

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Draft guidance consultation

Pembrolizumab with chemoradiotherapy for untreated locally advanced cervical cancer

The Department of Health and Social Care has asked the National Institute for Health and Care Excellence (NICE) to produce guidance on using pembrolizumab in the NHS in England. The evaluation committee has considered the evidence submitted by the company and the views of non-company stakeholders, clinical experts and patient experts.

This document has been prepared for consultation with the stakeholders. It summarises the evidence and views that have been considered, and sets out the recommendations made by the committee. NICE invites comments from the stakeholders for this evaluation and the public. This document should be read along with the evidence (see the [committee papers](#)).

The evaluation committee is interested in receiving comments on the following:

- Has all of the relevant evidence been taken into account?
- Are the summaries of clinical and cost effectiveness reasonable interpretations of the evidence?
- Are the recommendations sound and a suitable basis for guidance to the NHS?
- Are there any aspects of the recommendations that need particular consideration to ensure we avoid unlawful discrimination against any group of people on the grounds of age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex or sexual orientation?

Note that this document is not NICE's final guidance on this technology. The recommendations in section 1 may change after consultation.

After consultation:

- The evaluation committee will meet again to consider the evidence, this evaluation consultation document and comments from the stakeholders.
- At that meeting, the committee will also consider comments made by people who are not stakeholders.
- After considering these comments, the committee will prepare the final draft guidance.
- Subject to any appeal by stakeholders, the final draft guidance may be used as the basis for NICE's guidance on using pembrolizumab in the NHS in England.

For further details, see [NICE's manual on health technology evaluation](#).

The key dates for this evaluation are:

- Closing date for comments: 24 February 2026
- Second evaluation committee meeting: 10 March 2026
- Details of the evaluation committee are given in section 4

1 Recommendations

- 1.1 Pembrolizumab with chemoradiotherapy (external beam radiation therapy followed by brachytherapy) should not be used for untreated International Federation of Gynecology and Obstetrics (FIGO) 2014 stage 3 to 4A locally advanced cervical cancer in adults.
- 1.2 This recommendation is not intended to affect treatment with pembrolizumab 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 healthcare professional consider it appropriate to stop.

What this means in practice

Pembrolizumab with chemoradiotherapy is not required to be funded and should not be used routinely in the NHS in England for the condition and population in the recommendations.

This is because there is not enough evidence to determine whether pembrolizumab is value for money in this population.

Why the committee made these recommendations

Usual treatment for FIGO 2014 stage 3 to 4A locally advanced cervical cancer is chemoradiotherapy.

Clinical trial evidence shows that pembrolizumab with chemoradiotherapy increases how long people have before their cancer gets worse and how long they live compared with chemoradiotherapy alone.

There are uncertainties with the economic model. This is because of the assumptions used and the way the modelling was done.

Because of the uncertainties in the economic model it is not possible to determine the most likely cost-effectiveness estimates for pembrolizumab with chemoradiotherapy. More analyses are needed. So it should not be used.

2 Information about pembrolizumab

Marketing authorisation indication

2.1 Pembrolizumab (Keytruda, MSD) 'in combination with chemoradiotherapy (external beam radiation therapy followed by brachytherapy), is indicated for the treatment of FIGO 2014 Stage 3 – 4A locally advanced cervical cancer in adults who have not received prior definitive therapy'.

Dosage in the marketing authorisation

2.2 The dosage schedule is available in the [summary of product characteristics for pembrolizumab](#).

Price

2.3 Pembrolizumab costs £2,630 per 100-mg vial (excluding VAT; BNF online accessed January 2026), or around £91,000 for a year of treatment. The company has a commercial arrangement, which would have applied if pembrolizumab had been recommended.

Sustainability

2.4 Information on the Carbon Reduction Plan for UK carbon emissions for MSD will be included here when guidance is published.

3 Committee discussion

The [evaluation committee](#) considered evidence submitted by MSD, a review of this submission by the external assessment group (EAG), and responses from stakeholders. See the [committee papers](#) for full details of the evidence.

