Midline vs. Peripherally Inserted Central Catheter for Outpatient Parenteral Antimicrobial Therapy (OPAT)

Data on 825 PICCs and 1,999 Midlines placed for OPAT from January 2017 through November 2023

	Midline	PICC		Adjusted Hazard Ratio	95% CI
Complication Rates Overall					
Major Complications	0.8%	3.4%		0.46	0.23 - 0.91
Minor Complications	10.3%	13.8%		1.07	0.83 - 1.38
Device Failure	9.6%	12.1%		1.26	0.96 - 1.65
Complication Rates in Devices with Dwell ≤ 14 Days					
Major Complications	0.9%	5.3%		0.29	0.12 - 0.68
Device Failure	11.4%	17.1%		0.79	0.56 - 1.12
Complication Rates in Devices with Dwell > 14 Days					
Major Complications	0.6%	2.3%		0.42	0.13 - 1.40
Device Failure	5.9%	9.2%		1.02	0.64 - 1.61

Midlines appear to be safe alternative to PICCs for OPAT, especially for treatment durations of 14 or fewer days.



