



# Advanced Cervical Cancer Patients Value Disease Control in Addition to Overall Survival in Treatment Decision-making: A US Patient Preference Study

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## Background

- Advanced cervical cancer (including locally advanced and recurrent/metastatic disease) treatment landscape have evolved rapidly with new therapy options across multiple treatment settings.<sup>1-5</sup>
- Patient's preference has been recognized to facilitate joint-decision making in treatment selection, in a number of diseases including other cancer types.

## Methods

- A total of N=150 adult women (≥18 years) in the US with self-reported diagnosis of r/mCC (stage IVb, or ineligible for treatment with curative intent) were invited to participate in a 30-minute online discrete choice experiment (DCE) between July and September 2023
- Before the main DCE, the questionnaire and instrument were pre-tested and refined during cognitive interviews (10 r/mCC patients) and a quantitative pilot (30 r/mCC patients).
- Study participants completed two consecutive DCEs, whose attributes and levels were combined using a D-efficient design to ensure trade-offs.
- DCE 1 involved choosing between hypothetical treatment options to quantify the relative importance placed on key efficacy and safety attributes when deciding to receive a novel r/mCC treatment (Figure 1).
- DCE 2 explored willingness to accept a risk mitigation step together with a fixed profile treatment plan. The care plan choice was described in terms of accessibility of eye drops, number of doctor visits, and out-of-pocket cost per treatment cycle.
- Responses were analyzed using mixed logit models.

Figure 1. Example of DCE 1 (Treatment Choice)

|   | Treatment A   | Treatment B  |
|---|---|--|
| Survival rate at 12 months                                    | 40 out of 100 patients (40%)  | 60 out of 100 patients (60%)   |
| Chance of treatment shrinking or preventing tumor growth      | <br>20 out of 100 patients (20%)  | <br>50 out of 100 patients (50%)   |
| Tingling, numbness, pain, swelling, or weakness in your limbs | Mild or moderate: You may experience constant tingling or numbness, or noticeable subtle pain in your hands or feet               | Severe: You may experience weakness or the inability to use your limbs without difficulty (e.g., needing walking assistance) |
| Corneal side effects  | Not noticeable: you do not feel any discomfort in your eyes or a change in vision   | Severe: You may experience trouble seeing and feel severe pain in the eye that interferes with your normal daily activities. |
| Conjunctival side effects                                     | Mild or moderate: You may experience irritation and an urge to rub your eyes, increased tearing, or difficulties with your vision | No known risk: You do not feel any discomfort in your eyes or a change in vision   |
| Please choose your preferred option                           | <input type="radio"/>   | <input type="radio"/>  |

## Objectives

- To quantify the trade-offs that recurrent/metastatic cervical cancer (r/mCC) patients are willing to make regarding efficacy, safety, and convenience of their treatment
- To quantify patient preference for attributes related to non-clinical burden of receiving a novel treatment option with ocular adverse events (AEs) requiring a risk-mitigating eye-care plan

## Results

Figure 2A. DCE 1 (Treatment Choice) – Average Preference Results (n = 150)

