An analysis of Relative Telomere Length (RTL) during peri-operative chemotherapy in patients with operable gastric or gastro-oesophageal junction adenocarcinoma

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ABSTRACT

OBJECTIVES

The primary objective of this study is:

(a) to analyse Relative Telomere Length (RTL) in blood samples taken from patients during peri-operative chemotherapy for operable gastric or gastro-oesophageal junction adenocarcinoma. This will allow us to determine if the baseline (pre-treatment) RTL correlates with patient outcome as measured by relapse-free (RFS) and overall survival (OS).

The secondary objectives of this study are:

(a) to determine if the baseline (pre-treatment) RTL correlates with “tumour response” as measured by down-staging of the primary tumour with the pre-operative component of chemotherapy (comparison of the radiological staging at diagnosis, before pre-operative chemotherapy, with pathological staging at subsequent resection or with repeat radiological staging in the event of progressive disease so that the tumour is inoperable).

(b) to analyse changes in markers associated with cellular senescence in blood samples taken from patients during peri-operative chemotherapy for operable gastric or gastro-oesophageal junction adenocarcinoma. These will include cathelicidin-related antimicrobial protein (CRAMP), EF-1a, stathmin, and chitinase 3-like protein 3.

The tertiary (exploratory) objectives of this study are:

(a) to analyse changes in CK-18 in blood samples taken from patients during peri-operative chemotherapy for operable gastric or gastro-oesophageal junction adenocarcinoma as a marker of drug-induced cell death by apoptosis.

(b) to analyse changes in senescence-associated micro-RNAs in blood samples taken from patients during peri-operative chemotherapy for operable gastric or gastro-oesophageal junction adenocarcinoma.

STUDY DESIGN

This will be a multi-centre, open, non-randomised study. Eligible patients will be those with operable gastric, gastro-oesophageal junction or lower oesophageal adenocarcinoma who are about to undergo peri-operative chemotherapy with either the ECF/EOF or ECX/EOX (epirubicin, Cisplatin/oxaliplatin and capecitabine/5-FU) regimens. Additionally, patients randomised in the NCRN STO3 study to receive ECX + bevacizumab will also be eligible.

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ATTACHMENTS

GI160_RTL_PeriOp_v5_12Jun2014.pdf

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