

Putting NICE guidance into practice

Resource impact report: Atezolizumab with nab-paclitaxel for untreated PD-L1-positive, locally advanced or metastatic, triple-negative breast cancer (TA639)

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Summary

NICE has recommended atezolizumab with nab-paclitaxel for treating previously untreated PD-L1-positive, locally advanced or metastatic, triple-negative breast cancer.

We estimate that:

- 580 people with untreated PD-L1-positive, locally advanced or metastatic, triple-negative breast cancer are eligible for treatment with atezolizumab with nab-paclitaxel.
- 520 people will have atezolizumab with nab-paclitaxel from year 2 onwards once uptake has reached 90% as shown in table 1.

Table 1 Estimated number of people in England having atezolizumab with nab-paclitaxel

| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 |
|--|---------|---------|---------|---------|---------|
| Population having atezolizumab with nab-paclitaxel each year | 290 | 520 | 520 | 520 | 520 |

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

- 1.1 NICE has recommended atezolizumab with nab-paclitaxel for treating triple-negative, unresectable, locally advanced or metastatic breast cancer in adults whose tumours express PD-L1 at a level of 1% or more and who have not had previous chemotherapy for metastatic disease. It is recommended only if the company provides atezolizumab according to the commercial arrangement.
- 1.2 Current practice is for people to be treated by chemotherapy with either paclitaxel or docetaxel. Atezolizumab with nab-paclitaxel represents a new treatment option and is the first immunotherapy-based regimen for this population.
- 1.3 Atezolizumab with nab-paclitaxel is considered to be a life extending treatment at the end of life.

2 Resource impact of the guidance

- 2.1 We estimate that:
- 580 people in England with untreated PD-L1-positive, locally advanced or metastatic, triple-negative breast cancer are eligible for treatment with atezolizumab with nab-paclitaxel each year.
 - 520 people will have atezolizumab with nab-paclitaxel from year 2 onwards once uptake has reached 90%.
- 2.2 The current treatment and future uptake figure assumptions are based on expert opinion agreed by NHS England and the company and are shown in the resource impact template. Table 2 shows the number of people in England who are estimated to have atezolizumab with nab-paclitaxel by financial year.

2.3 PD-L1 testing is not currently standard practice in breast cancer and so this has been included as a cost of treating people with atezolizumab. The unit cost used is £121.08 per test.

Table 2 Estimated number of people having atezolizumab with nab-paclitaxel using NICE assumptions

| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 |
|--|---------|---------|---------|---------|---------|
| Population having atezolizumab with nab-paclitaxel each year | 290 | 520 | 520 | 520 | 520 |

2.4 This report is supported by a local resource impact template. Atezolizumab has a commercial arrangement in place which makes it available with a commercial-in-confidence discount to the list price. The discount takes the form of a simple discount patient access scheme. The discounted price of atezolizumab can be put into the template and other variables may be amended.

Savings and benefits

2.5 Atezolizumab is the first immunotherapy-based regimen to be recommended for people with untreated triple-negative, PD-L1-positive advanced breast cancer.

2.6 Atezolizumab with nab-paclitaxel has been shown to increase progression free survival in comparison with nab-paclitaxel alone.

2.7 Atezolizumab is considered to be a life-extending treatment at the end of life.

2.8 Currently the only treatment options available to people with untreated triple-negative PD-L1-positive advanced breast cancer are traditional chemotherapy agents so atezolizumab represents a stepped improvement.

3 Implications for commissioners

- 3.1 This technology is commissioned by NHS England. Providers are NHS hospital trusts.
- 3.2 Atezolizumab 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 45,700 new cases of breast cancer every year in England and of these around 41,100 (90%) have invasive disease. In people with invasive disease, around 39,000 (95%) will have early or locally advanced disease on diagnosis, of these around 27,300 (70%) will survive to disease progression and of these around 9,600 (35%) will progress to advanced disease.
- 4.2 Around 2,000 people will have advanced disease on diagnosis so the total number of people with advanced disease in England per year is around 11,600.
- 4.3 Around 1,700 people with advanced disease (15%) will have triple-negative breast cancer and around 1,500 (85%) of these people will have a PD-L1 test. Of people with triple-negative breast cancer who have a PD-L1 test, around 580 (39%) will test positive.

Table 3 Number of people eligible for treatment in England

| | Population | Proportion of previous row (%) | Number of people |
|---|--|--------------------------------|------------------|
| | Total population | | 55,977,178 |
| | Adult population | | 44,022,560 |
| a | Incidence of breast cancer ¹ | 0.1 | 45,700 |
| b | Proportion of people with invasive disease ² | 90 | 41,100 |
| c | Proportion with early or locally advanced disease ² | 95 | 39,000 |
| d | Proportion of people who survive to disease progression ² | 70 | 27,300 |
| e | Proportion of people who will progress to advance disease ² | 35 | 9,600 |
| f | Proportion of people with advanced disease on diagnosis ² | 5 of b | 2,000 |
| g | Total people with advanced breast cancer | e+f | 11,600 |
| h | Proportion of people who have triple-negative breast cancer ³ | 15 | 1,700 |
| i | Proportion of people who have a PD-L1 test ⁴ | 85 | 1,500 |
| j | People who test positive for PD-L1 and are eligible for treatment with atezolizumab ⁴ | 39 | 580 |
| | Total number of people estimated to have atezolizumab with nab-paclitaxel each year from year 2 | 90 | 520 |
| ¹ Source: Office for national statistics Cancer registration statistics, England 2017: Final [online: accessed 13.05.20] ² Source: Abemaciclib with an aromatase inhibitor for previously untreated, hormone receptor-positive, HER2-negative, locally advanced or metastatic breast cancer resource impact tools ³ Source: Cancer Research UK ⁴ Source: company information | | | |

Assumptions

4.4 The resource impact template assumes that:

- PD-L1 testing costs £121.08 per test (company submission).

About this resource impact report

This resource impact report accompanies the NICE guidance on [Atezolizumab with nab-paclitaxel for untreated PD-L1-positive, locally advanced or metastatic, triple-negative breast cancer](#) and should be read with it.

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