# NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

## Single Technology Appraisal

## Cediranib for treating relapsed, platinum-sensitive ovarian, fallopian tube or primary peritoneal cancer

## Final scope

### Remit/appraisal objective

To appraise the clinical and cost effectiveness of cediranib within its marketing authorisation for treating relapsed, platinum-sensitive ovarian, fallopian tube or primary peritoneal cancer.

### Background

Ovarian cancer represents a group of tumours that arise from diverse types of tissue contained in the ovary. The most common type of ovarian cancer arises from epithelial cells on the surface of the ovary, and can often spread from the ovary to any surface within the abdominal cavity including the fallopian tubes and peritoneal cavity, although recent research suggests it originates from the epithelium of the distal fallopian tubes. Fallopian tube cancer and primary peritoneal cancer are histologically equivalent diseases to epithelial ovarian cancer. Ovarian cancer is classified from stage I to stage IV. Advanced ovarian cancer falls within stages III and IV; stage III denotes disease that is locally advanced and has spread outside the pelvis into the abdominal cavity and stage IV denotes that distant metastasis to other body organs such as the liver and lungs has occurred. Most people are diagnosed with advanced stage disease.

The incidence of ovarian cancer increases with age, with 75% of diagnoses in people over 55 years. In 2012, approximately 6500 people were diagnosed with ovarian cancer in England and in 2011 there were 3500 deaths from ovarian cancer in England. The overall 5-year survival rate for ovarian cancer is approximately 43%.

Ovarian cancer may be categorised according to the response to initial platinum chemotherapy as follows: platinum-sensitive (disease responds to platinum-based therapy but relapses after 6 months or more); platinum-resistant (disease which relapses within 6 months of completion of platinum-based chemotherapy) and platinum-refractory, that is, does not respond to initial platinum-based chemotherapy. Although a significant percentage of people have disease that responds to initial chemotherapy, between 55% and 75% of people whose tumours respond to initial therapy relapse within 2 years of completing treatment.

In people whose disease relapses following initial therapy, NICE technology appraisal guidance 389 ‘Topotecan, pegylated liposomal doxorubicin hydrochloride, paclitaxel, trabectedin and gemcitabine for advanced ovarian

cancer (for recurrent disease only) (Review of TA 91 and TA 222)' recommends paclitaxel in combination with platinum or as monotherapy, and pegylated liposomal doxorubicin hydrochloride (PLDH) as monotherapy or in combination with platinum (the latter is not licensed in the UK for this indication). Gemcitabine in combination with carboplatin, trabectedin in combination with PLDH, and topotecan are not recommended for treating the first recurrence of platinum-sensitive ovarian cancer. There are currently no treatments licensed for the maintenance treatment of relapsed, platinum-sensitive ovarian cancer.

## The technology

Cediranib (Recentin, AstraZeneca) is an angiogenesis inhibitor that works by selectively inhibiting the tyrosine kinase activity of all vascular endothelial growth factor (VEGF) receptor subtypes. This reduces vascularisation of tumours thereby inhibiting tumour growth. Cediranib is administered orally.

Cediranib does not have a marketing authorisation in the UK for treating relapsed, platinum-sensitive ovarian cancer. It has been studied in clinical trials compared with placebo for both initial treatment and maintenance in adults with relapsed, platinum-sensitive epithelial ovarian cancer (including fallopian tube cancer and primary peritoneal) whose disease required further platinum-based chemotherapy.

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| **Intervention(s)** | Cediranib in combination with platinum based chemotherapy followed by cediranib alone as maintenance therapy |
| **Population(s)** | Adults with relapsed, platinum-sensitive ovarian, fallopian tube or primary peritoneal cancer |
| **Comparators** | • Platinum-based chemotherapy alone<br>• Paclitaxel in combination with platinum-based chemotherapy<br>• Pegylated liposomal doxorubicin hydrochloride in combination with platinum-based chemotherapy |
| **Outcomes** | The outcome measures to be considered include:<br>• overall survival<br>• progression free survival<br>• time to first subsequent chemotherapy or death<br>• time to second subsequent chemotherapy or death<br>• adverse effects of treatment<br>• health-related quality of life. |

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| **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.<br><br>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.<br><br>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. Where the wording of the therapeutic indication does not include specific treatment combinations, guidance will be issued only in the context of the evidence that has underpinned the marketing authorisation granted by the regulator. |
| **Related NICE recommendations and NICE Pathways** | Related Technology Appraisals:<br><br>Technology Appraisal No. 55, Jan 2003. 'Review of the clinical effectiveness and cost effectiveness of paclitaxel for ovarian cancer'. Transferred to the static guidance list (partially updated by TA 91).<br><br>Technology Appraisal No. 91, May 2005, 'Paclitaxel, pegylated liposomal doxorubicin hydrochloride and topotecan for second-line or subsequent treatment of advanced ovarian cancer: Review of Technology Appraisal Guidance 28, 45 and 55'. Ongoing review in combination with TA 222.<br><br>Technology Appraisal No. 222, Apr 2011, 'Trabectedin for the treatment of relapsed ovarian cancer'. Ongoing review in combination with TA 91.<br><br>Technology Appraisal No. 285, May 2013. 'Bevacizumab in combination with gemcitabine and carboplatin for treating the first recurrence of platinum-sensitive advanced ovarian cancer'. Review Date June 2016.<br><br>Technology Appraisal No. 389 'Topotecan, pegylated liposomal doxorubicin hydrochloride, paclitaxel, trabectedin and gemcitabine for advanced ovarian cancer (for recurrent disease only) (Review of TA 91 and TA 222)' Review Proposal Date April 2019.<br><br>Related Guidelines:<br><br>Clinical Guideline No. 122, April 2011, 'The recognition and initial management of ovarian cancer'. Review |

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| | Proposal Date June 2015.<br><br>Related Interventional Procedures:<br><br>Interventional Procedure No. 470, November 2013, 'Ultra-radical (extensive) surgery for advanced ovarian cancer'.<br><br>Related Quality Standards:<br><br>Quality Standard No. 18, May 2012, 'Ovarian cancer'. Review Proposal Date May 2017.<br><br>http://www.nice.org.uk/guidance/qualitystandards/qualitystandards.jsp<br><br>Related NICE Pathways:<br><br>NICE Pathway: Ovarian cancer, Pathway created: February 2012<br><br>http://pathways.nice.org.uk/pathways/ovarian-cancer<br>http://pathways.nice.org.uk/ |
| **Related National Policy** | 'Improving Outcomes: A Strategy for Cancer, second annual report, 2012', March 2013.<br><br>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/136551/Improving_outcomes_second_annual_report.pdf<br><br>Department of Health, NHS Outcomes Framework 2013-2014, Nov 2013.<br>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/256456/NHS_outcomes.pdf |