

# Dostarlimab with platinum-based chemotherapy for treating primary advanced or recurrent endometrial cancer with high microsatellite instability or mismatch repair deficiency

Technology appraisal guidance

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[www.nice.org.uk/guidance/ta1064](https://www.nice.org.uk/guidance/ta1064)

## 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](#).

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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 Recommendation .....	4
Why the committee made this recommendation .....	4
2 Information about dostarlimab .....	6
Marketing authorisation indication .....	6
Dosage in the marketing authorisation .....	6
Price .....	6
3 Committee discussion .....	7
The condition .....	7
Clinical evidence .....	9
Economic model .....	11
Cost-effectiveness estimates .....	18
Other factors .....	20
Conclusion .....	20
4 Implementation .....	22
5 Evaluation committee members and NICE project team .....	23
Evaluation committee members .....	23
Chair .....	23
NICE project team .....	23

This guidance replaces TA963.

# 1 Recommendation

- 1.1 Dostarlimab with platinum-based chemotherapy can be used as an option to treat primary advanced or recurrent endometrial cancer with high microsatellite instability or mismatch repair deficiency in adults when systemic therapy is suitable.

Dostarlimab can only be used if the company provides it according to the commercial arrangement.

## What this means in practice

Dostarlimab with platinum-based chemotherapy must be funded in the NHS in England to treat primary advanced or recurrent endometrial cancer with high microsatellite instability or mismatch repair deficiency when systemic therapy is suitable, if it is considered the most suitable treatment option. Dostarlimab with platinum-based chemotherapy must be funded in England within 90 days of final publication of this guidance.

There is enough evidence to show that dostarlimab with platinum-based chemotherapy provides benefits and value for money, so it can be used routinely across the NHS.

NICE has produced tools and resources to support the implementation of this guidance.

## Why the committee made this recommendation

This evaluation reviews the evidence for dostarlimab with platinum-based chemotherapy for primary advanced or recurrent endometrial cancer with high microsatellite instability or mismatch repair deficiency, which was approved for use in the Cancer Drugs Fund in NICE's technology appraisal guidance 963.

Usual treatment for this condition is platinum-based chemotherapy, specifically carboplatin plus paclitaxel. Clinical trial evidence shows that adding dostarlimab increases how long people have before their condition gets worse compared with carboplatin plus paclitaxel alone. It may also increase how long they live, but this is uncertain because people have only been followed up for a short period of time.

There are uncertainties in the economic model, but the most likely cost-effectiveness estimate is within the range that NICE considers an acceptable use of NHS resources. So, dostarlimab with platinum-based chemotherapy can be used.

## 2 Information about dostarlimab

### Marketing authorisation indication

- 2.1 Dostarlimab (Jemperli, GlaxoSmithKline) is indicated 'in combination with platinum-containing chemotherapy for the treatment of adult patients with primary advanced or recurrent endometrial cancer and who are candidates for systemic therapy'.

### Dosage in the marketing authorisation

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

### Price

- 2.3 The list price for dostarlimab is £5,887.33 per 500-mg vial (excluding VAT, BNF online, accessed March 2025).
- 2.4 The company has a [commercial arrangement](#). This makes dostarlimab available to the NHS with a discount. The size of the discount is commercial in confidence.

## 3 Committee discussion

The [evaluation committee](#) considered evidence submitted by GSK, 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.

### The condition

#### Unmet clinical need

- 3.1 Endometrial cancer starts in the lining of the uterus. Symptoms can include vaginal bleeding, pelvic pain, unintended weight loss, nausea and fatigue. About 25% to 30% of people with endometrial cancer have the subtype with deficient mismatch repair (dMMR) of DNA or high microsatellite instability (MSI-H). Tumours that are dMMR or MSI-H positive are less likely to correct errors in their DNA, which can make them more recognisable to the immune system. So, they are more likely to respond to treatment with immunotherapies. Endometrial cancer has a significant effect on both life expectancy and quality of life. Advanced or recurrent endometrial cancer (meaning the cancer has spread beyond the uterus or come back after treatment) has a poor prognosis. The impact is not just limited to physical health but also affects the mental health and wellbeing of people and their families. The patient experts emphasised that effective treatment options at this stage are limited, leaving people feeling frustrated, hopeless and abandoned. They noted the lack of treatment options in endometrial cancer compared with other cancer types. The committee concluded that advanced or recurrent endometrial cancer has a devastating effect on life expectancy and quality of life and that there is an unmet need for more effective treatments.

