

RGH Pharmacy E-Bulletin

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A joint initiative of the Patient Services Section and the Drug and Therapeutics Information Service of the Pharmacy Department, Repatriation General Hospital, Daw Park, South Australia. The RGH Pharmacy E-Bulletin is distributed in electronic format on a weekly basis, and aims to present concise, factual information on issues of current interest in therapeutics, drug safety and cost-effective use of medications.

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Bevacizumab for bowel cancer

Bowel cancer is currently the second largest cause of cancer deaths in Australia with over 250 new cases diagnosed every week. It is estimated 1 in 12 Australians will get bowel cancer by the age of 85.

A new treatment for Australians with advanced bowel cancer has recently been approved for subsidised supply under the auspices of the Pharmaceutical Benefits Scheme (PBS). Bevacizumab is a recombinant humanised monoclonal antibody that selectively binds to and neutralises the biological activity of human vascular endothelial growth factor (VEGF). Bevacizumab inhibits the binding of VEGF to its receptors, Flt-1 and KDR, located on the surface of endothelial cells. By reducing the biologic activity of VEGF, there is a reduction in the vascularisation of tumours and consequent inhibition of tumour growth.

Bevacizumab has been listed as a pharmaceutical benefit in combination with first-line chemotherapy, for patients with previously untreated metastatic colorectal cancer with a WHO performance status of 0 or 1. The treatment has also been funded for continuing therapy, in combination with first-line chemotherapy, for patients with metastatic colorectal cancer who have previously been issued with an authority for bevacizumab, who do not have progressive disease and who are remaining on first-line chemotherapy. The drug is not approved for subsidised supply as a first line therapy.

Bevacizumab is administered by intravenous infusion every two weeks, in combination with standard chemotherapy. Clinical trials have shown that patients treated with bevacizumab in combination with standard therapy had median survival increased by 30% (median survival of 20.3 months compared to 15.6 months in a placebo group). Results of research have also showed an increase in median progression-free survival time by 71% and increased duration of response (10.4 months vs. 7.1 months) in the bevacizumab treated group.

Serious side effects have been reported with bevacizumab:

- Gastrointestinal perforation occurs in up to 2.4% of patients, of which fatal outcomes were reported in approximately one third of these patients.
- Wound healing is impaired and the drug should not be initiated until 28 days following major surgery, or withheld prior to elective surgery
- An increase in arterial thromboembolic events has been seen in patients treated with bevacizumab, including CVAs, myocardial infarction and TIAs.
- Venous thromboembolic events have also been reported including deep vein thrombosis and pulmonary embolism.
- Severe or fatal haemorrhage has also been reported.

Other side effects include nausea, fatigue, dysgeusia, anorexia, skin changes, headache, and increased risk of infection, proteinuria, myalgia and hypertension.

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FOR FURTHER INFORMATION – CONTACT THE PHARMACY DEPARTMENT ON 82751763 or email: chris.alderman@rgh.sa.gov.au
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