



Australian Government

Medical Services Advisory Committee

Public Summary Document

Application No. 1516 – Testing for epidermal growth factor receptor (EGFR) status in patients with locally advanced or metastatic non-small cell lung cancer (NSCLC) to determine eligibility for osimertinib

Applicant: AstraZeneca Pty Ltd

Date of MSAC consideration: MSAC 79th Meeting, 28-29 July 2020

Context for decision: MSAC makes its advice in accordance with its Terms of Reference, [visit the MSAC website](#)

1. Purpose of application

An application for a streamlined codependent consideration requested:

- Pharmaceutical Benefits Schedule (PBS) listing of osimertinib for the first-line treatment of patients with locally advanced or metastatic, epidermal growth factor receptor mutation positive (*EGFR*_m), non-small cell lung cancer (NSCLC)
- an amendment of Medicare Benefits Schedule (MBS) item 73337 to include osimertinib in the list of EGFR tyrosine kinase inhibitors (TKI) agents for which *EGFR* mutation testing can be used to determine eligibility for access to PBS subsidised treatment.

2. MSAC's advice to the Minister

In alignment with the extended Pharmaceutical Benefits Scheme (PBS) listing of osimertinib as recommended by the Pharmaceutical Benefits Advisory Committee (PBAC) in July 2020, MSAC supported the modification of existing Medicare Benefits Schedule (MBS) item number 73337 to include this medicine by replacing the identified medicines with the drug class name of “EGFR tyrosine kinase inhibitor”.

Consumer summary

AstraZeneca applied for public funding for testing of epidermal growth factor receptor (EGFR) genetic status in people with locally advanced or metastatic non-small cell lung cancer (NSCLC) to help determine eligibility for osimertinib.

Most lung cancers are part of a group called NSCLC. EGFR is a protein on the surface of both healthy cells and cancer cells. When there is a mutation in the EGFR gene, which can occur in some lung cancer cells, cells grow quickly and this can make the cancer spread more quickly.

Consumer summary

Tumour samples from people with NSCLC can be tested for an EGFR mutation. There are other medicines already available to treat people with NSCLC whose tumour cells have an EGFR mutation. MSAC noted acceptance by the Pharmaceutical Benefits Advisory Committee (PBAC) of new data that show that the medicine osimertinib can help these people live longer, comparable with use of these other medicines. Based on this PBAC conclusion, MSAC considered that, in the relevant MBS item descriptor, osimertinib should be added to the list of medicines that can be used to treat people with NSCLC who have an EGFR mutation.

MSAC's advice to the Commonwealth Minister for Health

MSAC supported the modification of existing MBS item 73337 to include osimertinib by replacing the identified medicines in the item descriptor with the drug class name of "EGFR tyrosine kinase inhibitor".

3. Summary of consideration and rationale for MSAC's advice

MSAC noted that, in July 2020, the PBAC recommended the extended Pharmaceutical Benefits Scheme (PBS) listing of osimertinib (Tagrisso[®]), sponsored by Astra Zeneca Pty Ltd, to also include first-line treatment of locally advanced or metastatic epidermal growth factor receptor (*EGFR*) mutation positive non-small cell lung cancer (NSCLC).

MSAC noted that the PBAC relied on an updated clinical assessment and economic model including overall survival (OS) data from the FLAURA trial. At 58% maturity, the updated results of this trial continued to show that osimertinib is associated with a statistically significant and clinically meaningful improvement in OS (hazard ratio = 0.799; 95.05% confidence interval, 0.640, 0.996; p-value=0.0462).

To implement the intent of the requested amendment in the MBS item, MSAC instead advised that the drug group term "EGFR tyrosine kinase inhibitor" be used, rather than list the individual PBS-listed medicines, as follows:

Category 6 – PATHOLOGY SERVICES

P7 - Genetics

73337

A test of tumour tissue from a patient diagnosed with non-small cell lung cancer, shown to have non-squamous histology or histology not otherwise specified, requested by, or on behalf of, a specialist or consultant physician, to determine if the requirements relating to epidermal growth factor receptor (EGFR) gene status for access to an EGFR tyrosine kinase inhibitor listed under the Pharmaceutical Benefits Scheme (PBS) are fulfilled.