#### Dostarlimab with platinum-based chemotherapy

- 3.2 This evaluation reviews the evidence for dostarlimab with platinum-based chemotherapy for primary advanced or recurrent endometrial cancer when

systemic therapy is suitable, which was approved for use in the Cancer Drugs Fund in NICE's technology appraisal guidance 963 (TA963). It reviews updated data submitted by the company (see [section 3.4](#)). The company explained that dostarlimab with platinum-based chemotherapy had received a marketing authorisation extension with updated wording. The marketing authorisation wording at the time of TA963 was 'dostarlimab is indicated in combination with platinum-containing chemotherapy for the treatment of adult patients with mismatch repair deficient/microsatellite instability-high primary advanced or recurrent endometrial cancer and who are candidates for systemic therapy'. This has been replaced by the marketing authorisation wording stated in [section 2.1](#). The committee noted that the marketing authorisation is now broader and does not include a specification for dMMR or MSI-H. But it noted that this appraisal is restricted to the population that was covered in TA963, so applies only to dMMR or MSI-H positive endometrial cancer.

## Current management

- 3.3 Standard care for primary recurrent or advanced endometrial cancer is platinum-based chemotherapy, specifically carboplatin plus paclitaxel. People whose cancer progresses after chemotherapy may be offered immunotherapy treatment. Pembrolizumab with lenvatinib is available for all people who have previously had treatment for endometrial cancer (see [NICE's technology appraisal guidance on pembrolizumab with lenvatinib for previously treated advanced or recurrent endometrial cancer](#)). Pembrolizumab monotherapy is available through the Cancer Drugs Fund for people with MSI-H or dMMR positive endometrial cancer (see [NICE's technology appraisal guidance on pembrolizumab for previously treated endometrial, biliary, colorectal, gastric or small intestine cancer with high microsatellite instability or mismatch repair deficiency](#)). Dostarlimab monotherapy is available through the Cancer Drugs Fund for people with MSI-H or dMMR positive endometrial cancer (see [NICE's technology appraisal guidance on dostarlimab for previously treated advanced or recurrent endometrial cancer with high microsatellite instability or mismatch repair deficiency](#)). The company submission positions dostarlimab with platinum-based chemotherapy at an earlier line of therapy, instead of being given after disease progression on first-line chemotherapy. The company said that bringing an immunotherapy earlier into the treatment pathway will result in more people being offered and benefitting



from the treatment. The clinical experts explained that once the cancer has progressed after chemotherapy, many people are unable to tolerate further treatment. This means they are unable to access effective second-line immunotherapy treatments. A patient expert who had accessed dostarlimab outside of NHS clinical practice explained that it had allowed them to live an active life and presented very little additional treatment burden beyond chemotherapy. They had moved to dostarlimab monotherapy and explained that the adverse events were minor and transient. They felt that it was unfair that such a step-change treatment was not offered as a first-line treatment option to all people with this cancer. A second patient expert noted the current treatment approach is geared towards expecting a recurrence and only then adding a more effective second-line treatment. They explained that people whose endometrial cancer was diagnosed at stage 3 would have to wait for progression to metastatic disease before they could access immunotherapy. Having an immunotherapy recommended as a first-line treatment might prevent or delay this progression. They felt the most effective treatments should be offered earlier in the pathway to reduce the risk of recurrence and improve outcomes. The committee concluded that earlier access to immunotherapy would be welcomed by patients and clinicians.

## Clinical evidence

### Key trial results

- 3.4 The clinical evidence is from 2 interim analyses of RUBY-1. This is a phase 3, randomised, double-blind, multicentre placebo-controlled study in people with advanced or recurrent endometrial cancer. The first interim analysis, which informed TA963, was from September 2022 and is referred to as the first data cut from here. The second interim analysis is from September 2023 and is referred to as the second data cut from here. It compares dostarlimab plus carboplatin with paclitaxel (from now, dostarlimab) with placebo plus carboplatin with paclitaxel (from now, placebo). People in the trial needed to have endometrial cancer with a low potential for cure by radiation therapy, surgery alone, or in combination. In line with the initial marketing authorisation (see [section 3.2](#)), the company provided efficacy data for people with dMMR or MSI-H primary advanced or

