

# Atezolizumab for treating locally advanced or metastatic non-small-cell lung cancer after chemotherapy

Technology appraisal guidance

Published: 16 May 2018

[www.nice.org.uk/guidance/ta520](https://www.nice.org.uk/guidance/ta520)

## Your responsibility

The recommendations in this guidance represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take this guidance fully into account, alongside the individual needs, preferences and values of their patients. The application of the recommendations in this guidance is at the discretion of health professionals and their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

All problems (adverse events) related to a medicine or medical device used for treatment or in a procedure should be reported to the Medicines and Healthcare products Regulatory Agency using the [Yellow Card Scheme](#).

Commissioners and/or providers have a responsibility to provide the funding required to enable the guidance to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should [assess and reduce the environmental impact of implementing NICE recommendations](#) wherever possible.

# Contents

1 Recommendations .....	4
2 Information about atezolizumab .....	6
Marketing authorisation indication .....	6
Dosage in the marketing authorisation .....	6
Price.....	6
3 Committee discussion .....	7
The condition.....	7
Current treatments.....	7
Comparators .....	8
Clinical evidence .....	9
PD-L1 expression.....	10
Indirect treatment comparisons.....	12
The company's economic model .....	14
Continued treatment effect.....	15
Extrapolating overall survival .....	15
Stopping rule .....	16
Cost-effectiveness estimates .....	17
End of life .....	18
Conclusion .....	20
4 Implementation.....	21
5 Appraisal committee members and NICE project team .....	22
Appraisal committee members .....	22
NICE project team .....	22

# 1 Recommendations

- 1.1 Atezolizumab is recommended as an option for treating locally advanced or metastatic non-small-cell lung cancer (NSCLC) in adults who have had chemotherapy (and targeted treatment if they have an EGFR- or ALK-positive tumour), only if:
- atezolizumab is stopped at 2 years of uninterrupted treatment or earlier if the disease progresses and
  - the company provides atezolizumab with the discount agreed in the [patient access scheme](#).
- 1.2 This recommendation is not intended to affect treatment with atezolizumab that was started in the NHS before this guidance was published. People having treatment outside this recommendation may continue without change to the funding arrangements in place for them before this guidance was published, until they and their NHS clinician consider it appropriate to stop.

## Why the committee made these recommendations

Treatments for NSCLC after chemotherapy include docetaxel alone, pembrolizumab (for tumours expressing the PD-L1 protein) and nintedanib plus docetaxel for adenocarcinoma.

Clinical trial evidence shows that people having atezolizumab live longer than those having docetaxel alone. There is no evidence directly comparing atezolizumab with pembrolizumab. But indirect analyses show that for people with PD-L1-positive disease, there may be no difference in survival benefit for atezolizumab compared with pembrolizumab.

Atezolizumab meets NICE's criteria to be considered a life-extending treatment at the end of life compared with docetaxel alone, but not compared with pembrolizumab.

The most plausible cost-effectiveness estimates for atezolizumab, compared with docetaxel (for PD-L1-negative disease) and with pembrolizumab (for PD-L1-positive disease), are within the range NICE considers an acceptable use of NHS resources.

Therefore it can be recommended after chemotherapy for locally advanced or metastatic NSCLC.

## 2 Information about atezolizumab

### Marketing authorisation indication

- 2.1 Atezolizumab (Tecentriq, Roche) has a marketing authorisation in the UK for 'adult patients with locally advanced or metastatic non-small cell lung cancer after prior chemotherapy. Patients with EGFR-activating mutations or ALK-positive tumour mutations should also have received targeted therapy before receiving atezolizumab'.

### Dosage in the marketing authorisation

- 2.2 1,200 mg every 3 weeks by intravenous infusion. The company submission states that patients should have treatment until loss of clinical benefit or unmanageable toxicity.

### Price

- 2.3 A 1,200 mg vial costs £3,807.69 excluding VAT (company submission). The company has a [commercial arrangement](#). This makes atezolizumab available to the NHS with a discount. The size of the discount is commercial in confidence. It is the company's responsibility to let relevant NHS organisations know details of the discount.