Locally advanced cervical cancer

3.1 Locally advanced cervical cancer refers to cervical cancer that has spread beyond the cervix but is still confined to the pelvic region, without distant metastasis. It typically includes International Federation of Gynecology and Obstetrics (FIGO) stages 3 to 4A, in which the disease may involve the pelvic wall, lower third of the vagina, or nearby organs like the bladder or rectum. These stages are associated with a significantly poorer prognosis compared with early-stage disease, making treatment more complex and urgent. The company submitted results from a 2016 survey from Jo's Cervical Trust of 35 women diagnosed with cervical cancer. The women reported an often challenging and disruptive experience. After diagnosis, many felt isolated when having to make decisions and worried about future fertility. They said treatment, particularly chemoradiotherapy and radiotherapy, was physically and emotionally demanding, with common side effects such as nausea, fatigue, anxiety, and feelings of loneliness. These effects markedly affected daily life, including family routines, intimate relationships, and employment, sometimes leading to early retirement. Financial burdens because of increased living costs and loss of income added to the stress of managing the disease. The committee concluded that there is a high disease burden for people with locally advanced cervical cancer.

Clinical management

Treatment options

3.2 Usual treatment for locally advanced cervical cancer is chemoradiotherapy, which combines external beam radiotherapy (EBRT) and brachytherapy with weekly cisplatin chemotherapy. If the cancer recurs or spreads and tumours express PD-L1 with a combined positive score (CPS) of at least 1, a subsequent option is pembrolizumab with chemotherapy, in line with [NICE's technology appraisal guidance on pembrolizumab plus chemotherapy with or without bevacizumab for persistent, recurrent or metastatic cervical cancer](#). Other options are

chemotherapy alone, or no further active treatment. Clinical experts explained that the goal of chemoradiotherapy is cure, with a complete response expected at around 3 months; relapse typically occurs early. One clinical expert noted that, while cure rates with standard chemoradiotherapy are considered good, around 20% to 25% of people experience relapse or are not fully cured, leaving scope for improvement. For stage 3 to 4A disease, one expert estimated the chance of cure as under 50%, making treatments that increase cure rates particularly important. The clinical experts suggested that adding pembrolizumab to chemoradiotherapy could cure an additional 10% to 15% of people. The committee concluded that there is an unmet need for treatments that improve cure rates in locally advanced cervical cancer and agreed that standard chemoradiotherapy without pembrolizumab is the relevant comparator, in line with the NICE scope.

Clinical effectiveness

Key clinical trial: KEYNOTE-A18

3.3 The main clinical evidence was from KEYNOTE-A18, which was an international, phase 3, double-blind, randomised, placebo-controlled trial. It compared pembrolizumab plus chemoradiotherapy with placebo plus chemoradiotherapy for treating locally advanced cervical cancer that had not been treated before. In line with the marketing authorisation, the company presented data from people with FIGO 2014 stage 3 to 4A cancer. The final analysis of the trial showed that adding pembrolizumab to chemoradiotherapy significantly improved progression-free survival, with a hazard ratio of 0.63 (95% confidence interval 0.48 to 0.82; $p=0.0002$). It also significantly improved overall survival, with a hazard ratio of 0.64 (95% confidence interval 0.46 to 0.88; $p=0.0031$). The committee concluded that adding pembrolizumab to standard chemoradiotherapy for locally advanced cervical cancer significantly improved progression-free and overall survival.

Generalisability of KEYNOTE-A18 to the NHS

3.4 The EAG felt that KEYNOTE-A18 was broadly relevant to the NHS population of stage 3 to 4A locally advanced cervical cancer, but noted some differences:

- The chemoradiotherapy regimen used in KEYNOTE-A18 (cisplatin, EBRT, brachytherapy) reflects UK practice. But the total radiation dose in the trial was lower than that recommended in current NHS guidelines, introducing uncertainty about whether relative treatment effects would differ if higher doses were used in practice.
- KEYNOTE-A18 used the FIGO 2014 staging system, whereas UK practice now uses FIGO 2018. The EAG's clinical experts said that mapping from FIGO 2014 to 2018 was possible.

