

## Putting NICE guidance into practice

### **Resource impact report: Atezolizumab with carboplatin and etoposide for untreated extensive-stage small-cell lung cancer (TA638)**

Published: July 2020

## Summary

NICE has recommended atezolizumab with carboplatin and etoposide as an option for untreated extensive-stage small-cell lung cancer in adults, only if they have an Eastern Cooperative Oncology Group (ECOG) performance status of 0 or 1.

Adults with untreated extensive-stage small-cell lung cancer who are eligible for treatment are currently offered carboplatin and etoposide.

### We estimate that:

- 1,370 people with lung cancer are eligible for treatment with atezolizumab with carboplatin and etoposide
- 1,230 people will receive atezolizumab with carboplatin and etoposide from year 2021/22 onwards once uptake has reached 90% as shown in table 1.

**Table 1 Estimated number of people in England receiving atezolizumab with carboplatin and etoposide**

|  | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 |
|--|---------|---------|---------|---------|---------|
| Population receiving atezolizumab with carboplatin and etoposide each year | 615     | 1,230   | 1,230   | 1,230   | 1,230   |

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 with carboplatin and etoposide

1.1 Atezolizumab with carboplatin and etoposide is recommended as an option for untreated extensive-stage small-cell lung cancer in adults, only if:

- they have an Eastern Cooperative Oncology Group (ECOG) performance status of 0 or 1 and
- the company provides atezolizumab according to the commercial arrangement.

## 2 Resource impact of the guidance

2.1 We estimate that:

- 1,370 people with extensive-stage small-cell lung cancer are eligible for treatment with atezolizumab with carboplatin and etoposide each year.
- 1,230 people will receive atezolizumab with carboplatin and etoposide from year 2021/22 onwards once uptake has reached 90%.

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 atezolizumab with carboplatin and etoposide by financial year.

**Table 2 Estimated number of people in England receiving atezolizumab with carboplatin and etoposide using NICE assumptions**

|  | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 |
|--|---------|---------|---------|---------|---------|
| Population receiving atezolizumab with carboplatin and etoposide each year | 615     | 1,230   | 1,230   | 1,230   | 1,230   |

- 2.3 This report is supported by a local resource impact template. Atezolizumab has a commercial arrangement (simple discount patient access scheme). This makes atezolizumab available to the NHS with a discount. The size of the discount is commercial in confidence. The discounted price of atezolizumab can be put into the template and other variables may be amended. For enquiries about the commercial arrangement please contact [Welwyn.rx\\_bdop@roche.com](mailto:Welwyn.rx_bdop@roche.com).

### **Benefits**

- 2.4 People diagnosed with extensive-stage small-cell lung cancer have limited treatment options. Patient experts explained that after starting chemotherapy, people often feel better at first, but this may only last for a few months before their condition deteriorates further. Therefore any treatment that extends life would be welcomed. The committee concluded that atezolizumab with carboplatin and etoposide would be welcomed as a treatment option for people with extensive-stage small-cell lung cancer.

## **3 Implications for commissioners**

- 3.1 This technology is commissioned by NHS England. Providers are NHS hospital trusts.
- 3.2 Because atezolizumab has been made available in the NHS through the early access to medicines scheme, NHS England has indicated that this guidance will be implemented 30 days after final publication. Therefore implementation is assumed to start in August 2020.
- 3.3 Atezolizumab falls within the programme budgeting category 02D: Cancer, Lung.

## 4 How we estimated the resource impact

### *The population*

4.1 The annual incidence of adults in England with lung cancer is around 38,900 ([Cancer registration statistics](#), England, 2017). Around 1,370 people are eligible for treatment with atezolizumab with carboplatin and etoposide each year. Table 3 shows the details of the population with lung cancer who are estimated to be eligible for treatment with atezolizumab with carboplatin and etoposide.

**Table 3 Number of people eligible for treatment in England**

| Population   | Proportion of previous row (%) | Number of people |
|--|--------------------------------|------------------|
| Total adult population   |                                | 44,022,560       |
| Incidence of lung cancer <sup>1</sup>  | 0.09                           | 38,900           |
| People with small cell lung cancer (SCLC) <sup>2</sup>   | 12.5                           | 4,860            |
| People with extensive stage disease <sup>3</sup>   | 55                             | 2,680            |
| People with performance status 0-1 <sup>3</sup>  | 51                             | 1,370            |
| Total number of people eligible for treatment with atezolizumab with carboplatin and etoposide                                   |                                | 1,370            |
| Total number of people estimated to receive atezolizumab with carboplatin and etoposide each year from year 2020/21 <sup>4</sup> | 90                             | 1,230            |
| <sup>1</sup> <a href="#">Cancer registration statistics, England, 2017</a>   |                                |                  |
| <sup>2</sup> <a href="#">NLCA annual report 2017</a>   |                                |                  |
| <sup>3</sup> <a href="#">Small-Cell Lung Cancer in England: Trends in Survival and Chemotherapy. Khakwari et al 2014</a>         |                                |                  |
| <sup>4</sup> Expert clinical opinion   |                                |                  |

### **Assumptions**

4.2 The resource impact template assumes that:

- The uptake for atezolizumab with carboplatin and etoposide will reach a maximum of 90% from year 2021/22. This is based on Resource impact report: Atezolizumab with carboplatin and etoposide for untreated extensive-stage small-cell lung cancer (July 2020)

expert opinion from NHS England that all eligible people with performance status 0-1 will receive atezolizumab because it is an add-on to current treatment and treatment options are limited. It is assumed that 10% of people will choose to not receive atezolizumab treatment.

- 45% uptake is assumed in the first year given that funding will be available for only part of 2020/21, but maximum uptake is assumed to be reached after around 3 months, based on prior experience of cancer drugs.
- The eligible population currently receive treatment with carboplatin and etoposide.
- The regimen for atezolizumab, when given in combination with carboplatin and etoposide, is 1,200 mg IV given on day 1 of each 3 week cycle until loss of clinical benefit or unmanageable.
- The mean total dose in the clinical evidence trials was 10,193mg. This equates to around 8.5 doses on average with an induction phase of 4 cycles and a maintenance phase of 4.5 cycles, referenced in the company submission.
- Administration costs for carboplatin and etoposide were taken from the 2019/20 National tariff (June 2020): HRG code SB13Z (Deliver more Complex Parenteral Chemotherapy at First Attendance) and HRG code SB15Z (Deliver Subsequent Elements of a Chemotherapy Cycle).
- Administration costs for atezolizumab with carboplatin and etoposide, relating to the induction phase were taken from the 2019/20 National tariff (June 2020): HRG code SB13Z (Deliver more Complex Parenteral Chemotherapy at First Attendance) and HRG code SB15Z (Deliver Subsequent Elements of a Chemotherapy Cycle).

- Administration costs for the maintenance phase of treatment with atezolizumab alone were taken from the 2019/20 National tariff (June 2020): HRG codes SB12Z (Deliver Simple Parenteral Chemotherapy at First Attendance).

## ***About this resource impact report***

This resource impact report accompanies the NICE guidance on [atezolizumab with carboplatin and etoposide for untreated extensive-stage small-cell lung cancer](#) and should be read with it.

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