

Background

- Infection is one of the most significant concerns after prosthetic breast reconstruction.
- Patients, especially genetic mutation carriers, often undergo mastectomy and reconstruction concurrently with risk-reducing gynecologic operations (BSO, TAH).
- Studies suggest longer OR times and increased OR traffic can increase infection risk.
- Unknown impact of these concurrent procedures on SSI risk after tissue expander (TE) or implant placement.

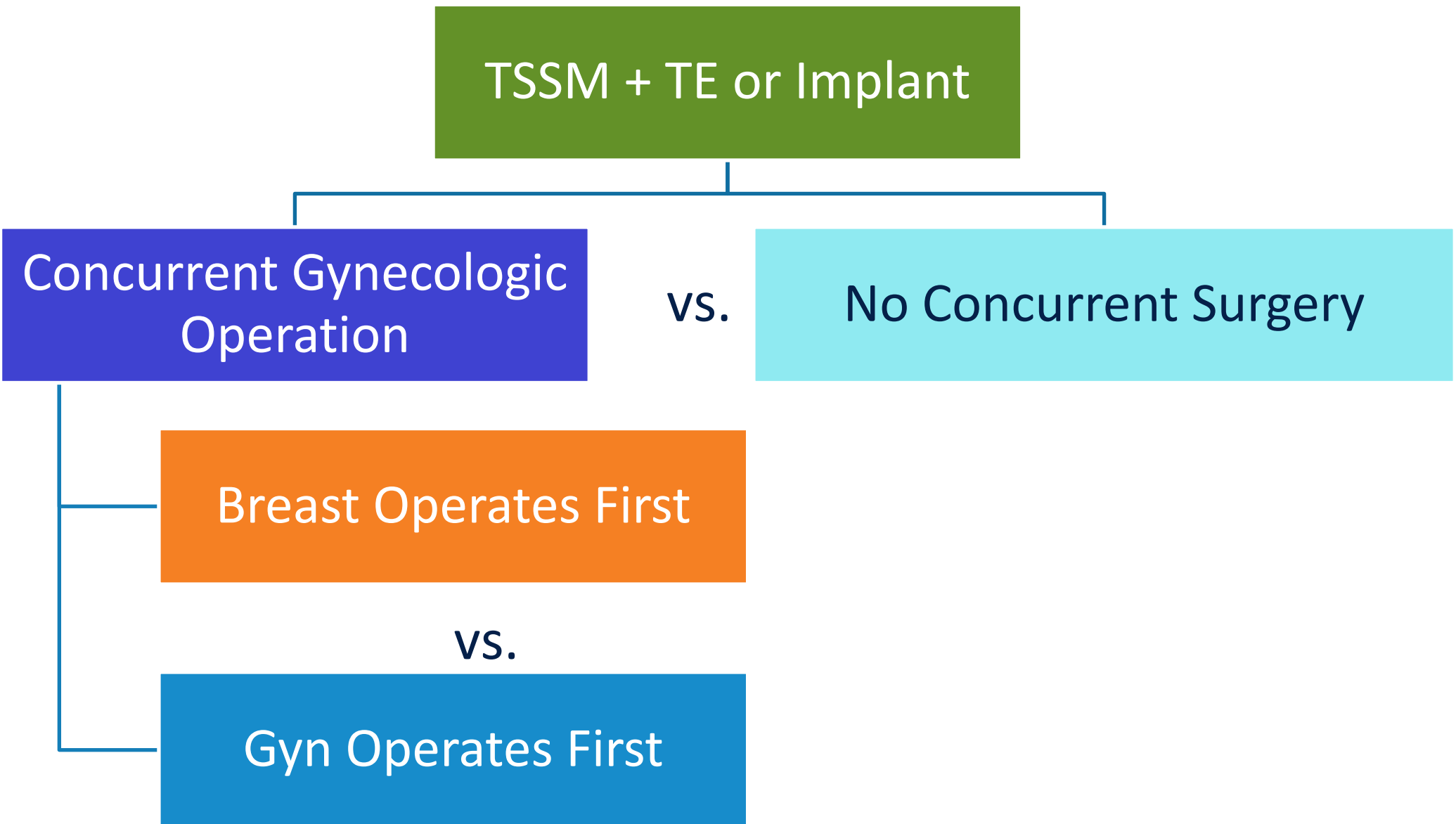
Aim

Evaluate the impact of concurrent gynecologic operations and surgery sequence on SSI rates after prosthetic breast reconstruction.

