NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health Technology Appraisal

Veliparib for induction treatment of previously untreated advanced ovarian, fallopian tube and primary peritoneal cancer in combination with carboplatin and paclitaxel, followed by veliparib maintenance treatment as a monotherapy

Draft scope

Draft remit/appraisal objective

To appraise the clinical and cost effectiveness of veliparib within its marketing authorisation as maintenance treatment of previously untreated advanced ovarian, fallopian tube and primary peritoneal cancer in combination with carboplatin and paclitaxel, followed by veliparib maintenance treatment as a monotherapy.

Background

Ovarian cancer is a cancerous growth that occurs in different parts of the ovary or fallopian tubes. The most common type of ovarian cancer, high-grade serous type, is thought to arise from the peritoneum or fallopian tube and presents after it has spread to the ovary. 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 the pleura (two thin layers of tissue that protect and cushion the lungs) has occurred. Most people are diagnosed with advanced stage disease. Some people have gene mutations that may increase the risk of ovarian cancer. Mutated inherited genes that increase the risk of ovarian cancer include BRCA 1 or 2.

The incidence of ovarian cancer increases with age and the peak rate of new cases are in people aged 75-79 years[1]. In 2017, 6,236 people were diagnosed with ovarian cancer in England[2] and there were 3,472 deaths from ovarian cancer in 2017[3]. The 5-year survival for women diagnosed with ovarian cancer between 2013 and 2017 and followed up to 2018 in England was 42.6%[4].

NICE technology appraisal guidance 55 recommends paclitaxel in combination with a platinum-based compound or platinum-based therapy alone (cisplatin or carboplatin) as alternatives for first-line chemotherapy (usually following surgery) in the treatment of ovarian cancer. Olaparib is recommended as an option for the maintenance treatment of patients with BRCA mutation-positive ovarian cancer that has responded to first-line platinum chemotherapy in NICE technology appraisal guidance 598. No treatments other than chemotherapy are currently recommended by NICE as induction therapy in first-line ovarian cancer.

The technology

Veliparib (brand name unknown, AbbVie) is a poly-ADP-ribose polymerise (PARP) inhibitor which inhibits PARP proteins involved in DNA repair. It is administered orally.

Veliparib does not currently have a marketing authorisation in the UK for any indication. It has been studied in a clinical trial in combination with carboplatin and paclitaxel, compared with placebo, in patients with previously untreated stage III and IV high-grade ovarian, primary peritoneal and/or fallopian tube cancer, followed by veliparib maintenance treatment as a monotherapy.

Intervention(s)	Veliparib in combination with carboplatin and paclitaxel
Population(s)	Patients with previously untreated, advanced ovarian, fallopian tube and primary peritoneal cancer

Comparators	• Paclitaxel induction therapy with or without platinum-based chemotherapy (cisplatin or carboplatin), followed by:
	  ○ Olaparib maintenance treatment of BRCA mutation-positive ovarian cancer that has responded to first-line chemotherapy, or
	  ○ Routine surveillance.

Outcomes	The outcome measures to be considered include: • overall survival • progression-free survival • progression-free survival 2 (i.e. progression-free survival on next line of therapy) • time to next line of therapy • 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. The availability of any commercial arrangements for the intervention, comparator and subsequent treatment technologies will be taken into account.

Other considerations	If the evidence allows the following subgroup will be considered: • Patients with BRCA mutation-positive ovarian cancer 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:** 'Veliparib for treating HER2-negative, BRCA-positive breast cancer' NICE Technology Appraisal [ID1404]. Publication expected date TBC. 'Veliparib with carboplatin and paclitaxel for untreated non-squamous non-small-cell lung cancer' NICE Technology Appraisal [ID1277]. Publication expected date TBC. Bevacizumab in combination with paclitaxel and carboplatin for first-line treatment of advanced ovarian cancer (2013) NICE technology appraisal guidance 284 Olaparib for maintenance treatment of BRCA mutation-positive advanced ovarian, fallopian tube or peritoneal cancer after response to first-line platinum-based chemotherapy (2019) NICE technology appraisal guidance 598 **Related Guidelines:** Ovarian cancer: recognition and initial management (2011) NICE guideline CG122. Review date to be confirmed **Related Interventional Procedures:** Ultra-radical (extensive) surgery for advanced ovarian cancer (2013) NICE interventional procedures guidance 470 **Related Quality Standards:** Ovarian cancer (2012) NICE quality standard 18 **Related NICE Pathways:** Ovarian cancer (2016) NICE Pathway
Related National Policy	The NHS Long Term Plan, 2019. NHS Long Term Plan Department of Health and Social Care, NHS Outcomes Framework 2016-2017: Domains 1 and 2. https://www.gov.uk/government/publications/nhs-outcomes-framework-2016-to-2017 NHS England (2018) Manual for prescribed specialised services 2018/19 Chapter 105: Specialist cancer services (adults)