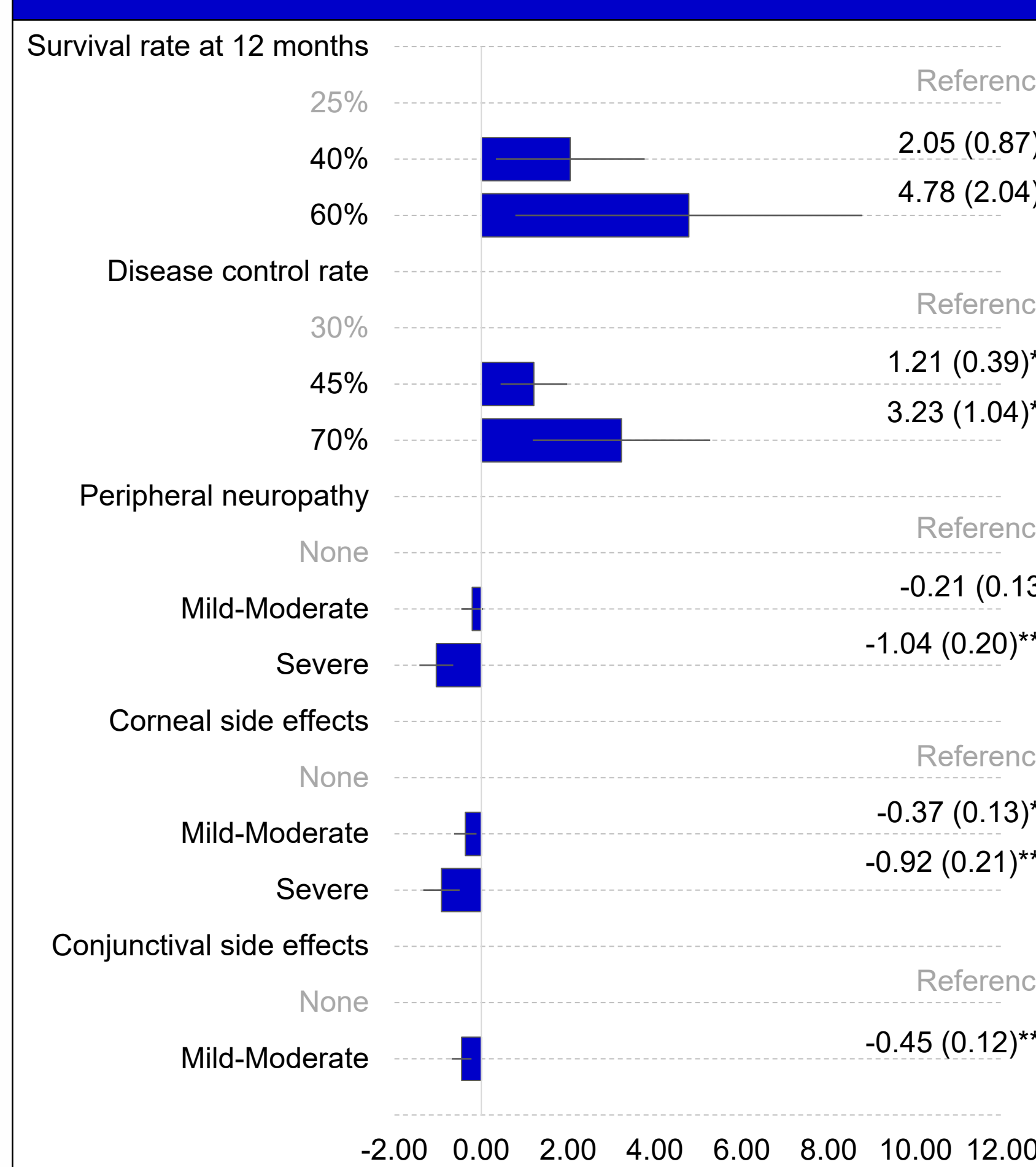
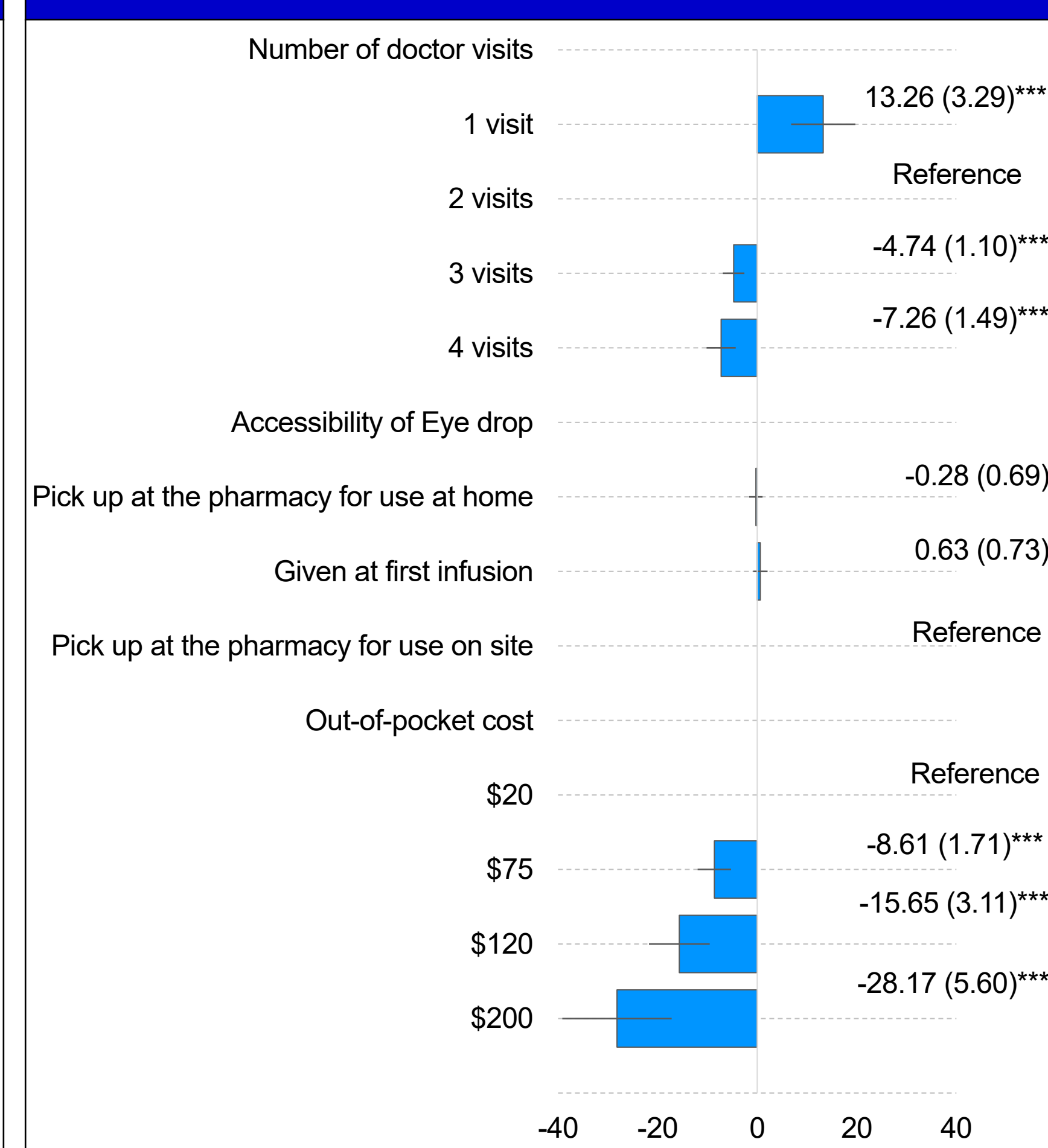