Methods

- **Retrospective review:** all patients who underwent mastectomy with tissue expander or implant placement between January 2018-January 2023
- ≥ 6 months follow-up

Figure 1. Comparison groups



- **Primary outcomes:** minor infection (oral antibiotics only), major infection (IV antibiotics or surgery) and reconstruction loss.

Results

Demographics

- 424 total patients, and 730 breasts included (Figure 2)
 - 31 patients (61 breasts) had concurrent surgery
 - 15 patients (30 breasts) had surgery with Gyn first
- Demographics were similar between the concurrent surgery and no concurrent surgery groups (Table 1)
- Demographics were similar between the Gynecology first and Breast first groups (Table 2)

Table 1. Demographics: No Concurrent Surgery vs. Concurrent Surgery

	Concurrent Gyn Surgery	No Concurrent Surgery	p
Age	44 ± 7	46 ± 10	0.12
BMI	23 ± 3	24 ± 5	0.39
DM	2 (6)	13 (3)	0.36
Smoking	1 (3)	6 (2)	0.48
Chemotherapy			
Neoadjuvant	13 (42)	139 (35)	0.47
Adjuvant	9 (29)	134 (34)	0.57
Radiation			
Pre	1 (3)	17 (4)	0.77
Post	6 (19)	66 (17)	0.72

