Pembrolizumab in combination with platinum-based chemotherapy for treating recurrent, persistent or metastatic cervical cancer

For public observers – ACIC information redacted

Technology appraisal committee A [13 September 2022]

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Company: Merck Sharp & Dohme (MSD)

NICE National Institute for Health and Care Excellence

Key clinical issues

- Median overall survival (OS) has not yet been reached.
    - What is the expected prognosis? Is prognosis expected to vary if the cervical cancer is (i) recurrent, (ii) persistent or (iii) metastatic?
    - What is the relationship between progression-free survival (PFS) and OS in cervical cancer? Is the assumption of gains in PFS leading to gains in OS appropriate?
    - Is there an expected benefit in post-progression survival (PPS)?
- Patients who had metastases at initial diagnosis had statistically significant worse outcomes for PFS and OS in KEYNOTE-826 those without. The marketing authorisation includes those with metastases at diagnosis. Is there a reason why people with metastases at initial diagnosis might benefit less?

Background on recurrent, persistent or metastatic cervical cancer

People who do not receive a HPV vaccine or screening remain at risk

Causes

- Develops when abnormal cells in cervix lining grow in an uncontrolled way, forming a tumour
- Over 90% of all cervical cancers estimated to be caused by HPV

Epidemiology

- Incidence of new diagnoses of cervical cancer was 9.8 per 100,000 females in 2019
    - 2,735 new cervical cancer cases in England in 2019

Diagnosis and classification

- People with recurrent, persistent or metastatic cervical cancer have a median age of 51
- Cervical cancer is defined as recurrent when it has returned following treatment, persistent when it does not respond to treatment, and metastatic when it has spread beyond the cervix to other places in the body

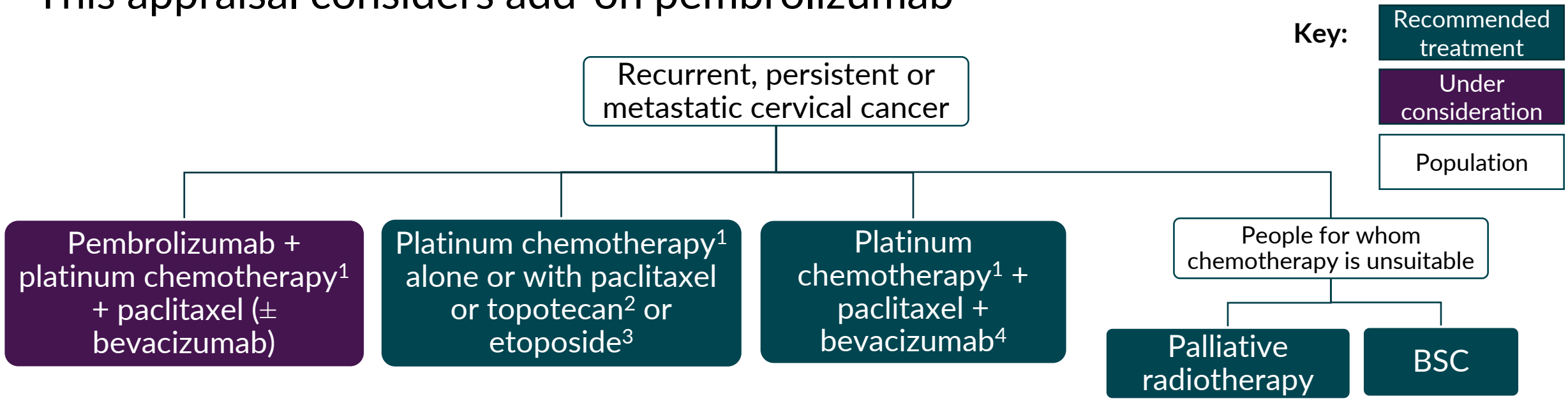
Prognosis

- Median OS with standard of care treatment is 13-17 months

Abbreviations: HPV, human papillomavirus; OS, overall survival

Treatment pathway

Platinum based therapy reflects clinical practice for majority of UK patients. This appraisal considers add-on pembrolizumab



[1]Cisplatin or carboplatin

[2]NICE recommends topotecan with cisplatin as an option for treating recurrent or stage 4B cervical cancer in people who have not previously received cisplatin (TA183)

[3]Source: Cancer Research UK and NHS chemotherapy protocol (indicated for small cell gynaecological cancers including those affecting the cervix, endometrium and ovaries)

[4]Bevacizumab with paclitaxel and platinum chemotherapy[1] available in routine commissioning for untreated recurrent or metastatic cervical cancer

Abbreviations: BSC, best supportive care.