recurrent endometrial cancer (the dMMR or MSI-H population). Investigator-assessed progression-free survival (PFS) was the primary endpoint for this population. There was a statistically significant benefit for dostarlimab compared with placebo for PFS. At the first data cut (PFS data maturity of 56%), dostarlimab reduced the risk of progression or death by 72% compared with placebo (hazard ratio [HR] 0.28, 95% confidence interval [CI] 0.16 to 0.50). The company did not submit full updated PFS data from the second data cut because the predefined statistical significance for PFS had already been met at the first data cut. Descriptive data on PFS from the second data cut was later provided to the EAG at the clarification stage and the EAG used this to reconstruct PFS data for the second data cut. This is considered commercial in confidence by the company and cannot be reported here. The company explained that there were few additional events and that there was a high degree of consistency between the 2 data cuts. The company provided PFS2 (defined as time since randomisation until the second instance of disease progression or death, not used in the economic model) and overall survival (OS) data from the later data cut. Median PFS2 was 21.6 months (95% CI 13.4 to 39.1) in the placebo arm and not reached for the dostarlimab arm, and the HR was 0.33 (95% CI 0.18 to 0.63) suggesting a post-progression benefit for dostarlimab. At OS data maturity of 40.2%, dostarlimab reduced the risk of death by 68% compared with placebo (HR 0.32, 95% CI 0.17 to 0.63). The clinical experts confirmed that the benefits seen in RUBY-1 were clinically meaningful and similar to trials for other immunotherapy drugs in similar populations. The committee concluded that RUBY-1 demonstrated that dostarlimab shows clinical benefit in the relevant population.

## Robustness of clinical trial data

- 3.5 The EAG had concerns about whether RUBY-1 data reflects the true benefit of the treatment. It noted the small sample size of the dMMR or MSI-H population (n=118) and the immaturity of the data. The clinical experts advised that the small sample size was reasonable given the relatively small patient population in the NHS. The EAG also had concerns about the randomisation between the 2 arms because there were more people in the placebo arm (n=65) than the dostarlimab arm (n=53). This was because of misclassification of dMMR and MSI-H status in the trial, because some people's dMMR or MSI-H status was recorded incorrectly in the records used for randomisation. The EAG noted that people in the placebo

arm were generally older and had a higher BMI but better performance status than the dostarlimab arm, and that these factors could bias the treatment-effect estimate. The committee acknowledged the immaturity of the data, the small sample size and the unknown risk of bias from differences in baseline characteristics between the groups because of dMMR or MSI-H misclassification. It concluded that adding dostarlimab to usual treatment is likely to be clinically effective, but the amount of benefit is uncertain because of concerns about the robustness of the trial.

## Economic model

### Company's modelling approach

- 3.6 The company used a partitioned survival model with 3 health states to estimate the cost effectiveness of adding dostarlimab to carboplatin plus paclitaxel. The 3 health states were PFS, progressed disease and death. Health-state utilities and baseline characteristics were taken from the dMMR or MSI-H population in RUBY-1. The comparator arm of RUBY-1 was placebo in combination with carboplatin plus paclitaxel. This was used to inform the comparator arm in the model (that is, carboplatin and paclitaxel). Diagnostic testing for dMMR and MSI-H is routine in the NHS, so the costs for this were not included in the model. In line with the marketing authorisation, a 3-year stopping rule was applied. The EAG noted the low average age of the trial population (which is considered commercial in confidence by the company and cannot be reported here) compared with the expected average age in real-world use in the NHS. It preferred to use a median of 67.1 years based on a study by Pennington et al. (2016) for its economic base case. The NHS Clinical Lead for the Cancer Drugs Fund reported that 262 people have had dostarlimab with carboplatin and paclitaxel since it has been in the Cancer Drugs Fund and their median age was 66 years. The committee noted this and decided that the starting age in the model should be 66 to reflect usage in the NHS. It concluded that the model structure is appropriate for decision making.