Figure 2. Breasts in Each Comparison Group

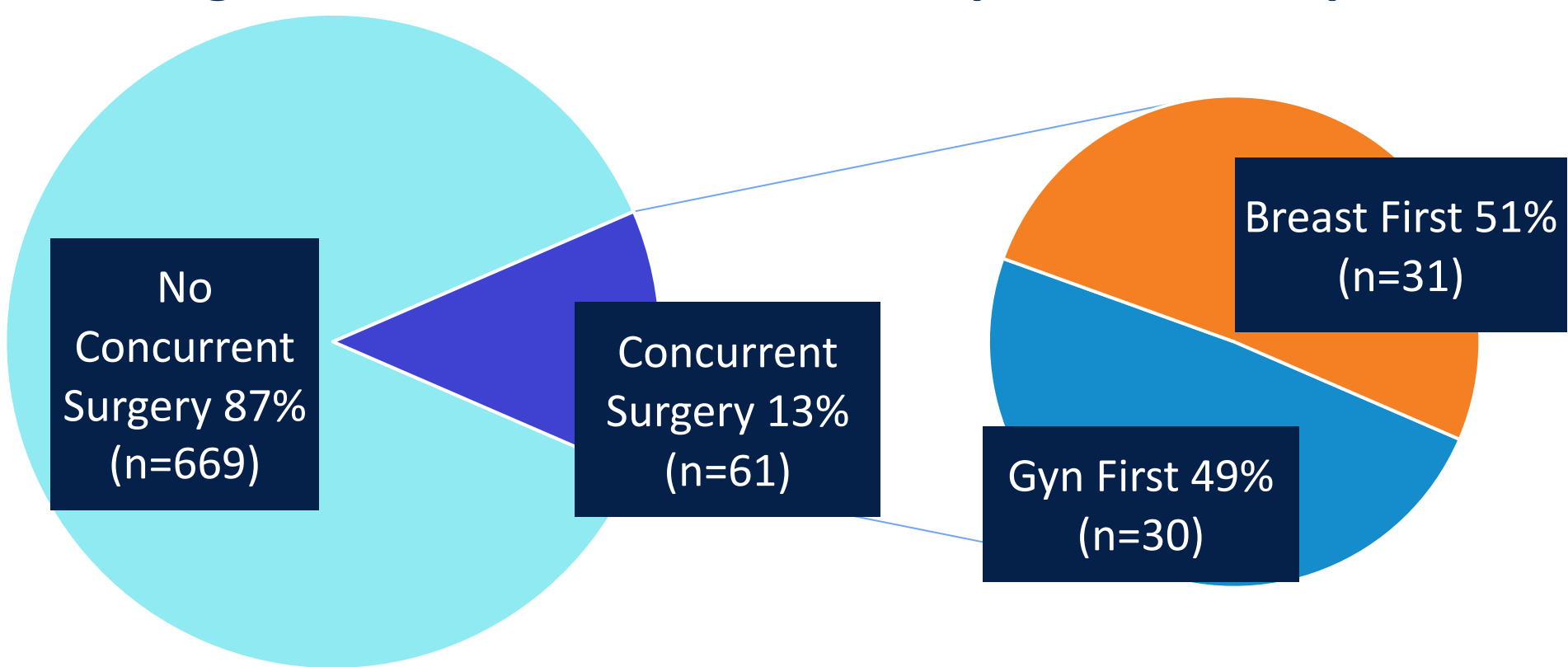


Table 2. Demographics: Gynecology Operates First vs. Breast Operates First

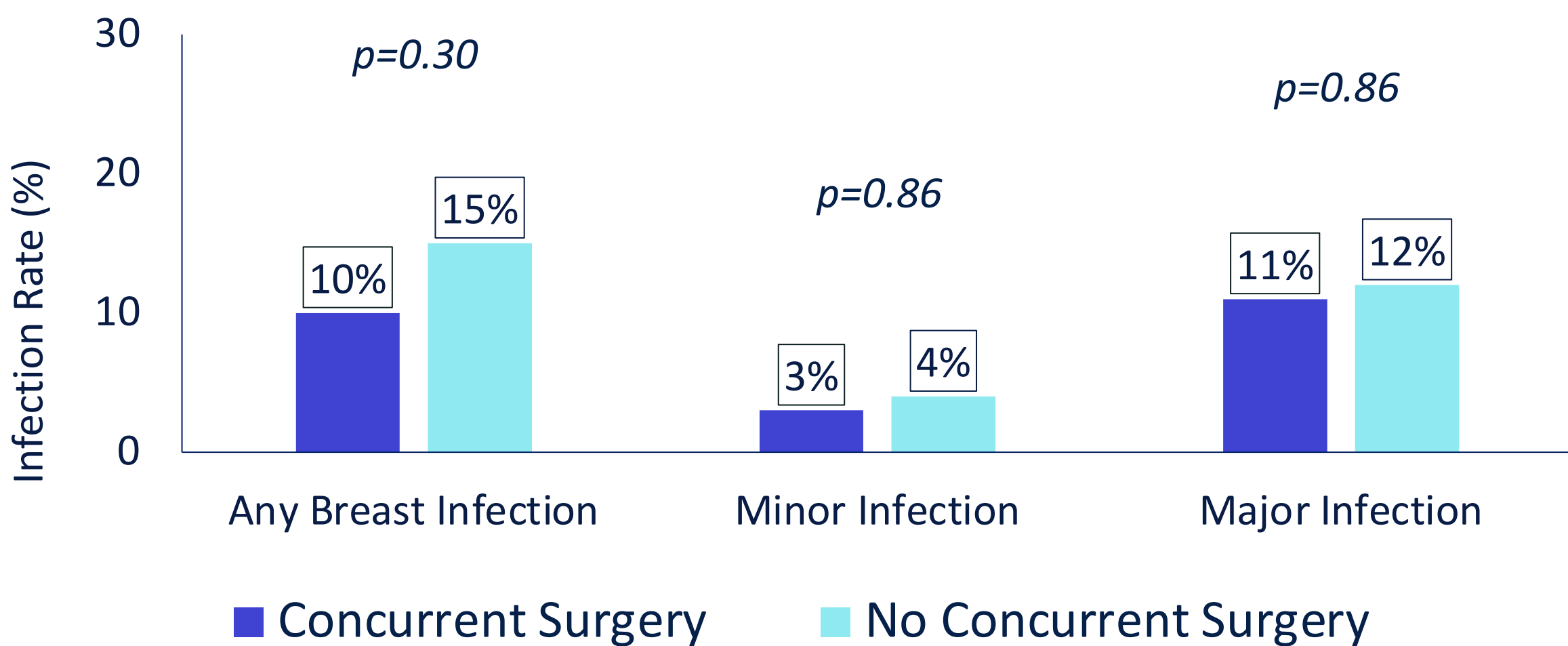
	Gynecology Operates First	Breast Operates First	p
Age	44 ± 7	44 ± 8	0.91
BMI	23 ± 3	24 ± 4	0.55
DM	2 (13)	0 (0)	0.13
Smoking	1 (7)	0 (0)	0.29
Chemotherapy			
Neoadjuvant	4 (27)	9 (56)	0.10
Adjuvant	2 (13)	7 (44)	0.06
Radiation			
Pre	1 (7)	0 (0)	0.29
Post	1 (7)	5 (31)	0.08

Post-Operative Outcomes

Concurrent Surgery vs. No Concurrent Surgery

- Overall infection rate, minor infection rate, major infection rate (Figure 3).
- Reconstruction loss due to infection was also similar between both groups: 10% Concurrent, 5% No Concurrent (p=0.11).