Fee: \$397.35 Benefit: 75% = \$298.05 85% = \$337.75

MSAC advised that there would be no immediate change predicted for the MBS budget, considering that the consequential small reduction in *T790M* testing (MBS item 73351) would take several years to become noticeable.

4. Background

MSAC has not previously considered this application.

MSAC had previously considered and supported public funding on the MBS for *EGFR* testing to help determine eligibility for erlotinib (Application 1173), gefitinib (Application 1161), and afatinib (Application 1293).

The MSAC Executive, at its March 2019 meeting, suggested that the MBS item 73337 descriptor should be amended to refer to the drug group term '*EGFR* TKI' rather than list each individual PBS listed medicine.

5. Prerequisites to implementation of any funding advice

Diagnostic laboratories must be National Association of Testing Authorities (NATA) accredited to receive MBS funding for *EGFR* mutation testing.

Australian pathology service providers participate in a local *EGFR* mutation testing quality assurance program that is administered by the Royal College of Pathologists of Australasia Quality Assurance Programs Pty Limited (RCPAQAP).

6. Proposal for public funding

This application requests the addition of osimertinib to the list of medicines for which MBS item 73337 can be used to help determine patient's eligibility under the PBS (Table 1).

Table 1 Proposed amendment to MBS item 73337 (amendment underlined)

Category 6 – PATHOLOGY SERVICES
A test of tumour tissue from a patient diagnosed with non-small cell lung cancer, shown to have non-squamous histology or histology not otherwise specified, requested by, or on behalf of, a specialist or consultant physician, to determine if the requirements relating to epidermal growth factor receptor (<i>EGFR</i>) gene status for access to erlotinib, gefitinib, afatinib <u>or osimertinib</u> under the Pharmaceutical Benefits Scheme (PBS) are fulfilled.
Proposed Fee: \$397.35 Benefit: 75% = \$298.05 85% = \$337.75

Source: p1 of Minor Submission

After considering the applicant's proposed amendment to MBS item 73337, MSAC instead advised that the drug group term "EGFR tyrosine kinase inhibitor" be used, rather than list the individual PBS-listed medicines.

7. Proposed intervention's place in clinical management

The effective inclusion of osimertinib in the proposed MBS item 73337 descriptor, by replacing the individual PBS-listed medicines with the drug group term "EGFR tyrosine kinase inhibitor, would not affect the utilisation of *EGFR* mutation testing in patients with NSCLC.

8. Comparative effectiveness

Test methodology

The Applicant stated there are at least 18 different Australian molecular pathology service providers that routinely offer *EGFR* mutation testing for patients with NSCLC. Australian molecular pathology service providers currently use a number of different commercial test kits and locally developed methods, the most common of which are the cobas® *EGFR* mutation test kit (Roche Molecular Systems, Inc.), Therascreen® *EGFR* RGQ (Qiagen NV), OncoFOCUS Panel (Agena Bioscience) and TruSight Tumor 26 (Illumina) (RCPAQAP, 2017).

The Applicant also reported that the primary studies for erlotinib (IPASS), afatinib (LUX Lung 3) and osimertinib (FLAURA) all utilised real time PCR-based *EGFR* testing. Specifically, the Qiagen Therascreen kit was included in the IPASS and LUX Lung 3 studies while the Roche Cobas kit was utilised in FLAURA.

The Applicant advised that these kits were included in the 2017 RCPAQAP which demonstrated 100% concordance for *EGFR* mutation testing at Australian laboratories. This is consistent with international data, which reported a concordance rate of 98.0% between the two test kits (Kimura, 2014). Both Cobas and Therascreen have also been demonstrated to deliver concordant results with Sanger sequencing which was utilised in the primary study for gefitinib (EURTAC): 96% and 98% respectively for Cobas and Therascreen (Wong, 2013).

9. Financial/budgetary impacts

There is no financial impact anticipated for the change proposed by the application, as the eligible population for testing is not expected to change.

10. Applicant comments on MSAC's Public Summary Document

The applicant had no comment.

11. Further information on MSAC

MSAC Terms of Reference and other information are available on the MSAC Website: [visit the MSAC website](#)