## Extrapolation of PFS

- 3.7 Long-term PFS was estimated by extrapolating the data from RUBY-1. The committee noted that the company's modelling of PFS was unchanged from that submitted in TA963 (see [section 3.4](#)). The committee noted that in that evaluation the company, EAG and committee had agreed on a 2-knot odd spline model to extrapolate PFS in the comparator arm, and a 1-knot odd spline model for the dostarlimab arm. The EAG still considered these to be the appropriate models but preferred to apply them to reconstructed data from the second data cut (see [section 3.4](#)). The company explained that it would have preferred to use the second data cut but it had not been available to them at the time of the evidence submission. It noted that the very few additional progression events meant there was very little difference in the PFS results between the 2 data cuts. The EAG explained that it preferred to include treatment waning for PFS after 36 months for a period of 2 years, with the hazards becoming equal in both arms after that time. But it noted that the choice of data cut and whether treatment-effect waning is included for PFS had a very small impact on the incremental cost-effectiveness ratio (ICER). The committee concluded that it would be preferable to use the most recent data cut to extrapolate PFS.

## Extrapolation of OS

- 3.8 The company estimated long-term OS by extrapolating from the second data cut from RUBY-1. The EAG noted that it was difficult to select the most appropriate parametric distribution because all curves showed a similar visual fit, which is often the case with such immature survival data. The company explained that the log-normal and log-logistic curves had the best statistical fit, and that it had selected the log-logistic because it provided a slightly more conservative extrapolation. The EAG clinical expert had stated that a 5-year OS of between 40% and 60% would be plausible for the dostarlimab arm. The EAG thought that the company's selection of log-logistic for both arms for its base case was acceptable if an assumption of treatment-effect waning was applied (see [section 3.9](#)). But it explained that because the hazards in both arms could be interpreted as constant, it had also explored the use of the exponential model as a clinically plausible scenario analysis. The company had discounted the exponential based upon the RUBY-1 data showing the hazard falling to week 50

then being broadly flat to week 150. The committee noted the similar visual fit of the different parametric models and that selection of an appropriate distribution was difficult because of the immaturity of the data. It also noted that it was not clear that there were constant hazards in either arm, and that the trial data appeared to show bigger changes in hazards in the placebo arm. The committee noted that, unlike the exponential, the log-logistic distribution allows for a turning point in the hazards. For dostarlimab, the hazards first decrease and then later increase. This might be either because the treatment effect wanes or because the hazards converge with background mortality. The committee decided that the exponential curve was likely to be too pessimistic and that the assumption of constant hazards implied by this distribution was not justified. It agreed that the log-logistic model was likely a better fit with the hazards for both arms and is acceptable for decision making. But it concluded that this choice was associated with a high degree of uncertainty because of the immaturity of the survival data and uncertainty about possible treatment-effect waning.

## Treatment-effect waning

- 3.9 The company's base case assumes that the dostarlimab treatment benefit is sustained for the full duration of the model. The EAG explained that there was very little data from RUBY-1 beyond 36 months, which made it difficult to assess whether there was any treatment-effect waning. It noted that events beyond this point gave some indication of potential waning of the treatment effect. The company agreed that RUBY-1 was not sufficiently mature to show evidence for a sustained treatment effect in the longer term. But it explained that there are other immunotherapy studies in different disease areas, including dMMR or MSI-H populations, which typically show sustained benefit even after treatment is stopped. Clinical advice to the EAG suggested that a potential basis for treatment-effect waning was that people who have a partial response to dostarlimab would be more likely to lose this response when dostarlimab is stopped than people who have had a complete response. Clinical advice also suggested it was likely that outcomes beyond 5 years would be independent of the initial treatment used. The EAG noted that people in the comparator arm could go on to have subsequent immunotherapies, so it was reasonable to expect that the hazards post progression would converge to some extent, although this is uncertain. So, the EAG preferred to assume that the treatment effect begins to

wane after 36 months, over a period of 2 years. The clinical experts agreed with the company that data from other immunotherapies had shown that this type of treatment has a durable treatment effect in people with dMMR or MSI-H positive endometrial cancer. They would expect dostarlimab to show the same efficacy as other PD-L1 inhibitors. They mentioned emerging data for relapsed cancer, which showed durable responses to immunotherapy treatments beyond the stopping rule. In particular, in the [trial of pembrolizumab as second-line treatment for MSI-H or dMMR advanced endometrial cancer](#) there was a 50% response rate and a 66% 4-year duration of response. The clinical experts suggested it would be reasonable to assume a similar if not greater magnitude of benefit in first-line use. The committee noted that RUBY-1 data did not show a clear waning effect for dostarlimab. It also noted that immunotherapy treatments showed sustained benefit over the longer term in other tumour types and are particularly effective in dMMR or MSI-H positive cancer (see [section 3.1](#)). It concluded there was not enough evidence from RUBY-1 to know if, and when, the dostarlimab treatment effect wanes. The committee noted that when the log-logistic distribution was used to extrapolate OS for dostarlimab the implied hazard ratio falls sharply. But it then slowly increases, which could reflect a waning of treatment effect (see [section 3.8](#)). The committee concluded that it was preferable not to model additional treatment-effect waning for dostarlimab beyond that already accounted for in the selected curves. But it noted that this was associated with substantial uncertainty.