Figure 3. Infection Outcomes: Concurrent Surgery vs. No Concurrent Surgery

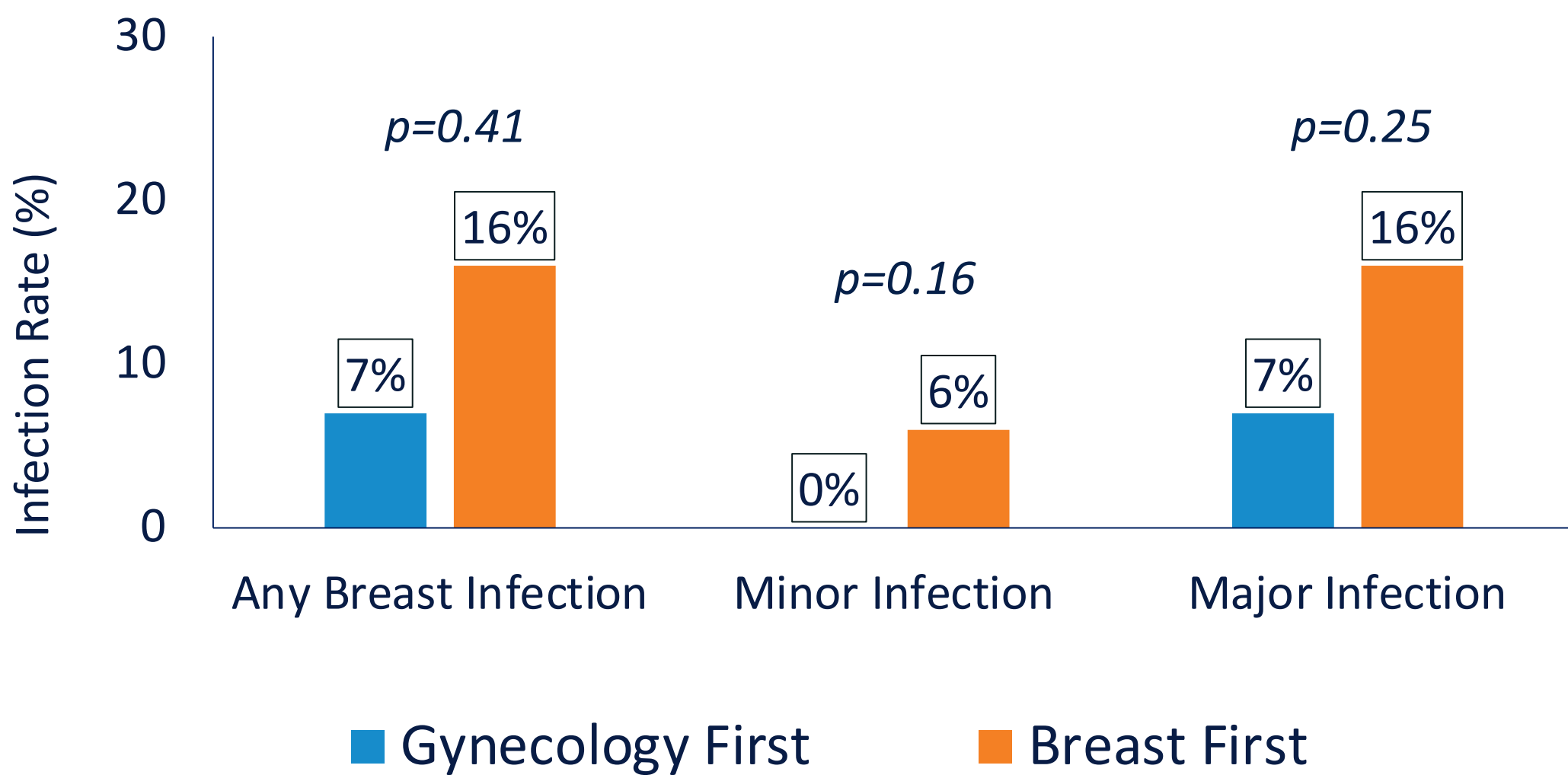


Post-Operative Outcomes

Gynecology Operates First vs. Breast Operates First

- There was a pattern of higher infection rates in the Breast first group, but this was not significant (Figure 4).
- Reconstruction loss due to infection was similar between groups: 7% Gyn first Group, 13% Breast first group (p=0.41).

Figure 4. Gynecology Operates First vs. Breast Operates First



Conclusions

- Concurrent gynecologic procedures can be performed without higher infection rates after prosthetic reconstruction.
- Evaluating case order may represent a straightforward intervention to reduce SSI.
- As our sample size is small, data collection is ongoing to refine these findings.

Acknowledgements

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