

# Pancreatoduodenectomy for malignancy: which patients are high-risk?

<sup>1</sup>TB Russell, <sup>1</sup>PL Labib, <sup>2</sup>RAW Study Collaborators, <sup>1</sup>S Aroori • <sup>1</sup>University Hospitals Plymouth NHS Trust, <sup>2</sup>Various • s.aroori@nhs.net



## Background:

- In the absence of metastases, pancreatoduodenectomy (PD) is indicated in fit patients with a resectable pancreatic head/periampullary cancer
- Surgeons should have a sound understanding of its complication profile for consenting purposes and to benchmark their own complication rates

## Aims:

- To calculate the overall incidence of PD complications and identify risk factors

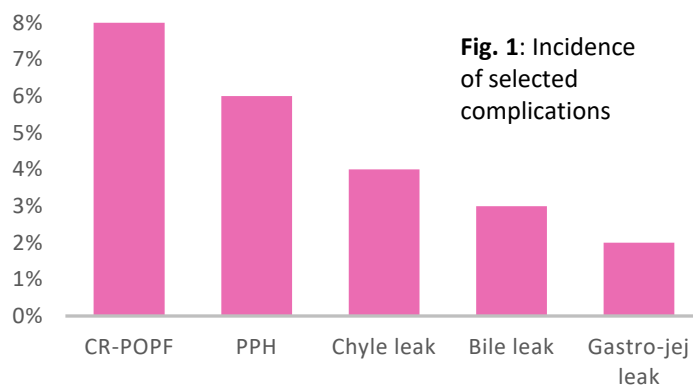
## Methods:

- Data extracted from the Recurrence After Whipple's (RAW) study (2012-2015)
  - Retrospective cohort study (29 centres, 8 countries)
  - PD for confirmed malignancy (n=1484)
- Incidence and severity of all complications recorded
- Patients who experienced any complication, major morbidity, clinically relevant postoperative pancreatic fistula (CR-POPF), post-pancreatectomy haemorrhage (PPH) and 90-day mortality were compared to those who did not
  - Univariate and multivariate tests

## Results:

- Overall morbidity: 53%
- 90-day mortality: 4%
- 1340 complications recorded

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Any complication (53%)	Odds ratio	p-value
High BMI	1.1	<u>0.007*</u>
ASA grade >II	2.2	<u>&lt;0.00001*</u>
Classic Whipple (vs PPPD)	1.6	<u>0.005*</u>
<b>Major morbidity (17%)</b>		
ASA grade >II	2.2	<u>&lt;0.00001*</u>
<b>CR-POPF (8%)</b>		
High BMI	1.1	<u>0.001*</u>
<b>PPH (6%)</b>		
Pre-op diabetes	0.4	<u>&lt;0.05*</u>
ASA grade >II	2.5	<u>0.002*</u>
+ve nodes on pre-op CT	2.1	<u>0.01*</u>
P-J anastomosis (vs P-G)	0.5	<u>0.03*</u>
<b>90d mortality (4%)</b>		
None	N/A	N/A

Tab. 1: Multivariable analysis

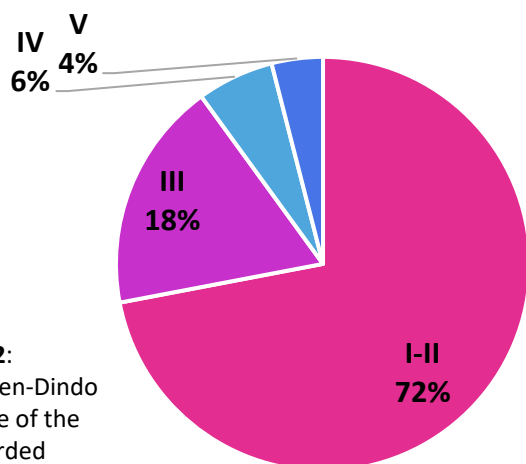


Fig. 2: Clavien-Dindo grade of the recorded complications

## Conclusions:

- 53% of patients developed a complication but most of these were minor
- A high BMI and ASA grade >II correlated with the studied adverse outcomes
- Patients who fall into these groups should be made aware of their increased level of risk