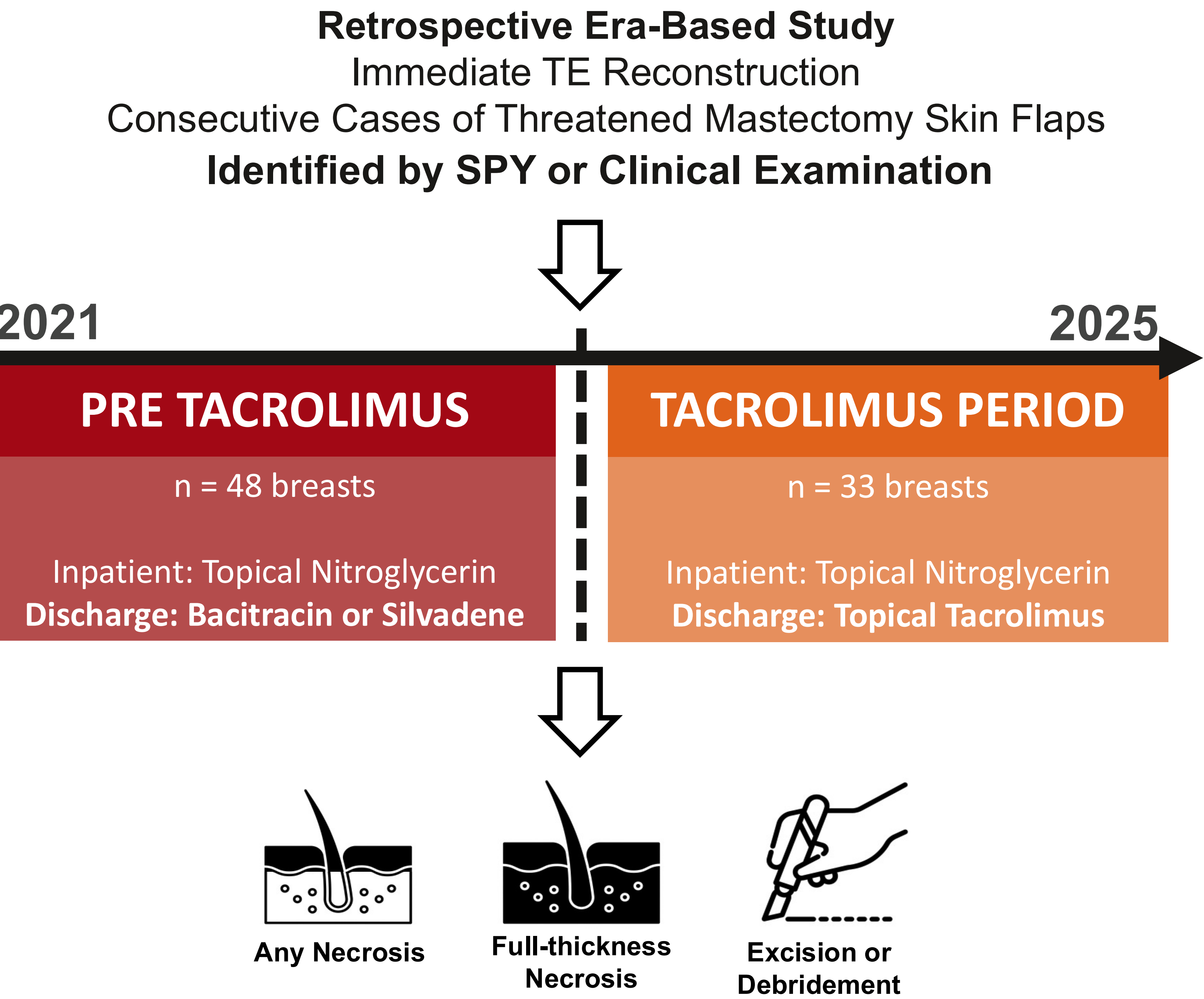


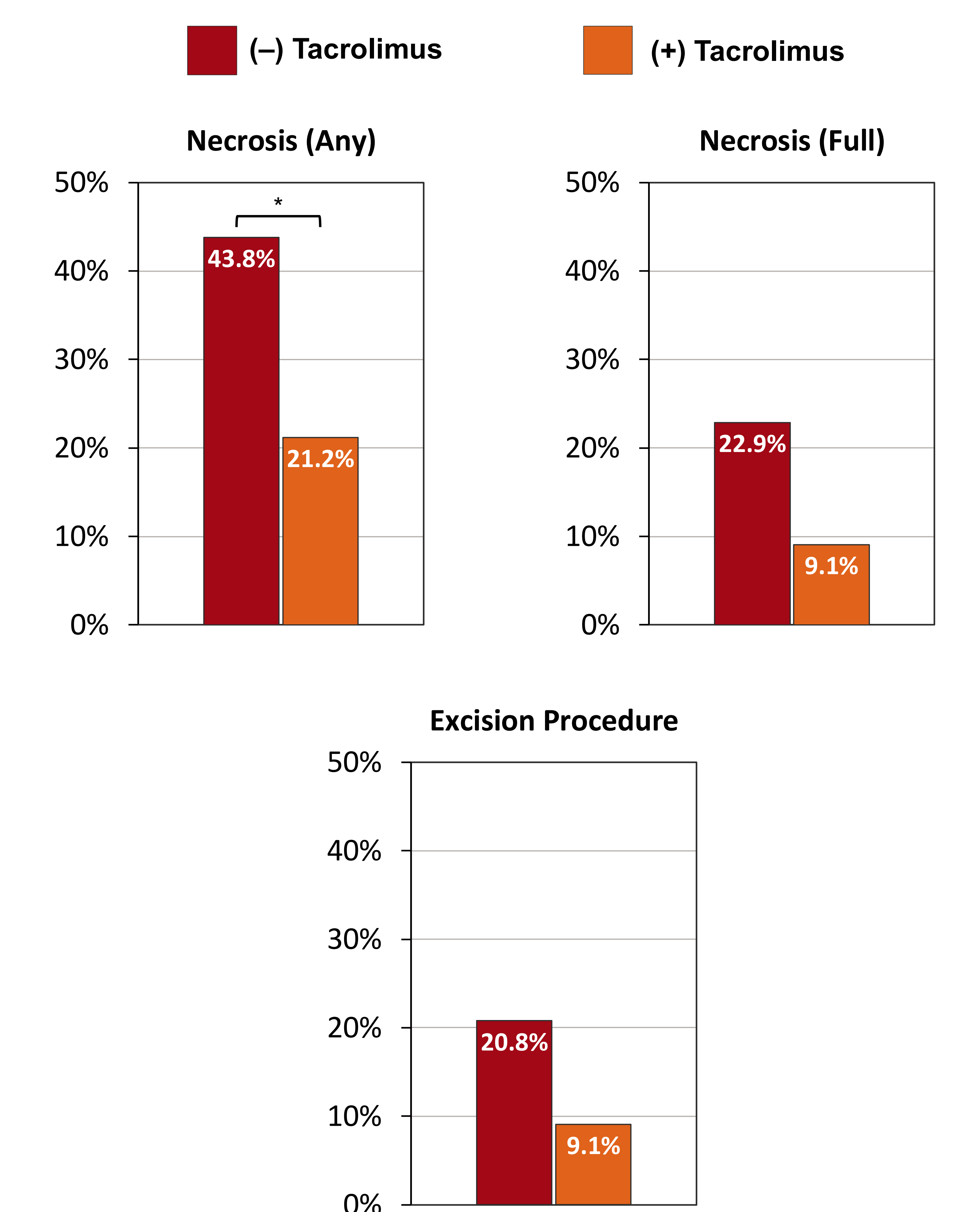
BACKGROUND

- **Skin Flap Necrosis:** up to 30% of tissue expander (TE) reconstructions
- **Consequences:** delayed healing, infection, TE loss, re-operation, and poor cosmesis
- **Nitroglycerin:** vasodilator
 - Clinical data: single postoperative application reduces skin necrosis
 - Side effects (headache, dizziness, hypotension) may limit outpatient use
- **Tacrolimus:** calcineurin inhibitor, suppresses T cell activation
 - Preclinical data: reduces skin necrosis in rodent models
 - Greater viable tissue compared with nitroglycerin or DMSO

METHODS



RESULTS



STRENGTHS & LIMITATIONS

- First clinical study using topical tacrolimus in threatened mastectomy skin flaps
- Results align with preclinical studies
- Retrospective design
- Single surgeon experience
- Era-based study may be susceptible to improved surgeon experience in the later cohort

CONCLUSION

- Topical tacrolimus at discharge was associated with a significant reduction in **any necrosis**
- Results for **full-thickness necrosis** trended favorably but did not reach statistical significance at this sample size
- Results for **excision procedures** also trended favorably
- Larger, prospective studies are warranted to evaluate the effect of topical tacrolimus as an adjunct to nitroglycerin or as a primary treatment for reducing mastectomy skin flap necrosis

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