MSAC Application 1762

Amendment to HER-2 MBS item to allow for trastuzumab deruxtecan for the treatment of patients with metastatic gastric or gastroesophageal junction adenocarcinoma

Application for MBS eligible service or health technology

Application ID:
HPP200038

Application title:
Amendment to HER-2 MBS item to allow for trastuzumab deruxtecan for the treatment of patients with metastatic gastric or gastroesophageal junction adenocarcinoma.

Submitting organisation:
ASTRAZENECA PTY LTD

Submitting organisation ABN:
54009682311

Application description

Succinct description of the medical condition/s:
Gastric and GEJ adenocarcinomas are the fifth most common cancers and fourth leading cause of cancer deaths worldwide, affecting both men and women. There were approximately 1 million incident cases and more than 769 000 associated deaths in 2020. (Sung H 2020) In Australia, the estimated incidence of gastric cancer diagnosed in 2022 was 2,572 patients (1,661 males + 911 females) with an overall five-year survival rate (2014-2018) of 37%. (Cancer Australia, AIHW). Approximately one in five gastric and GEJ adenocarcinomas are HER2-positive: an aggressive subtype that correlates with poor outcomes. (Iqbal N, 2014, ACS 2020)
HER2 expression is a prognostic biomarker that is routinely screened in Australian clinical practice in patients with metastatic gastric or GEJ adenocarcinoma to determine eligibility to trastuzumab (first line treatment). HER2 testing for access to trastuzumab in metastatic gastric cancer is currently funded on the MBS.

Succinct description of the service or health technology:
To establish the human epidermal growth factor receptor 2 (HER2) status in metastatic gastric cancer patients there are two existing MBS items (immunohistochemical [IHC]: 72868 and in situ hybridisation [ISH]: 73342). This application is seeking an amendment to Item 73342, which makes specific reference to trastuzumab, to ensure this is applicable to allow access to trastuzumab deruxtecan on the PBS.

Application contact details

Are you the applicant, or are you a consultant or lobbyist acting on behalf of the applicant?
Applicant

Are you applying on behalf of an organisation, or as an individual?
Organisation

Is the applicant organisation the organisation you are representing in the HPP today?
Yes

Application details

Does the implementation of your service or health technology rely on a new listing on the Pharmaceutical Benefits Scheme (PBS) and/or the Prostheses List?
Yes

Which list/schedule will the other health technologies be listed on?
Pharmaceutical Benefits Scheme

Is the application for a new service or health technology, or an amendment to an existing listed service or health technology?
Amendment

What is the nature of the amendment?
Minor amendment to the item descriptor that does not affect how the service is delivered

Justification for amendment:
The main objective of this application is to request an amendment to the current MBS item (73342) descriptor for human epidermal growth factor receptor 2 (HER2) testing to include trastuzumab deruxtecan regimen.

AstraZeneca will be seeking PBS listing for trastuzumab deruxtecan for treatment of metastatic gastric or gastroesophageal junction adenocarcinoma in patients who have progressed following trastuzumab, based on data from the phase 2 DESTINY-Gastric (DG-01) (Shitara et al, 2020) and DESTINY-Gastric (DG-02) (Van Cutsem E at al. 2023) studies. DG-01 recruited patients without a requirement for a post-trastuzumab biopsy/re-testing of HER2 status whereas, in DG-02 post-trastuzumab progression biopsy/re-testing of HER2 status was required. In our application to the PBAC, AstraZeneca intend to request that a requirement for re-testing of HER2 status in not included in the PBS restriction for trastuzumab deruxtecan given challenges and potential harms associated with a re-biopsy and evidence suggesting there is benefit with trastuzumab deruxtecan regardless of post-trastuzumab HER2 status (DG-01).

With this application AstraZeneca would like to seek guidance from the department regarding the appropriate MSAC process for the proposed minor change to the descriptor and also seek guidance regarding retesting requirements in support of our PBAC submission. Based on historical precedence for trastuzumab deruxtecan (e.g. HER2 testing for treatment of patients with unresectable, metastatic HER2-low breast cancer) we note that a submission to MSAC was not required.

Please select any relevant MBS items.

