



A Surgery-First Approach Improves Overall Survival for Clinical T1 Gastric Cancer

Julie B. Siegel MD, Rupak Mukherjee PhD, Bryce DeChamplain, David M. Mahvi MD, William P. Lancaster MD



Medical University of South Carolina Department of Surgery

Background

- Gastric cancer is the 3rd most common cause of cancer-related death worldwide.
- Treatment is determined by cancer stage.
- The randomized controlled trial, the MAGIC trial, provided evidence for neoadjuvant chemotherapy for \geq Stage II disease=T2 or nodal disease.
- Few T1 tumors were included in the MAGIC trial.
- There is little evidence on whether T1 tumors with or without nodal disease would benefit from neoadjuvant chemotherapy.

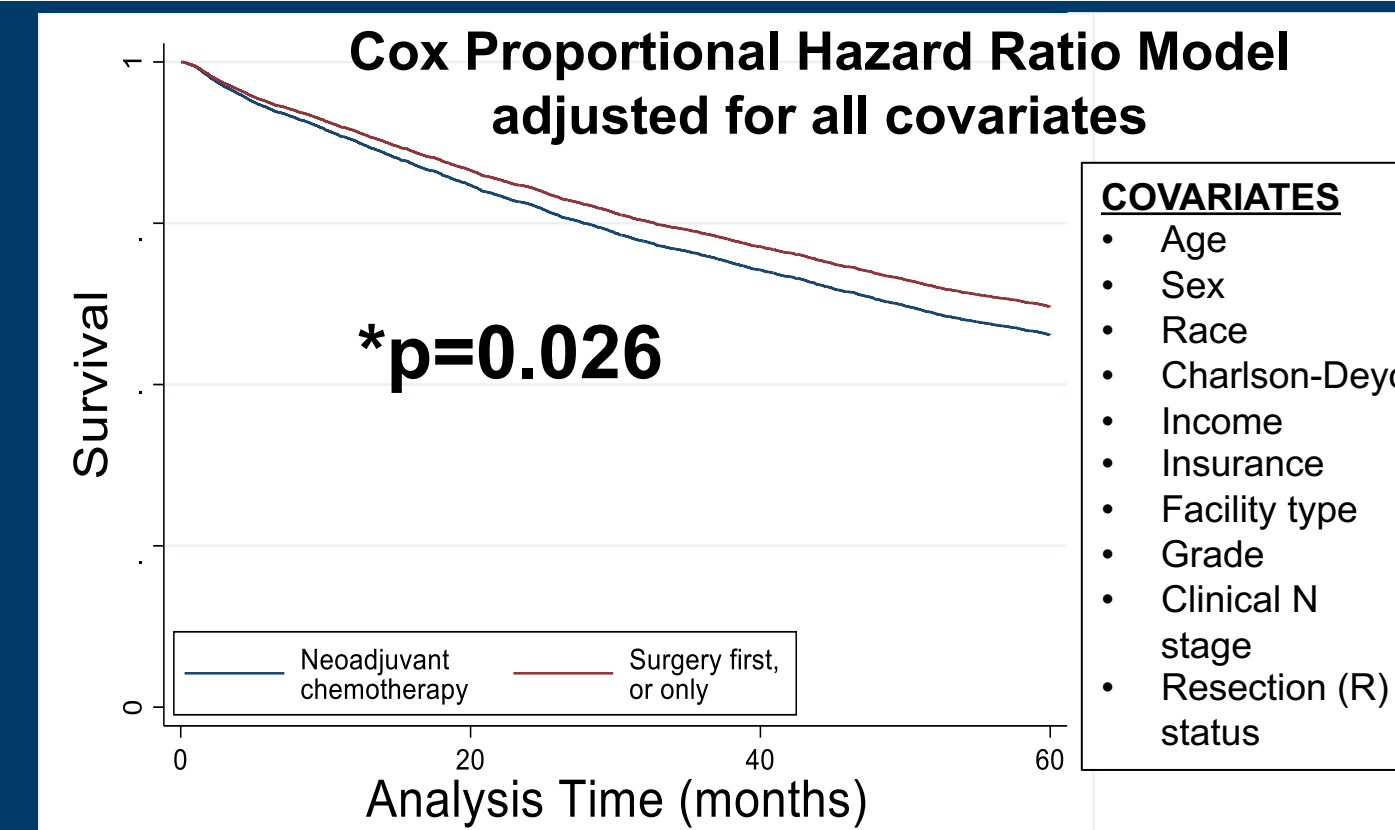
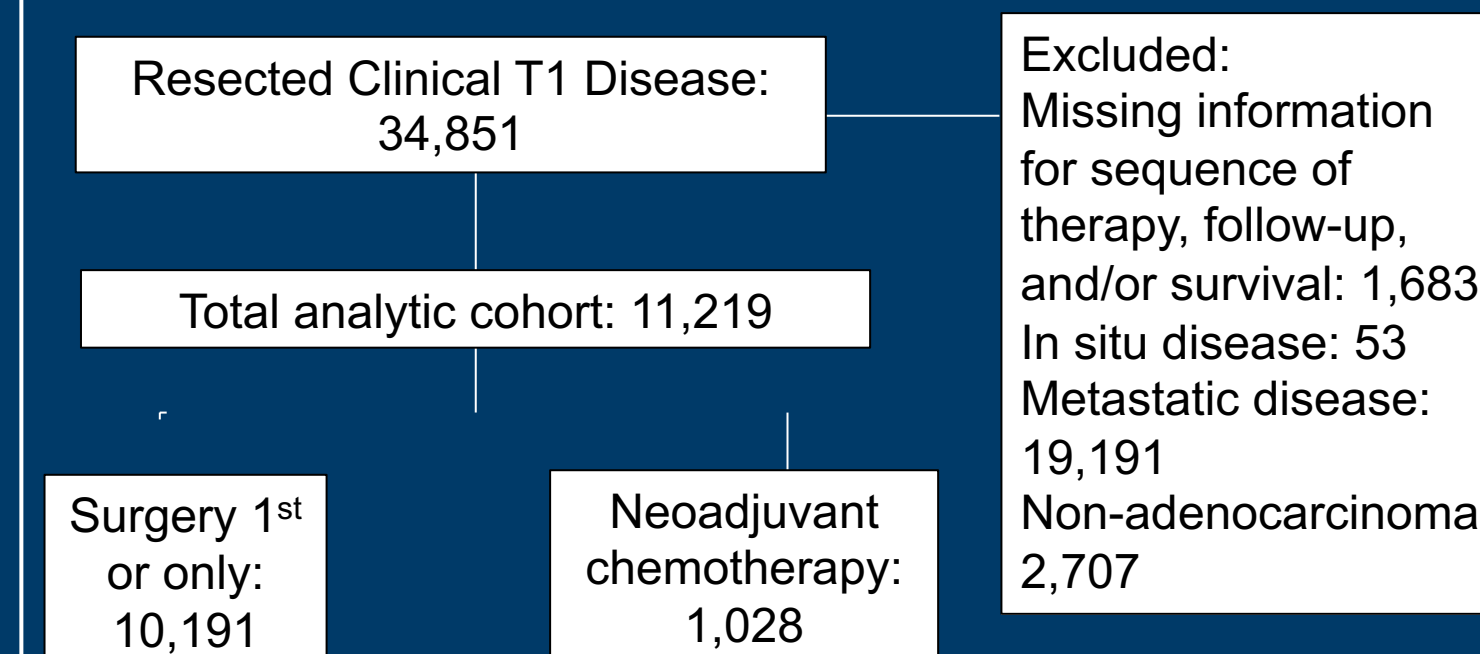
Objectives

- Is there a survival benefit with neoadjuvant chemotherapy for clinical T1-stage tumors?
- Are these treatment strategies influenced by healthcare disparities?

