

# Perioperative chemotherapy (ECF/FLOT/EOX) for esophagogastric adenocarcinoma: Impact of postoperative chemotherapy on outcome

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**BACKGROUND:** Platin-based perioperative chemotherapy plus curative surgical resection has become the standard of care in Europe for locally advanced esophagogastric adenocarcinoma. In contrast to preoperative chemotherapy, the postoperative administration of chemotherapy is omitted in a high percentage of patients.

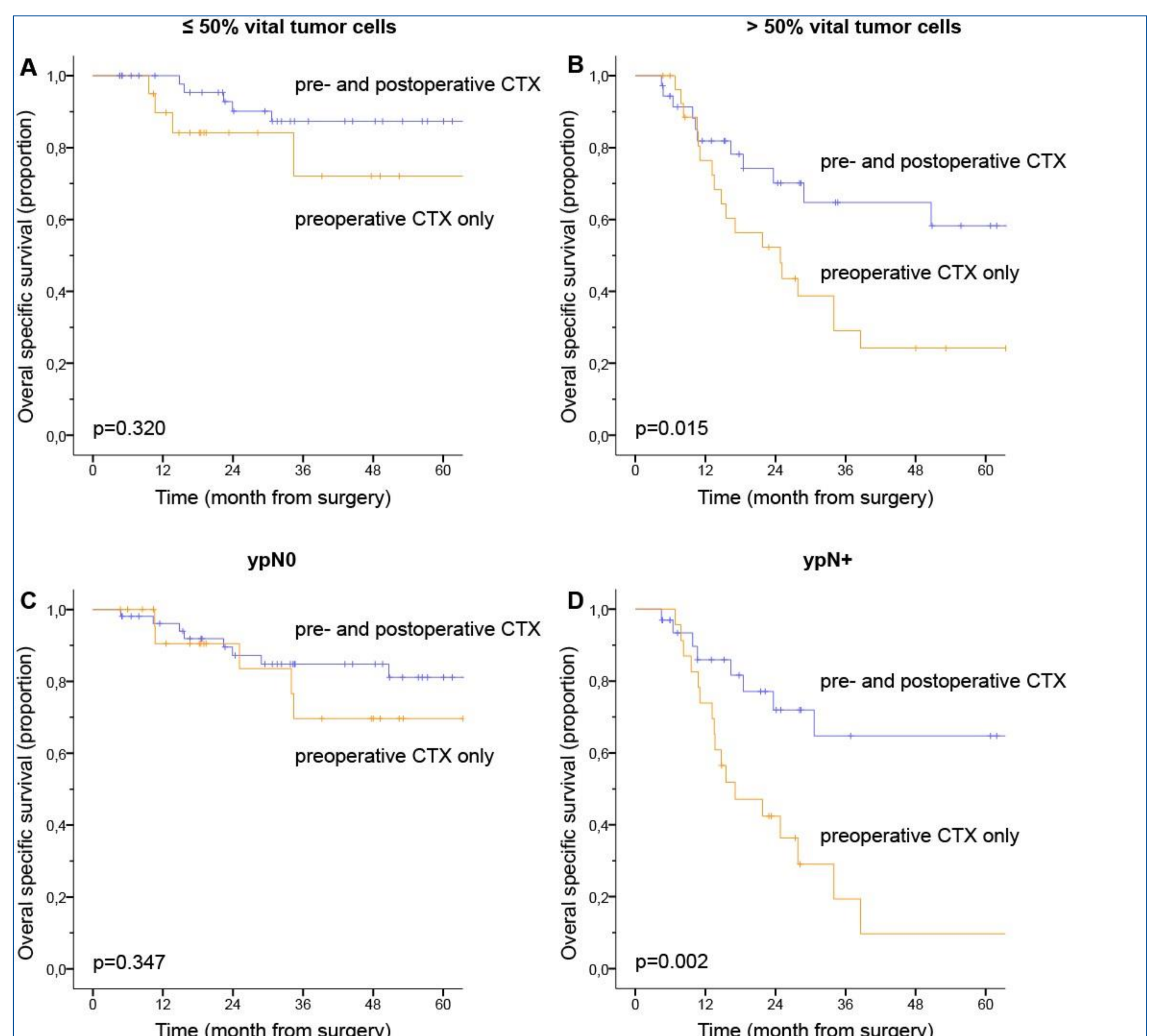
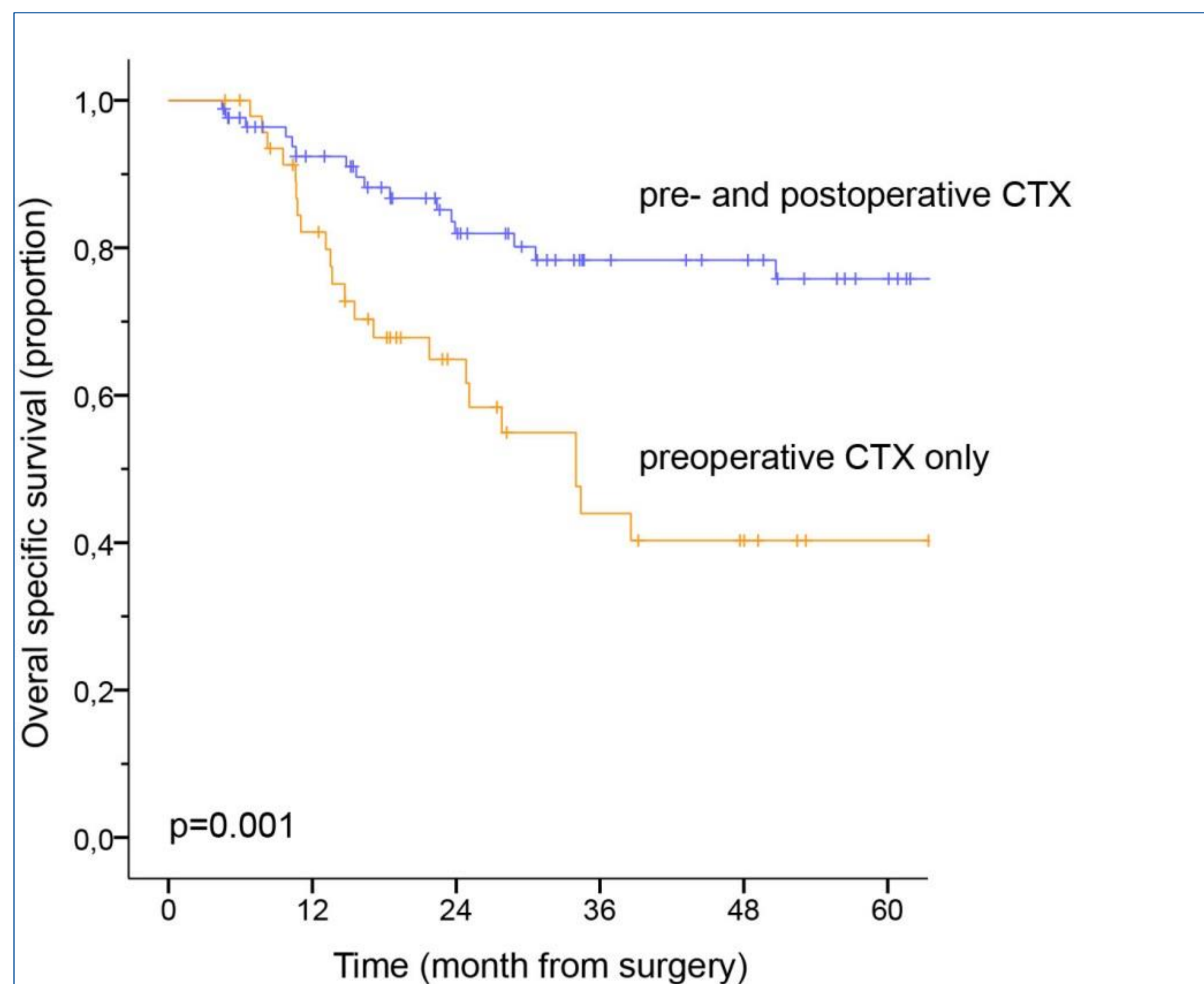
**METHODS:** Patients (n= 134) with esophagogastric adenocarcinoma (cT3-4 and/or cN+) were treated with preoperative chemotherapy (FLOT/ECF/EOX) plus curative surgical resection. All patients were pretherapeutically designated for administration of postoperative chemotherapy. Patient demographics, postoperative tumour stages, histopathological regression and administration of postoperative chemotherapy were correlated with overall survival.