## 3 Committee discussion

The appraisal committee ([section 5](#)) considered evidence submitted by Roche and a review of this submission by the evidence review group (ERG). See the [committee papers](#) for full details of the evidence.

### The condition

#### **Atezolizumab is a potentially important option for locally advanced or metastatic NSCLC after chemotherapy**

3.1 Locally advanced or metastatic non-small-cell lung cancer (NSCLC) that has progressed after chemotherapy is often diagnosed late in life and has a poor prognosis. It is a debilitating condition with many distressing symptoms. The current outlook for people with NSCLC whose disease has relapsed after chemotherapy is poor. The clinical experts stated that people with this disease have limited treatment options, which are all associated with high toxicity. The committee noted that improving quality of life and even small extensions to life are of considerable importance to this patient group. The committee concluded that atezolizumab is a potentially important treatment option for people with locally advanced or metastatic NSCLC after chemotherapy.

### Current treatments

#### **Options for NSCLC after chemotherapy include docetaxel, nintedanib plus docetaxel, and pembrolizumab**

3.2 Platinum-based chemotherapy is given as a first treatment for NSCLC in people whose tumours are not epidermal growth factor receptor (EGFR)-positive, followed by docetaxel, or nintedanib plus docetaxel for people with adenocarcinoma. For people with EGFR-positive tumours, treatment starts with a tyrosine kinase inhibitor followed by platinum-based therapy. For people with anaplastic lymphoma kinase

(ALK)-positive tumours, standard treatment is ALK inhibitors followed by platinum-based chemotherapy. NICE technology appraisal guidance recommends pembrolizumab for treating PD-L1-positive NSCLC after chemotherapy; NICE also recommends pembrolizumab as an option for untreated PD-L1-positive NSCLC if the tumour expresses at least a 50% tumour proportion score (see the NICE technology appraisal guidance on [pembrolizumab for treating PD-L1-positive NSCLC after chemotherapy](#) and [pembrolizumab for untreated PD-L1-positive metastatic NSCLC](#)). The clinical experts stated that since publication of this guidance the use of pembrolizumab has been increasing and PD-L1 testing at diagnosis has become part of standard care for this population. The committee understood that, after chemotherapy, most patients would have active treatment such as pembrolizumab, docetaxel or nintedanib plus docetaxel. But for a small proportion of patients who decline docetaxel, or cannot not tolerate it, best supportive care may be the only option. The committee concluded that atezolizumab could be a treatment option for people who have had previous chemotherapy and for people with EGFR-activating mutations or ALK-positive mutations who have had a targeted therapy instead of docetaxel, nintedanib plus docetaxel (for adenocarcinoma), or pembrolizumab (for PD-L1-positive NSCLC).

## Comparators

### **Docetaxel (for PD-L1-negative disease) and pembrolizumab (for PD-L1-positive disease) are relevant comparators**

- 3.3 For both second- and third-line treatment, the comparators would be docetaxel alone, nintedanib plus docetaxel (for people with adenocarcinoma), pembrolizumab (for PD-L1-positive NSCLC), and best supportive care when docetaxel is not suitable. The company had included both docetaxel and nintedanib plus docetaxel as comparators in the submission. At the third committee meeting, the Cancer Drugs Fund clinical lead and the clinical expert explained that docetaxel and nintedanib plus docetaxel (for the adenocarcinoma population only) are considered relevant treatments only for PD-L1-negative disease. Comments received at consultation suggested that nintedanib plus docetaxel is used only for a small number of people in clinical practice,



which the committee accepted. The company had not considered nivolumab and best supportive care, which were included in the final scope. The committee considered that excluding best supportive care was reasonable because patients eligible to have atezolizumab would be well enough to have other treatment, and it noted that nivolumab is not recommended for routine commissioning. The committee concluded that for the populations under consideration, the relevant comparators for atezolizumab were:

- docetaxel alone (for PD-L1-negative disease)
- pembrolizumab (for PD-L1-positive disease).