Methods

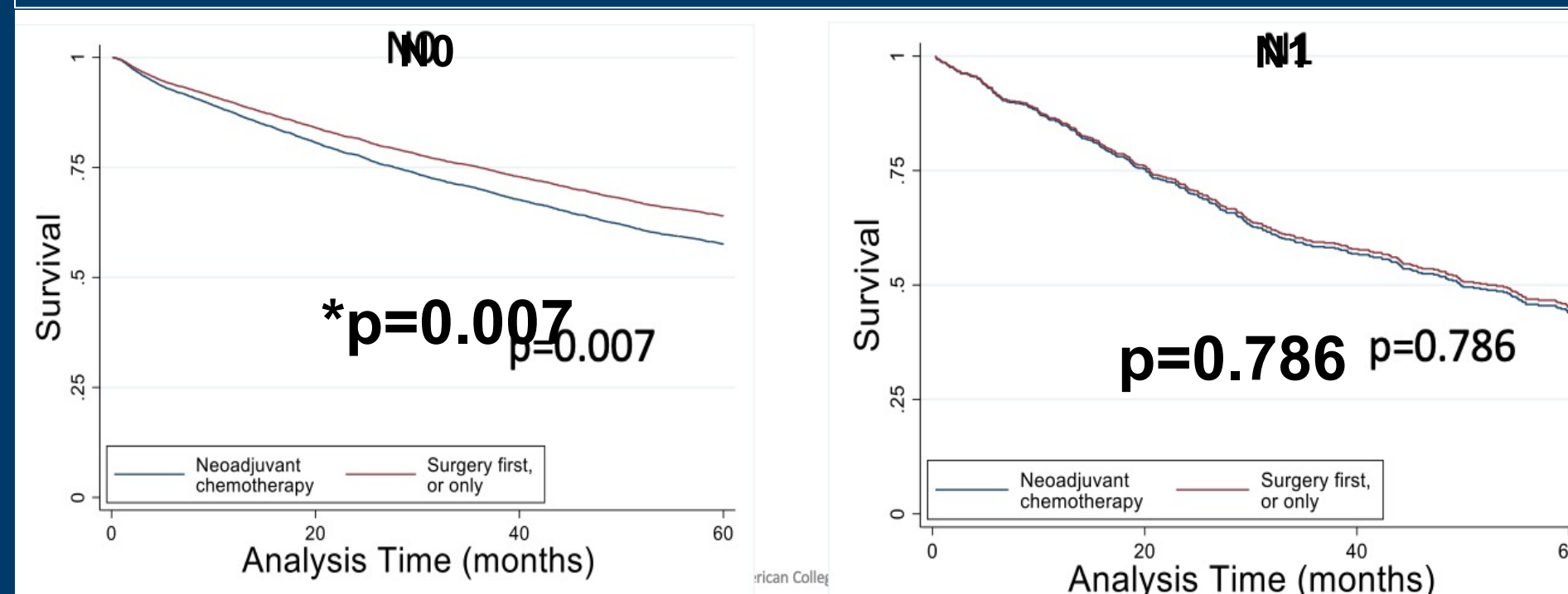
- Retrospective cohort analysis of the National Cancer Database 2017 public use file
- Compared overall survival (OS) for clinical T1-stage gastric tumors that were resected if they had neoadjuvant chemotherapy vs. surgery first or only
- Conducted cox proportional hazard ratios and adjusted for all covariates in the model and created models stratifying all covariates.

Results



Stratification of N Clinical Stage

Only cN0 had improved OS with a surgery-first approach



Stratification of Other Covariates

- Only specific patient groups had improved OS with a surgery-first approach
 - Younger patients (<50 years)
 - Males
 - White patients
 - Charlson-Deyo score of 0
 - High volume academic center
 - Privately insured
 - Highest income quartile

Conclusions

- For T1-stage gastric tumors a surgery 1st/only approach is associated with improved OS irrespective of patient and tumor factors.
- Only clinical N0 disease improved with a surgery first approach.
 - No difference in OS for \geq N1 disease based on treatment strategy
- The benefits of a surgery first approach is subject to disparities.

References

Cunningham D, Allum WH, Stenning SP, Thompson JN, Van de Velde CJH, Nicolson M, Scarffe JH, Lofts FJ, Falk SJ, Iveson TJ et al: Perioperative Chemotherapy versus Surgery Alone for Resectable Gastroesophageal Cancer. *The New England Journal of medicine* 2006, 355(1):11-20.