The clinical experts at the committee meeting said that KEYNOTE-A18 was applicable to NHS clinical practice in terms of the population and the treatment the participants had. They explained that it can be difficult to treat locally advanced disease with an adequate dose of radiation in clinical practice, so patients may not have the recommended dose. They noted that the trial showed that adding pembrolizumab to standard chemotherapy benefited people with stage 3 to 4A locally advanced cervical cancer. The committee acknowledged the differences identified by the EAG but was satisfied that KEYNOTE-A18 was applicable to NHS clinical practice.

Subsequent treatments

3.5 The EAG noted that a large proportion of patients with disease progression in KEYNOTE-A18 had subsequent treatment. The company considered the exact results confidential so they cannot be reported here. The clinical expert said that if people did not have a complete response to chemoradiotherapy in the first 3 months (as noted in [section 3.2](#), around 50% are likely to experience relapse), they are offered palliative chemotherapy with pembrolizumab, in line with [NICE's technology](#)

[appraisal guidance on pembrolizumab plus chemotherapy with or without bevacizumab for persistent, recurrent or metastatic cervical cancer](#). The company noted in its submission that retreatment with immunotherapy was only allowed on the NHS if their cancer progresses at least 6 months after the initial course of pembrolizumab is finished. The committee queried whether, if someone had first-line pembrolizumab alongside chemoradiotherapy, they could be offered pembrolizumab again, and if there would be any benefit. It noted that the EAG's clinical advisers had mixed views on retreatment with pembrolizumab. One said they were unlikely to use it again because there was no evidence to support its efficacy and safety. Another said they might consider retreatment given the limited treatment options available in the second-line setting. The clinical experts at the committee meeting said that they had not seen any evidence of benefit from offering pembrolizumab again so were not sure of its value. They said the preference was to use it with the aim of a cure earlier in the pathway. The NHS England clinical lead said that pembrolizumab was available as a second-line treatment to allow clinical choice. The committee concluded that there was a lack of evidence for the value of pembrolizumab retreatment and that its use in clinical practice for cervical cancer is uncertain.

Economic model

Company's modelling approach

3.6 The company's model took a cohort-level semi-Markov approach, with 4 health states:

- progression free
- progressed disease 1
- progressed disease 2
- death.

Clinical data from KEYNOTE-A18 was used for transitions from the

progression-free health state, and data from the KEYNOTE-826 trial (see [section 3.10](#)) for transitions after progression. The EAG said it was broadly satisfied with the model. But the need for calibration to fit overall survival (see section 3.10) and uncertainty about long-term benefits and cure assumptions (see [sections 3.7 and 3.8](#)) made the results highly uncertain. The committee agreed that the results of the model were highly uncertain (see sections 3.8, 3.10 and [section 3.11](#)).

Long-term survival modelling

3.7 The company's original submission estimated long-term progression-free survival and time to progression using standard parametric models based on the interim analysis of KEYNOTE A-18. At clarification, the company updated its analyses, using flexible parametric survival models, based on the final analysis of KEYNOTE-A18. It chose a 1-knot odds restricted cubic spline (RCS) model to estimate progression-free survival in the placebo plus chemoradiotherapy arm because it was the best statistical fit and had a good hazard fit. It chose the same model for the pembrolizumab plus chemoradiotherapy arm for consistency. The company also estimated time to progression using 1-knot odds RCS models for both treatment arms, again for consistency with the progression-free survival modelling. The company got clinical expert advice on the plausibility of the survival curves based on interim data from the original company submission. But it did not get clinical input on the updated curves. The EAG's clinical experts said that the predictions from the 1-knot odds RCS models were reasonable but longer follow up was needed to be confident the benefits would be maintained long term. The EAG noted that the model-predicted overall survival did not reflect that of the final results of KEYNOTE-A18 (see [section 3.10](#)). It said that further input from clinical experts about the plausibility of the company's modelled progression-free survival and overall survival estimates would be valuable. The clinical experts at the committee meeting agreed with the EAG's clinical experts that the estimated survival curves for progression-free survival and time to progression looked plausible and in line with their

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experience. The committee concluded that the results for progression-free survival and time to progression using the 1-knot odds RCS model (company and EAG base case) were clinically plausible.

