

Dalbavancin in High-Risk Patients: Real-World Safety with Zero 30-Day Mortality

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INTRODUCTION

- Dalbavancin is a long-acting lipoglycopeptide with a half-life of approximately 14 days.
- Medical Use: FDA-approved for acute bacterial skin and skin structure infections (ABSSSI), with expanding off-label use in vulnerable populations like persons who inject drugs (PWID).
- Data Availability: Real-world safety and effectiveness data in high-risk groups are limited.

OBJECTIVES

- Evaluate clinical outcomes of dalbavancin at a safety-net hospital.
- Emphasize safety (30-day mortality), adherence to dosing, and 30-day infection-related readmission.
- Explore risk factors for failure, including PWID status, bacteremia, and metastatic infection.

METHODS

- Design: Retrospective cohort of adults receiving dalbavancin for gram-positive infections (May 2023–March 2025). Regimen: 1500 mg IV once; optional second 1500 mg on day 8.
- Primary outcomes: 30-day infection-related readmission, 30-day mortality, treatment completion.
- Secondary: Risk factors for failure (PWID, bacteremia, metastatic complications).
- Statistics: Proportions with 95% CI; Fisher’s exact test for categorical comparisons.

RESULTS

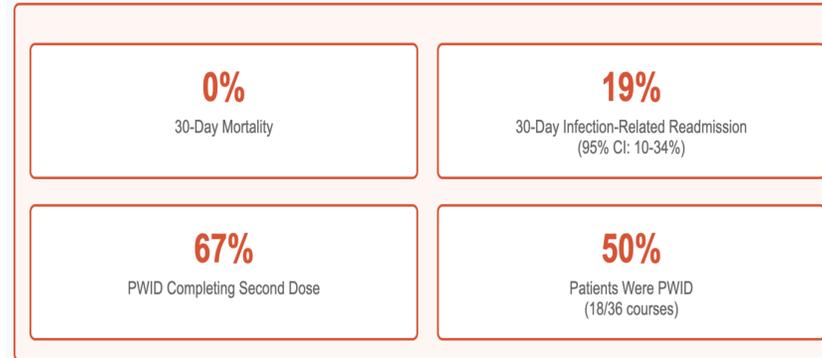


Table 1. Indications for Dalbavancin

Category	N	%
Bacteremia + metastatic inf.	11	32%
Bacteremia only	1	3%
OM/SA without bacteremia	9	25%
Endocarditis	1	3%
SSTI MRSA/MSSA	4	11%
SSTI culture-negative	2	6%
Other Gram-positive infections	4	11%
Total	34*	100%

*Two patients received dalbavancin twice during the study period.

Table 2. 30-Day Infection-Related Readmission by Category

Category	N	Readm.	Rate (%)	95% CI
Bacteremia + metastatic inf.	11	4	36%	15–65%
Bacteremia only	1	0	0%	0–79%
OM/SA without bacteremia	9	2	22%	6–55%
Endocarditis	1	0	0%	0–79%
SSTI MRSA/MSSA	4	1	25%	5–70%
SSTI culture-negative	2	0	0%	0–66%
Other Gram-positive infections	4	0	0%	0–49%

DISCUSSION

Key Findings:

- Excellent safety profile with **zero 30-day mortality**
- Challenges assumptions about PWID adherence: **67% completed two-dose regimens**
- 19% readmission rate compares favorably to historical outcomes in similar high-risk populations

Clinical Implications:

- Higher failure rates in PWID (33% vs. 6%) and bacteremic patients (29% vs. 14%) underscore multifactorial treatment success
 - Failures in bacteremia with metastatic foci likely reflect the need for source control/surgical intervention rather than antimicrobial inadequacy
- Limitations:** Small sample size, potential selection bias, single-center experience

CONCLUSION

Dalbavancin represents a safe and feasible harm-reduction strategy for invasive gram-positive infections in vulnerable populations with barriers to traditional prolonged IV therapy.

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