Conclusion: This study highlights that a significant proportion of the patients did not receive perioperative treatment, which may, at least partially, explain the poor survival rates for gastric cancer. More research is necessary to elucidate the importance of the individual components of perioperative treatment.

Poor compliance with perioperative treatment in patients with resectable gastric cancer

van Putten Margreet1, Lemmens Valery1, van Laarhoven Hanneke2, Pruut Hans1,
Nieuwenhuijzen Graard3, Verhoeven Rolf3
1Netherlands Comprehensive Cancer Organisation, Eindhoven, The Netherlands,
2Academic Medical Center Amsterdam, Amsterdam, The Netherlands, 3Jeroen Bosch Hospital, Den Bosch, The Netherlands, 4Catharina Hospital, Eindhoven, The Netherlands

Introduction: In several European countries it is recommended to treat gastric cancer patients with perioperative chemotherapy if they are eligible for surgery. However, little is known about its use in daily clinical practice. This study examines the use of perioperative treatment and its impact on survival in the Netherlands.

Methods: Patients diagnosed with potentially resectable gastric cancer (cT1N0-cT2-T3,X any cN, cM0-X) between 2006 and 2014 were selected from the Netherlands Cancer Registry (n = 5,824). Treatment trends were examined. Propensity score matching was used to create a subsample to reduce selection bias. Cox regression analysis was used to assess differences in overall survival.

Results: The percentage of patients treated with perioperative treatment increased from 3% in 2006 to 26% in 2014 and the use of only surgery decreased from 60% to 26%. 35% of all patients did not undergo surgery. Of the patients who underwent preoperative chemotherapy and surgery, 43% did not commence postoperative treatment. Cox regression analysis showed a better overall survival for patients who underwent perioperative treatment compared to patients who underwent preoperative treatment only (HR = 0.79 95% CI 0.68-0.93, propensity matched sample: HR = 0.81 95% CI 0.67-0.97), whereas survival was comparable for patients who underwent preoperative chemotherapy versus surgery alone (HR = 0.92 95% CI 0.80-1.06, propensity matched sample: HR = 0.89 95% CI 0.75-1.07).