## Modelling of time to treatment discontinuation

3.10 The company used a piecewise approach to modelling time to treatment discontinuation (TTD), which had 3 parts:

- week 1 to week 16 applied the proportion of people in the dostarlimab arm who had dostarlimab
- week 17 to week 145 applied the TTD Kaplan–Meier first data-cut curve
- week 146 to week 150 extrapolated the TTD KM first data-cut curve using the Weibull distribution.

The EAG explained that there was no obvious justification for using this



approach. It also noted a disconnect between the TTD and PFS data for the dostarlimab arm, because of a difference in the censoring rules used. For PFS, someone stopping treatment or withdrawing from the trial is censored (does not count as a PFS event) but their withdrawal would count as a TTD event. This approach implicitly assumes that people stopping dostarlimab sustain the benefits of treatment without incurring the costs, and either overestimates PFS or underestimates TTD. Both of these possibilities would bias the results in favour of dostarlimab. The EAG explained that the proportion of people in PFS who are modelled as incurring the costs of dostarlimab does not align with clinical expert opinion; that is, most people who are doing well on dostarlimab will continue to have it for the full 3 years allowed by the stopping rule (this data is considered commercial in confidence by the company and cannot be reported here). The EAG explained that ideally there would be more explicit modelling of non-progression discontinuation or reanalysis of PFS and OS to use the same approach to censoring as TTD. But it acknowledged that this would require more data and updated analyses. It suggested an alternative to use the ratio between the number of people in RUBY-1 (using the second data cut) who remained in PFS and the number who continued treatment, to approximate the proportion of those in PFS who incur the costs of dostarlimab during each treatment cycle (this data is considered commercial in confidence by the company and cannot be reported here). This approach avoids the large gap between PFS and TTD seen in the company's model. The committee agreed that the company's piecewise approach to the modelling of TTD was not sufficiently justified and was associated with uncertainty. It also agreed with the EAG that the different censoring rules used for PFS and TTD in RUBY-1 meant that the company's 2 curves for PFS and TTD were constructed on different bases, so were not directly comparable. It noted that a reanalysis of PFS and OS using the same censoring approach to TTD would be a preferable approach to explore this uncertainty. It decided that the EAG's approach to modelling TTD was not a standard approach and was suboptimal but noted that TTD did not appear to be a big driver of cost effectiveness. It concluded that, in the absence of alternative analyses, the EAG's suggested approach to modelling TTD was acceptable for decision making.

## 3-year stopping rule

- 3.11 The company included a 3-year stopping rule for dostarlimab in its modelling. But the trial protocol allowed dostarlimab to be used for more than 3 years if the patient was clinically stable and the trial investigator decided they were deriving clinical benefit from treatment. The EAG noted that the proportion of people who had dostarlimab for more than 3 years was low in absolute terms, but because very few people in the trial had reached 36 months of follow up it was a high proportion in relative terms. If this proportion were to be maintained during additional follow up it would likely contribute substantial additional costs to the dostarlimab arm. The clinical experts advised that the 3-year follow up for dostarlimab would likely be adhered to in the NHS, in line with the marketing authorisation. This is because clinicians now have a broader experience with other immunotherapies, such as the use of pembrolizumab monotherapy at second line, and are confident that expected treatment benefits are durable after treatment stops because of stopping rules (see [section 3.9](#)). The committee agreed that treatment would likely stop at 3 years in clinical practice and it was appropriate to apply a stopping rule in the modelling.