Decision problem from the scope

	Final scope	Company	ERG
Population	Adults with untreated recurrent, persistent or metastatic cervical cancer	Restricted to CPS ≥1 as per marketing authorisation	Excluding ECOG 2 status in KEYNOTE-826 may not reflect NHS setting
Intervention	Pembrolizumab with paclitaxel and platinum-based chemotherapy† ± bevacizumab		Consistent with scope
Comparators	• Platinum chemotherapy† alone or with paclitaxel or topotecan or etoposide • Platinum-based chemotherapy† plus paclitaxel and bevacizumab for some people	• Platinum chemotherapy† + paclitaxel ± bevacizumab • Excluded etoposide (MA does not cover cervical cancer) and topotecan (clinical advice said not usually used)	Broadly agrees with company
Outcomes	• OS • PFS • Response rates • Adverse effects of treatment • Health-related quality of life	• Addition of duration of response	• OS immature • Uncertain relationship between PFS and OS

Notes: †, cisplatin or carboplatin

Abbreviations: CDF, Cancer Drugs Fund; CPS, combined positive score; ECOG, Eastern Cooperative Oncology Group; MA, marketing authorisation; OS, overall survival; PFS, progression-free survival

Pembrolizumab (KEYTRUDA®, MSD)

Marketing authorisation (May 2022)	• Treatment of persistent, recurrent, or metastatic cervical cancer in adults whose tumours express PD-L1 with a CPS ≥ 1
Mechanism of action	• Monoclonal antibody, which binds to the PD-1 receptor, increasing immune response to tumour cells
Administration	• 200 mg every 3 weeks (Q3W)* or 400mg every 6 weeks (Q6W) • IV infusion over 30 minutes

Price	• List price: £2,630 per 100 mg vial
	• Cost per administration (list price):
	  • 200 mg Q3W: £5,260
	  • 400 mg Q6W: £10,520
	• The price of pembrolizumab is subject to a confidential CAA with a simple discount

Notes: *, KEYNOTE-826 only evaluated 200 mg Q3W dose

Is administration every 6 weeks more likely to be adopted in clinical practice?

Abbreviations: CAA, Commercial Access Arrangement; CPS, combined positive score; IV, intravenous; PD-1, programmed cell death protein 1; PD-L1, programmed death-ligand 1; QxW, every x weeks

Patient perspectives

Submissions from Jo's Cervical Cancer Trust and BGCS

- For women who receive a late-stage diagnosis of cervical cancer, the prognosis can often be poor. There are currently very few treatment options for those with recurrent, persistent or metastatic cervical cancer. If these treatment options prove to be unsuccessful, patients are left with no alternatives. Patients are also left with little control or decision making-power over the treatment they receive, because of the limited options.
- Despite its benefits, only 14.5% of metastatic/recurrent cervical cancer patients treated over a 10-year period were eligible to receive bevacizumab. Identifying new therapies with improved safety profiles for use in this challenging population is critical.
- The addition of a new treatment option affords patients the opportunity to make choices about their treatment pathway, and may provide more opportunities to find a type of treatment that works for them. Pembrolizumab, in some cases, can prolong life by several months. Extra time at the end of life cannot be overstated.

There has been a need for some time for innovation and development for treating cervical cancer patients, and we are pleased that this technology may provide that.

This cancer mostly affects young women of working age. Many have families and dependents. Treatment can enable women to return to their daily lives, including work and their caring responsibilities.

Abbreviations: BGCS, British Gynaecological Cancer Society

Clinical perspectives

Submissions from NCRI-ACP-RCP-RCR, BGCS and 1 clinical expert:

- There is an unmet need for women with advanced and recurrent cervical cancer
  - Limited efficacy and significant toxicity associated with treatment options in this setting. Alternative options are urgently needed.
  - There are no standard second line treatments as response rates are so low
- A clinically significant treatment response is:
  - Increasing median time to disease progression by at least 2 months
  - To increase proportion of long term survivors (beyond 18 months) by at least 10%
- Pembrolizumab outcomes have significant and meaningful impact on patients and their families in terms of survival, but also improved quality of survival by management of symptoms
- Treatment delivery would be similar to current standard of care
  - Additional / different toxicities that can occur with immunotherapy compared to chemotherapy are managed by protocols already established in every hospital

