The Drug Utilisation Sub-Committee (DUSC) of the Pharmaceutical Benefits Advisory Committee (PBAC) held its 92nd meeting on 1st of February 2018.

DUSC has a national focus of excellence in collecting, analysing and interpreting data on the utilisation of medicines in Australia for use by the PBAC. Review of the utilisation of medicines is an essential management tool in facilitating the objectives of the National Medicines Policy.

## Submissions to the PBAC

DUSC noted that 24 major submissions had been received for the March 2018 meeting of PBAC. DUSC provided detailed advice to the PBAC on projected usage and financial cost for the major submissions where there is high cost, uncertain utilisation, first medicine in class or quality use of medicines concerns. The agenda for the March 2018 PBAC meeting can be found on the [PBS website](http://www.pbs.gov.au/pbs/industry/listing/elements/pbac-meetings/agenda/march-2018-pbac-meeting-agenda).

## Utilisation of PBS Listed Medicines

DUSC regularly examines utilisation of PBS items when there is at least 24 months of prescription data available and where DUSC or the PBAC has highlighted items of interest. When an analysis of utilisation is to be undertaken sponsors are notified, provided with a copy of the report and an opportunity to comment prior to the DUSC meeting. Reviews to be considered by the PBAC are also published in the [PBAC meeting agenda](http://www.pbs.gov.au/pbs/industry/listing/elements/pbac-meetings/agenda/march-2018-pbac-meeting-agenda).

All reports, Sponsor comments and DUSC assessment of the reports are subsequently provided to the PBAC.

The PBAC is committed to understanding consumer perspectives and integrating them into its consideration of medicines and vaccines. Consumers are able to provide their views about medicine utilisation reviews to the PBAC via a [web interface](http://www.health.gov.au/internet/main/publishing.nsf/Content/PBAC_online_submission_form).

Full restrictions for PBS listed medicines are available in the [PBS Schedule](http://www.pbs.gov.au/).

DUSC reviewed the utilisation of the following PBS medicines in February 2018:

**Ivacaftor for cystic fibrosis**

DUSC reviewed a predicted versus actual utilisation analysis for ivacaftor for the treatment of cystic fibrosis (CF). Since listing in December 2014, a total of 268 patients have been supplied ivacaftor for CF. The actual number of patients treated with ivacaftor was less than predicted in the first two years of listing. The DUSC considered that this may have been due to the initial submission over-estimating the proportion of the CF population with a G551D mutation.

In contrast, the number of prescriptions per patient was higher than predicted. This may have been due to higher adherence or fewer dose reductions than anticipated in patients with hepatic impairment or concomitant CYP3A4 inhibitor use.

DUSC requested that the report be provided to the PBAC.

**Cetuximab, bevacizumab and panitumumab for metastatic colorectal cancer**

The growth in the utilisation of bevacizumab, cetuximab and panitumumab (“targeted therapies”) began to decline from 2013 and had stabilised by 2016. In 2016, a total of 5,177 patients were treated with these medicines. DUSC noted most patients were treated with bevacizumab in first-line. DUSC considered that there may have been a preference for bevacizumab over cetuximab and panitumumab as side effects from this therapy are less common.

DUSC considered that bevacizumab was potentially being used to treat progressive disease; which was not permitted within its restrictions. DUSC noted that the duration of therapy with bevacizumab was longer than that observed in clinical trials.

Bevacizumab is required to be given in combination with chemotherapy. DUSC noted that the number of cases where bevacizumab may have been used alone was negligible. Under the restrictions for the targeted therapies, they cannot be co-administered with each other. DUSC noted that there were no identified cases of potential co-administration of these therapies.

DUSC noted the results from a broader analysis which attempted to identify chemotherapy regimens used with the targeted therapies by line of therapy. DUSC noted the difficulties in performing such an analysis using PBS data. Particular limitations that were noted included: an inability to identify the stage of disease and line of therapy from unrestricted chemotherapy listings; and defining appropriate assumptions to detect the co-administration of drugs that are part of a chemotherapy regimen.

DUSC requested that the report be provided to the PBAC.

**Medicines for the treatment of HER2 positive metastatic breast cancer**

DUSC reviewed a predicted versus actual utilisation analysis for trastuzumab, pertuzumab and trastuzumab emtansine for the treatment of metastatic breast cancer. Since PBS listing in July 2015, the number of people treated with pertuzumab has been slightly higher than expected and the number of people treated with trastuzumab has been higher than expected.

DUSC noted that trastuzumab was used more than pertuzumab. This difference occurred even though pertuzumab is partnered with trastuzumab in first line treatment. Some use of trastuzumab without pertuzumab was expected in patients with later stage disease. This would include patients transitioning from the Herceptin Program, those with metastatic disease classified in the data as having early breast cancer or the group of metastatic breast cancer patients who may be receiving first line trastuzumab without pertuzumab. Given the clinical trial results showed significant overall survival gain with pertuzumab, it is not clear why this is the case.

Lower numbers of patients used trastuzumab emtansine (T-DM1) than predicted. A contributing factor could be patients staying on pertuzumab and trastuzumab and so not transitioning to T-DM1.

DUSC considered that as the pertuzumab and T-DM1 utilisation data is still immature, time on treatment cannot yet be reliably determined. DUSC recommended a further review of utilisation of trastuzumab, pertuzumab and T-DM1 in 24 months.

## Upcoming Utilisation Analysis of PBS Listed Medicines

Utilisation of the following medicines and therapeutic areas have been selected for consideration at future DUSC meetings.

**Predicted versus Actual Utilisation Analysis**

* Posaconazole tablets for prophylaxis and treatment of fungal infections
* Obinutuzumab and ofatumumab for the treatment of chronic lymphocytic leukaemia
* Febuxostat for gout

**Analysis of multiple medicines in a treatment area**

* Targeted and immunomodulatory therapies for the treatment of melanoma
* Botulinum Toxin A for the treatment of spasticity, spasmodic torticollis, blepharospasm and hemifacial spasm
* Medicines for attention deficit hyperactivity disorder (ADHD), including a predicted versus actual utilisation analysis of lisdexamfetamine following listing in 2015.

An outcome statement will be available following each meeting of DUSC. For further information, please contact the DUSC Secretariat at DUSC@health.gov.au.

A/Professor Christopher Etherton-Beer

Chair

Drug Utilisation Sub-Committee