MBS item number	Selected reason type
73342	Expansion or amendment to existing item

What is the type of service or health technology?
Therapeutic

PICO Sets

Application PICO sets

PICO set number	PICO set name
1	MBS Application PICO set_Enhertu_T-DXd_HER2+_GC

MBS Application PICO set_Enhertu_T-DXd_HER2+_GC

Supporting documentation

Document type	File name(s)
Application PICO set documents	MBS Application PICO set EnhertuTDXdHER2posGC.docx
Reference list	Reference List.docx

Population

Describe the population in which the proposed health technology is intended to be used:
Patients with metastatic gastric or gastro-oesophageal junction (GEJ) adenocarcinoma who have progressed on trastuzumab containing regimens.

The main objectives of this application is to request an amendment to the current MBS item (73342) descriptor for human epidermal growth factor receptor 2 (HER2) testing to include trastuzumab deruxtecan (ENHERTU™) regimen, to seek the advice of the MSAC secretariat regarding the appropriate MSAC process for the proposed minor change to the descriptor and also seek guidance regarding retesting requirements in support of our PBAC submission noting that trastuzumab deruxtecan will be used in patients who have previously progressed on trastuzumab.

Based on historical precedence for trastuzumab deruxtecan (e.g. HER2 testing for treatment of patients with unresectable, metastatic HER2-low breast cancer) we note that a submission to MSAC was not required. On February 1,2023, the MSAC Executive advised regarding an application for trastuzumab deruxtecan in patients with HER2-low breast cancer: "The MSAC Executive advised that a codependent submission to MSAC is not needed for this application. If a positive recommendation is received from the PBAC, the Department can seek policy approval from the Government to implement the relevant changes to the MBS item as a part of the PBS listing process."

If there is an option for the item descriptor amendment to progress without MSAC consideration and before a PBAC submission or PBS listing, we will also be able to provide this advice to the PBAC.

Search and select the most applicable Medical condition terminology (SNOMED CT):

Intervention

Name of the proposed health technology:
The proposed health technology is the existing MBS item 73342. A modification to the descriptor as outlined in red is requested to expand use of the current test so it can also be applied to trastuzumab deruxtecan on the PBS (Table 2).

Comparator

Nominate the appropriate comparator(s) for the proposed medical service (i.e. how is the proposed population currently managed in the absence of the proposed medical service being available in the Australian health care system). This includes identifying health care resources that are needed to be delivered at the same time as the comparator service:
HER2 positive gastric cancer patients who have failed on trastuzumab: No HER2 re-testing + standard of care, chemotherapy

Outcomes

Outcome description – please include information about whether a change in patient management, or prognosis, occurs as a result of the test information:
The treatment with trastuzumab deruxtecan (preceded by HER2 testing or not) is associated with superior outcomes compared to standard of care, chemotherapy, in patients with metastatic HER2-positive gastric or GEJ adenocarcinoma following first-line trastuzuamab. It is important to emphasise that DG-01 trial showed that overall survival results are similar between re-tested vs not re-tested patients supporting the proposal that retesting should be discretionary given the challenges associated with re-biopsying patients.

Proposed MBS items

Proposed Item AAAAA

MBS item number:
73342

Please search and select the proposed category:
PATHOLOGY SERVICES

Please search and select the proposed group:
GENETICS

Please search and select the proposed item descriptor or draft a proposed item descriptor to define the population and health technology usage characteristics that would define eligibility for funding:
An in situ hybridisation (ISH) test of tumour tissue from a patient with metastatic adenocarcinoma of the stomach or gastro-oesophageal junction, with documented evidence of human epidermal growth factor receptor 2 (HER2) overexpression by immunohistochemical (IHC) examination giving a staining intensity score of 2+ or 3+ on the same tumour tissue sample, requested by, or on the advice of, a specialist or consultant physician who manages the treatment of the patient to determine if the requirements relating to HER2 gene amplification for access to a trastuzumab-containing agent under the Pharmaceutical Benefits Scheme are fulfilled.

Proposed MBS fee:
$315.40

Indicate the overall cost per patient of providing the proposed health technology:
$268.10

Please specify any anticipated out of pocket costs:
$47.30

Provide details and explain:
NA

How is the technology/service funded at present? (For example: research funding; State-based funding; self-funded by patients; no funding or payments):
ISH test already exists on MBS (Item 73342, Table 4). As such, the current testing, interpretation, and reporting paradigm will remain unchanged as it already reports on the diagnostic criteria required to identify patients with HER2-positive gastric or GEJ cancer and allows re-testing.