## Clinical evidence

### **Atezolizumab offers a gain in survival compared with docetaxel alone**

3.4 The main clinical trial evidence for atezolizumab compared with docetaxel came from the OAK trial. This was an open-label, phase 3 randomised controlled trial in adults with locally advanced or metastatic NSCLC, whose disease had progressed during or after 1 platinum-containing chemotherapy regimen. The data used by the company in its clinical and cost-effectiveness analyses were from a primary population (n=850), and the study had recruited more patients in total (n=1,225) by the time the company made its original submission. The results of the primary analysis showed a statistically significant median overall survival gain for atezolizumab (13.8 months; 95% confidence interval [CI] 11.8 to 15.7) compared with docetaxel (9.6 months; 95% CI 8.6 to 11.2). In response to the second consultation, the company submitted the results from the full trial population (n=1,225). The committee noted that the results from the larger population supported the results from the primary analysis, and concluded that atezolizumab offers a gain in survival compared with docetaxel alone.

## Using the unadjusted trial data to account for treatment switching is appropriate

3.5 In the primary analysis of the OAK trial, 5% of patients having atezolizumab and 17% of patients having docetaxel went on to have subsequent therapy, mostly nivolumab. In response to the first consultation, the company provided analyses that adjusted for this subsequent treatment. These analyses used the rank-preserving structural failure time method, which the ERG stated was not suitable for adjusting for subsequent therapies (it is normally used to adjust for treatment crossover). The committee was aware that in the [NICE technology appraisal of pembrolizumab for treating PD-L1-positive NSCLC after chemotherapy](#), the preferred method of adjusting for crossover was the 2-stage adjustment method. The company did not provide this analysis, noting that it could not be implemented for the OAK dataset because it would need new baseline values of previously selected variables to be defined at the time of the switch. Therefore the committee agreed that it would use the estimates from the unadjusted trial data. The committee concluded that the unadjusted data in the company's original submission should be considered for decision-making.

## PD-L1 expression

### Results from the full trial population are not suitable for decision-making

3.6 The marketing authorisation for atezolizumab is for adults with locally advanced or metastatic NSCLC after chemotherapy, and after chemotherapy and targeted treatment in people with EGFR- or ALK-positive tumours; it does not specify treatment based on PD-L1 expression. The committee noted that the trial results suggested that higher levels of PD-L1 expression led to greater clinical response in people with locally advanced or metastatic NSCLC after previous chemotherapy (see table 1). The committee was aware that 54% of patients recruited in the OAK trial had PD-L1-positive disease. In this population, pembrolizumab is the appropriate comparator. Comments

from the first and second consultation noted that it was inappropriate for the committee to make a recommendation based on PD-L1 expression, because PD-L1 is not a perfect biomarker and atezolizumab has shown benefit regardless of PD-L1 expression. The committee agreed that the OAK trial showed atezolizumab to be more effective than docetaxel alone, regardless of PD-L1 expression, but it did not include the appropriate comparator for most patients recruited. The committee concluded that the results from the full trial population were not suitable for its decision-making.

## **The company's PD-L1 subgroup analyses are suitable for decision-making**

3.7 The company noted that overall survival with atezolizumab was better compared with docetaxel alone regardless of PD-L1 expression, so it had positioned atezolizumab as a treatment for the full population. The company did not initially provide analyses by PD-L1 expression because the trials for atezolizumab (OAK) and pembrolizumab (KEYNOTE-010) used different PD-L1 tests. A clinical expert commented that data presented at the European Society for Medical Oncology conference suggested that there is some consistency between the Ventana SP142 and the Dako 22C3 immunohistochemistry assays. They noted that in clinical practice it was likely that tumours identified by the 2 tests would be treated in a similar way, and there would be considerable overlap in the patients identified by the different tests as having PD-L1-positive NSCLC. Also, following the adoption of pembrolizumab in NHS practice, PD-L1 testing is already routinely done and, if needed, existing tests such as the Dako 22C3 could be used to inform treatment with atezolizumab. The Cancer Drugs Fund clinical lead noted that there were studies ongoing to assess the test accuracy of 4 PD-L1 assays. The committee concluded that a comparison in people with PD-L1-positive NSCLC as defined by the tests would be appropriate, given that there was likely overlap in the patients identified. In response to the second consultation, the company provided separate clinical effectiveness analyses (see [table 1](#)) and cost-effectiveness analyses for:

