

Postoperative Nonsteroidal Immunosuppressant Use Within 30 Days of Posterior Lumbar Fusion are Not Associated with Wound and Bone Healing Complications

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INTRODUCTION

Immunosuppressive (IS) agents have been theorized to impair wound healing and bone repair processes.

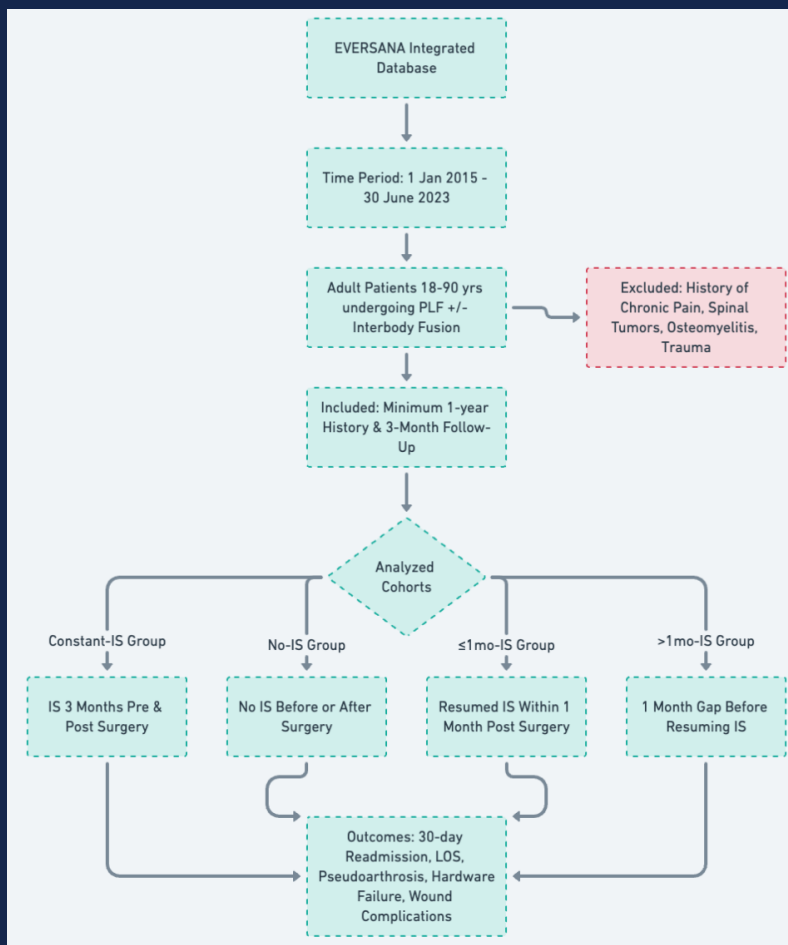
Non-spine orthopedic studies have shown that patients undergoing IS therapy have an elevated susceptibility of postoperative infections and impairments in bone fusion.

Despite this, it remains standard practice for patients to resume IS therapy shortly after spine surgery.

OBJECTIVE & METHODS

- To evaluate how the use of IS therapy 3 months before surgery and within 3 months after surgery impacted the rates of complications, including wound and bone healing.
- To determine whether there is a difference in postoperative outcomes if patients are administered IS within 1 month of surgery versus resuming medications after 1 month of surgery.
- The outcomes that were assessed: all-cause 30-day readmissions, length of stay, pseudoarthrosis, hardware failure, and wound complications.

COHORT SELECTION



RESULTS

	OR (95% CI)	P-VALUE
NO-IS VS. IS		
30-DAY READMISSIONS	0.57 (0.24, 1.36)	0.21
HARDWARE FAILURE	2.02 (0.43, 9.62)	0.38
LOS	1.62 (0.64, 4.14)	0.31
PSEUDOARTHROSIS	0.45 (0.23, 0.89)	0.02
WOUND COMPLICATIONS	0.57 (0.08, 3.89)	0.57
≤1 MO-IS VS. ≥ 1MO-IS		
30-DAY READMISSIONS	0.93 (0.23, 3.76)	0.92
LOS	0.39 (0.11, 1.45)	0.16
PSEUDOARTHROSIS	1.7 (0.72, 4.03)	0.23
WOUND COMPLICATIONS	0.56 (0.07, 4.47)	0.59