**Auditing the use of trastuzumab for metastatic gastric cancer and reviewing overall survival outcomes**

**Descriptor:**

This audit will retrospectively measure the local practice and management of patients with HER2-positive metastatic gastric or gastro-oesophageal adenocarcinoma. Trastuzumab has recently been approved by NICE for treatment in these patients who meet specific criteria and so compliance will be audited against these NICE guidelines. Patients must be tested for HER2 status, so this was also audited. Median overall survival was reviewed and compared to the ToGA trial data.

**Background:**

In order for eligible patients to be given access to trastuzumab therapy, all suitable patients should be tested for HER2 positivity. The outcomes of therapy were audited to compare overall survival to the ToGA trial data.

## The Cycle

**The standard:**

1. NICE technology appraisal 208: Patients starting trastuzumab should have a gastric or gastro-oesophageal junctional tumour

2. NICE technology appraisal 208: Patients starting trastuzumab should have metastatic disease

3. NICE technology appraisal 208: Patients starting trastuzumab should have had no prior treatment for their metastatic disease

4. NICE technology appraisal 208: Patients starting trastuzumab should have tumours that overexpress HER2 defined on immunohistochemistry as 3+

5. NICE technology appraisal 208: Patients on trastuzumab therapy should have cardiac monitoring of LVEF before and during treatment

6. NICE technology appraisal 208: Patients on trastuzumab should have therapy discontinued after disease progression

7. Suitable patients that meet the NICE criteria should be identified and tested for HER2 status to determine eligibility for trastuzumab therapy

8. Local median overall survival outcomes should be compared to the ToGA trial data

**Target:**

1. 100% of patients on trastuzumab to be compliant to all NICE guideline criteria

2. 100% of suitable patients to be tested for HER2 status

3. Median overall survival to be comparable to the ToGA result of 16.0 months within 95% confidence intervals

## Assess local practice

**Indicators:**

1. Proportion of patients on trastuzumab to be compliant to all NICE guideline criteria

2. Proportion of suitable patients to be tested for HER2 status

3. Median overall survival within 95% confidence intervals

**Data items to be collected:**

• Date of birth

• Gender

• Primary tumour type

• Histology

• TNM tumour stage

• Date of diagnostic scan

• Metastatic sites

• HER2 status

• Details of previous treatment

• Dates of cardiac monitoring and results

• Dates of tumour progression scans and results

• Date trastuzumab therapy stopped

• Date of death/last seen in clinic

**Suggested number:**

• Patients starting trastuzumab audited against the NICE guidelines over an 18 month period

• Proportion of suitable patients tested for HER2 status over an 18 month period

• Median overall survival calculated for patients over an 18 month period, with outcomes monitored for a further 6 months

• Patients identified from chemotherapy database and pathology database

**Suggestions for change if target not met:**

• Summarise audit findings and distribute to clinicians

• Identify issues and reasons for non-compliance

• Educate and increase awareness of the NICE guidelines among clinicians

• Update patient literature to include trastuzumab as a potential treatment option

• Look at local pathology laboratory testing procedures for HER2 testing

• Improve documentation and MDT communication for requesting HER2 testing on suitable patients

• Re-audit in 12 months

**Resources:**

- Personnel: Clinical Oncologist, Pathology lead, MDT co-ordinator

- Time: 18 hours to collect data

[**29\_Trastuzumab gastric audit tool JH nd EY 2013.doc**](https://www.rcr.ac.uk/sites/default/files/audit_template/co/29_Trastuzumab%20gastric%20audit%20tool%20JH%20nd%20EY%202013.doc)WORD - 37.5 KB

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**Editor's comments:**

This audit was undertaken by a fourth year medical student as a project option. NICE guidance had recently approved the use of Trastuzumab in gastro-oesophageal cancer but we had access to the drug through local funding prior to the date of NICE guidance. As well as looking at compliance to NICE guidance we also looked at survival data for the larger group of patients with longer follow up.

**Submitted by:**

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