	NHS England. 2013/14 NHS Standard Contract for Cancer: Chemotherapy (Adult). B15/S/a. NHS England. 2013/14 NHS Standard Contract for Cancer: Gynaecological. E10/S/f/. NHS England (2015) Clinical Commissioning Policy: Genetic Testing for BRCA1 and BRCA2 Mutations Public Health England (2015) Living with and beyond ovarian cancer Department of Health (2016) NHS outcomes framework 2016 to 2017 Independent Cancer Taskforce (2015) Achieving world-class cancer outcomes: a strategy for England 2015-2020 Department of Health (2014) The national cancer strategy: 4th annual report

Questions for consultation

Have all relevant comparators for veliparib been included in the scope? To what extent is olaparib maintenance considered to be established clinical practice in the NHS as a maintenance treatment for patients with BRCA mutation-positive ovarian cancer that has responded to first-line platinum chemotherapy?

Do patients with advanced ovarian cancer typically undergo BRCA mutation testing prior to receiving first-line induction chemotherapy, or following first-line induction chemotherapy to guide the decision on whether to use olaparib? If veliparib were to be recommended in combination with first-line induction chemotherapy in BRCA mutation-positive patients only, do you anticipate that an increase in BRCA mutation testing would be required?

Are the outcomes listed appropriate?

Is the subgroup suggested in 'other considerations' appropriate? Are there any other subgroups of people in whom veliparib is expected to be more clinically effective and cost effective or other groups that should be examined separately?

Where do you consider veliparib will fit into the existing NICE pathway, ovarian cancer?

NICE is committed to promoting equality of opportunity, eliminating unlawful discrimination and fostering good relations between people with particular protected characteristics and others. Please let us know if you think that the proposed remit and scope may need changing in order to meet these aims. In particular, please tell us if the proposed remit and scope:

- could exclude from full consideration any people protected by the equality legislation who fall within the patient population for which veliparib will be licensed;

- could lead to recommendations that have a different impact on people protected by the equality legislation than on the wider population, e.g. by making it more difficult in practice for a specific group to access the technology;

- could have any adverse impact on people with a particular disability or disabilities.

Please tell us what evidence should be obtained to enable the Committee to identify and consider such impacts.

Do you consider veliparib to be innovative in its potential to make a significant and substantial impact on health-related benefits and how it might improve the way that current need is met (is this a 'step-change' in the management of the condition)?

Do you consider that the use of veliparib can result in any potential significant and substantial health-related benefits that are unlikely to be included in the QALY calculation?

Please identify the nature of the data which you understand to be available to enable the Appraisal Committee to take account of these benefits.

To help NICE prioritise topics for additional adoption support, do you consider that there will be any barriers to adoption of this technology into practice? If yes, please describe briefly.

NICE intends to appraise this technology through its Single Technology Appraisal (STA) Process. We welcome comments on the appropriateness of appraising this topic through this process. (Information on the Institute's Technology Appraisal processes is available at http://www.nice.org.uk/article/pmg19/chapter/1-Introduction).

References

1. Cancer research UK Ovarian cancer incidence statistics

2. Office for National Statistics (2018) Cancer Registration Statistics, England 2017, Accessed April 2020

3. Office for National Statistics (2018) Death Registrations Summary Tables – England and Wales 2017 Accessed April 2020

4. Office for National Statistics (2019) Cancer survival in England- Adults diagnosed between 2013 and 2017 and followed-up to 2018 Accessed April 2020