NICE National Institute for Health and Care Excellence

Putting NICE guidance into practice

# Resource impact report:

## Olaparib for maintenance treatment of relapsed, platinum-sensitive, BRCA mutation-positive ovarian, fallopian tube and peritoneal cancer after response to second-line or subsequent platinum-based chemotherapy (TA381)

Published: January 2016

## Summary

Olaparib is recommended within its marketing authorisation as an option for treating adults with relapsed, platinum-sensitive ovarian, fallopian tube or peritoneal cancer who have BRCA1 or BRCA2 mutations and whose disease has responded to platinum-based chemotherapy only if:

- they have had 3 or more courses of platinum-based chemotherapy and
- the drug cost of olaparib for people who remain on treatment after 15 months will be met by the company.

The estimated eligible population for this treatment is around 334 women. However, uptake is estimated to reach 75% of the total eligible population (251 women) over 5 years.

- The average treatment period is 18.8 months with the NHS paying for the first 15 months of each individual treatment. The drug cost of olaparib after 15 months of each individual treatment will be met by the company.

The resource impact is given in the following summary table.

| Resource impact | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 onwards |
|---|---|---|---|---|---|
| Uptake of eligible population | 50% | 55% | 60% | 65% | 75% |
| Number of women | 167 | 184 | 201 | 217 | 251 |
| **Resource impact £000s** | **8,126** | **11,052** | **12,057** | **13,062** | **15,071** |

This technology is commissioned by NHS England. Providers are secondary care acute trusts.

# 1 Introduction

1.1 This report looks at the resource impact of implementing the NICE guidance on olaparib for maintenance treatment of relapsed, platinum-sensitive, BRCA mutation-positive ovarian, fallopian tube and peritoneal cancer after response to second-line or subsequent platinum-based chemotherapy in England.

1.2 The guidance states that:

- Olaparib is recommended within its marketing authorisation as an option for treating adults with relapsed, platinum-sensitive ovarian, fallopian tube or peritoneal cancer who have BRCA1 or BRCA2 mutations and whose disease has responded to platinum-based chemotherapy only if:
  - they have had 3 or more courses of platinum-based chemotherapy and
  - the drug cost of olaparib for people who remain on treatment after 15 months will be met by the company.
- People whose treatment with olaparib is not recommended in this NICE guidance, but was started within the NHS before this guidance was published, should be able to continue treatment until they and their NHS clinician consider it appropriate to stop.

1.3 This report is supported by a resource impact assessment template.

1.4 This technology is commissioned by NHS England. Providers are secondary care acute trusts.

# 2 Background and epidemiology of ovarian, fallopian tube and peritoneal cancer

2.1 Approximately 7,100 women are diagnosed with ovarian, fallopian tube or peritoneal cancer in the UK each year (Office for National Statistics, 2012). This gives an estimated annual incidence of 5,984 cases per year in England.

2.2 Standard care in England for women with relapsed ovarian cancer is active surveillance during periods of remission, and treatment with chemotherapy at each subsequent relapse when women are able to tolerate treatment. The comparator used in this appraisal was routine surveillance ('watch and wait'), and is standard care after a woman has received 3 or more courses of platinum-based chemotherapy.

2.3 Table 1 estimates the number of women with ovarian, fallopian tube and peritoneal cancer in England and those who may be eligible for treatment with this technology.

**Table 1 Number of people who have ovarian, fallopian tube and peritoneal cancer in England and the estimated population eligible for treatment with olaparib**

| Population | Proportion | Number of women |
|---|---|---|
| Women aged 18 and over | | 21,720,000 |
| Incidence (a) | 0.028% | 5,984 |
| Total number potentially eligible for treatment (subject to guidance criteria) | | **5,984** |
| Percentage of women with high grade serous carcinoma (b) | 70% | 4,189 |
| Women who receive and respond to first-line platinum-based chemotherapy (b) | 76% | 3,183 |
| Women who receive and respond to second-line platinum-based chemotherapy (b) | 60% | 1,910 |
| Women who receive and respond to third-line platinum based chemotherapy (c) | 50% | **955** |
| Women who have the BRCA1/2 mutation (d) | 35% | **334** |
| Total number of women eligible for treatment with olaparib | | **334** |

(a) Office for National Statistics UK (2012) Ovarian cancer statistics. Adjusted for England population

(b) Olaparib NICE STA company submission (2015) Table 2.1 p35 & Table 8.1 p204

(c) Company response to NICE ACD2 (2015) p10 women who are platinum sensitive after 3 lines of chemotherapy

(d) Company response to NICE ACD 2 (2015) p11 percentage of women who are BRCAm positive who remain platinum sensitive after 3 lines of chemotherapy

2.4 It is estimated that around 334 women are eligible for treatment with olaparib each year.

# 3 Assumptions made

## *Activity*

3.1 The company estimated the uptake of olaparib in the eligible population from years 1 to 5. The activity estimates for each year are presented in table 2.

