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Introduction

- Operable pancreatic ductal adenocarcinoma (PDAC) → managed with a multimodal approach involving surgery + systemic therapy.
- Adjuvant chemotherapy → improved overall survival in patients with PDAC.
- Delays in return to intended oncologic therapy (RIOT) → worse oncologic outcomes.
- Minimally invasive approaches (laparoscopic or robotic) may reduce time to and/or increase rates of RIOT.
- Objective of the study:** To compare RIOT rates between minimally invasive and open distal pancreatectomy (DP).

Methods

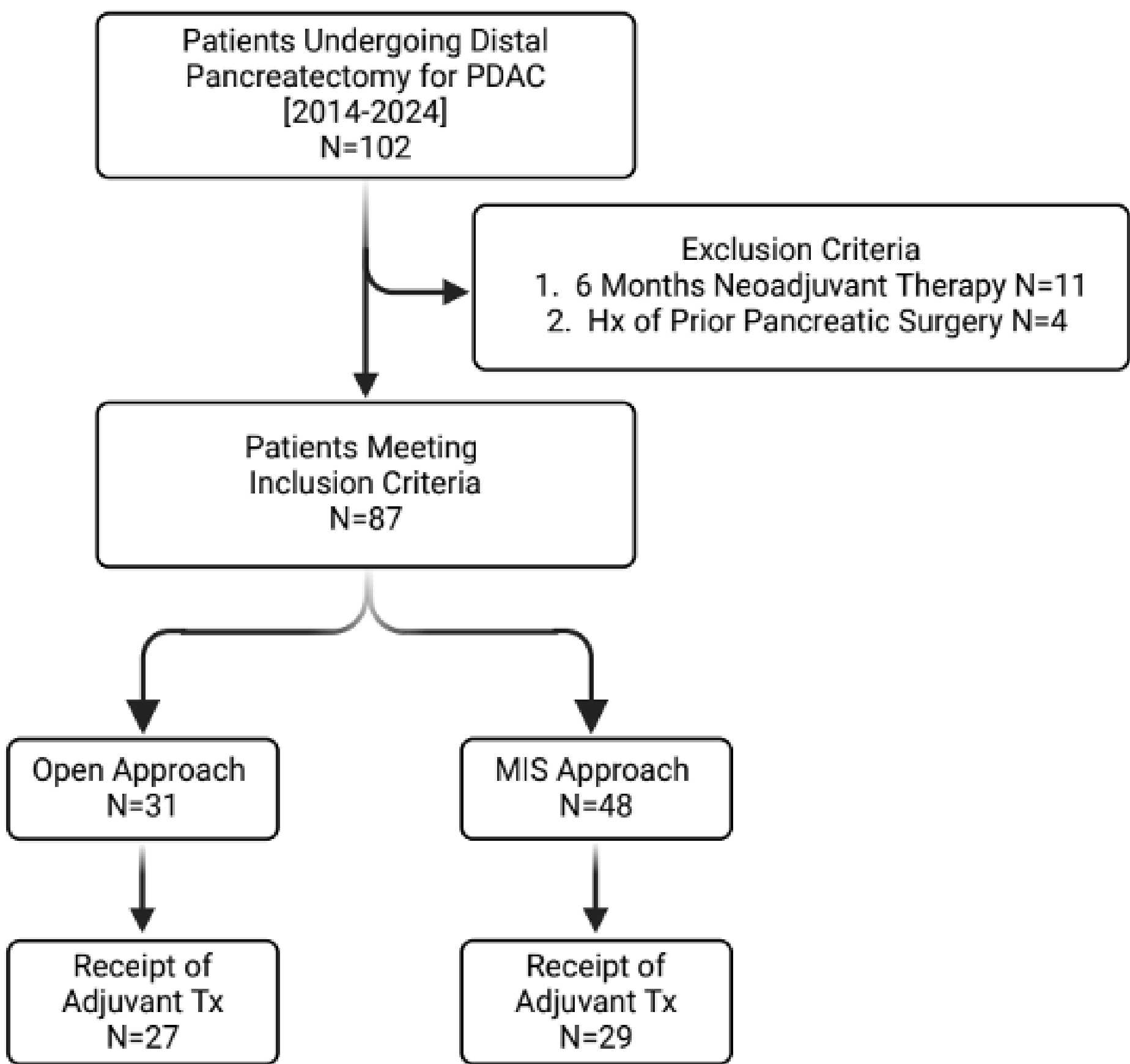


Figure 1. Selection Criteria for Minimally Invasive and Open Distal Pancreatectomy on Return to Intended Oncologic Therapy for Pancreatic Adenocarcinoma.

Conclusions

Minimally invasive versus open distal pancreatectomy:

- Comparable rates of return to intended oncologic therapy and similar short-term oncologic safety** by surgical approach.
- Longer operative time** but **higher lymph node yield** with minimally invasive approach.
- Age ≥ 65** and **Need for IR/GI intervention** → associated with lower rate of return to intended oncologic therapy.
- Surgical approach is training dependent and should be tailored to the patient

Covariate	N	Odds Ratio (95% CI)	OR P-value	Overall P-value
Surgical Approach				
MIS	47			
Open	36	1.05 (0.34-3.17)	0.937	0.937
Age				
>median	40	0.33 (0.11-0.98)	0.046	0.046
≤median	43			
Race				
Black	28	2.20 (0.64-7.55)	0.212	0.212
White	55			
IR/GI intervention				
Yes	14	0.24 (0.06-0.96)	0.043	0.043
No	69			
Operative Time (minutes)	83	0.99 (0.99-1.01)	0.101	0.101

Table 1. Multivariable Logistical Regression for Factors Affecting RIOT.

Results

Patient Cohort:

- Total patients: 87
- DP: 39 (44.8%)
- MIS: 48 (55.2%)

Baseline Characteristics & Postoperative Outcomes:

- No significant differences in demographics or preoperative characteristics between groups.
- No differences in short-term postoperative outcomes, including:
- Return to operating room
- Major complications (Clavien-Dindo ≥ 3)
- Readmission within 20 days
- 30-day mortality

RIOT:

- RIOT rates: 60.4% (MIS) vs. 69.2% (Open), $p = 0.426$
- Median time to RIOT: 52 days (MIS) vs. 70 days (Open), $p = 0.400$
- Multivariable analysis: Surgical approach (MIS vs. Open), race, and operative time were not independently associated with RIOT

Other Key Findings:

- Operative time:** Longer in MIS (mean 371.2 vs. 186.7 min, $p = 0.002$)
- Lymph node yield:** Higher in MIS (mean 28.1 vs. 19.3 nodes, $p < 0.001$)
- Age ≥ 65:** Associated with 67% lower odds of RIOT (OR 0.33, 95% CI 0.11–0.98, $p = 0.046$)
- Need for IR/GI intervention:** Associated with 76% lower odds of RIOT (OR 0.24, 95% CI 0.06–0.96, $p = 0.043$)

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