Aspects of the timing of surgical resection after neoadjuvant chemoradiotherapy in treatment of esophageal cancer

Klara Nilsson, Division of Surgery
klara.nilsson@ki.se

OVERALL AIM
To compare outcomes with regard to the timing of surgical resection after neoadjuvant chemoradiotherapy (nCRT) in cancer of the esophagus or gastric cardia.

INTRODUCTION
nCRT is the mainstay therapeutic option in the multi modality management of esophageal and gastric esophageal junction (GEJ) cancers in many parts of the world. It has repeatedly been shown that a complete eradication of tumour cells, when evaluated in the resected specimen, directly translates into a better survival of the patient. Conventionally, surgery is performed 4-6 weeks after completed nCRT.

Several registry based studies on treatment of rectal cancer show that further delay of surgery may significantly increase the proportion of patients with histological tumour response and possibly also RO resection rates. Clinical observations suggest that this finding may also be valid in esophageal and GEJ tumours. For instance, the CROSS study group have shown 23.6% complete histological response in patients operated <8 weeks after nCRT compared to 43.1% in patients operated >8 weeks after nCRT.

PLANNED STUDIES
Study 1: Comparing conventional and delayed time to surgery (TTS) concerning complete histological response, postoperative morbidity and mortality. Based on the population-based national quality registry for gastric and esophageal cancer (NREV 2006-2014).
Study 2: Comparing tumour response and RO resection rate between patients having surgical resection 4-6 weeks and 10-12 weeks after completed nCRT respectively. Based on results from the ongoing NeoRes 2 trial.
Study 3: Comparing conventional and prolonged TTS concerning morbidity and mortality. Based on results from the ongoing NerRes 2 trial.
Study 4: Evaluating PET-CT combined with endoscopy and biopsy results as a potential method to assess complete histological response. NeoRes 2 trial.