## Subsequent treatments in the comparator arm

- 3.12 People in RUBY-1 were able to have subsequent treatments when they stopped taking carboplatin plus paclitaxel. The company stated that subsequent treatments in RUBY-1 included several treatments not routinely available on the NHS. So, subsequent treatment use in the company's economic model was informed by clinical expert opinion. The clinical experts said that since the recent recommendation for pembrolizumab monotherapy second line, the treatments used in the NHS more closely resemble second-line treatments used in RUBY-1 when disease progressed after treatment with carboplatin plus paclitaxel. The committee noted that because of the limited follow up in RUBY-1 it was possible that the treatment effects of subsequent immunotherapy were not yet captured in the data. But the clinical experts explained that a substantial number of people had progressed by 36 months, so the efficacy of these subsequent treatments would have had some impact on the survival data from RUBY-1. The committee noted it was possible that the treatment effect of subsequent immunotherapies in the comparator arm of RUBY-1 might not be fully reflected in the OS data from



the trial because of its immaturity. But it concluded that it would prefer to see modelling of subsequent treatment costs in this arm according to the proportions seen in RUBY-1 because these closely resemble second-line treatments used in the NHS. But it noted that this was associated with uncertainty.

## Subsequent treatments in the dostarlimab arm

- 3.13 People in the dostarlimab arm of RUBY-1 could have retreatment with immunotherapies after disease progression and many people did (the exact proportions are considered confidential by the company and cannot be reported here). A clinical expert and the NHS Clinical Lead for the Cancer Drugs Fund confirmed that no retreatment with immunotherapy is given in the NHS after disease progression on or after using an immunotherapy. They explained that there is no evidence to support the efficacy of retreatment with immunotherapy. The committee noted that even though immunotherapy retreatment was not offered in clinical practice, it was possible that any effects of immunotherapy retreatment would be seen in the OS results for dostarlimab from RUBY-1. If the costs of these are not applied in the model it would bias the results in favour of dostarlimab. The committee recalled that it was possible that any effects of subsequent immunotherapies were not fully reflected in the OS results because of the immaturity of the data (see [section 3.12](#)). The committee noted that applying the costs of subsequent immunotherapies in the dostarlimab arm would not reflect NHS clinical practice and could overestimate costs for the dostarlimab arm. But it also noted that the effect of any subsequent immunotherapies in the dostarlimab arm of the trial was unknown. So, it agreed that applying the RUBY-1 proportions of subsequent treatments and their costs for consistency with the clinical-effectiveness data for dostarlimab was an acceptable approach and likely to be conservative. But the committee noted that this was associated with uncertainty.

## Other modelling considerations

- 3.14 The EAG noted the 3-year stopping rule for dostarlimab (see [section 3.11](#)) but that the company's model assumes a maximum treatment duration of 156 weeks. This does not include the treatment at the start of week 157, which falls within

the 3-year window. The EAG explained that because of this it preferred to include week 157 costs in its base case. It noted the company's model assumes that 100% of people with disease progression have a second-line treatment. But the EAG suggested that, in the absence of other data, it is reasonable to apply the first-line proportion of people having treatment in the PFS health state as a proxy for what is likely with second-line treatments (see [section 3.10](#); the exact proportion is considered commercial in confidence by the company and cannot be reported here). The EAG explained that it was not able to validate the administration costs used in the company's model. NHS reference costs for 2022 to 2023 suggest that most chemotherapy administrations are day cases, but a significant proportion of people have chemotherapy as outpatients. For this reason, the EAG preferred to apply weighted-average costs of £459 and £393 for the SB13Z and SB12Z reference cost codes, respectively. The committee agreed that these minor adjustments to the modelling had a small impact on cost effectiveness and concluded that they were appropriate for decision making.

## Cost-effectiveness estimates

### Acceptable ICER

3.15 [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 noted the high level of uncertainty, specifically concerning:

- the robustness of the RUBY-1 results given the small sample size, and potential imbalances in baseline characteristics because of misclassification of dMMR or MSI-H status (see [section 3.5](#))
- the long-term clinical benefit of dostarlimab and most appropriate choice of extrapolation (see [section 3.8](#))

- if and when the treatment effect starts to wane and over what time period (see [section 3.9](#))
- whether or not the effect of subsequent immunotherapies in the comparator arm that were costed in the model were fully reflected in the trial outcomes (see [section 3.12](#)).

The committee also considered the large unmet clinical need, the durable benefits seen in dMMR or MSI-H populations, the data seen in RUBY-1 to date and the uncertainty around modelling of subsequent treatments in the dostarlimab arm. Given the level of uncertainty, the committee concluded that an acceptable ICER would be about £20,000 per QALY gained.