Cure assumption

3.8 Based on clinical advice, the company's economic model assumed that some people in both treatment groups (pembrolizumab plus chemoradiotherapy and chemoradiotherapy alone) would be cured after initial treatment. Specifically, the probability of progression from the progression-free state was reduced by 95% at year 7, reducing approximately linearly from 0% at year 5. Beyond year 7, the risk of progression remained at 5% of the predicted probabilities from the fitted survival models. For people considered cured, the transition probability to progressed disease became zero, and mortality risk aligned with age-matched general population mortality uplifted by a standardised mortality ratio. People considered cured did not return to the general population's mortality risk because the company had clinical advice that this is unlikely in people who have had cancer because typically they will have other types of ill health, despite being progression free. These cure assumptions applied only to first-line treatments and did not apply if the cancer had already progressed. The company said these assumptions reflected clinical practice, in which if someone's cervical cancer has not come back by 5 years, they are typically discharged and considered functionally cured.

The EAG noted that the way cure was implemented in the model was based on arbitrary assumptions and that the proportion of people who may be cured was uncertain. It said the company could have used an evidence-based approach to estimate cure, by attempting a mixture cure approach. The company said that it had not had enough time to carry out this analysis, and that it felt that its assumptions were robust, given the trial follow up and the natural history of locally advanced cervical cancer.

The clinical experts agreed that it was appropriate to assume a proportion

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of people are cured. They said that usually, if someone remained progression free for 2 to 3 years, then they were likely to be cured. They added that occasionally someone could relapse after 5 years, but this was rare. As noted in [section 3.2](#), in their experience around 50% of people were cured with chemoradiotherapy, and adding pembrolizumab would increase this. The committee accepted that a cure assumption was appropriate in principle, but the assumptions used to implement cure were not evidence based. It noted in particular that clinical advice suggested cure may occur earlier than 5 years. It also found it counterintuitive that removing the cure assumption had only a small effect on the incremental cost-effectiveness ratio (ICER). This, combined with the need for calibration factors to align model-predicted overall survival with trial data (see [section 3.10](#)), suggested potential misspecification of the economic model. The committee concluded that there was substantial uncertainty around the way the cure assumption was modelled and more evidence was needed. It concluded that it wanted to see the results of a mixture cure model because it could estimate the proportion of patients cured based on observed progression-free and overall survival in KEYNOTE-A18, and may help reduce the uncertainty around the cure assumption.

Treatment effect waning for pembrolizumab

3.9 The company's economic model assumed that the full treatment effect of pembrolizumab would be maintained for 5 years after starting treatment. Between years 5 and 7, the proportion of people benefiting from pembrolizumab decreased linearly from 100% to 0% from year 7 onwards. This waning assumption applied to pembrolizumab in both first-line and second-line settings. The company said this assumption was in line with previous NICE appraisals, in particular [NICE's technology appraisal guidance on pembrolizumab plus chemotherapy with or without bevacizumab for persistent, recurrent or metastatic cervical cancer](#). The EAG said that longer follow up from KEYNOTE-A18 was needed to confirm or refute the assumption. Clinical advice to the EAG was that

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assuming the treatment effect wanes over time would have a limited effect on first-line treatment benefit for pembrolizumab plus chemoradiotherapy, because by year 7 the baseline risk of progression for chemoradiotherapy alone is expected to be close to zero. The committee recalled its request for a mixture cure model to estimate long-term overall and progression-free survival (see [section 3.8](#)). It thought that pembrolizumab treatment waning was appropriate in the first-line setting but anticipated that it would largely be accounted for by the mixture cure model. And it also concluded that it was appropriate to assume treatment effect waning for pembrolizumab in the second-line setting, for consistency with NICE's technology appraisal guidance on pembrolizumab in persistent, recurrent or metastatic cervical cancer.