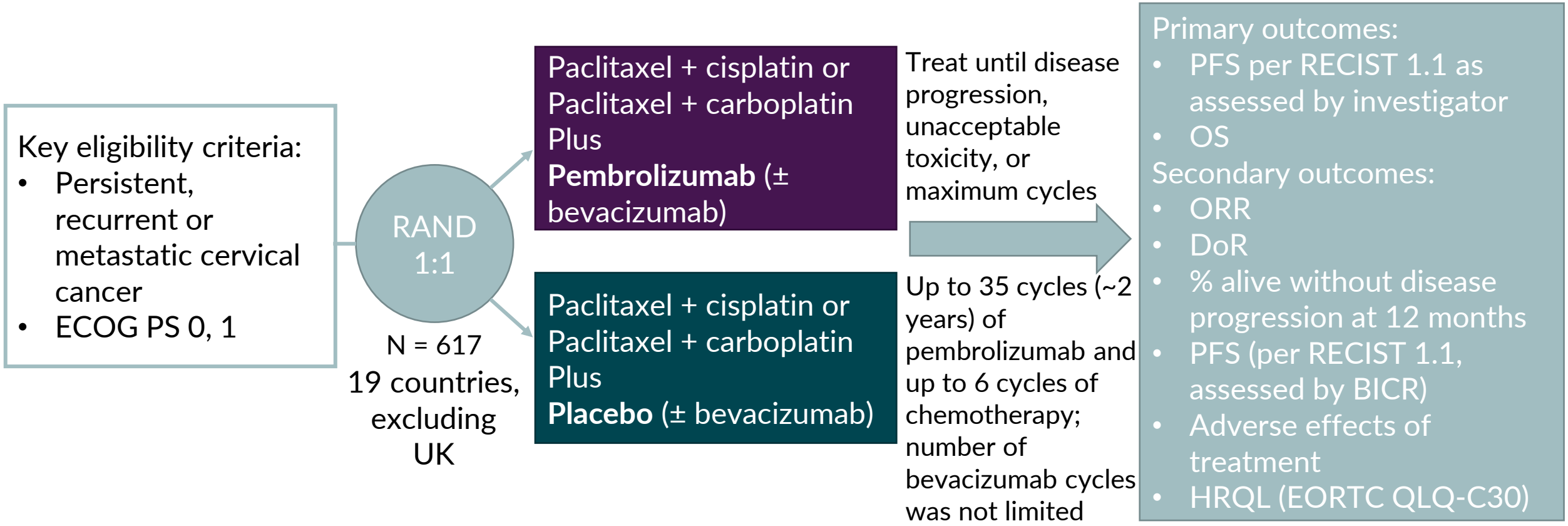
This treatment provides a large step change in the management of advanced and recurrent cervical cancer with a significant survival benefit on a different scale to the results in previous studies in this patient group (e.g. GOG 240).

Abbreviations: ACP, Association of Cancer Physicians; BGCS, British Gynaecological Cancer Society; NCRI, National Cancer Research Institute; RCP, Royal College of Physicians; RCR, Royal College of Radiologists

Clinical effectiveness

NICE National Institute for Health and Care Excellence

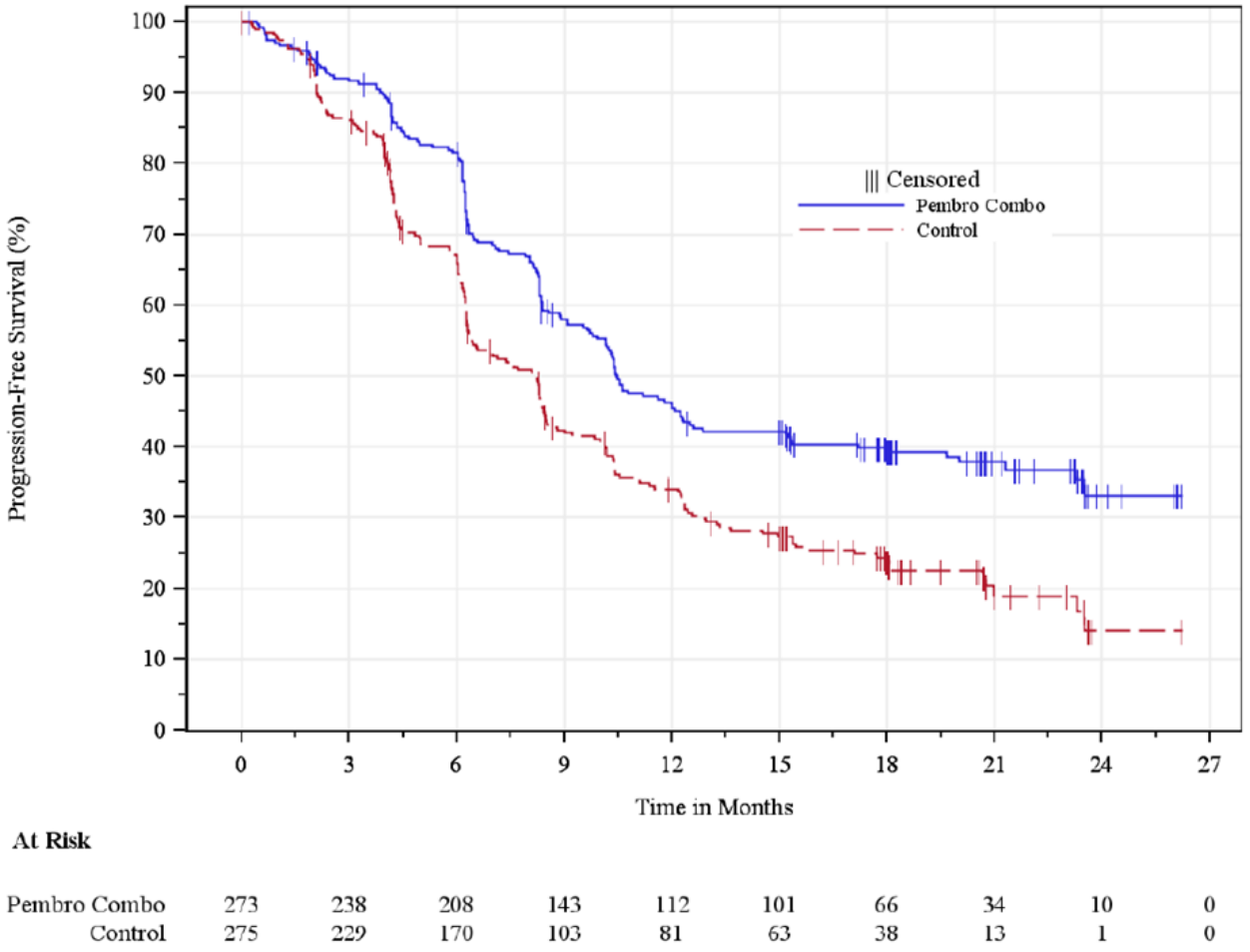
KEYNOTE-826 (NCT03635567) study design
Phase III, randomized, double-blind, placebo-controlled trial



