Serious post-op complications correlate with lower rates of adjuvant chemo. after Whipple's: Would selected high-risk patients benefit from neoadjuvant therapy?

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Background:

- Adjuvant chemotherapy (AC) can prolong overall survival (OS) after pancreatoduodenectomy (PD) for pancreatic ductal adenocarcinoma (PDAC)
- Fitness for AC may be influenced by post-op recovery

Aims:

- To investigate if serious (Clavien-Dindo grade ≥IIIa) post-op complications affected AC rates, disease recurrence and OS

Methods:

- Data extracted from the Recurrence After Whipple's (RAW) study (2012-2015)
  - Retrospective cohort study (29 centres)
  - PD performed for confirmed malignancy (n=1484)
- Patients who died within 90d of PD excluded
- Kaplan-Meier method used to compare OS in those receiving or not receiving AC, and those with and without serious post-op complications
- Groups compared using univariable and multivariable tests

Results:

- 808 patients included (PDAC only)
- Serious post-op complication: 12%
- Five-year recurrence: 69%
- Five-year OS: 24%
- Commenced AC: 71%
  - Of these, 63% completed the course
  - Median time to 1st dose: 69 days
- Commencing and completing AC → improved OS
- A serious complication alone did not affect OS (90d mortality patients excluded)

Commenced AC vs did not	
Age	Mean difference: 2.7 years
Completed AC vs did not	
Age	Mean difference: 2.2 years
Serious post-op complication vs none	
30-day readmission	OR: 3.3 (95% CI: 1.9-5.8)
ASA grade I-II	OR: 0.4 (95% CI: 0.2-0.6)
Commenced AC	OR: 0.5 (95% CI: 0.3-0.8)

Tab. 1: Multivariable analysis.

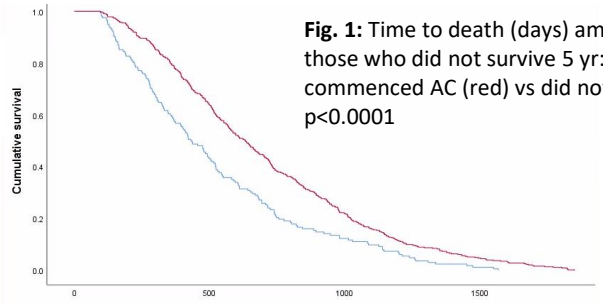

Fig. 1: Time to death (days) among those who did not survive 5 yr: commenced AC (red) vs did not (blue), p<0.0001

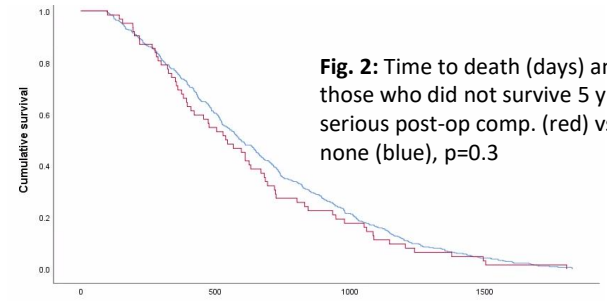

Fig. 2: Time to death (days) among those who did not survive 5 yr: serious post-op comp. (red) vs none (blue), p=0.3

Conclusions:

- Commencing and completing AC conferred a significant survival advantage
- Patients who commenced AC had less often experienced a serious post-op complication
- The pre-op identification of patients who are high-risk for a serious complication may have implications for management planning
- Would selected older patients who are ASA >II benefit from neoadjuvant treatment?

RAW
RECURRENCE AFTER WHIPPLE'S

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