Trial and model-predicted overall survival

3.10 The company's economic model estimated overall survival using:

- models fitted to progression-free survival and time to progression from KEYNOTE-A18
- post-progression survival data from KEYNOTE-826 (a trial of pembrolizumab plus chemotherapy for persistent, recurrent or metastatic cervical cancer)
- structural assumptions on cure, treatment effect waning and subsequent treatments.

The model predictions did not fit well with the observed overall survival from the final analysis of KEYNOTE-A18. To address this, the company applied calibration factors to transition probabilities out of the first progression state, forcing modelled overall survival to better fit observed overall survival. The company noted that this approach had also been used in [NICE's guidance on pembrolizumab for adjuvant treatment of resected non-small-cell lung cancer](#). The EAG said that calibration was pragmatic but 'not ideal'. It could not determine the

exact cause of the overall survival discrepancy but suggested likely contributors were:

- failing to account for competing risks when deriving progression and death probabilities
- possible misspecification of parametric survival models used for transitions
- using data from KEYNOTE-826, which may not fully represent the KEYNOTE-A18 progressed population.

The company suggested that the most likely reason for the overall survival mismatch was using KEYNOTE-826 for progressed disease states in the model. It said that data from the KEYNOTE-826 trial was used in the economic analysis because KEYNOTE-A18 did not have enough long-term data after progression. To improve comparability with KEYNOTE-A18, the company restricted its analyses of KEYNOTE-826 to the subgroup of patients with a CPS of 1 or more who had had chemoradiotherapy. The EAG said that using KEYNOTE-826 for post-progression modelling was pragmatic, and that the subgroup of patients with a CPS of 1 or more and prior chemoradiotherapy was broadly comparable to the population in KEYNOTE-A18 at progression. But it noted that unmeasured prognostic differences left uncertainty. For example, KEYNOTE-826 patients completed chemoradiotherapy before November 2018 while in KEYNOTE-A18 they started chemoradiotherapy from May 2020. Clinical advice to the EAG was that chemoradiotherapy dose and delivery mode may influence overall survival and there was no data available on radiotherapy regimens used in KEYNOTE-826 to assess the impact of this factor. The EAG also noted that prior treatment was not a randomisation stratification factor in KEYNOTE-826 so restricting the data set to people who had had prior chemoradiotherapy may compromise randomisation.

The clinical experts said that pembrolizumab worked in different ways

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in KEYNOTE-A18 and KEYNOTE-826. In KEYNOTE-A18, they said that using pembrolizumab at the same time as chemoradiotherapy would have had a big impact on the primary tumour, enabling local control and so improving survival. Whereas in KEYNOTE-826, patients had recurrent metastatic cancer and treatment was systemic rather than local, so would not have had the same impact. The committee noted that the populations in the 2 trials were also different because in KEYNOTE-826, no one had had prior pembrolizumab, so it did not capture the post-progression benefit of immunotherapy.

The committee discussed its concerns about substantial uncertainties around the modelling. It discussed how the differences in disease mechanisms and treatment context noted by the EAG and clinical experts may have affected outcomes. It discussed how using KEYNOTE-826 data in the model could have led to an underestimate of overall survival benefits for pembrolizumab over the KEYNOTE-A18 duration, which is why the company applied calibration factors. The committee thought that this was likely to be the main factor driving the mismatch in overall survival between the model predictions and the observed data from KEYNOTE-A18. It noted that the model appeared to underestimate overall survival in the follow-up period of KEYNOTE-A18. But longer term this was not supported by evidence. The committee recalled its request for a mixture cure model to estimate long-term overall and progression-free survival (see [section 3.8](#)). It anticipated that using direct data from KEYNOTE-A18 rather than from KEYNOTE-826 for the progressed disease states for the pembrolizumab arm of the model would help reduce uncertainty. The committee also acknowledged that data from KEYNOTE-826 would still be needed to inform the comparator arm in the progressed disease states for the modelling of second-line treatment with pembrolizumab.

