NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Appraisal

Pertuzumab for untreated metastatic HER2-positive gastric or gastro-oesophageal junction cancer

Draft scope

Remit/appraisal objective

To appraise the clinical and cost effectiveness of pertuzumab within its marketing authorisation for untreated metastatic HER2-positive gastric or gastro-oesophageal junction cancer.

Background

Gastric cancer is a malignant tumour arising from cells in the stomach. The most common type of gastric cancer is gastric or gastro-oesophageal junction adenocarcinoma, which affects about 95% of people with the disease. Gastric cancer is more common in men than women, with approximately 3,500 cases diagnosed in men, and 1,800 cases in women in England in 2014[1]. About 80% of people have metastatic disease at diagnosis.

The aim of treatment in advanced gastric cancer is to prevent progression, extend survival and relieve symptoms with minimal adverse effects. Treatment usually consists of surgery which is typically carried out in the earlier stages of gastric cancer, but may also be carried out in advanced stages to relieve pain and discomfort from the disease. In addition chemotherapy and/or radiotherapy is offered and the type of treatment mainly depends on the stage of the disease. Chemotherapy regimens used in untreated gastric cancer include fluorouracil or capecitabine in combination with one or more of the following: cisplatin, oxaliplatin, mitomycin, epirubicin, docetaxel and irinotecan. For some people who have untreated HER2-positive metastatic gastric or gastro-oesophageal junction cancer, NICE's technology appraisal 208 recommends trastuzumab in combination with cisplatin and capecitabine or 5-fluorouracil.

The technology

Pertuzumab (Perjeta, Roche); is a recombinant humanised monoclonal antibody that specifically targets the extracellular dimerisation domain of the human epidermal growth factor receptor 2 (HER2) protein. It prevents the dimerisation of HER2 with other HER family receptors at the surface of cancer cells, which inhibits intracellular signalling pathways, leading to cell death. It is administered by intravenous (IV) infusion.

Pertuzumab does not currently have marketing authorisation in the UK for previously untreated metastatic HER2-positive gastric or gastro-oesophageal junction cancer. It has been studied in clinical trials in combination with trastuzumab, a fluoropyrimidine and cisplatin as first-line treatment in adults with HER2-positive metastatic gastroesophageal junction or gastric cancer.

Intervention(s)	Pertuzumab in combination with trastuzumab, fluorouracil/capecitabine, and cisplatin
Population(s)	Adults with HER2-positive metastatic gastroesophageal junction or gastric cancer.
Comparators	Trastuzumab in combination with fluorouracil/capecitabine, and cisplatin
Outcomes	The outcome measures to be considered include: • overall survival • progression-free survival • response rate • adverse effects of treatment • health-related quality of life.
Economic analysis	The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year. The reference case stipulates that the time horizon for estimating clinical and cost effectiveness should be sufficiently long to reflect any differences in costs or outcomes between the technologies being compared. Costs will be considered from an NHS and Personal Social Services perspective.
Other considerations	Guidance will only be issued in accordance with the marketing authorisation. Where the wording of the therapeutic indication does not include specific treatment combinations, guidance will be issued only in the context of the evidence that has underpinned the marketing authorisation granted by the regulator.

Related NICE recommendations and NICE Pathways	Related Technology Appraisals: 'Trastuzumab for the treatment of HER2-positive metastatic gastric cancer (2010). NICE Technology Appraisal 208. Guidance on static list 'Capecitabine for the treatment of advanced gastric cancer (2010)' NICE Technology Appraisal 191. Guidance on static list Guidelines in development 'Oesophago-gastric cancer. Publication expected January 2018. Related Interventional Procedures: 'Endoscopic submucosal dissection of gastric lesions (2010) NICE interventional procedure guidance 360 Laparoscopic gastrectomy for cancer (2008) NICE interventional procedure guidance 269 Laparo-endogastric surgery (2003) NICE interventional procedure guidance 25 Related NICE Pathways: Gastrointestinal cancers (2016) NICE pathway
Related National Policy	NHS England (2016) Manual for prescribed specialised services 2016/17 Chapter 105: specialist cancer services (adults). NHS England (2016) Clinical Commissioning Policy: Robotic assisted surgery for oesophago-gastric cancers NHS England (2013) 2013/14 NHS Standard Contract for Cancer: Oesophageal and Gastric (adult) National Service Frameworks Cancer Department of Health (2016) NHS outcomes framework 2016 to 2017 Independent Cancer Taskforce (2015) Achieving world-class cancer outcomes: a strategy for England 2015-

	2020 Department of Health (2014) The national cancer strategy: 4th annual report Department of Health (2011) Improving outcomes: a strategy for cancer Department of Health (2009) Cancer commissioning guidance Department of Health (2007) Cancer reform strategy

Questions for consultation

Have all relevant comparators for pertuzumab been included in the scope? Which treatments are considered to be established clinical practice in the NHS for untreated metastatic HER2-positive gastric or gastro-oesophageal junction cancer?

Are the outcomes listed appropriate?

Are there any subgroups of people in whom pertuzumab is expected to be more clinically effective and cost effective or other groups that should be examined separately?

Where do you consider pertuzumab will fit into the existing NICE pathway for gastric cancers?

NICE is committed to promoting equality of opportunity, eliminating unlawful discrimination and fostering good relations between people with particular protected characteristics and others. Please let us know if you think that the proposed remit and scope may need changing in order to meet these aims. In particular, please tell us if the proposed remit and scope:

- could exclude from full consideration any people protected by the equality legislation who fall within the patient population for which pertuzumab will be licensed;
- could lead to recommendations that have a different impact on people protected by the equality legislation than on the wider population, e.g. by making it more difficult in practice for a specific group to access the technology;
- could have any adverse impact on people with a particular disability or disabilities.

Please tell us what evidence should be obtained to enable the Committee to identify and consider such impacts.

Do you consider pertuzumab to be innovative in its potential to make a significant and substantial impact on health-related benefits and how it might improve the way that current need is met (is this a 'step-change' in the management of the condition)?

Do you consider that the use of pertuzumab can result in any potential significant and substantial health-related benefits that are unlikely to be included in the QALY calculation?

Please identify the nature of the data which you understand to be available to enable the Appraisal Committee to take account of these benefits.

To help NICE prioritise topics for additional adoption support, do you consider that there will be any barriers to adoption of this technology into practice? If yes, please describe briefly.

NICE intends to appraise this technology through its Single Technology Appraisal (STA) Process. We welcome comments on the appropriateness of appraising this topic through this process. (Information on the Institute's Technology Appraisal processes is available at http://www.nice.org.uk/article/pmg19/chapter/1-Introduction).

NICE has published an addendum to its guide to the methods of technology appraisal (available at https://www.nice.org.uk/Media/Default/About/what-we-do/NICE-guidance/NICE-technology-appraisals/methods-guide-addendum-cost-comparison.pdf), which states the methods to be used where a cost comparison case is made. We welcome comments on the appropriateness and suitability of the cost comparison methodology to this topic.

- Is the new technology likely to be similar in its clinical efficacy and resource use to any of the comparators?

- Is the primary outcome that was measured in the trial or used to drive the model for the comparator(s) still clinically relevant?

- Is there any substantial new evidence for the comparator technologies that has not been considered? Are there any important ongoing trials reporting in the next year?

References

1. Cancer Research UK Stomach cancer incidence statistics. Accessed July 2017.