NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Single Technology Appraisal

Durvalumab for maintenance treatment of unresectable non-small-cell lung cancer after platinum-based chemoradiation (CDF review of TA578) [ID3885]

Final scope

Remit/appraisal objective

To appraise the clinical and cost effectiveness of durvalumab within its marketing authorisation for the maintenance treatment of locally advanced unresectable non-small-cell lung cancer that has not progressed following platinum-based chemoradiation therapy.

Background

Lung cancer falls into 2 main histological categories: around 85–90% are non-small-cell lung cancers (NSCLC) and the remainder are small cell lung cancers. NSCLC can be further classified into 3 histological sub-types of large-cell undifferentiated carcinoma, squamous cell carcinoma and adenocarcinoma. Most lung cancers are diagnosed at an advanced stage, when the cancer has spread to lymph nodes and other organs in the chest (locally advanced disease; stage III) or to other parts of the body (metastatic disease; stage IV).

Cancer cells expressing an immunologic marker called programmed cell death 1 ligand (PD-L1) are believed to suppress certain immune responses and cause increased tumor aggressiveness. The proportion of NSCLC that is PD-L1 positive in England is unknown.

In 2018, around 35,000 people were estimated to be diagnosed with NSCLC in England.[1,2] Around 22% had stage III disease.[1] The prognosis for people with NSCLC is generally poor. Between 2013 and 2017 around 40% of people with lung cancer survived for 1 year or longer and only 16% survived for 5 years or longer.[2]

NICE guideline 122 (NG122) recommends chemoradiotherapy as an option for people with stage II or III unresectable NSCLC. There is currently no national clinical guidance on maintenance therapy for people who do not progress following chemoradiotherapy.

This review of technology appraisal guidance 578 only covers the population eligible for treatment according to that guidance (that is, adults with locally advanced unresectable NSCLC whose tumours are PD-L1 positive and whose disease has not progressed after concurrent platinum-based chemoradiation).

The technology

Durvalumab (Imfinzi, AstraZeneca) is a human monoclonal antibody that targets the 'programmed death ligand-1' (PD-L1) protein. Durvalumab blocks PD-L1 interaction with both PD-1 and CD80 on T cells, countering the tumour's immune-evading tactics and activating the patient's immune system to attack the cancer. It is administered by intravenous infusion.

Durvalumab has a marketing authorisation for treating locally advanced unresectable NSCLC in adults whose tumours express PD-L1 on at least 1% of tumour cells and whose disease has not progressed after platinum-based chemoradiation.

Intervention(s)	Durvalumab
Population(s)	Adults with locally advanced unresectable non-small cell lung cancer whose tumours express PD-L1 on at least 1% of tumour cells and whose disease has not progressed after concurrent platinum-based chemoradiation therapy
Comparators	Best supportive care
Outcomes	The outcome measures to be considered include: • overall survival • progression-free survival • response rates • 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. The availability of any commercial arrangements for the intervention, comparator and subsequent treatment technologies will be taken into account.

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: None Related Guidelines: Lung Cancer: Diagnosis and management (2019). NICE guideline 122. Review date TBC. Related Quality Standards: Lung cancer in adults (2012). NICE quality standard 17. Related NICE Pathways: Lung cancer. Pathway created: Mar 2012.
Related National Policy	The NHS Long Term Plan, 2019. NHS Long Term Plan NHS England (2016) Manual for Prescribed Specialised Services 2016/17. See section 105 – specialist cancer services, pp 228-. Department of Health and Social Care, NHS Outcomes Framework 2016-2017: Domains 1-5. https://www.gov.uk/government/publications/nhs-outcomes-framework-2016-to-2017 NHS England (2015) Non-small-cell lung cancer. National chemotherapy algorithm. This is commercial in confidence NHS England. 2013/14 NHS Standard Contract for Radiotherapy (All ages). B01/S/a NHS England. 2013/14 NHS Standard Contract for Chemotherapy (All ages). B15/S/a NHS England (April 2013). Clinical Commissioning Policy: Stereotactic Ablative Body Radiotherapy for Non-Small-Cell Lung Cancer (Adult). NHSCB/B01/P/a 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

References

1. National lung cancer audit 2018 (2021) Royal college of Physicians. Accessed November 2021.

2. 2 Cancer survival in England: adult, stage at diagnosis and childhood-patients followed up to 2018 (2019) Office for National Statistics. Accessed November 2021