Retreatment with pembrolizumab

3.11 The company's economic model assumed that people could have pembrolizumab again after disease progression, if it was at least 2.5 years after starting first-line pembrolizumab plus chemoradiotherapy. For these 'late progressors', the model assumed:

- 51% would have pembrolizumab plus chemotherapy (with or without bevacizumab)
- 29% would have chemotherapy (with or without bevacizumab)
- 20% would have no further active treatment.

The model assumed no reduction in effectiveness when pembrolizumab was used again. The committee recalled its earlier conclusion that retreatment with pembrolizumab in clinical practice is uncertain (see [section 3.5](#)). It concluded that it would like to see sensitivity analyses exploring different rates of retreatment, including no retreatment, and reduced efficacy with pembrolizumab when used as retreatment.

Equality

Sex and age

3.12 The company and clinical experts noted that cervical cancer primarily affects women, often of working age with caring responsibilities; younger people are frequently affected. Sex and age are protected characteristics under the Equality Act 2010. But because the committee's recommendations do not restrict access to treatment for some people over others, the committee agreed these were not potential equalities issues that could be addressed in a technology appraisal.

Socioeconomic deprivation

3.13 The company and clinical experts noted that deprived groups (when considering factors such as income, education, having English as a first

language, and availability of human Papillomavirus (HPV) immunisation and cervical screening) are affected more by cervical cancer. Incidence and mortality are higher in the most deprived groups. A clinical expert noted the practical barriers to adherence to the treatment schedule, including time and travel costs for frequent hospital visits needed for pembrolizumab infusions. They said the extended treatment schedule (chemoradiotherapy followed by pembrolizumab for up to 2 years) may be particularly difficult to manage for people with caring responsibilities, inflexible work, or those from more deprived backgrounds because of the need for repeated face to face reviews before each infusion. The other clinical expert agreed that people with stage 3 to 4A locally advanced cervical cancer were often from the most deprived groups. But they emphasised that each extra treatment appointment was an opportunity to engage, offer treatment with the potential to cure and assess for relapse, and so extra visits would not disadvantage deprived groups. They also highlighted that people may not come to follow-up appointments but are likely to attend for treatment.

The company presented a distributional cost-effectiveness analysis (DCEA) indicating a social gradient in incidence and outcomes, and explored net health benefits by Index of Multiple Deprivation. It used the University of York's health equity impact calculator, noting that the ICD10 code used in the calculations was an overall code that includes all stages of cervical cancer, not just stage 3 to 4A. The company noted the substantial gradient in incidence across deprivation groups and suggested that this would be even steeper for stage 3 to 4A cervical cancer. The EAG noted several methodological limitations to the DCEA including:

- that the population was not specific to locally advanced cervical cancer
- the lack of sensitivity analyses to test uncertainty
- the lack of reporting for some assumptions.

During the committee meeting, the company confirmed that the DCEA

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assumed equal uptake of treatment across groups. The committee considered whether this assumption was appropriate, noting the earlier comments that the extended treatment schedule may be a barrier to treatment for people from deprived backgrounds. But it was reassured by the additional comments that the extra appointments needed were an opportunity to further engage with people from deprived groups and potentially improve outcomes. The committee acknowledged the uncertainties with the DCEA. It thought that issues around uptake of treatment could not be addressed in a technology appraisal. The committee recognised that cervical cancer, especially in the advanced stages, is concentrated in deprived groups and has poorer outcomes. So, pembrolizumab has the potential to help to improve health inequalities. It noted that if practical barriers affected uptake in more deprived groups the health inequality benefit may not be realised, but was reassured that those barriers may not appear in practice. It concluded that there was a potential health inequalities benefit associated with pembrolizumab and it would take this into account when it agreed its preferred ICER threshold.

