



DECIPHER Study

Background

Those diagnosed with Gastrooesophageal cancer (cancer of the stomach, food pipe or the area where the stomach joins the food pipe) early will generally have chemotherapy followed by surgery, followed by the same chemotherapy post-surgery.

Research shows that chemotherapy after surgery is less likely to work well in some people. There is evidence that cancer is more likely to come back if there are small amounts of cancer in the bloodstream (called circulating tumour DNA or ctDNA) after chemotherapy and surgery.

Aims

DECIPHER aims to treat ctDNA, using a drug called trastuzumab deruxtecan, to reduce the chance of the cancer coming back.

Trastuzumab deruxtecan is a combination of the targeted cancer drug trastuzumab and a chemotherapy drug called deruxtecan. Trastuzumab works by attaching to HER2 receptors on cancer cells. When it attaches to the HER2, it allows deruxtecan to go into the cancer cell. Inside the cell, deruxtecan becomes active and kills the cancer cell.

Therefore, patients in the trial will be HER2 positive and ctDNA positive following chemotherapy and surgery.

Design and Methods

DECIPHER aims to recruit 25 patients from NHS Secondary Care Centres. Patients will be invited to consent to the tissue testing part of the study prior to surgery, or within 4 weeks following surgery. HER2 testing is performed as part of standard care and is not tested within the trial. After the standard of care surgery, part of the tumour that has been removed will be sent to a laboratory along with two blood samples to test whether the patient is ctDNA positive.

Patients who are HER2 and ctDNA positive will be treated with trastuzumab deruxtecan at a dose of 6.4 mg/kg every 21 days for a maximum of 8 cycles. Following treatment patients will be followed up for a maximum of 2 years, with CT scans performed every 12 weeks.

Trial Status

The trial is currently open to recruitment at the following sites:

- Leeds Teaching Hospitals NHS Trust
- Oxford University Hospitals NHS Trust
- University Hospitals Coventry and Warwickshire NHS Trust
- Hull University Teaching Hospitals NHS Trust
- University College London Hospitals NHS Foundation Trust
- The Christie NHS Foundation Trust
- Cambridge University Hospitals NHS Foundation Trust
- University Hospitals of Derby and Burton NHS Foundation Trust
- NHS Tayside
- Lancashire Teaching Hospitals NHS Foundation Trust