Abbreviations: BICR, blinded independent central review; DoR, duration of response; ECOG PS, Eastern Cooperative Oncology Group performance status; EORTC, European Organisation for Research and Treatment of Cancer; HRQL, health-related quality of life; ORR, overall response rate; OS, overall survival; PFS, progression-free survival; QLQ-C30, Quality of Life questionnaire C30; PFS, progression-free survival; RAND, randomised; RECIST 1.1, Response Evaluation Criteria in Solid Tumours Version 1.1

KEYNOTE-826 results: PFS as assessed per RECIST 1.1 by investigator assessment (CPS ≥ 1 population)

Pembrolizumab combination improves progression free survival

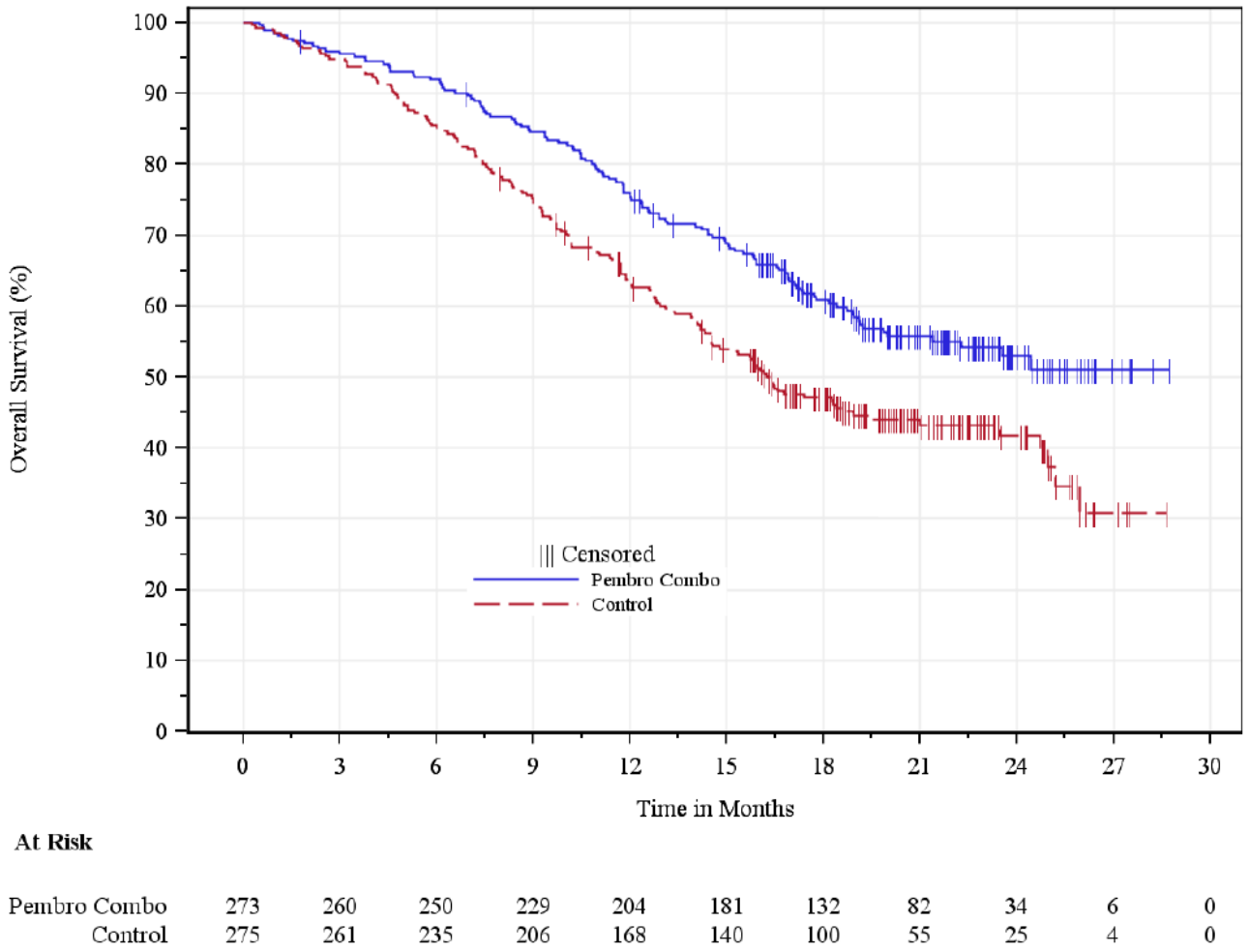


PFS	Pembrolizumab (n=273)	Placebo (n=275)
N patients with event (%)	157 (58)	198 (72)
Median, months (95% CI)	10.4 (9.7 to 12.3)	8.2 (6.3 to 8.5)
HR (95% CI)	0.62 (0.50 to 0.77); p < 0.0001	

Abbreviations: CI, confidence interval; CPS, combined positive score; HR, hazard ratio; PFS, progression-free survival; RECIST 1.1, Response Evaluation criteria in solid tumours version 1.1

KEYNOTE-826 results: OS (CPS ≥ 1 population)

Pembrolizumab combination improves OS, but data immature (median OS estimate not reached in pembrolizumab arm)



OS	Pembrolizumab (n=273)	Placebo (n=275)
N patients with event (%)	118 (43)	154 (56)
Median, months (95% CI)	NR (19.8 to NR)	16.3 (14.5 to 19.4)
HR (95% CI)	0.64; (0.50 to 0.81); p < 0.0001	

[redacted]

Abbreviations: CI, confidence interval; CPS, combined positive score; HR, hazard ratio; NR, not reached OS, overall survival

Subgroup: people with metastases at initial diagnosis

	Metastatic at initial diagnosis[1] (CPS ≥1 population)			
	No		Yes	
	Pembrolizumab: 68.5%	Placebo: 68.0%	Pembrolizumab: 31.5%	Placebo: 32.0%
PFS HR (95% CI)	0.53 (0.41 to 0.70)		0.91 (0.63 to 1.30)	
OS HR (95% CI)	0.56 (0.41 to 0.75)		0.88 (0.58 to 1.35)	

ERG comments

- Apparent lack of effect for PFS (in particular) and for OS was similar (in terms of HRs) to that seen in the PD-L1 CPS <1 subgroup, which was excluded from the EMA's marketing authorisation

