

Dalbavancin

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Pharma Today

- This edition of the Bulletin is about a newer antibiotic Dalbavancin, and its action against bacterial infections.
- Dalbavancin is a long-acting second-generation lipoglycopeptide antibiotic with activity against most gram-positive bacteria, with excellent tissue and bone penetration,
- It was initially approved by the Food and Drug Administration for treatment of acute bacterial skin and soft tissue infections. Since then, Dalbavancin's role has expanded to off-label indications such as bone and articular infections, endocarditis, and bacteremia
- Dalbavancin is used for confirmed or suspected infections caused by gram-positive organisms which are resistant to first line antibiotics.

Expected side effects

Gastrointestinal disorders	Abdominal pain, Gastrointestinal Hemorrhage
General disorders and administration site conditions	Infusion-related reactions
Hepatobiliary disorders	Hepatotoxicity
Immune system disorders	Anaphylactic reaction
Metabolism and nutrition disorders	Hypoglycemia
Nervous system disorders	Dizziness
Skin and subcutaneous tissue disorders	Rash, urticarial
Investigations	Blood alkaline phosphatase increased

Discussion

- Dalbavancin inhibits bacterial cell wall biosynthesis, disrupts the bacterial cell wall, leading to cell death
- Recent outcome studies have demonstrated that a Gram-positive infection may increase the hospital length of stay from 7 to 28 days.
- Treatment with dalbavancin simplifies the antibiotic regimen and allows for early discharge from the hospital and reduction in hospital length of stay.
- For complicated soft tissue infections, osteomyelitis, and spinal infections, the cure rate was 91%
- Dalbavancin is not cost-effective or affordable for most patients, with the current market price ranging from ₹18,000 to ₹33,000 per vial, respectively
- In patients treated with dalbavancin, serious hypersensitivity and skin reactions have been reported.