NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE
Health Technology Evaluation

Osimertinib for maintenance treatment of EGFR mutation-positive locally advanced or unresectable non-small-cell lung cancer after platinum-based chemoradiation

Draft scope

Draft remit/evaluation objective

To appraise the clinical and cost effectiveness of osimertinib within its marketing authorisation as maintenance treatment of EGFR mutation-positive locally advanced or unresectable non-small-cell lung cancer (NSCLC) which has not progressed after platinum based chemoradiation.

Background

Lung cancer is the third most common cancer and the most common cause of cancer death in the UK, accounting for 10% of all new cancer cases and 20% of all cancer deaths in 2020.[1] There were around 37,000 new lung cancer cases and 27,000 deaths from lung cancer in England in 2020.[1] 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 3) or to other parts of the body (metastatic disease; stage 4).[2] In 2022, 92% (around 33,000) of people diagnosed with lung cancer in England had NSCLC.[2]

As a result of the targeted NHS Lung Health Check programme, which is being rolled out in the UK, it is expected that lung cancer will increasingly be diagnosed at an earlier stage, when treatment may be more successful. Around 15% of non-small-cell lung cancers harbour an EGFR mutation.[3]

NICE's Lung cancer: diagnosis and management guideline recommends several options for people with unresectable locally advanced non-small-cell lung cancer. These include chemoradiation which can be either concurrent (chemotherapy given alongside radiotherapy) or sequential (chemotherapy followed by radiotherapy) and radiotherapy alone. NICE guidance (TA798) recommends durvalumab as maintenance treatment for people whose NSCLC is PD-L1 positive and has not progressed after concurrent platinum based chemoradiation. Some people may have best supportive care.

The technology

Osimertinib (Tagrisso, AstraZeneca) does not currently have a marketing authorisation in the UK as a maintenance treatment for NSCLC after platinum-based chemotherapy. It is being studied in a phase 3 clinical trial compared with placebo in people who have locally advanced, unresectable NSCLC with one of the two common EGFR mutations, exon 19 deletion or L858R, either alone or in combination with other EGFR mutations.

Osimertinib does have a marketing authorisation for use as an adjuvant treatment of EGFR genetic alteration positive NSCLC after complete tumour resection and for treating untreated and previously treated EGFR mutation positive locally advanced or metastatic NSCLC.

Intervention(s)	Osimertinib
Population(s)	Adults with EGFR mutation-positive (exon 19 deletion or L858R, either alone or in combination with other EGFR mutations) locally advanced or unresectable NSCLC whose disease has not progressed after platinum based chemoradiation
Subgroups	If the evidence allows then the following subgroups will be considered: • people who had concurrent or sequential chemoradiation therapy • PD-L1 expression • disease stage • newly diagnosed or recurrent NSCLC (including post-surgery recurrence) • treatments had at previous stages (if any)
Comparators	• durvalumab (for people who had concurrent chemoradiation therapy and have PD-L1 positive NSCLC) • best supportive care (for people who had sequential chemoradiation therapy, whose NSCLC is PD-L1 negative or where a PD-L1 inhibitor is not suitable or preferred)
Outcomes	The outcome measures to be considered include: • overall survival • progression-free survival • disease 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. If the technology is likely to provide similar or greater health benefits at a similar or lower cost than technologies recommended in published NICE technology appraisal guidance for the same indication, a cost comparison may be carried out. 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	**Related technology appraisals:** Durvalumab for maintenance treatment of unresectable non-small-cell lung cancer after platinum-based chemoradiation (2022) NICE technology appraisal guidance 798 **Related NICE guidelines:** Lung cancer: diagnosis and management (2023) NICE guideline 122 **Related diagnostics guidance:** EGFR-TK mutation testing in adults with locally advanced or metastatic non-small-cell lung cancer (2013) NICE diagnostics guidance 9. **Related quality standards:** Lung cancer in adults (2012). NICE quality standard 17.
Related National Policy	The NHS Long Term Plan, 2019. NHS Long Term Plan

	NHS England (2023) Manual for prescribed specialist services (2023/2024) Chapter 105: Specialist cancer services (adults).

Questions for consultation

Where do you consider osimertinib will fit into the existing care pathway for NSCLC?

Would osimertinib be a candidate for managed access?

Do you consider that the use of osimertinib can result in any potential 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 committee to take account of these benefits.

Are the comparators suggested above appropriate?

What would best supportive care involve for NSCLC that is not treated with durvalumab maintenance?

Are the outcomes suggested above appropriate? (Specifically, is disease-free or progression-free survival the most appropriate outcome)

Is testing for EGFR genetic alterations routine for unresectable locally advanced NSCLC?

At what point in the pathway is testing for EGFR genetic alterations usually carried out?

Would a PD-L1 inhibitor be used in unresectable locally advanced NSCLC which is positive for an EGFR mutation?

Would use of osimertinib as maintenance after platinum based chemoradiation affect the use of EGFR specific targeted treatments in the advanced and metastatic decision space? If so, how?

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 osimertinib 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.

NICE intends to evaluate this technology through its Single Technology Appraisal process. (Information on NICE's health technology evaluation processes is available at https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-technology-appraisal-guidance/changes-to-health-technology-evaluation).

References

1. NHS England. Cancer Registration Statistics, England 2020. Accessed March 2024

2. Royal College of Surgeons of England (2024). National Lung Cancer Audit: State of the Nation Report 2024. Accessed May 2024

3. Prevalence of Epidermal Growth Factor Receptor Exon 20 Insertion Mutations in Non-small-Cell Lung Cancer in Europe: A Pragmatic Literature Review and Meta-analysis. Van Sanden. S, Murton. M et al (2022). Accessed January 2024