## Company and EAG cost-effectiveness estimates

3.16 The committee considered the ICERs for dostarlimab plus carboplatin and paclitaxel compared with chemotherapy alone. Because of confidential commercial arrangements for dostarlimab and subsequent treatments in the pathway, the ICERs are confidential and cannot be reported here. The committee's preferred cost-effectiveness estimates included the following assumptions:

- PFS for carboplatin plus paclitaxel extrapolated using a 2-knot odd spline model (second data cut, see [section 3.7](#))
- PFS for dostarlimab extrapolated using a 1-knot odd spline model (second data cut, see [section 3.7](#))
- OS for both carboplatin plus paclitaxel and dostarlimab extrapolated using a log-logistic model (second data cut, see [section 3.8](#))
- no treatment-effect waning for PFS or OS (see [section 3.9](#))
- TTD modelled using number on treatment to number in PFS ratio from RUBY-1 (second data cut, see [section 3.10](#))
- baseline starting age in the model of 66 years (see [section 3.6](#))

- second-line treatment proportions taken from RUBY-1 (see [sections 3.12 and 3.13](#))
- percentage of treatment at second line to align with percentage of treatment at first line (see [section 3.14](#))
- using weighted average of SB13Z and SB12Z costs (see section 3.14)
- including week 157 treatment in the model (see section 3.14).

The committee noted the substantial uncertainty around the OS extrapolation, based on the immaturity of the data. But the most likely cost-effectiveness estimate is within the range that NICE usually considers an acceptable use of NHS resources. So, the committee concluded that dostarlimab with platinum-based chemotherapy is suitable for routine use in the NHS.

## Other factors

### Equality

- 3.17 The committee noted that Black ethnic groups have substantially higher mortality rates for endometrial cancer than other ethnic groups in the UK. The company said that access to innovative treatment on the NHS for late-stage disease can help address severe inequalities in survival outcomes by ethnicity or socioeconomic deprivation. The committee considered equality issues and concluded that its recommendations do not affect people protected by the equality legislation differently from the wider population.

## Conclusion

### Recommendation

- 3.18 The committee concluded that, using its preferred assumptions, the most likely

cost-effectiveness estimate is within the range that NICE usually considers an acceptable use of NHS resources. So, dostarlimab with platinum-based chemotherapy is suitable for routine use in the NHS.

## 4 Implementation

- 4.1 Section 7 of the [National Institute for Health and Care Excellence \(Constitution and Functions\)](#) and the [Health and Social Care Information Centre \(Functions\) Regulations 2013](#) requires integrated care boards, NHS England and, with respect to their public health functions, local authorities to comply with the recommendations in this evaluation within 90 days of its date of publication.
- 4.2 Chapter 2 of [Appraisal and funding of cancer drugs from July 2016 \(including the new Cancer Drugs Fund\) – A new deal for patients, taxpayers and industry](#) states that for those drugs with a draft recommendation for routine commissioning, interim funding will be available (from the overall Cancer Drugs Fund budget) from the point of marketing authorisation, or from release of positive draft guidance, whichever is later. Interim funding will end 90 days after positive final guidance is published (or 30 days in the case of drugs with an Early Access to Medicines Scheme designation or cost comparison evaluation), at which point funding will switch to routine commissioning budgets. The [NHS England Cancer Drugs Fund list](#) provides up-to-date information on all cancer treatments recommended by NICE since 2016. This includes whether they have received a marketing authorisation and been launched in the UK.
- 4.3 The Welsh ministers have issued directions to the NHS in Wales on implementing NICE technology appraisal guidance. When a NICE technology appraisal guidance recommends the use of a drug or treatment, or other technology, the NHS in Wales must usually provide funding and resources for it within 60 days of the first publication of the final draft guidance.
- 4.4 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 primary advanced or recurrent endometrial cancer with high microsatellite instability or mismatch repair deficiency and the healthcare professional responsible for their care thinks that dostarlimab with platinum-based chemotherapy is the right treatment, it should be available for use, in line with NICE's recommendations.

## 5 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.

**Luke Cowie**

Technical lead

**Samuel Slayen**

Technical adviser

**Jennifer Upton**

Project manager

**Janet Robertson**

Associate director

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