

Clinical Outcomes of Off-label Dalbavancin Use within an Outpatient Antibiotic Therapy Program (OPAT) Rita Igwilo-Alaneme, MD¹; Hongkai Bao, PharmD²; Mani Kahn, MD³; Priya Nori, MD⁴

¹Department of Medicine, ²Department of Pharmacy; ³Department of Orthopedic Surgery, ⁴Department of Medicine (Infectious Diseases) and Orthopedic Surgery, Montefiore Medical Center, Bronx, NY

BACKGROUND

- Dalbavancin is approved for the treatment of acute bacterial skin and skin structure infections (ABSSSI).
- There is less data on outcomes of off-label use of dalbavancin for complex orthopedic infections.
- The objective of this study was to analyze clinical outcomes of deep-seated infections treated with IV dalbavancin as an alternative to daily, long-term IV antibiotics post hospital discharge.

OUTCOMES OF INTEREST

- Primary outcome was 90-day infection recurrence
- Secondary outcomes:
 - ~ Hardware retention rates
 - ~ 90-day mortality
 - ~ Adverse events
 - ~ Characteristics of antibiotic regimens

METHODS

Study Design

- Observational, retrospective case series conducted at an urban health system in the Bronx, New York between January 2020 and February 2022
- List of patients obtained via outpatient parenteral antibiotic therapy (OPAT) program insurance claims

Inclusion Criteria	Exclusion Criteria
 ≥18 years old 	 Received
 Received at least one dose of dalbavancin for off-label indications 	dalbavancin for ABSSI

- Data collected included demographics, comorbidities, infection type, organism, treatment setting, details of dalbavancin dosing and surgical management
- IRB approval waived

RESULTS

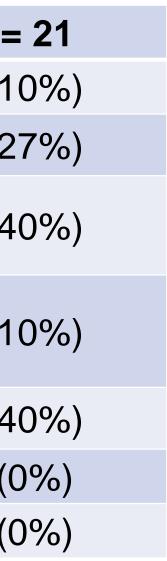
Table 1 Dationt Summary Infection Characteristics Treatment		Table 2. Outcomes		
Table 1. Patient Summary, Infection Characteristics, Treatme			N =	
	N = 21	90-d infection recurrence	2 (10	
Male, n (%)	14 (67%)	Hardware retention at dalbavancin initiation	5 (27	
Age, years, median	51	Eventual hardware removal due to	2 (40	
Race		recurrence within 90 days		
Hispanic	13 (62%)	Eventual hardware removal due to	1 (10	
Black	2 (10%)	recurrence within 180 days		
White Charles in Comparishing the days are adjusted	6 (29%)	Hardware retention without recurrence	2 (40	
Charlson Comorbidity Index, median	1	90-d mortality	0 (00	
Infection type	0 (200/)	Adverse effects	0 (0	
Hardware infection	8 (38%)	 DISCUSSION Most common reasons for dalbavancin use were persistence infection after initial therapy, difficulty with vancomycin dosin line access, and intravenous drug use history. Our study showed high rates of infection cure with dalbavan hardware infections overall, the 90-d cure rate was 75% (6 d patients), and 100% (3 of 3 patients) when combined with su management. For all other infections, there were no recurre Limitations include a small number of patients, the observation nature without a comparator group, the lack of standardized regimens, and unclear contribution from ongoing oral antibide 		
Spinal abscess	3 (14%)			
Osteomyelitis	4 (19%)			
Complex soft tissue infection ¹	5 (24%)			
Septic arthritis	1 (5%)			
Hardware infection (n=8)				
Prosthetic device removal prior to dalbavancin treatment	3			
Prosthetic device retention prior to dalbavancin treatment	5			
MSSA	7 (33%)			
MRSA	6 (29%)	CONCLUSION		
Receipt of antibiotics prior to dalbavancin	21 (100%)	 Use of dalbavancin for hardware infections, osteomyelitis, complicated soft tissue infections and spinal infections is as with favorable cure rates, safety profile and tolerability 		
Concomitant antibiotic treatment (along with dalbavancin)	6 (29%)			
Doses of Dalbavancin (milligrams)		 For hardware infections, source control is essentia 	I for clinica	
1000mg followed by 500mg 1 week apart	13 (62%)	 Substantial cost-saving implications through reduction in holength of stay and readmissions Large, multicenter studies and randomized controlled trials to establish efficacy, tolerability, standardized dosing, and reductions 		
1500mg followed by 1500mg 1 week apart	5 (24%)			
Received antibiotics after dalbavancin completion	11 (52%)			
Location: Outpatient/ER	20 (95%) / 1 (5%)	concomitant antibiotics		

¹Silicone implanted-related cellulitis (1), deep surgical wound infection (1), bullous erysipelas (1), complex fracture with cellulitis (1), hidradenitis suppurativa (1)

Contact Information Rita Igwilo-Alaneme, MD **Montefiore Medical Center Department of Medicine** 600 E 233rd Street, Bronx, NY 10466 rigwilo@montefiore.org

REFERENCES

1. Wunsch S, Krause R, Valentin T, et al. Multicenter clinical experience of real life Dalbavancin use in gram-positive infections. Int J Infect Dis. 2019;81:210-214. https://doi.org/10.1016/j.ijid.2019.02.01 2. Malabarba A, Goldstein BP Origin, structure, and activity in vitro and in vivo of dalbavancin. J Antimicrob Chemother 2005;55: ii15-20. https://doi.org/10.1093/jac/dki008



ice of sing and

ancin. For of 8 surgical rences. ational ed dosage piotics.

ssociated

ical cure ospital

will serve role for