Ethnicity and language

3.14 A clinical expert noted that in some areas (for example, London) many people with cervical cancer were born outside the UK where HPV vaccination and screening may be less routine. They also said language can be a barrier to understanding and engaging with care. Race is a protected characteristic under the Equality Act 2010. There is potential for indirect discrimination if access is hindered by service delivery factors (for example, frequent in-person infusions) that disproportionately impact groups with caring responsibilities, lower incomes, or limited English proficiency. But the committee concluded that these were implementation issues that the NHS could mitigate through service organisation rather than issues that could be addressed in the technology appraisal.

Uncaptured benefits

3.15 The committee considered whether there were any uncaptured benefits of pembrolizumab. It did not identify additional benefits not captured in the economic modelling. So the committee concluded that all additional benefits of pembrolizumab had already been taken into account.

Cost-effectiveness estimates

3.16 The company and EAG base-case ICERs were above the range that NICE considers a cost-effective use of NHS resources. They cannot be reported here because of confidential commercial arrangements for pembrolizumab and 1 of the post-progression treatments. Also, the committee thought that the ICERs were highly uncertain because of:

- the cure assumptions in the model (see [section 3.8](#))
- the mismatch between observed trial overall survival and model-predicted overall survival, which needed the company to apply calibration factors to force a fit (see [section 3.10](#))
- the modelled assumptions about pembrolizumab retreatment (see [section 3.11](#)).

The committee concluded that further analyses were needed to determine the most plausible estimates for decision making (see [section 3.17](#)).

The committee's preferred analyses and assumptions

3.17 The committee requested further analyses to reduce uncertainty:

- A mixture cure model based on observed progression-free and overall survival in KEYNOTE-A18 (see [section 3.8](#)). It anticipated that using direct data from KEYNOTE-A18 rather than from KEYNOTE-826 for the pembrolizumab progressed disease states may help to reduce uncertainty (see [section 3.10](#)).

- Sensitivity analyses exploring different rates of retreatment, including no retreatment, and reduced efficacy with pembrolizumab when used as retreatment (see [section 3.11](#)).

The committee's preferred assumptions related to these analyses were that a cure assumption was plausible and that treatment effect waning should be applied for pembrolizumab (see [section 3.9](#)).

Acceptable ICER

3.18 [NICE's manual on health technology evaluations](#) notes that, above a most plausible ICER of £20,000 per quality-adjusted life year (QALY) gained, judgements about the acceptability of a technology as an effective use of NHS resources will take into account the degree of certainty around the ICER. The committee will be more cautious about recommending a technology if it is less certain about the ICERs presented. But it will also take into account other aspects including uncaptured health benefits. The committee recalled the potential to reduce health inequalities for more deprived groups (see [section 3.13](#)). But it also noted the high levels of uncertainty in the evidence and the need for further analyses to reduce this uncertainty. The committee concluded that it could not set an acceptable ICER threshold until it had seen further analyses.

Conclusion

3.19 The committee could not determine its preferred cost-effectiveness estimate for pembrolizumab because of the uncertainties in the economic model. It agreed that further analyses were needed to reduce this uncertainty (see [section 3.17](#)). So, the committee was unable to establish if pembrolizumab with chemoradiotherapy for locally advanced cervical cancer was a cost-effective use of NHS resources.

4 Evaluation committee members and NICE project team

Evaluation committee members

The 4 technology appraisal committees are standing advisory committees of NICE.

This topic was considered by [committee A](#).

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

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

Chair

Radha Todd

Chair, technology appraisal committee A

NICE project team

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

Emilene Coventry

Technical lead

Zoe Charles

Technical adviser

Jennifer Upton

Project manager

Ian Watson

Associate director

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