## RESULTS:

- 38 Tumors were located in the stomach and 96 at the esophagus.
- Median follow-up was 2.8 years.
- Pretherapeutic T staging cT2 (n=16), cT3 (n=111) and cT4 (n=7)
- Pretherapeutic N staging cN+ (n=98) and cN0 (n=36)
- FLOT 57% (n=76), ECF 49% (n=53), EOX 4% (n=5)
- The 5-year survival for the whole collective was 58%.
- Postoperative chemotherapy was omitted in 36% (n=48) of patients.
- 5-year-survival was 75.8 % in patients who received pre- and postoperative chemotherapy and 40.3 % in patients with only preoperative chemotherapy (p<0.001).
- Subgroup Analysis: Survival benefit after administration of postoperative chemotherapy in patients with ypN+ stages (5-year-survival 64.5% versus 9.7%, p=0.002) and poor histopathological regression of the primary tumour to preoperative chemotherapy (5-year-survival 55.5% versus 19.3%, p=0.015).
- Administration of postoperative chemotherapy was identified as an independent predictor of improved survival (RR: 0.45; p=0.016).

### Omission of postoperative chemotherapy (CTX)

	48 (36 %)
<b>Reason</b>	
Toxicity	10 (21 %)
Non-Compliance	17 (35 %)
Other Disease	5 (10 %)
Postoperative Complication	4 (8 %)
Poor Response to preoperative CTX	7 (14 %)
unknown n	5 (10 %)



## CONCLUSION:

- Postoperative chemotherapy adds an important part to the beneficial effect of platin-based perioperative chemotherapy on oncologic outcome in perioperative chemotherapeutic treatment of esophagogastric adenocarcinoma.
- The administration of postoperative chemotherapy was identified as an independent prognosticator of survival in platin-based perioperative chemotherapy-treated patients.
- Therefore, all patients should be treated by postoperative adjuvant platinbased chemotherapy after preoperative neoadjuvant platin-based chemotherapy plus curative surgery. Especially patients with limited histopathological regression to preoperative neoadjuvant chemotherapy and patients with lymphonodular tumour involvement seem to benefit from adjuvant systemic tumour treatment achieved by postoperative chemotherapeutic completion of platin-based perioperative chemotherapy-protocols.

