NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

Proposed Health Technology Appraisal

Bevacizumab for the treatment of recurrent advanced ovarian cancer

Final scope

Remit/appraisal objective

To appraise the clinical and cost effectiveness of bevacizumab within its licensed indication for the treatment of platinum-sensitive or partially platinum-sensitive recurrent advanced ovarian cancer (including fallopian tube and primary peritoneal cancer).

Background

Ovarian cancer is a common gynaecological which represents a group of different tumours that arise from diverse types of tissue contained within the ovary. The most common type of ovarian cancer arises from epithelial cells (the outside layer of cells) on the surface of the ovary. Ovarian cancer can often spreads from the ovary to any surface within the abdominal cavity including the fallopian tubes and peritoneal cavity. Symptoms of ovarian cancer tend to be non-specific and are widely experienced among the general population. These include persistent pelvic and abdominal pain, abdominal bloating, urinary frequency or urgency, loss of appetite, and abnormal or postmenopausal bleeding. Most women are diagnosed with advanced stage disease.

Ovarian cancer mainly affects women who have had their menopause, with the highest rates of incidence in the age group of 65 and above. Approximately 6700 new cases of ovarian cancer were diagnosed every year in the UK between 2004 and 2007, of these, approximately 4500 had stage III or IV (advanced) disease. In 2008 there were 4370 deaths in the UK caused by ovarian cancer.

Ovarian cancer may be categorised according to the response to first-line platinum chemotherapy as follows: fully platinum-sensitive (disease responds to first-line platinum-based therapy but relapses after 12 months or more); partially platinum-sensitive (disease which responds to first-line platinum-based therapy but relapses between 6 and 12 months); platinum-resistant (disease which relapses within 6 months of completion of initial platinum-based chemotherapy) and platinum-refractory, that is, does not respond to initial platinum-based chemotherapy. Although a significant percentage of women with ovarian cancer respond to initial chemotherapy, between 55% and 75% of women whose tumours respond to first line therapy relapse within 2 years of completing treatment. The overall 5-year survival rate is less than 41%.

Current management of ovarian cancer involves surgery to remove as much of the cancer as possible and chemotherapy. Increasingly chemotherapy is given before surgery. NICE Technology Appraisal No. 55 recommends the use of paclitaxel in combination with a platinum-based compound or platinum-based therapy alone to treat residual disease.

NICE Technology Appraisal No. 91 recommends the following as options for the second-line (or subsequent) treatment of platinum-sensitive or partially platinum-sensitive ovarian cancer:

- paclitaxel in combination with a platinum compound in platinum-sensitive or partially platinum-sensitive disease
- pegylated liposomal doxorubicin hydrochloride in partially platinum-sensitive disease

The technology

Bevacizumab (Avastin, Roche Products) is a humanised anti-vascular endothelial growth factor (VEGF) monoclonal antibody that reduces vascularisation of tumours, inhibiting tumour growth. It is administered by intravenous infusion.

Bevacizumab does not currently have a UK marketing authorisation for the treatment of recurrent or relapsed advanced ovarian cancer. It has been studied in clinical trials in addition to standard treatment (carboplatin in combination with paclitaxel, docetaxel or gemcitabine) for the treatment of women with platinum-sensitive or partially platinum-sensitive recurrent epithelial ovarian carcinoma.

Intervention(s)	Bevacizumab in combination with platinum-based therapy
Population(s)	Women with recurrent platinum-sensitive or partially platinum-sensitive advanced epithelial ovarian, fallopian tube or primary peritoneal cancer
Comparators	• Paclitaxel in combination with a platinum compound • Gemcitabine in combination with carboplatin • Pegylated liposomal doxorubicin hydrochloride in combination with a platinum compound • Platinum-based chemotherapy as monotherapy

Outcomes	The outcome measures to be considered include: • overall survival • progression-free survival • response rate • adverse effects of treatment • health-related quality of life.
Economic analysis	The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year. The reference case stipulates that the time horizon for estimating clinical and cost effectiveness should be sufficiently long to reflect any differences in costs or outcomes between the technologies being compared. Costs will be considered from an NHS and Personal Social Services perspective.
Other considerations	Guidance will only be issued in accordance with the marketing authorisation.

Related NICE recommendations	Related Technology Appraisals: Technology Appraisal No. 222, April 2011. Trabectedin for the treatment of relapsed ovarian cancer. Review decision November 2012 (combined with review of TA 91). Technology Appraisal No. 91, May 2005. Topotecan, pegylated liposomal doxorubicin hydrochloride and paclitaxel for the treatment of advanced ovarian cancer (Review of TA 28, TA 45 and TA 55 [for relapsed disease only]). Technology Appraisal No. 55, January 2003. Review of the clinical effectiveness and cost effectiveness of paclitaxel for ovarian cancer. Transferred to the static guidance list. Technology Appraisal in Preparation, 'Bevacizumab in combination with paclitaxel and carboplatin for the first-line treatment of advanced and/or metastatic ovarian cancer'. Earliest anticipated date of publication April 2013. Related Guidelines: Clinical GuidelineNo. 122, April 2011. The recognition and initial management of ovarian cancer.