- atezolizumab compared with docetaxel alone (using data from the OAK primary analysis for people with PD-L1-negative [tumour cell or infiltrating cell; TC0 or

IC0] disease)

- atezolizumab compared with pembrolizumab (using data from the OAK primary analysis for people with PD-L1-positive [TC1/2/3 or IC1/2/3] disease).

The committee concluded that the company's analyses by PD-L1 expression were appropriate for its decision-making.

**Table 1 OAK overall survival results by PD-L1 expression. In the OAK trial, PD L1 expression was measured using an immunohistochemistry assay. The results were grouped according to the proportion of cells stained at any intensity: tumour cell (TC) 3:  $\geq 50\%$ ; TC2/3:  $\geq 5\%$ ; TC1/2/3:  $\geq 1\%$ ; TC0:  $< 1\%$ ; infiltrating cell (IC) 3:  $\geq 10\%$ ; IC2/3:  $\geq 5\%$ ; IC1/2/3:  $\geq 1\%$ ; IC0:  $< 1\%$ .**

Population	Number (%)	Median overall survival (months) for atezolizumab	Median overall survival (months) for docetaxel	Hazard ratio (95% confidence interval)
Intention to treat	850 (100)	13.8	9.6	0.73 (0.62 to 0.87)
TC3 or IC3	137 (16)	20.5	8.9	0.41 (0.27 to 0.64)
TC2/3 or IC2/3	265 (31)	16.3	10.8	0.67 (0.49 to 0.90)
TC1/2/3 or IC1/2/3	463 (54)	15.7	10.3	0.74 (0.58 to 0.93)
TC0 and IC0	379 (45)	12.6	8.9	0.75 (0.59 to 0.96)

## Indirect treatment comparisons

### All indirect treatment comparisons are associated with uncertainty

- 3.8 In response to the first consultation, the company updated the indirect treatment comparison analyses using a smaller network of comparators:

- atezolizumab (in the full population)
- docetaxel (in the full population)
- nintedanib plus docetaxel (in people with adenocarcinoma)
- pembrolizumab (in people with PD-L1-positive disease [1% expression or more]).

The original network had included more comparators: atezolizumab, docetaxel, nintedanib plus docetaxel, erlotinib, pemetrexed, afatinib, gefitinib, paclitaxel and dacomitinib. The ERG stated that the results of both indirect comparisons were not robust; there was statistical heterogeneity that was influenced by a range of factors, including the choice of comparators included in the network, the populations used, use of fixed effects or random effects models, and the type of fractional polynomial model chosen. The committee agreed to use the company's updated networks, but noted the uncertainty associated with all the indirect analyses.

## **The second updated indirect treatment comparison shows no difference in overall survival between atezolizumab and pembrolizumab**

3.9 In response to the second consultation, the company further updated the indirect treatment comparison analyses using a smaller network of comparators and including only people with PD-L1-positive disease (1% expression or more). The comparators in the second updated indirect treatment comparison were:

- atezolizumab
- docetaxel
- pembrolizumab.

The updated results showed no statistically significant difference in overall survival for atezolizumab compared with pembrolizumab (–0.18 months [95% CI –5.58 to 4.60]) using the unadjusted OAK data. The ERG reiterated that in the updated analysis there was statistical heterogeneity that was influenced by

a range of factors. At the third appraisal committee meeting, the ERG provided a comparative analysis of overall survival and progression-free survival in the PD-L1-positive population of OAK with data from KEYNOTE-010 (the pivotal trial used in the [NICE technology appraisal of pembrolizumab for treating PD-L1-positive NSCLC after chemotherapy](#)). The results suggested that overall survival was higher with atezolizumab than with pembrolizumab, but median overall survival was lower in the docetaxel arm of KEYNOTE-010. The rates of treatment-related adverse events in each trial were similar. The committee agreed to use the company's second updated network in its decision-making, but noted the uncertainty associated with all the indirect analyses. It concluded that atezolizumab may be clinically equivalent to pembrolizumab, but uncertainty remains.

