

# Is the lymph node ratio a relevant prognostic score neo-adjuvant chemotherapy for pancreatic cancer?

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## Background

Lymph node ratio (LNR) is a strong prognostic marker in pancreatic cancer (PDAC). In recent years, use of neoadjuvant chemotherapy (NAT) has increased, where it is associated with a higher rate of N0 resections, compared with a surgery first approach. The prognostic accuracy of the LNR after NAT has not been assessed.

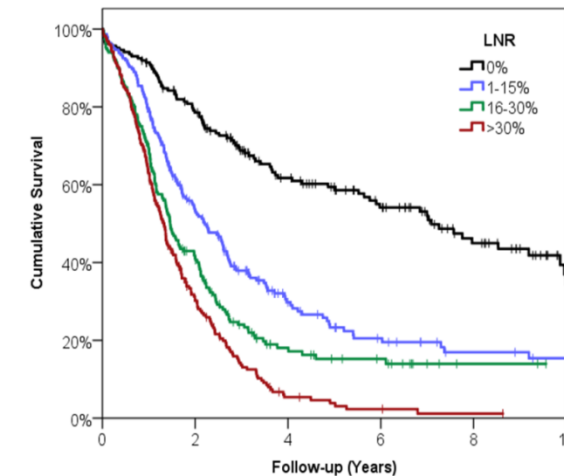
## Methods

- Retrospective review of prospectively collected data from 2008-2020 of all patients undergoing pancreaticoduodenectomy (PD) for PDAC.
- Basic demographics, pathological and clinical outcomes were analysed using standard statistical tests.
- Cox regression and Kaplan-Meier analyses were performed.

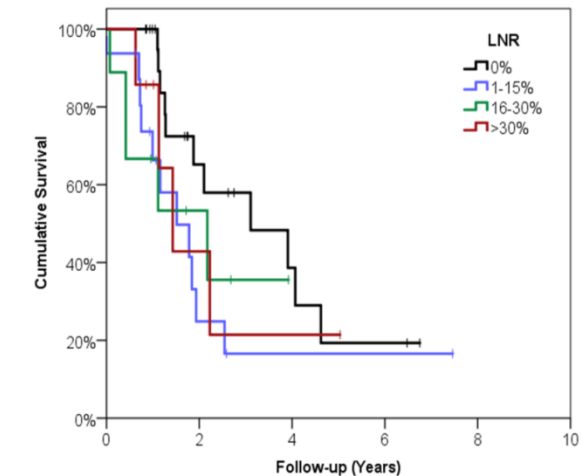
## Results

- N= 891 patients underwent PD
- 57 (6.4%) received NAT, the majority of whom received FOLFRINOX (83%).
- Patients receiving NAT had significantly fewer positive nodes (median 1 vs. 3,  $p=0.001$ ) and, subsequently, significantly lower LNRs (median 5% vs. 16%,  $p<0.001$ ) than those that did not receive NAT.

## A) No NAT



## B) NAT



- No significant association between LNR and overall survival was observed for patients receiving NAT, compared to those that did not receive NAT, where the prognostic value was retained

## Conclusion

NAT reduces the predictive accuracy of the LNR in resected pancreatic cancer; alternative prognostic models will require development.