**Table 2 Estimated activity levels for olaparib for treating ovarian, fallopian tube and peritoneal cancer**

| | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
|---|---|---|---|---|---|
| Eligible population | 334 | | | | |
| Percentage of eligible population treated | 50% | 55% | 60% | 65% | 75% |
| Estimated eligible population treated years 1 to 5 (year 5 recurring) | **167** | **184** | **201** | **217** | **251** |

## *Costs*

3.2 The cost per month taking into account the dose per day is £3,194. Costs after 15 months will be met by the company. In a study of women who received treatment with olaparib, the average duration of treatment was 571.7 days (equivalent to 18.8 months).

3.3 A genetic test for the BRCA1/2 mutation is needed in advance of treatment. This is included in the resource impact at a cost of £790 per test.

3.4 CT scans are also needed every 2 months. These cost £97 per scan (National Tariff 2015/16 RA08A).

3.5 Olaparib is likely to be prescribed to women in the outpatient setting, supported by appropriate monitoring.

3.6 A monthly clinic appointment is needed for monitoring of treatment during the first 12 months, with less frequent visits after this time.

# 4 Resource impact

4.1 Using the assumptions described in section 3, the resource impact is given in table 3.

**Table 3 Estimated resource impact**

| Resource impact | 2016/17 | 2017/18 | 2018/19 | 2019/2020 | 2020/21 onwards |
|---|---|---|---|---|---|
| Uptake | 50% | 55% | 60% | 65% | 75% |
| Number of women | 167 | 184 | 201 | 217 | 251 |
| **Costs** | £000 | £000 | £000 | £000 | £000 |
| Drug cost **£000s** | 7,686 | 10,568 | 11,529 | 12,490 | 14,411 |
| Monitoring and administration **£000s** | 440 | 484 | 528 | 572 | 660 |
| **Resource impact £000s** | **8,126** | **11,052** | **12,057** | **13,061** | **15,071** |
| *Monitoring and administration costs include the cost of CT scans, BRCA mutation test costs and clinic attendances (see 3.3 to 3.6 above) | | | | | |

# 5 Savings and benefits

5.1 Olaparib is the only specific maintenance treatment for inherited or acquired BRCA mutation positive ovarian cancer, and provides women with a treatment option that improves quality of life and extends life.

5.2 Olaparib is associated with a statistically significant improvement in median progression-free survival compared with placebo in people with the BRCA mutation.

# 6 Implications for commissioners

6.1 The commissioner for this topic is NHS England. This topic falls within programme budgeting category 2G ‘Cancers & Tumours – gynaecological’.

# 7 References

Cancer Reasearch UK (2014) Ovarian cancer statistics.Office for National

Statistics (2012). Cancer statistics registrations, England (series MB1), No. 43, 2012

Olaparib company submission (January 2015) AstraZeneca submission of evidence for Olaparib as a monotherapy for the maintenance treatment of adult patients with platinum-sensitive relapsed BRCA-mutated (germline and/or somatic) high-grade, serous epithelial ovarian, fallopian tube or primary peritoneal cancer who are in response (complete or partial response) to platinum-based chemotherapy.

Olaparib company response to the NICE ACD2 (2015) AstraZeneca submission 27th August 2015.

# About this resource impact report

This resource impact report accompanies the NICE technology appraisal guidance on olaparib for maintenance treatment of relapsed, platinum-sensitive, BRCA mutation-positive ovarian, fallopian tube and peritoneal cancer after response to second-line or subsequent platinum-based chemotherapy and should be read in conjunction with it. See terms and conditions on the NICE website.

**This report is written in the following context**

This report represents the view of NICE, which was arrived at after careful consideration of the available data and through consulting healthcare professionals. The report is an implementation tool and focuses on the recommendations that were considered to have a significant impact on national resource use.

Assumptions used in the report are based on assessment of the national average. Local practice may be different from this, and the impact should be estimated locally.

Implementation of the guidance is the responsibility of local commissioners and providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this Resource impact report: Olaparib for maintenance treatment of relapsed, platinum-sensitive, BRCA mutation-positive ovarian, fallopian tube and peritoneal cancer after response to second-line or subsequent platinum-based chemotherapy. January 2016

costing tool should be interpreted in a way that would be inconsistent with compliance with those duties.