## The company's economic model

### The committee accepted the company's updated economic model

3.10 In response to the first consultation, the company updated the model, incorporating the ERG's corrections for:

- applying a different discount rate for the intervention (discount from week 1) than for the comparators (discount from year 2)
- not applying an age-related utility decrement
- applying an inappropriate half cycle correction.

In response to the second consultation, the company updated the patient access scheme and cost-effectiveness analyses for atezolizumab:

- compared with docetaxel alone in the full trial population
- compared with pembrolizumab in people with PD-L1-positive disease
- compared with docetaxel alone in people with PD-L1-negative disease.

The committee accepted the company's updated economic model.

## Continued treatment effect

### A lifetime treatment effect for atezolizumab is implausible

3.11 The company explained that atezolizumab's mechanism of action suggests that its effects on tumours would continue after treatment stopped. The committee considered this assumption to be biologically plausible, but it was concerned about the lack of evidence to support this. In response to the first consultation, the company provided updated data from the OAK trial which showed that the median length of treatment effect had increased from 16.3 months to 23.9 months. It also provided scenario analyses using various cut-offs for treatment effect, including a waning effect and spanning 5 to 20 years after stopping atezolizumab. The committee considered that the treatment effect was unlikely to last more than 5 years after treatment had stopped. It concluded that although it was biologically plausible for the treatment effect to continue after stopping treatment, the length of any continued effect was uncertain.

## Extrapolating overall survival

### Using Kaplan–Meier data plus a log-logistic model produces clinically plausible survival assumptions at 5 years

3.12 To estimate overall survival for atezolizumab in the full population, the company used data from OAK in which the median length of overall survival follow-up was 21.4 months for atezolizumab. In response to the first consultation, the company used Kaplan–Meier data up to 23.3 and 16.3 months for atezolizumab and docetaxel, respectively and extrapolated the data using a log-logistic curve based on best statistical fit for both atezolizumab and docetaxel. The ERG's preferred method was to use Kaplan–Meier data up to 19 months and then extrapolate using an exponential curve in both arms, which was the best fit visually for the trial data after 19 months. In response to the second consultation the committee considered comments from the clinical expert, Cancer Drugs Fund clinical lead and the company. These suggested that the ERG's

preferred method (Kaplan–Meier plus exponential overall survival extrapolation; 4% alive at 5 years) underestimated 5-year survival, and that the company's preferred overall survival extrapolation (Kaplan–Meier plus log-logistic curve; 10% alive at 5 years) was more appropriate. The company provided a range of survival estimates from other immunotherapy trials which supported this. The committee accepted that overall survival at 5 years was likely to be similar to that predicted for other immunotherapies, and concluded that using the Kaplan–Meier data with a log-logistic curve was appropriate for its decision-making.

## Stopping rule

### **The committee prefers a 2-year stopping rule in the model**

3.13 The company explained that the evidence for immunotherapies such as atezolizumab was immature. There are no clear data on the effect of stopping treatment in the absence of disease progression. The company and the clinical expert explained that in a trial investigating the effect of 1-year nivolumab treatment, patients who stopped therapy after 1 year had statistically significantly worse progression-free survival than those who continued therapy until they no longer benefitted clinically. The committee noted that the mean length of therapy in the OAK trial was less than 11 cycles (about 33 weeks), and that there was no maximum length of treatment (that is, a stopping rule). The Cancer Drugs Fund clinical lead said that the long-term consequences of stopping treatment are unknown, but clinical experience of immunotherapies in other indications suggests that significant treatment-related toxicities may occur while the disease is still responding. There is growing concern among clinicians about the use of immunotherapies beyond 2 years. The clinical experts explained that the best length of treatment with immunotherapies such as atezolizumab is uncertain, with clinicians stopping treatment anywhere between 6 months and 2 years. The committee considered that sometimes treatment may continue beyond 2 years, but it acknowledged that there was very limited evidence to support this. In response to the second consultation, the company included a 2-year stopping rule in its sensitivity analyses (but reiterated that applying it was unreasonable given the potential harm to patients in



