

## Your questions to the PBAC

### Aprepitant – recommendations for PBS listing

In April 2005 the Pharmaceutical Benefits Advisory Committee (PBAC) approved the listing of aprepitant as a pharmaceutical benefit. Aprepitant is available as an authority item for the management of nausea and vomiting associated with cytotoxic chemotherapy being used to treat malignancy, in combination with a 5-HT<sub>3</sub> antagonist and dexamethasone, where any one of the following chemotherapy agents are to be administered:

- altretamine
- carmustine
- cisplatin
- cyclophosphamide at a dose of 1500 mg/m<sup>2</sup>/day or greater
- dacarbazine
- procarbazine or
- streptozocin.

Aprepitant was approved by the Therapeutic Goods Administration (TGA) for use in combination with other antiemetic agents for the prevention of acute and delayed nausea and vomiting associated with initial and repeat courses of highly emetogenic cancer chemotherapy, including high-dose cisplatin. This TGA approval is broad, yet the PBAC has restricted the use of aprepitant as a pharmaceutical benefit to certain cancer chemotherapy.

The only phase III trial data available for aprepitant are from patients receiving cisplatin chemotherapy. Presumably the PBAC selected drugs that had an emetogenic risk similar to that of cisplatin.<sup>1,2</sup> If this were true, why were drugs such as dactinomycin, lomustine, mechlorethamine or pentostatin omitted?<sup>1</sup>

Combinations of chemotherapy increase the emetogenic potential.<sup>3</sup> The National Comprehensive Cancer Network's 2005 antiemesis guidelines include the combination of doxorubicin or epirubicin with cyclophosphamide as having the same high emetogenic risk as cisplatin.<sup>2</sup> Aprepitant is not available for this combination. How did the PBAC decide which cytotoxic drugs would qualify patients for subsidised treatment with aprepitant?

Jim Siderov  
Senior Pharmacist  
Cancer Services  
Austin Health  
Melbourne

### References

1. Jordan K, Kasper C, Schmoll HJ. Chemotherapy-induced nausea and vomiting: current and new standards in the antiemetic prophylaxis and treatment. *Eur J Cancer* 2005;41:199-205.

2. National Comprehensive Cancer Network. Antiemesis practice guidelines in oncology. Version 1, 2005. [http://www.nccn.org/professionals/physician\\_gls/PDF/antiemesis.pdf](http://www.nccn.org/professionals/physician_gls/PDF/antiemesis.pdf) [cited 2005 Aug 22]
3. Hesketh PJ, Kris MG, Grunberg SM, Beck T, Hainsworth JD, Harker G, et al. Proposal for classifying the acute emetogenicity of cancer chemotherapy. *J Clin Oncol* 1997;15:103-9.

### *PBAC response:*

It was the sponsor who requested that only specific highly emetogenic drugs be included in the restriction. Although dactinomycin, lomustine, mechlorethamine and pentostatin are generally considered highly emetogenic, they were not included in the requested restriction. Further, mechlorethamine and pentostatin are not currently approved by the TGA for use in Australia.

The PBAC recommended listing on the basis of acceptable cost-effectiveness when aprepitant is used with certain highly emetogenic cytotoxic chemotherapy agents, either in isolation or in combination with other agents. The PBAC considered that even though there were some uncertainties around the cost-effectiveness of the product, the extent of incremental effectiveness of antiemetic therapy involving aprepitant was of substantial clinical importance. There are likely to be cost off-sets from reduced use of extended regimens of 5-HT<sub>3</sub> drugs and the total cost to the Pharmaceutical Benefits Scheme would be small.

An additional consideration for the PBAC was the pack size proposed for listing. The PBAC noted that the pack size will result in wastage of the 80 mg capsules if used to prevent nausea and vomiting in patients undergoing multidose chemotherapy. It therefore restricted listing to single-dose cycles of chemotherapy.

The PBAC would welcome a re-submission from the sponsor to address whether other highly emetogenic drugs should be included in the restriction.