

# Antiplatelet Therapy in Inguinal Hernia Repair: To Continue or Interrupt? A Systematic Review and Meta-Analysis

Augusto Graziani e Sousa, MD,<sup>1</sup> Júlia Copetti Burmann,<sup>2</sup> Caroline Daleaste Wilmsen,<sup>3</sup>  
Júlia Martins da Silva Duarte,<sup>4</sup> **Diego Laurentino Lima, MD, MSc.<sup>5</sup>**

<sup>1</sup>Centro Universitário de Anápolis, Anápolis, Brazil, <sup>2</sup>Pontifical Catholic University of Rio Grande do Sul, Porto Alegre, Brazil, <sup>3</sup>Universidade do Planalto Catarinense, Lages, Brazil, <sup>4</sup>Universidade do Vale do Rio dos Sinos, São Leopoldo, Brazil, <sup>5</sup>Montefiore Medical Center, New York, USA.

## Introduction

This study aims to perform a comprehensive systematic review and meta-analysis to evaluate the effect of antiplatelet therapy during inguinal hernia repair (IHR) and their respective outcomes.

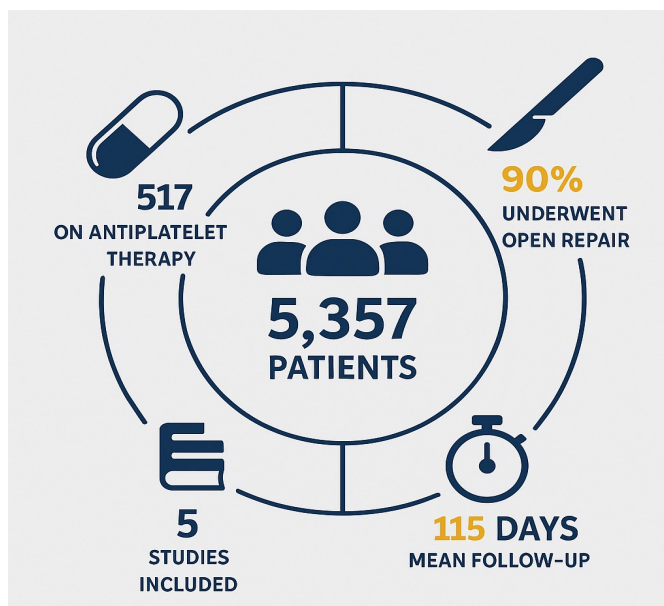
## Material & Methods

PubMed, Cochrane, and Embase were searched for studies comparing the use of antiplatelet agents in patients undergoing IHR. The results analyzed were surgical site occurrences (SSO), surgical site infection (SSI), operative time, length of stay (LOS), reoperation, hernia recurrence, and readmission. Statistical analysis was performed with Review Manager 5.4 using a random-effects model.

## Results

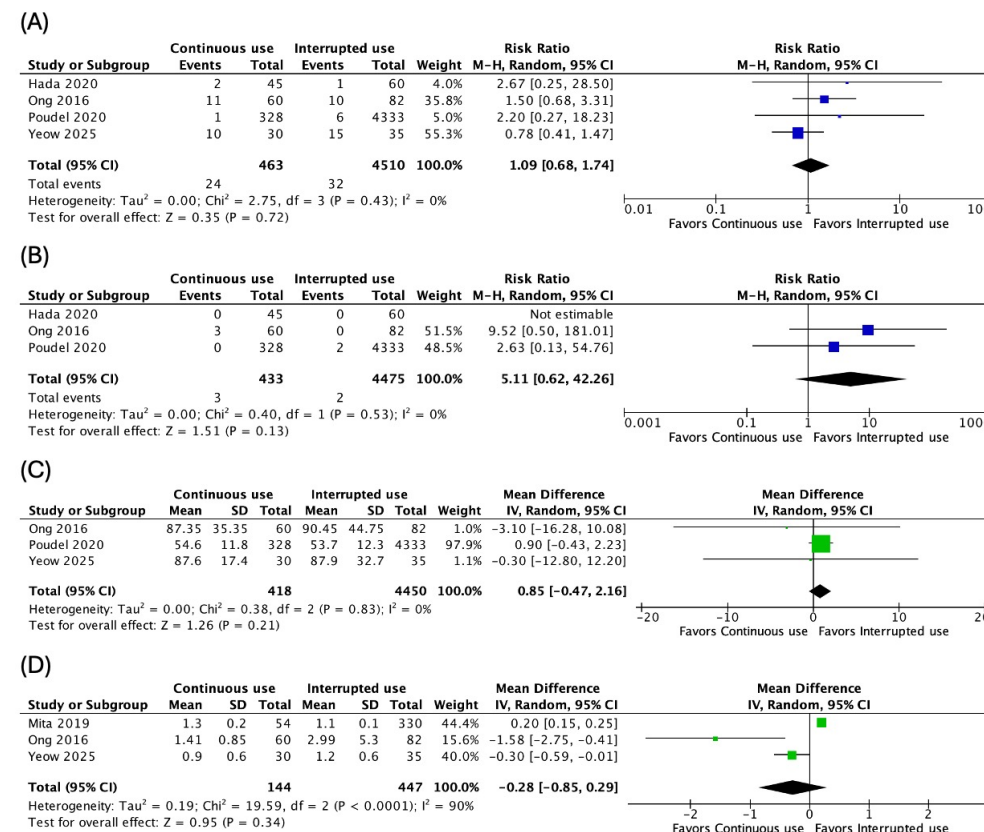
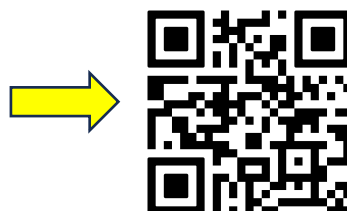
From 1588 records, 5 studies were included, encompassing 5,357 patients (antiplatelets continuation n = 517), with 90% of patients submitted to open surgical repair and a mean follow-up time of 115 days. Overall analysis showed comparable results between groups regarding SSO (RR 1.09; 95% CI 0.68 to 1.64; p = 0.72), reoperation (RR 5.11; 95% CI 0.62 to 42.26; p = 0.13), operative time (MD 0.85 minutes; 95% CI -0.47 to 2.16 minutes; p = 0.21), and LOS (MD -0.28 days; 95% CI -0.85 to 0.29 days; p = 0.34).

Additionally, no statistically significant results were seen for SSI (RR 0.39; 95% CI 0.02 to 9.16; p = 0.56), readmission (RR 0.46; 95% CI 0.10 to 2.18; p = 0.32), and hernia recurrence rates (RR 2.73; 95% CI 0.25 to 29.45; p = 0.41), as shown in Figure 2.



**Figure 1.** Summary of Patient distribution and key characteristics.

Scan to  
access our  
Table 1 and  
references!



**Figure 2.** The continuous use of antiplatelet therapy following inguinal hernia repair was not significant between groups for (A) surgical site occurrences; (B) reoperation rates; (C) operative time; and (D) hospital length of stay.

## Conclusion

Antiplatelet therapy during IHR is associated with comparable results between groups for SSO, reoperation, operative time, LOS, SSI, readmission, and hernia recurrence rates.