

Putting NICE guidance into practice

Resource impact report: Abemaciclib with endocrine therapy for adjuvant treatment of hormone receptor- positive, HER2-negative, node-positive early breast cancer at high risk of recurrence (TA810)

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Summary

NICE has recommended abemaciclib as an option for adjuvant treatment of hormone receptor-positive, HER2-negative, node positive early breast cancer in adults whose disease is at high risk of recurrence, defined as pathological tumour involvement in:

- at least 4 positive axillary lymph nodes, or
- 1 to 3 positive axillary lymph nodes, and at least one of the following criteria:
 - grade 3 disease (defined as at least 8 points on the modified Bloom Richardson grading system or equivalent), or
 - primary tumour size of at least 5 cm.
- It is recommended only if the company provides it according to the commercial arrangement (see section 2 of the guidance).

By the year 2026/27 we estimate that:

- Around 4,100 adults with hormone receptor-positive, HER2-negative, node positive early breast cancer whose disease is at high risk of recurrence are eligible for treatment with abemaciclib based on predicted population growth.

Around 3,000 people will receive abemaciclib each year, including people continuing treatment from the previous year based on predicted population growth.

Table 1 Estimated number of people in England receiving abemaciclib

	2022/23	2023/24	2024/25	2025/26	2026/27
Uptake rate for abemaciclib (%)	15	25	55	55	55
People starting treatment with abemaciclib each year (adjusted for population growth)	470	780	1,740	1,750	1,760
People continuing treatment with abemaciclib each year (adjusted for population growth)		340	570	1,260	1,260
Total number of people receiving abemaciclib each year	470	1,120	2,310	3,010	3,010

This report is supported by a local resource impact template because the list price of abemaciclib has a discount that is commercial in confidence. The discounted price of abemaciclib 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 **Abemaciclib**

1.1 NICE has recommended abemaciclib as an option for adjuvant treatment of hormone receptor-positive, HER2-negative, node positive early breast cancer in adults whose disease is at high risk of recurrence, defined as pathological tumour involvement in:

- at least 4 positive axillary lymph nodes, or
- 1 to 3 positive axillary lymph nodes, and at least one of the following criteria:
 - grade 3 disease (defined as at least 8 points on the modified Bloom Richardson grading system or equivalent), or
 - primary tumour size of at least 5 cm.
- It is recommended only if the company provides it according to the commercial arrangement (see section 2 of the guidance).

1.2 Chemotherapy, followed by endocrine therapy, is standard care for adjuvant treatment of hormone receptor-positive, HER2-negative, node-positive early breast cancer at high risk of recurrence. Abemaciclib is given in addition to endocrine therapy and is the first targeted therapy for this population.

2 **Resource impact of the guidance**

2.1 By the year 2026/27 we estimate that:

- 4,100 adults with hormone receptor-positive, HER2-negative, node positive early breast cancer whose disease is at high risk of recurrence are eligible for treatment with abemaciclib based on predicted population growth.
- 3,000 people will receive abemaciclib each year, including people continuing treatment from the previous year based on predicted population growth.

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2.2 The current treatment and future uptake figure assumptions are based on clinical expert opinion and are shown in the resource impact template. Table 2 shows the number of people in England who are estimated to receive abemaciclib by financial year.

Table 2 Estimated number of people receiving abemaciclib using NICE assumptions

	2022/23	2023/24	2024/25	2025/26	2026/27
Uptake rate for abemaciclib (%)	15	25	55	55	55
People starting treatment with abemaciclib each year (adjusted for population growth)	470	780	1,740	1,750	1,760
People continuing treatment with abemaciclib each year (adjusted for population growth)		340	570	1,260	1,260
Total number of people receiving abemaciclib each year	470	1,120	2,310	3,010	3,010

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

Savings and benefits

2.4 Abemaciclib is the first targeted therapy for this population and can increase the time taken for disease recurrence when compared to endocrine therapy alone. Treatment with abemaciclib with endocrine therapy has been demonstrated to reduce the rate of metastatic and non-metastatic disease recurrence when compared with endocrine therapy alone.

3 Implications for commissioners

- 3.1 This technology is commissioned by NHS England. Providers are NHS hospital trusts.
- 3.2 Abemaciclib falls within the programme budgeting category 02F, cancers and tumours, breast.

4 How we estimated the resource impact

The population

- 4.1 By 2026/27 it is estimated, based on predicted population growth, there will be around 50,400 breast cancer diagnoses per year. Of these around 43,900 (87.1%) will have early or locally advanced disease. Around 28,300 (64.5%) people with early or locally advanced breast cancer will have HR positive HER2 negative disease and around 7,100 (25%) of these people will have high-risk disease. Of these around 4,100 (57.4%) will have disease at high risk of recurrence and will be eligible for treatment with abemaciclib.

Table 3 Number of people eligible for treatment in England

Population	Proportion of previous row (%)	Number of people in year 2026/27
Adult population		46,263,200
Incidence of breast cancer ¹	0.11	50,400
Proportion of people with early or locally advanced disease ²	87.1	43,900
Proportion of people with hormone receptor positive, HER2 negative disease ³	64.5	28,300
Proportion of people with high-risk disease ⁴	25.0	7,100
Total number of people eligible for treatment with abemaciclib ⁵	57.4	4,100
Total number of people estimated to receive abemaciclib in 2022/23		470
Total number of people estimated to receive abemaciclib in 2026/27		3,000
¹ Source: https://digital.nhs.uk/data-and-information/publications/statistical/cancer-registration-statistics		
² Source: https://crukcanerintelligence.shinyapps.io/EarlyDiagnosis/		
³ Source: Midpoint of Howlader et al, 2014 and DeKoven et al, 2012		
⁴ Source: Company submission		
⁵ Source: Clinical expert opinion		

Assumptions

4.2 The resource impact template assumes that:

- Abemaciclib will be given for 2 years, with 21% of people discontinuing in the first year and 28% in the second year of treatment.
- Abemaciclib is given with endocrine therapy and the endocrine therapy will continue to be given even if abemaciclib is discontinued.
- Abemaciclib is given with a fixed dose of 150mg twice daily.
- Administration costs are based on HRG SB11Z deliver exclusively oral chemotherapy - £161 per cycle.

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- No costs are included for endocrine therapy as the use will not be affected by whether abemaciclib is used.

About this resource impact report

This resource impact report accompanies the NICE guidance on [Abemaciclib with endocrine therapy for adjuvant treatment of hormone receptor-positive, HER2-negative, node-positive early breast cancer at high risk of recurrence](#) and should be read with it.

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