Please provide a cost break down attachment:

Document type	File name(s)
Cost breakdown attachment	breakdown costs.docx

Claims

In terms of health outcomes (comparative benefits and harms), is the proposed technology claimed to be superior, non-inferior or inferior to the comparator(s)?
Superior

Please state what the overall claim is, and provide a rationale:
Superiority vs. No testing + standard of care chemotherapy.
Trastuzumab deruxtecan preceded or not by HER2 testing is associated with superior outcomes compared to "No HER2 testing and standard of care chemotherapy" in patients with metastatic HER2+ gastric or GEJ cancer whose disease progressed on previous trastuzumab-containing regimens

Estimated utilisation

Estimate the prevalence and/or incidence of the proposed population:
For patients failing trastuzumab there may be some retesting arising from the availability of PBS-funded trastuzumab deruxtecan however, since the number of patients currently treated with trastuzumab for gastric cancer is small (less than 200 patients per year) it follows that the number of patients receiving trastuzumab deruxtecan will be less than 200. Hence, the additional healthcare resources including costs to the MBS due to trastuzumab deruxtecan on the PBS will be minimal.

Provide the percentage uptake of the proposed health technology by the proposed population:

Year 1 estimated uptake(%):
100
Year 2 estimated uptake(%):
100
Year 3 estimated uptake(%):
100
Year 4 estimated uptake(%):
100

Estimate the number of patients who will utilise the proposed technology for the first full year:
less than 200 patients

Optionally, provide details:

Will the technology be needed more than once per patient?
No, once only

Provide references to support these calculations.

Document type	File name(s)
Estimated utilisation references	Estimated utilisation Trastuzumab use.xlsx

Consultation

List all appropriate professional bodies / organisations representing the group(s) of health professionals who provide the health technology/service:

Professional body name:
The Royal College of Pathologists of Australasia

List all appropriate professional bodies / organisations representing the group(s) of health professionals that may be impacted by the health technology/service:

Professional body name:
The Royal College of Pathologists of Australasia (RCPA)

List the patient and consumer advocacy organisations or individuals relevant to the proposed health technology:

Number of organisations listed: 4
Professional body name:
AUSTRALASIAN GASTRO-INTESTINAL TRIALS GROUP

Number of organisations listed: 4
Professional body name:
Pancare Foundation

Number of organisations listed: 4
Professional body name:
Patient Voice Initiative Incorporated

Number of organisations listed: 4
Professional body name:
RARE CANCERS AUSTRALIA LTD

List the relevant sponsor(s) and / or manufacturer(s) who produce similar products relevant to the proposed service or health technology:

Professional body name:
Anti-HER2/neu (4B5) antibody: Roche

Professional body name:
HER2 IQFISH pharmDx (Dako Omnis)

Professional body name:
HercepTest antibody: Agilent;

Professional body name:
Laboratory validated test for ISH probe methods

Professional body name:
Roche HER2 Dual-ISH DNA Probe Cocktail Assay

Regulatory information

Would the proposed health technology involve the use of a medical device, in-vitro diagnostic test, radioactive tracer or any other type of therapeutic good?
No

Codependent details

Will a submission be made to the Pharmaceutical Benefits Advisory Committee (PBAC)?
Yes

Please provide a rationale for the codependency and indicate how the proposed PBS restriction would reference the intervention(s) proposed for MSAC consideration:
Currently trastuzumab is the first-line treatment of choice in HER2 positive metastatic patients. In order to determine HER2 status, as a pre-requisite for accessing trastuzumab on the PBS, at diagnosis patients with metastatic gastric or GEJ adenocarcinoma undergo an ICH test followed by an ISH were appropriate. HER2 positive patients inevitable fail on trastuzumab. Trastuzumab deruxtecan provides a superior treatment option for patients who progress on trastuzumab compared to chemotherapy, the current standard of care. There is some evidence of down-regulation of HER2 status therefore re-testing to verify HER2 status may be appropriate in

accordance with clinical discretion. Therefore, the MBS item needs to be modified to accommodate trastuzumab deruxtecan.

AstraZeneca also seek guidance regarding re-testing requirements in support of our PBAC submission. Based on historical precedence for trastuzumab deruxtecan (e.g. HER2 testing for treatment of patients with unresectable or metastatic HER2-low breast cancer) we note that a submission to MSAC was not required.