIDE EFFECTS:
- All-Cause Mortality
- Mortality Imbalance and Lower Cure Rates in Hospital-Acquired Pneumonia
- Hepatic Adverse Effects

DRUG INTERACTIONS:
Warfarin: Prothrombin time or other suitable anticoagulation test should be monitored if Tigecycline is administered with warfarin.
Oral Contraceptives: Concurrent use of antibacterial drugs with oral contraceptives may render oral contraceptives less effective.

OVERDOSE:
Intravenous administration of Tigecycline at a single dose of 300 mg over 60 minutes in healthy volunteers resulted in an increased incidence of nausea and vomiting.

INSTRUCTIONS:
Store below 30°C. Protect from heat, light and moisture. Keep out of the reach of children.

PRESENTATION:
Tigetral IV Injection 50mg is available as one vial of lyophilized powder along with ampoule of 5ml Celine 09%.

ہدایات: ۳۰ ڈگری سینٹی گریڈ سے کم درجہ حرارت پر رکھیں۔ گرمی، روشنی اور نمی سے بچائیں۔ بچوں کی پہنچ سے دور رکھیں۔

Manufactured by:
NABIQASIM INDUSTRIES (PVT.) LTD.
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Rev: 01-22/0