NICE National Institute for Health and Care Excellence

Putting NICE guidance into practice

Resource impact report:
Niraparib for maintenance treatment of relapsed, platinum-sensitive ovarian, fallopian tube and peritoneal cancer (TA784)

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Summary

NICE has recommended niraparib as an option for treating relapsed, platinum-sensitive high-grade serous epithelial ovarian, fallopian tube or primary peritoneal cancer that has responded to the most recent course of platinum-based chemotherapy in adults, only if:

- they have a BRCA mutation and have had 2 courses of platinum-based chemotherapy, or
- they do not have a BRCA mutation and have had 2 or more courses of platinum-based chemotherapy, and
- the company provides it according to the commercial arrangement.

We estimate that:

- In the first year 80 people with relapsed, platinum-sensitive high-grade serous epithelial ovarian, fallopian tube or primary peritoneal cancer with a BRCA mutation and 330 people without a BRCA mutation are eligible for treatment with niraparib although this figure is expected to reduce over time as use of PARP inhibitors for first-line maintenance increases.
- 250 people will start treatment with niraparib in year 1 onwards and this will reduce as uptake of PARP inhibitors for first-line maintenance increases as shown in table 1.

Table 1 Estimated number of people in England starting treatment with niraparib by year

	2022/23	2023/24	2024/25	2025/26	2026/27
Uptake of PARP inhibitors for first-line maintenance (%)	50%	50%	85%	85%	85%
Eligible population for treatment with niraparib	410	410	120	120	120
Population starting treatment with niraparib each year	250	250	75	75	75

This report is supported by a local resource impact template because the list price of niraparib has a discount that is commercial in confidence. The discounted price of niraparib can be put into the template and other variables may be amended.

This technology is commissioned by NHS England. Providers are NHS hospital trusts.

1 Niraparib

1.1 NICE has recommended niraparib as an option for treating relapsed, platinum-sensitive high-grade serous epithelial ovarian, fallopian tube or primary peritoneal cancer that has responded to the most recent course of platinum-based chemotherapy in adults, only if:

- they have a BRCA mutation and have had 2 courses of platinum-based chemotherapy, or
- they do not have a BRCA mutation and have had 2 or more courses of platinum-based chemotherapy, and
- the company provides it according to the commercial arrangement.

1.2 Niraparib is currently available in the cancer drugs fund (CDF) and will transition to routine commissioning after publication of this guidance.

1.3 Niraparib is a PARP inhibitor, other PARP inhibitors (olaparib, and rucaparib) are also available in the CDF. Olaparib in combination with bevacizumab and rucaparib are treatment options at an earlier stage in the pathway than niraparib. If a person is treated with a PARP inhibitor such as rucaparib or olaparib in combination with bevacizumab, they will not be offered niraparib in a later line of treatment.

2 Resource impact of the guidance

2.1 We estimate that:

- In the first year 80 people with relapsed, platinum-sensitive high-grade serous epithelial ovarian, fallopian tube or primary peritoneal cancer with a BRCA mutation and 330 people without a BRCA mutation are eligible for treatment with niraparib

although this figure is expected to reduce over time as use of PARP inhibitors for first-line maintenance increases.

2.2 250 people will start treatment with niraparib in year 1 onwards and this will reduce as uptake of PARP inhibitors for first-line maintenance increases.

2.3 The current treatment and future uptake figure assumptions are based on blueteq data from NHS England and are shown in the resource impact template. Table 2 shows the number of people in England who are estimated to start treatment with niraparib by financial year.

Table 2 Estimated number of people starting treatment with niraparib using NICE assumptions

	2022/23	2023/24	2024/25	2025/26	2026/27
Uptake of PARP inhibitors for first-line maintenance (%)	50%	50%	85%	85%	85%
Eligible population for treatment with niraparib	410	410	120	120	120
Population starting treatment with niraparib each year	250	250	75	75	75

2.4 This report is supported by a local resource impact template. Niraparib has an agreed patient access scheme which makes it available with a commercial-in-confidence discount to the list price. The discounted price of niraparib can be put into the template and other variables may be amended.

3 Implications for commissioners

3.1 This technology is commissioned by NHS England. Providers are NHS hospital trusts.

3.2 Niraparib will be available through routine commissioning. The technology was previously funded from the Cancer Drugs Fund, but this will stop from 90 days after the publication of the guidance on 30/03/2022.

3.3 Niraparib falls within the programme budgeting category 02G cancers and tumours, gynaecological.

4 How we estimated the resource impact

The population

4.1 There are around 6,600 diagnoses per year for ovarian, fallopian tube or peritoneal cancer in England. Of these around 1,450 people (22%) will progress to second-line platinum-based chemotherapy. Of people who have second-line platinum-based chemotherapy around 810 people's disease (56%) will respond to the therapy and they will be eligible for a maintenance treatment.

4.2 Of people who are eligible for maintenance therapy it is estimated that by year 3, 85% will have had a PARP inhibitor as maintenance therapy for first-line platinum-based chemotherapy and so around 120 people (15%) will be eligible for treatment with niraparib.

4.3 It is estimated that around 75 people will start treatment with niraparib from year 3 onwards.

Table 3 Number of people eligible for treatment in England at year 3 onwards

	Population	Proportion of previous row (%)	Number of people
	Total population		56,286,961
	Adult population		44,263,393
a	incidence of ovarian, peritoneal or fallopian tube cancer[1]	0.015	6,600
b	Proportion of people who have second-line platinum-based chemotherapy[2]	22.06	1,450
c	Proportion of people who respond to second-line therapy and are eligible for maintenance treatment[2]	56	810
d	Less: Proportion of people who receive a PARP inhibitor as maintenance therapy following response to first-line platinum-based chemotherapy[3]	85	(690)
e	People without prior PARP inhibitor treatment	c-d	120
f	People with a BRCA mutation[2]	20	20
g	Uptake among people with a BRCA mutation[3]	30	7
h	People without a BRCA mutation[2]	80 of e	100
i	Uptake among people without a BRCA mutation[3]	70	68
j	**Total number of people estimated to start treatment with niraparib each year from year 3**	**g+i**	**75**
	[1] Source: Cancer registration statistics, England 2019 [2] Source: Company submission [3] Source: NHS England and NHS Information		

Assumptions

4.4 The resource impact template assumes that:

- Niraparib is taken as a 200mg dose daily for every day of a 28-day cycle. Niraparib can be given as a 300mg daily dose but the guidance states that clinical experts agreed that 200mg would be the most common daily dose.

- No price for niraparib is included in current practice as this is covered by the CDF budget.

- The average treatment duration for niraparib in the BRCA mutation population is 2.3 years and for the non-BRCA population it is 0.9 years. This was based on real-world data from the Systemic Anti-Cancer Therapy (SACT) Dataset.

- Administration costs are £132 per cycle based on HRG SB11Z deliver exclusively oral chemotherapy (2021/22 National tariff Payment System).

- Comparator treatments are available in the CDF, but these have not been included in the resource impact template as use of these treatments is not expected to change following the publication of the guidance.

About this resource impact report

This resource impact report accompanies the NICE guidance on Niraparib for maintenance treatment of relapsed, platinum-sensitive ovarian, fallopian tube and peritoneal cancer http://www.nice.org.uk/guidance/TA784 and should be read with it.