NICE National Institute for Health and Care Excellence

Putting NICE guidance into practice

Resource impact report:
Abemaciclib with fulvestrant for treating hormone receptor-positive, HER2-negative advanced breast cancer after endocrine therapy (TA725)

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Summary

NICE has recommended abemaciclib plus fulvestrant as an option for treating hormone receptor-positive, human epidermal growth factor receptor 2 (HER2)-negative, locally advanced or metastatic breast cancer in adults who have had endocrine therapy.

Abemaciclib with fulvestrant is currently available for this population through the cancer drugs fund and will move into routine commissioning following publication of the guidance.

We estimate that:

- 2,200 people with hormone receptor-positive, human epidermal growth factor receptor 2 (HER2)-negative, locally advanced or metastatic breast cancer who have had endocrine therapy are eligible for treatment with abemaciclib plus fulvestrant.
- Around 450 people will begin treatment with abemaciclib each year from year 4 onwards once uptake has reached 20% as shown in table 1.

Table 1 Estimated number of people in England receiving abemaciclib plus fulvestrant

	2021/22	2022/23	2023/24	2024/25	2025/26
Uptake rate for abemaciclib plus fulvestrant (%)	15	16	19	20	20
Population receiving abemaciclib plus fulvestrant each year	340	360	430	450	450

This report is supported by a local resource impact template because the list price of abemaciclib plus fulvestrant 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 plus fulvestrant

1.1 NICE has recommended abemaciclib plus fulvestrant as an option for treating hormone receptor-positive, human epidermal growth factor receptor 2 (HER2)-negative, locally advanced or metastatic breast cancer in adults who have had endocrine therapy only if:

- exemestane plus everolimus is the most appropriate alternative to a cyclin-dependent kinase 4 and 6 (CDK 4/6) inhibitor and
- the company provides abemaciclib according to the commercial arrangement (see section 2).

1.2 Currently abemaciclib plus fulvestrant is available in the cancer drugs fund alongside palbociclib plus fulvestrant. Exemestane plus everolimus and ribociclib plus fulvestrant are currently available through routine commissioning.

2 Resource impact of the guidance

2.1 We estimate that:

- 2,200 people with hormone receptor-positive, human epidermal growth factor receptor 2 (HER2)-negative, locally advanced or metastatic breast cancer who have had endocrine therapy are eligible for treatment with abemaciclib plus fulvestrant each year.
- Around 450 people will begin treatment with abemaciclib plus fulvestrant from year 4 onwards once uptake has reached 20%.

2.2 The current treatment and future uptake figure assumptions are based on current trends in prescribing in the cancer drugs fund and 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 plus fulvestrant by financial year.

Table 2 Estimated number of people receiving abemaciclib plus fulvestrant using NICE assumptions

	2021/22	2022/23	2023/24	2024/25	2025/26
Uptake rate for abemaciclib plus fulvestrant (%)	15	16	19	20	20
Population starting treatment with abemaciclib plus fulvestrant each year	340	360	430	450	450
Population continuing treatment with abemaciclib plus fulvestrant from previous years	340	360	430	450	450

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.

2.4 We anticipate abemaciclib plus fulvestrant use will increase over time as market share is taken from everolimus plus exemestane.

3 Implications for commissioners

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

3.2 Abemaciclib will be available through routine commissioning and there will be a resource impact for specialised 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 15/09/2021.

3.3 Abemaciclib falls within the programme budgeting category 02F cancers and tumours, breast.

4 How we estimated the resource impact

The population

4.1 There are around 45,800 cases of breast cancer, of these around 43,000 (94%) will be diagnosed in the early disease stage, of people with early disease on diagnosis, 36,600 (85%) people have disease progression.

4.2 Of all people whose disease progresses, 12,800 (35%) will progress to advanced disease, in addition to this around 2,750 (6%) of all people diagnosed with breast cancer will have advanced disease on diagnosis giving a total of around 15,550 people with advanced breast cancer each year.

4.3 Around 12,750 people with advanced breast cancer (85%) will be post-menopause and of these around 8,150 (64%) will have HR+ HER2- disease.

4.4 6,000 people (64%) with HR+ HER2- disease will have no visceral metasteses and of these 4,200 (70%) will have endocrine therapy of these 2,200 (53%) will have disease progression and be eligible for treatment with abemaciclib plus fulvestrant.

Table 3 Number of people eligible for treatment in England

	Population	Proportion of previous row (%)	Number of people
	Total population		54,786,327
	Adult population		43,108,471
a	Incidence of breast cancer[1]	0.1	45,800
b	Proportion of people with early breast cancer[2]	94.0	43,000
c	Proportion who have disease progression[3]	85.0	36,600
d	Proportion who progress to advanced stage disease[4]	35.0	12,800
e	Proportion of people with advanced disease on diagnosis[5]	6.0 of a	2,750
f	Total people with advanced disease	d+e	15,550
g	Proportion who are post-menopause[1]	82.0	12,750
h	Proportion of people with HR+ HER2-[6]	64.0	8,150
i	Proportion of people without visceral metastases[7]	74.0	6,000
j	Proportion of people who have endocrine therapy[8]	70	4,200
k	Proportion of people who have disease progression during or after endocrine therapy[8]	53.0	2,200
	Total number of people eligible for treatment with abemaciclib with fulvestrant		2,200
	Total number of people estimated to receive abemaciclib plus fulvestrant each year from year 5	20.0	450

[1] Source: Cancer registration statistics 2017. ICD-10 code C50

[2] Source: http://www.ncin.org.uk/publications/survival_by_stage

[3] Source: https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/breast-cancer#heading-Three

[4] Source: Company estimate

[5] Source: http://www.ncin.org.uk/publications/survival_by_stage

[6] Source: DeKoven et al, 2012

[7] Source: Sharma et al, 2011

[8] Source: Everolimus with exemestane for treating advanced breast cancer after endocrine therapy (TA421) resource impact template

Assumptions

4.5 Assumptions can be changed in the resource impact template to suit local circumstances. The resource impact template assumes that:

- Abemaciclib plus fulvestrant has an average treatment duration of 24 months.
- Everolimus has an average treatment duration of 6 months, exemestane 12 months.
- Ribociclib plus fulvestrant and palbociclib plus fulvestrant have an average treatment duration of 12 months.
- Oral medicines are assumed to be delivered via a homecare service which means that only homecare costs are included at £50 per month.
- Intramuscular medicines have an administration cost based on SB12Z deliver simple parenteral chemotherapy at first attendance.

About this resource impact report

This resource impact report accompanies the NICE guidance on abemaciclib plus fulvestrant for treating hormone receptor-positive, HER-2 negative advanced breast cancer after endocrine therapy and should be read with it.