Company

- KEYNOTE-826 was not designed or powered to look at benefit specifically in metastatic at diagnosis
- Marketing authorisations issued by the MHRA and EMA include people with metastatic disease at diagnosis
- A recommendation excluding this group would not be in line with NICE's commitments to reducing health inequalities

Clinical expert comments

- Very difficult to draw conclusions from an unplanned subgroup analysis
- Would not expect to differentiate treatment choice based on this subset analysis

Is there a reason why people with metastases at initial diagnosis might benefit less?

[1], FIGO [2009] stage IVB

Abbreviations: CPS, combined positive score; EMA, European Medicines Agency; HR, hazard ratio; MHRA, Medicines and Healthcare products Regulatory Agency; OS, overall survival; PFS, progression-free survival; PD-L1, programmed death-ligand 1

Cost effectiveness

NICE National Institute for Health and Care Excellence

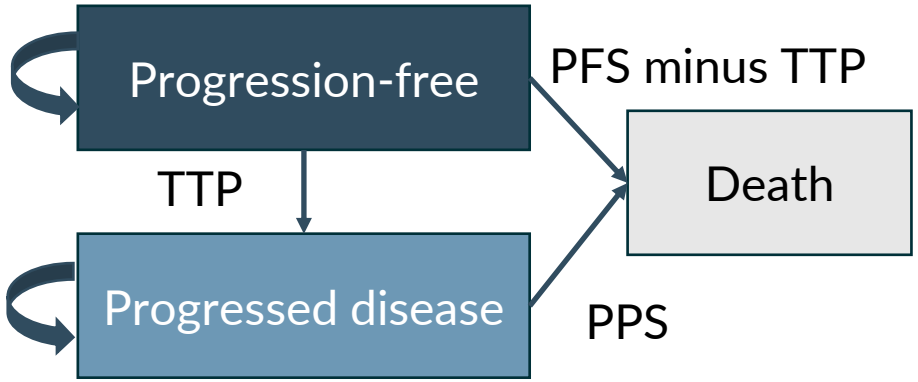
Key cost-effectiveness issues

- Does the committee agree that it is reasonable not to use the trial OS data in the model?
- The company extrapolate pembrolizumab TTP and PFS using two-piece extrapolations; the ERG uses a single-piece log-logistic approach. Which is more plausible?
- What is the most likely benefit of pembrolizumab on PFS and OS:
    1. PFS is better in pembrolizumab arm but there is no overall OS benefit
    2. PFS is better in pembrolizumab arm and the only impact on OS is via equivalent PPS
    3. PFS and PPS are better in pembrolizumab arm, suggesting benefits in OS arise from two sources
- What is the likely duration of treatment effect for pembrolizumab? Is the treatment waning scenario appropriate?
- The company uses a time to death approach to estimate HRQL, the ERG favours a progression-based approach – which is more plausible?
- Are the end of life criteria met? Are there a small group of responders who have a long life expectancy?

