

Colorectal Cancer Survival Outcomes at the Northern Hospital: A Retrospective Review 2016 – 2021

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Background

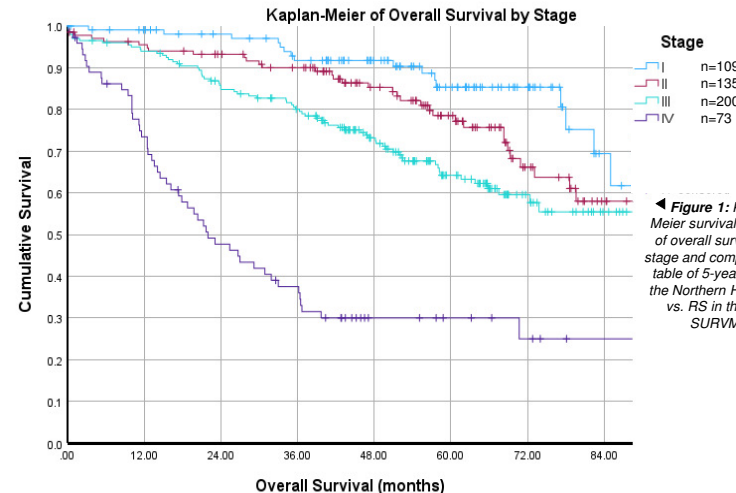
- Colorectal cancer (CRC) is a significant contributor to disease burden in Australia, being the 4th most diagnosed and 2nd most lethal cancer in 2023 ¹
- Relative survival (RS) in Australia is 99% in stage I CRC, 89% in stage II, 71% in stage III, and 13% for stage IV ²

Aims

- To determine **overall survival (OS)** and for patients with CRC at the Northern Hospital and ensure it is comparable to high-income countries globally
- To determine **prognostic factors for survival** in both the overall cohort and for a subgroup of patients with metastatic disease

Methods

- 518 patients identified from national Bowel Cancer Outcomes Registry (B-COR) were included in the analysis overall
- Kaplan-Meier modelling used for overall survival, and cox proportional hazards used to determine prognostic factors



5-year survival %	Stage I	Stage II	Stage III	Stage IV	Overall
Northern Hospital (OS)	85.3%	78.5%	64.2%	30.0%	67.1%
ICBP SURVMARK-2 ³ (RS)	91.6 – 96.9%	83.0 – 89.3%	63.6 – 74.9%	8.5 – 18.4%	60.0 – 70.9%

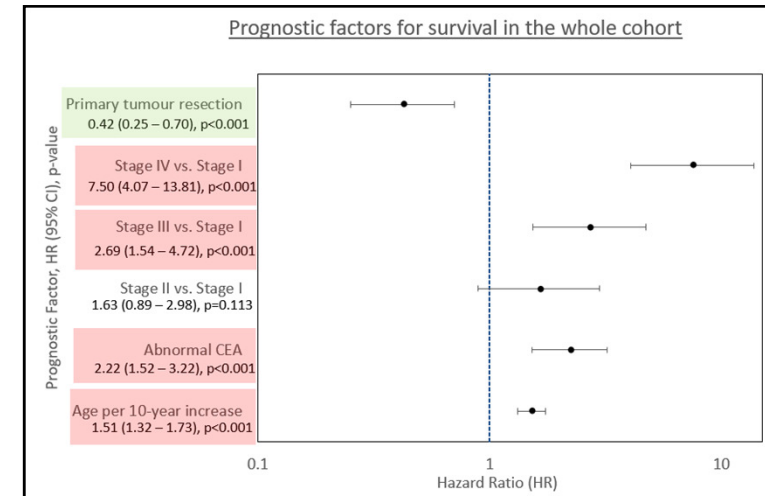
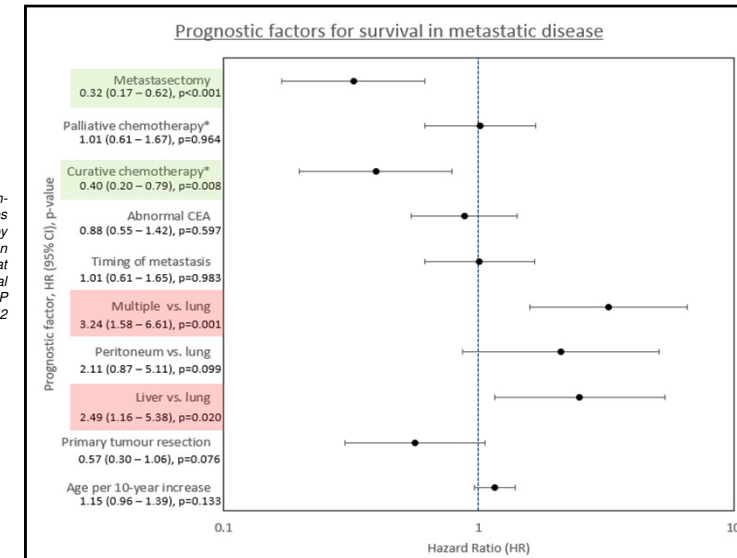


Figure 2: Summary plot of multivariate cox regression on prognostic factors in the whole cohort



* Compared to no chemotherapy

Figure 3: Summary plot of multivariate cox regression on prognostic factors in patients with metastatic disease (n=167)

Conclusion

- The Northern Hospital provides equitable and comparable standards of care to high-income countries
- Key prognostic factors for survival are age, abnormal CEA, TNM staging, and primary tumour resection; chemotherapy was key in stage III-IV disease
- In metastatic disease, positive predictors of survival were the receipt of a metastasectomy and metastasis only to the lung

References

- Australian Institute of Health and Welfare. (2023). Cancer data in Australia Retrieved from <https://www.aihw.gov.au/reports/cancer/cancer-data-in-australia>
- Australian Institute of Health and Welfare. (2018). Colorectal and other digestive-tract cancers. Canberra: AIHW
- The Internal Cancer Benchmarking Project (ICBP) SURVMARK-2 evaluated survival in CRC across 7 high-income countries with a total sample size of approximately 387,000 patients. Source: Arnold, M., Sierra, M. S., Laversanne, M., Soerjomataram, I., Jemal, A., & Bray, F. (2017). Global patterns and trends in colorectal cancer incidence and mortality. Gut, 66(4), 683-691. <https://doi.org/10.1136/gutjnl-2015-310912>