



Impact Of Hospital Stay Duration On Complications, Readmissions, And Reoperations Following Immediate Implant-based Breast Reconstruction

Henry Diamond-Pott, BA¹, Diana S. Shaari, BA¹, Sheuli Chowdhury, MD¹, Peter W. Henderson, MD, MBA¹

1. Division of Plastic and Reconstructive Surgery, Icahn School of Medicine at Mount Sinai (New York, NY)

BACKGROUND

- Immediate implant-based breast reconstruction is increasingly performed with shorter hospital stays
- Early discharge may reduce healthcare utilization, but concerns remain regarding postoperative safety
- Limited large data exist evaluating outcomes based on discharge timing

OBJECTIVE

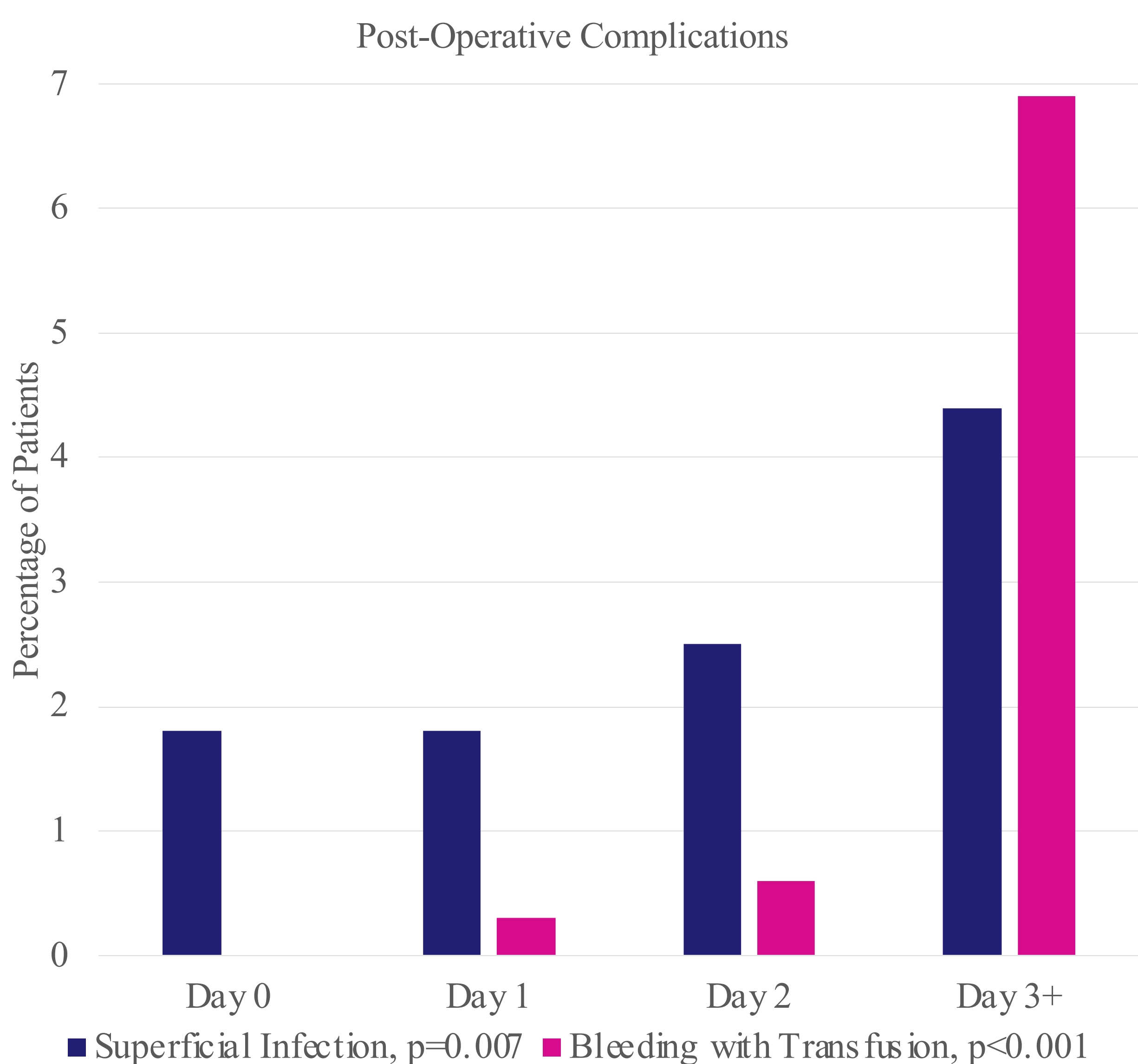
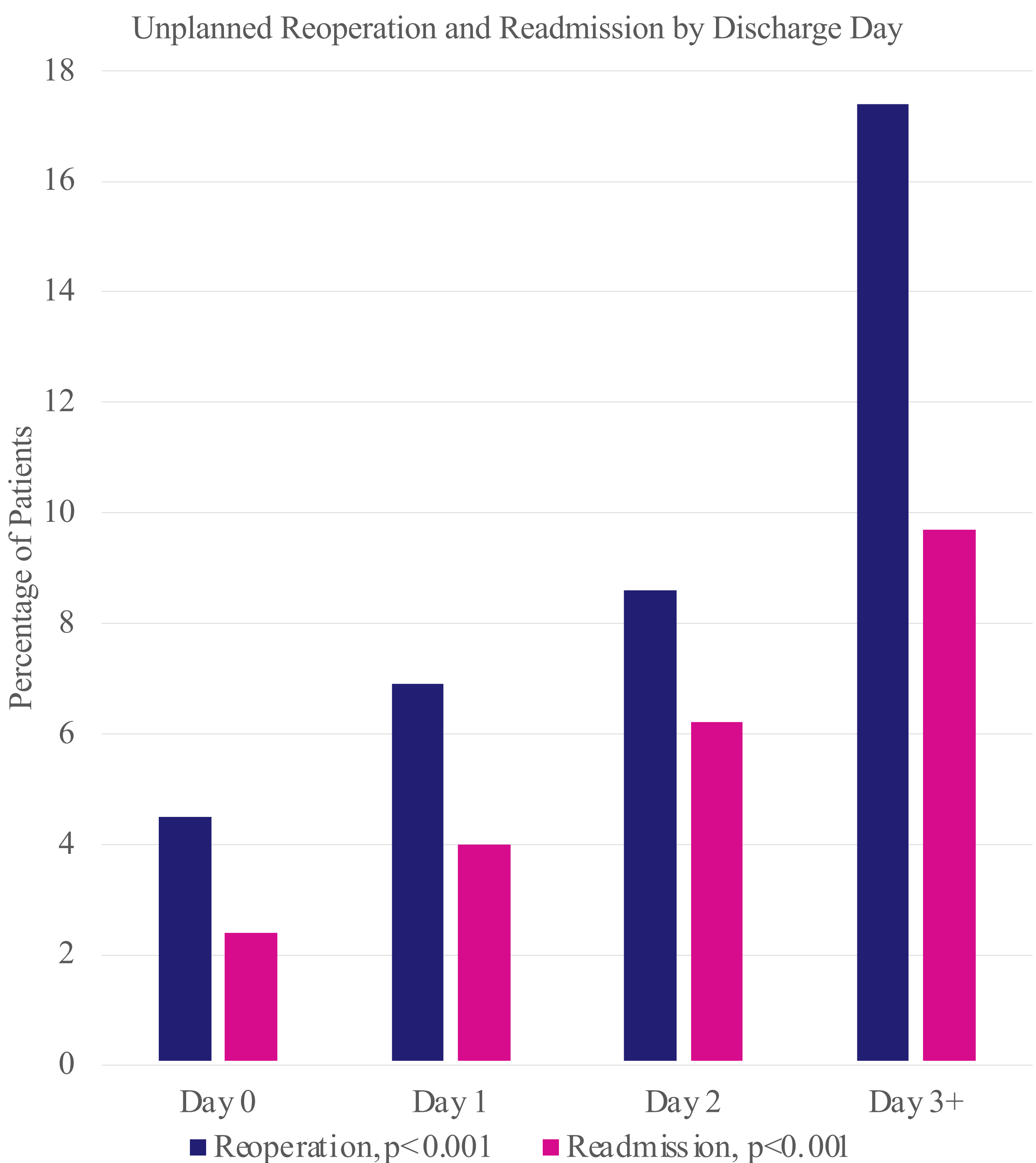
- Assess the association between discharge timing and postoperative complications.
- Evaluate differences in unplanned reoperations and hospital readmissions across discharge groups