Company's model overview

Three-state Markov state transition model

- OS data from trial not used in model
- Company based model OS on PFS and PPS
- There are 2 ways to transition to death health state



Input	Assumption/ evidence source
Baseline characteristics	KN-826 (CPS≥1)
Clinical effectiveness: PFS, TTP and PPS	KN-826 (CPS≥1) with extrapolation
Utilities	KN-826 EQ-5D-5L mapped to 3L (van Hout et al.)
Costs/resource use	NHS reference costs and PSSRU/ UK clinician input
Treatment waning assumption	Company included preferred waning from 5-7 years after end of treatment (years 7-9 in the model)
PD-L1 testing	KN-826 (% patients); NHS reference costs
Subsequent treatment composition	UK advisory board (composition); KN-826 (duration)

Abbreviations: CPS, combined positive score; EQ-5D, EuroQol five-dimension scale; KN-826, KEYNOTE-826; OS, overall survival; PD-L1, Programmed death-ligand 1; PFS, progression-free survival; PPS, post-progression survival; PSSRU, Personal Social Services Research Unit; TTP, time-to-progression

Key issue: Uncertain if PFS gains and OS gains are linked

Relationship between PFS and OS not formally validated

Background

- Company submission considers gains in PFS should translate into gains in OS
- ERG's clinical advisors: PFS and OS are not necessarily related this way in this population

Company

- Similar magnitude PFS and OS treatment effects in KEYNOTE-826 and GOG240 4-year data
- Biologically, gains in PFS should be linked with gains in OS in advanced cervical cancer
- PPS is independent of TTP on the aggregate level

ERG comments

- No evidence is provided to suggest PFS and OS are related in this way, and observed correlation between PFS and PPS does not necessarily indicate a causal relationship
- Agrees gains in PFS could translate into gains in OS, but cannot consider issue resolved until clinically validated

Clinical expert comments

- Extremely unlikely that significant PFS benefit does not translate into a significant OS benefit
- In previous studies, there has been a relationship between PFS and OS, with the OS benefit greater than PFS

Is the assumption of gains in PFS leading to gains in OS appropriate?

Abbreviations: OS, overall survival; PFS, progression-free survival; PPS, post-progression survival; TTP, time to progression

Extrapolation of PFS (1/3)

- Company's original base case approach used two-piece extrapolations for TTP and PFS:
  - Observed Kaplan-Meier data to 37 weeks, followed by a log-logistic parametric survival model
- Company preferred two-piece extrapolations because single piece models have poor visual fit to observed data and do not appropriately capture the emerging plateau

Company modelled TTP (left) and PFS (right) in the CPS≥1 population (original base case)

Abbreviations: CPS, combined positive score; PEM, pembrolizumab; PFS, progression-free survival; SoC, standard of care; TTP, time to progression

Extrapolation of PFS (2/3)

- ERG agrees with company that there is some evidence of a reduction in hazards, and an emerging plateau in relevant TTP and PFS Kaplan-Meier curves for pembrolizumab
- However, limited OS evidence to support substantial PFS and OS gains and optimistic proportion of patients achieving long-term survival on pembrolizumab, resulting from company's two-piece approach
- ERG prefers one-piece log-logistic extrapolation of PFS and TTP

ERG modelled TTP (left) and PFS (right) in the CPS≥1 population

Abbreviations: CPS, combined positive score; ERG, evidence review group; PFS, progression-free survival; SoC, standard of care; TTP, time to progression

Extrapolation of PFS (3/3)

Company following technical engagement:

- ERG's one-piece model has very poor visual fit to pembrolizumab arm
  - Underestimates outcomes for patients who have responded well to immunotherapy in KEYNOTE-826
- Pembrolizumab has a different mechanism of action to SoC → a separate model type may be appropriate
- Evidence on long term plausibility comes from clinical experience, the 5-year data of other pembrolizumab trials and from the weighted survival analysis by response status
- **Updated base case** with one-piece TTP/PFS curve for SoC and two-piece for pembrolizumab

ERG comments

- No validation provided of 2-piece model predicted long term PFS in pembrolizumab arm. ERG clinical advice noted that PFS [redacted] at 5 years and [redacted] at 10 years optimistic
- Does not consider data from trials of pembrolizumab for other indications relevant in choosing whether 1 or 2-piece approach most appropriate

Clinical expert comments

- Extrapolation of PFS is reasonable, and the longer follow up data from GOG 240 does fit with the modelling with a long term tail

Company use a two-piece approach for pembrolizumab, and one-piece for SoC. The ERG use one-piece for both treatment arms– which is more plausible?