stopping treatment early). The committee was aware that the summary of product characteristics does not include a 2-year stopping rule and it queried whether clinicians would follow such a rule, especially if the patient was still benefitting from treatment. The Cancer Drugs Fund clinical lead clarified that a 2-year stopping rule is acceptable to both patients and clinicians, and would be implementable. The committee further noted that NICE guidance for other immunotherapies for previously treated NSCLC (pembrolizumab and nivolumab) include 2-year stopping rules. It concluded that it would prefer a 2-year stopping rule in the economic model.

## Cost-effectiveness estimates

### The company's updated analyses include the committee's preferred assumptions

3.14 The committee considered the company's amended economic analyses, which incorporated the updated patient access scheme. It recalled that because the data for the full trial population did not include the appropriate comparator for PD-L1-positive disease, the company's cost-effectiveness estimates using these data were not suitable for decision-making. It noted that, responding to a request from NICE, the company had provided sensitivity analyses that included the committee's preferred assumptions, specifically:

- extrapolating overall survival using Kaplan–Meier data plus a log-logistic curve ([section 3.12](#))
- applying a 2-year stopping rule ([section 3.13](#))
- assuming that the effects of atezolizumab last for up to 3 years after stopping treatment ([section 3.11](#))
- not adjusting for subsequent treatment switching.

## End of life

### People with NSCLC have a life expectancy of less than 24 months

3.15 The committee considered the advice about life-extending treatments for people with a short life expectancy in [NICE's Cancer Drugs Fund technology appraisal process and methods](#). The committee discussed whether life expectancy without atezolizumab would be less than 24 months. It noted the company's evidence, which showed that people with NSCLC have an average life expectancy of less than 24 months (median survival has been reported as 7.5 months for stage 3b and 3.4 months for stage 4 NSCLC, which was supported by trial data and estimates from the economic model). The committee concluded that the short life expectancy criterion was met.

### Atezolizumab compared with docetaxel meets NICE's end-of-life criteria

3.16 The committee discussed whether a survival benefit of over 3 months can be expected for atezolizumab compared with docetaxel. The committee heard that in the full trial population the mean number of months of life gained with atezolizumab, as estimated by the company's economic model, was over 3 months compared with docetaxel. It further noted that for people with PD-L1-negative disease, the estimated difference in mean overall survival with atezolizumab was 7.1 months compared with docetaxel. The committee considered it reasonable to assume that the benefit is likely to exceed 3 months and concluded that atezolizumab met the end-of-life criteria for this population.

### Atezolizumab compared with pembrolizumab does not meet NICE's end-of-life criteria

3.17 The results of the company's indirect treatment comparison showed no statistically significant difference in overall survival between atezolizumab and pembrolizumab in people with PD-L1-positive disease. The committee concluded that atezolizumab compared with

pembrolizumab for PD-L1-positive disease did not offer a proven extension to life of more than 3 months.

## **Atezolizumab is cost effective for PD-L1-positive NSCLC if treatment is stopped at 2 years**

3.18 The committee considered the company's cost-effectiveness analysis for PD-L1-positive disease, submitted in response to the second consultation, including the sensitivity analyses. The incremental cost-effectiveness ratios (ICERs) for atezolizumab compared with pembrolizumab for PD-L1-positive disease included an updated patient access scheme for atezolizumab and a confidential commercial access agreement for pembrolizumab which was incorporated by the ERG, so the exact values cannot be reported here. However, atezolizumab had similar total costs and quality-adjusted life years (QALYs) to pembrolizumab. In response to the second consultation, the company provided an updated cost-minimisation analyses using the OAK trial data for people with PD-L1-positive disease. The results supported the conclusions from the cost-effectiveness analyses. The committee concluded that because the ICER is within the range normally considered to be a cost-effective use of NHS resources, atezolizumab can be recommended for routine use to treat PD-L1-positive NSCLC in adults, only if treatment is stopped at 2 years.

