

TCS/24/42 - Total Neoadjuvant Treatment In Oesophageal Adenocarcinoma: The TNT-OAC Trial Feasibility

Oesophageal cancer is the 5th leading cause of cancer death in Scotland. Currently, patients with potentially curable oesophageal cancer receive 4 cycles of chemotherapy before surgery and 4 after surgery, curing 50% of patients. Surgery removes the primary oesophageal tumour and chemotherapy aims to eradicate microscopic spread of cancer cells around the body which is undetectable but present in many patients.

Due to complications from surgery, less than half of patients complete post operative chemotherapy, suggesting that survival could be improved if more patients completed all intended chemotherapy. Delivering all chemotherapy cycles before surgery, known as total neoadjuvant treatment (TNT), may help achieve this.

An alternative treatment is low dose chemotherapy with radiotherapy (chemoradiotherapy) before surgery. While overall this approach provides a lower cure rate (40%), it is an important treatment for some patients. Existing clinical trials indicate that chemotherapy is optimal in controlling undetected distant cancer spread while chemoradiotherapy may be optimal in treating the primary tumour in the oesophagus. Therefore, combining both treatment modalities may be the most effective TNT approach.

We propose a randomised study comparing:

- Standard of care pre- and post-surgery chemotherapy
- Extended pre-surgery chemotherapy where all chemotherapy is delivered before surgery (TNT)
- Pre-surgery chemotherapy followed by pre-surgery chemoradiotherapy (TNT)

Assessment factors include treatment tolerance, side effects, and patients' ability to progress to surgery after completing TNT. The trial will determine if TNT is tolerable and the findings will contribute to a larger trial which will definitively evaluate effectiveness of TNT.