Abbreviations: ERG, evidence review group; OS, overall survival; PFS, progression-free survival; SoC, standard of care; TTP, time to progression

Extrapolation of PPS (1/2)
Company's approach assumes differential survival benefit across treatment arms

- Company's base-case model uses one-piece generalised gamma models to predict PPS
  - Assumes a differential survival benefit across treatment arms with patients progressing on pembrolizumab assumed to have longer PPS

Company modelled PPS in the CPS≥1 population

[redacted]

Disaggregated life years for company model (post technical engagement)

	SoC	PEM	
		Waning 3-5 years post treatment	Waning 5-7 years post treatment
Pre-progression	1.23	3.02	3.32
Post-progression	0.83	0.93	0.92
Total	**2.06**	**3.95**	**4.25**

Abbreviations: CPS, combined positive score; PEM, pembrolizumab; PPS, post-progression survival; SoC, standard of care.

Extrapolation of PPS (2/2)

ERG comments

- Company's model results in overly optimistic estimates of survival with an overly long-tail
- Limited treatment options in second-line setting; unlikely any patients alive beyond 3 years post progression
- Limited evidence to support company's assumed differential survival benefit across treatment arms
- KM data from KEYNOTE-826 not necessarily supportive of a PPS benefit on pembrolizumab (curves for pembrolizumab and SoC cross at week 63)

ERG preferred approach

- Assume equal PPS across treatment arms (extrapolate from pooled data) using the generalised gamma curve
- Use a more pessimistic Weibull model in scenario analysis

Company

- Patients who remain progression-free for longer are also more likely to have longer PPS
- Longer PPS in bevacizumab arm of GOG 240 observed at all time points suggests a better treatment option provides lasting benefit in this disease area
- Default expectation should be to use the data rather than making an unsubstantiated assumption
- Superior statistical fit for two independent generalised gamma curves versus single generalised gamma curve

Clinical expert comments

- Reasonable assumption that PPS will increase further for pembrolizumab arm once data is more mature

Company assumes a differential survival benefit across treatment arms, the ERG prefers a consistent PPS across treatment arms – which is more plausible?

Abbreviations: ERG, evidence review group; PPS, post-progression survival

Including treatment waning effect for pembrolizumab

Background

- After technical engagement, company updated base case includes treatment waning from 5-7 years post treatment or years 3-5 post treatment (most conservative)

Company

- No evidence of treatment waning in this indication
- No treatment waning effect apparent in three available 5-year follow-up studies of pembrolizumab
- Treatment waning assumption has been imposed inconsistently across multiple pembrolizumab appraisals

ERG comments

- Though maintenance of a treatment effect after stopping pembrolizumab may be biologically plausible, duration of this effect is uncertain
- No indication-specific evidence to support a sustained treatment effect
- Overall immaturity of the survival evidence means any such claimed benefit is highly uncertain

Clinical expert comments / Previous appraisals

- Do not have long term data; have to extrapolate ongoing treatment effect from other immunotherapy studies
- Committee accepted pembrolizumab waning 3 to 5 years post treatment in TA737 and TA770; a 5-year treatment effect in TA661 and TA801. No waning effect mentioned in FADs of TA709, TA540, and TA772

What is the likely duration of treatment effect for pembrolizumab?

Abbreviations: ERG, evidence review group; FAD, Final Appraisal Document

Key issue: Health state utilities

Background

- Company derive health state utilities based on time to death
- ERG prefers the use of progression-based health state utilities

Company

- Progression-based methods may be less appropriate when assessing immunotherapies due to patients experiencing “pseudo-progression”
- Delays between progression and symptoms, and different progression types, may blur impact of progression on HRQL
- Limited utility assessments are typically available in IO trials following disease progression

ERG comments

- Observed correlations between HRQL and TTD are likely due to confounding, with TTD acting as proxy for severity of disease (likely highly correlated with both OS and HRQL)
- Time to death approach favours pembrolizumab and results in unevidenced treatment related utility benefit

Company uses time to death to estimate HRQL, the ERG favours progression-based approach – which is more plausible?

Abbreviations: ERG, evidence review group; HRQL, health related quality of life; IO, immune-oncology; OS, overall survival; TTD, time to death

End of life criteria

Treatment is indicated for patients with a short life expectancy, normally <24 months	SoC median OS	KEYNOTE-826: 16.3 months (95% CI 14.5 to 19.4) GOG 240: 13.3 to 16.8 months
	SoC mean OS	Estimated from model 2.06 years (company base case post-TE) 2.08 years (ERG base case)
Sufficient evidence to indicate the treatment extends life - normally a mean of ≥3 months compared with current treatment	Median undiscounted LYG versus SoC	6.67 months (post-TE)
	Mean undiscounted LYG versus SoC	2.19 years (company base case post-TE) 9.84 months (ERG base case)

Company

- End of life criteria should be applied for this population
- In KEYNOTE-826, 58.3% of patients in the SoC arm had died at 24 months
- In GOG 240, OS at 2 years is 28.3% in the chemo-only group and 35.3% in the chemo-bevacizumab group

ERG comments

- End of life criteria are typically interpreted with respect to mean or average life-expectancy
- Strong evidence to indicate that the second criterion is met

Clinical expert comments

- Average survival for the UK population is less than 2 years

Are the end of life criteria met?