## **Atezolizumab is cost effective for PD-L1-negative NSCLC if treatment is stopped at 2 years**

3.19 The committee considered the company's updated cost-effectiveness analysis for PD-L1-negative disease, submitted in response to the second consultation, including the committee's preferred assumptions. It was aware that for extrapolating overall survival, the company had used a Kaplan–Meier plus log-logistic curve for the atezolizumab arm and a Kaplan–Meier plus log-normal curve for the docetaxel arm. The results (which cannot be reported here because they include an updated patient access scheme for atezolizumab) showed that the ICER was within the range normally considered a cost-effective use of NHS resources. The committee concluded that atezolizumab is cost effective for PD-L1-negative NSCLC in adults, only if treatment is stopped at 2 years.

## Conclusion

### **Atezolizumab is recommended for people with previously treated NSCLC**

3.20 The committee recalled its earlier conclusion that because the company's full trial population data did not include the appropriate comparator for people with PD-L1-positive disease, it preferred the company's subgroup analyses by PD-L1 status. It concluded that the most plausible ICER for atezolizumab compared with pembrolizumab for PD-L1-positive disease was within the range usually considered a cost-effective use of NHS resources. For PD-L1-negative disease the committee noted that atezolizumab met NICE's end-of-life criteria compared with docetaxel. It concluded that the most plausible ICER for atezolizumab compared with docetaxel was also within the range usually considered a cost-effective use of NHS resources. The committee recalled its conclusion that a 2-year stopping rule for treatment with atezolizumab is preferred because the best length of treatment with immunotherapies is uncertain. The committee therefore recommended atezolizumab as an option for treating locally advanced or metastatic NSCLC in adults who have had chemotherapy (and targeted treatment if they have an EGFR- or ALK-positive tumour), only if:

- atezolizumab is stopped at 2 years of uninterrupted treatment, or earlier if the disease progresses and
- the company provides atezolizumab with the discount agreed in the patient access scheme.

## 4 Implementation

- 4.1 Section 7(6) of the National Institute for Health and Care Excellence (Constitution and Functions) and the Health and Social Care Information Centre (Functions) Regulations 2013 requires clinical commissioning groups, NHS England and, with respect to their public health functions, local authorities to comply with the recommendations in this appraisal within 3 months of its date of publication.
- 4.2 The Welsh ministers have issued directions to the NHS in Wales on implementing NICE technology appraisal guidance. When a NICE technology appraisal recommends the use of a drug or treatment, or other technology, the NHS in Wales must usually provide funding and resources for it within 2 months of the first publication of the final appraisal document.
- 4.3 When NICE recommends a treatment 'as an option', the NHS must make sure it is available within the period set out in the paragraphs above. This means that, if a patient has previously treated locally advanced or metastatic non-small-cell lung cancer and the doctor responsible for their care thinks that atezolizumab is the right treatment, it should be available for use, in line with NICE's recommendations.

## 5 Appraisal committee members and NICE project team

### Appraisal committee members

The 4 technology appraisal committees are standing advisory committees of NICE. This topic was considered by [committee C](#).

Committee members are asked to declare any interests in the technology to be appraised. If it is considered there is a conflict of interest, the member is excluded from participating further in that appraisal.

The [minutes of each appraisal committee meeting](#), which include the names of the members who attended and their declarations of interests, are posted on the NICE website.

### NICE project team

Each technology appraisal is assigned to a team consisting of 1 or more health technology analysts (who act as technical leads for the appraisal), a technical adviser and a project manager.

#### **Jessica Maloney and Victoria Kelly**

Technical Leads

#### **Fay McCracken and Alexandra Filby**

Technical Advisers

#### **Stephanie Callaghan**

Project Manager

ISBN: 978-1-4731-2936-8