METHODS

- Retrospective analysis of NSQIP database (2015–2020) identifying patients undergoing mastectomy with immediate implant-based reconstruction
- Patients stratified by discharge timing: same-day, post-op Day 1, Day 2, Day ≥ 3
- Outcomes analyzed using chi-square tests and multivariable logistic regression ($p < 0.05$)

RESULTS

Baseline Characteristics by Discharge Timing				
	Day 0	Day 1	Day 2	Day 3+
N (%)	616 (11.3)	3094 (56.5)	1374 (25.1)	390 (7.1)
Mean Age	50.4	50.9	48.7	49.4
Mean BMI	26.4	26.7	27.4	28.1



Multivariable Analysis of Reoperation and Readmission by Discharge Timing (Reference: Same-Day Discharge)			
	Day 1	Day 2	Day 3+
Unplanned Reoperation			
OR	0.56	0.85	2.36
P-Value	0.012	0.229	<0.001
Unplanned Readmission			
OR	0.40	0.63	1.61
P-Value	0.002	0.003	0.030

CONCLUSIONS

- Later discharge after immediate implant-based breast reconstruction is associated with **progressively higher rates of complications, reoperation, and readmission**
- Discharge on postoperative day ≥ 3 independently increased odds of adverse outcomes, while **same-day and day 1 discharge had the lowest risk**
- **Prolonged hospitalization may reflect increased patient risk** rather than provide protection

CLINICAL RELEVANCE

- Same-day and post-op day 1 discharge are **safe for appropriately selected patients** and can support efficient care pathways
- **Delayed discharge identifies a higher-risk population** that may benefit from closer monitoring and targeted management after surgery
- Discharge timing can aid in **risk stratification and resource optimization**