Abbreviations: CI, confidence interval; ERG, evidence review group; LYG, life years gained; OS, overall survival; SoC, standard of care; TE, technical engagement

Cost-effectiveness results

As confidential discounts are available for comparator and subsequent treatments, ICERs are not reported in Part 1.

ICERs including confidential discounts will be presented in Part 2.

Summary

- **If the end of life criteria are met,** company's base case is **lower** than what would usually be considered cost-effective use of NHS resources
- **If the end of life criteria are not met,** company's base case is **higher** than what would usually be considered cost-effective use of NHS resources
- ERG's base case is **higher** than what would usually be considered cost-effective use of NHS resources, **irrespective of if the end of life criteria are met**

Abbreviations: ICER, incremental-cost effectiveness ratio; PAS, patient access scheme

Summary of company and ERG base case assumptions

Assumption	Company base case post technical engagement	ERG exploratory base case	ICER impact (on company base case 1)?
Extrapolation of TTP and PFS	• Pembrolizumab: two-piece (KM to 37 weeks plus log-logistic) • SoC: one-piece (log-logistic)	Pembrolizumab and SoC: one-piece (log-logistic)	Large (~£37k/QALY)
Treatment waning	1. From 5-7 years after end of treatment (years 7-9 in the model) 2. From 3-5 years after end of treatment (years 5-7 in the model)	From 2-5 years after end of treatment (years 4-7 in model)	Moderate (~£6k/QALY)
Health state utilities	Time to death based	Progression based	Moderate (~£3k/QALY)
Extrapolation of PPS	Pembrolizumab and SoC: one-piece (generalised gamma)	Pooled (generalised gamma)	Moderate (~£3k/QALY)

Abbreviations: ERG, evidence review group; ICER, incremental cost effectiveness ratio; KM, Kaplan-Meier; PFS, progression-free survival; PPS, post-progression survival; SoC, standard of care; TTP, time to progression

Impact of ERG scenario analysis on company base case ICER (with waning from 5-7 years after end of treatment [years 7-9 in the model])

Scenario (applied to company base case)	Incremental costs (£) versus SoC	Incremental life years versus SoC	Incremental QALYs versus SoC	ICER (£) versus SoC
ERG base case	↑	↓	↓	↑
One-piece log-logistic extrapolation of the PFS and TTP curve for pembrolizumab	↓	↓	↓	↑
Treatment waning between 2 and 5 years post treatment	↓	↓	↓	↑
Progression based utilities	=	=	↓	↑
Pooled survival curve for PPS using generalised gamma curve	↑	↓	↓	↑
Pooled survival curve for PPS using Weibull curve	↑	↓	↓	↑

Descending ICER

Arrow indicates direction and scale of change in costs, LYs, QALYs or ICER **compared to company base case**

Abbreviations: ERG, evidence review group; ICER, incremental-cost effectiveness ratio; PFS, progression-free survival; PPS, post-progression survival; QALY, quality-adjusted life year; SoC, standard of care; TTP, time to progression

Impact of ERG scenario analysis on company base case ICER (with waning from 5-7 years after end of treatment [years 7-9 in the model])

Scenario (applied to company base case)	Incremental costs (£) versus SoC	Incremental life years versus SoC	Incremental QALYs versus SoC	ICER (£) versus SoC
GP/nurse visits, blood-counts, and thyroid function tests costs	↑	=	=	↑
All AESI >5% of patients	↑	=	=	↑
All patients receive biosimilar bevacizumab	↑	=	=	↑
Subsequent therapy distribution from KEYNOTE-826	↓	=	=	↓
Bevacizumab maintenance treatment allowed	↓	=	↑	↓

Descending ICER

Arrow indicates direction and scale of change in costs, LYs, QALYs or ICER **compared to company base case**

Abbreviations: AESI, adverse event of special interest; ERG, evidence review group; GP, general practitioner; ICER, incremental-cost effectiveness ratio; QALY, quality-adjusted life year; SoC, standard of care

Other considerations

Equality considerations

- No equality considerations relating to the use of pembrolizumab have been identified or are anticipated except that the condition in question is relatively more prevalent in lower socioeconomic and ethnic minority groups. Improving outcomes for these groups is in line with NICE's "Principle 9. Aim to reduce health inequalities".

Innovation

- Company
    - Minimal developments have been made in the management of recurrent, persistent or metastatic cervical cancer over the last decade, and there is a need for effective treatment options.
    - The last NICE technology appraisal relating to pharmacological treatment of cervical cancer was published more than 12 years ago [TA183]
    - Pembrolizumab offers a new systemic treatment as the first immunotherapy in this cohort of patients, and highlights the benefits in treatment prior to disease progression
- Professional organisations
    - Yes (consider the technology to be innovative)

Abbreviations: NICE, National Institute for Health and Care Excellence; TA, technology appraisal

NICE National Institute for Health and Care Excellence

Thank you.