NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Appraisal

Nivolumab for treating unresectable advanced oesophageal cancer when standard chemotherapy has failed

Draft scope

Remit/appraisal objective

To appraise the clinical and cost effectiveness of nivolumab within its marketing authorisation for unresectable, advanced oesophageal cancer when standard chemotherapy has failed.

Background

Oesophageal cancer is a malignant tumour arising from cells lining the oesophagus (gullet), which is the muscular tube through which food passes from the throat to the stomach. The two main types of oesophageal cancer are squamous cell carcinoma and adenocarcinoma. Together, these account for over 95% of oesophageal cancer cases[1].

There are an estimated 8,919 new diagnoses of oesophageal cancer in the UK each year[2]. It is more common in men than women, with approximately 19 new cases for every 100,000 males and 9 for every 100,000 females. Around 80% of all new cases are diagnosed in people aged over 60[3]. Because of the nature of symptoms, oesophageal cancer is often diagnosed at an advanced stage, with around 70-80% diagnosed at stage 3 (locally advanced) or 4 (metastatic)[2].

Surgery with or without radiotherapy can be used to treat early oesophageal cancer. Chemotherapy is sometimes used when surgery with or without radiotherapy is not effective. There is currently no standard treatment for previously treated advanced oesophageal cancer in the UK.

The technology

Nivolumab (Opdivo, Bristol-Myers Squibb) is a human monoclonal antibody that targets a receptor on the surface of lymphocytes known as PD-1. This receptor is part of the immune checkpoint pathway, and blocking its activity may promote an anti-tumour immune response. Nivolumab is administered intravenously.

Nivolumab does not currently have a marketing authorisation for oesophageal cancer in the UK. It is being studied in clinical trials versus docetaxel, paclitaxel or placebo in people with unresectable advanced or recurrent oesophageal cancer that is refractory to standard therapy or in whom standard therapy is not tolerated, including combination therapy with fluoropyrimidine and platinum-based drugs.

Intervention(s)	Nivolumab
Population(s)	Adults with previously treated advanced or recurrent unresectable oesophageal cancer that is refractory or intolerant to chemotherapy
Comparators	• chemotherapy including taxanes (docetaxel/paclitaxel) or irinotecan • best supportive care (including but not limited to antiemetics, blood transfusions, oesophageal stents)
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 Guidelines:** 'Oesophago-gastric cancer: assessment and management in adults' (2018) NICE guideline NG83. Review date: TBC NICE guideline CG106 Barrett's oesophagus: ablative therapy Published date: August 2010 **Related Technology Appraisals:** NICE technology appraisal guidance 378 Ramucirumab for treating advanced gastric cancer or gastro–oesophageal junction adenocarcinoma previously treated with chemotherapy. Published date: January 2016 **Appraisals in development (including suspended appraisals):** Nivolumab for previously treated gastric or gastro-oesophageal junction cancer NICE technology appraisal guidance [ID1118]. Publication expected: TBC Pembrolizumab for previously treated oesophageal or gastro-oesophageal junction cancer NICE technology appraisal guidance [ID1357]. Publication expected: TBC Pembrolizumab for gastric or gastroesophageal junction adenocarcinoma NICE technology appraisal guidance [ID1305]. Publication expected: TBC Avelumab for treating gastric or gastro-oesophageal junction cancer after 2 therapies NICE technology appraisal guidance [ID1289]. Publication expected: TBC Pembrolizumab for previously treated metastatic gastric or gastro-oesophageal junction cancer NICE technology appraisal guidance [ID1168]. Appraisal suspended Pertuzumab for untreated metastatic HER2-positive gastric or gastro-oesophageal junction cancer NICE technology appraisal guidance [ID1096]. Appraisal suspended **Related NICE Pathways:** Gastrointestinal cancers (2018), NICE pathway available at: https://pathways.nice.org.uk/pathways/gastrointestinal-cancers

Related National Policy	NHS England (2017/18) Manual for Prescribed Specialised Services Chapter 2A Adult highly specialist oesophageal gastric services in the form of gastro-electrical stimulation for patients with intractable gastroparesis NHS England (2013) NHS Standard contract for cancer: Oesophageal and gastric (adult) section B part 1 - Service specifications. REF: B11/S/a NHS England (2016) Clinical Commissioning Policy: Robotic assisted surgery for oesophago-gastric cancers. Ref: NHS England: 16006/P Department of Health, NHS Outcomes Framework 2016-2017 (published 2016): Domains 1-5. https://www.gov.uk/government/publications/nhs-outcomes-framework-2016-to-2017

Questions for consultation

Have all relevant comparators for nivolumab been included in the scope?

Which treatments are considered to be the most commonly used in the NHS for previously treated, advanced or recurrent unresectable oesophageal cancer when standard chemotherapy has failed:

- second-line chemotherapy including taxanes (docetaxel/paclitaxel) or irinotecan or
- best supportive care?

Are the outcomes listed appropriate?

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

Where do you consider nivolumab will fit into the existing NICE pathway on gastrointestinal 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 nivolumab 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 nivolumab 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 nivolumab 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.

References

1. Macmillan Cancer Support. Oesophageal Cancer. 2015 [cited 2017 03.04.]; Available from: http://www.macmillan.org.uk/information-and-support/oesophageal-gullet-cancer/understanding-cancer/types-oesophageal-cancer.html

2. Cancer Research UK. Oesophageal Cancer Incidence Statistics. 2014 [cited 2017 03.04.]; Available from: http://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/oesophageal-cancer/incidence#heading-Zero

3. Cancer Research UK. Oesophageal Cancer - Causes and Risks. 2016 [cited 2017 03.04.]; Available from: http://www.cancerresearchuk.org/about-cancer/oesophageal-cancer/causes-risks