Figure 2B. DCE 2 (Care Plan Choice) – Average Preference Results (n = 150)



\*\*\* P<0.1%; \*\* P<1%; \* P<5%

Fig. 2A: Impact of changes within each attribute on participants' treatment preferences (N=150). Utilities link an improvement in an attribute level (e.g., an increase in survival rate from 25% to 40%) to preferences. Higher utilities indicate a higher desirability, but the absolute value of utility cannot be interpreted. The chart shows the estimated effects of the attribute over the range used in the DCE. Black bars show the 95% CI for each utility value. The model had a good fit (adjusted McFadden R<sup>2</sup> = 22.1%) and was able to explain the choices that participants made in the DCE.

Fig. 2B: The chart shows the estimated effects of the attribute over the range used in the DCE. Black bars show the 95% CI for each utility value. The model had a good fit (adjusted McFadden R<sup>2</sup> = 49.65%) and was able to explain the choices that participants made in the DCE.

- In DCE1, on average, differences in preference for efficacy attributes (survival rate at 12 months or DCR) were more pronounced, and that for safety attributes were less variable (Figure 2A).
- Patients in the study would be willing to tolerate risks associated with treatment if adequately compensated with better treatment efficacies.
  - To tolerate risks of both moderate ocular and peripheral neuropathy AEs, patients would require a treatment that offers an improvement of 12.79% in DCR or 7.93% in the 12-month OS rate.
- A total of 83% of participants were willing to take the fixed profile treatment plan (defined by a 12-month OS rate of 51%, tumor shrinkage/disappearance at 24%, no tumor growth at 48%, mild or moderate peripheral neuropathy, corneal, and conjunctival side effects)
- In DCE2, patients significantly preferred a treatment that required fewer doctor visits, all else being equal (Figure 2B).
  - Willingness to accept a treatment plan is sensitive to both number of clinic visits and out-of-pocket costs (Figure 3).

## Reference

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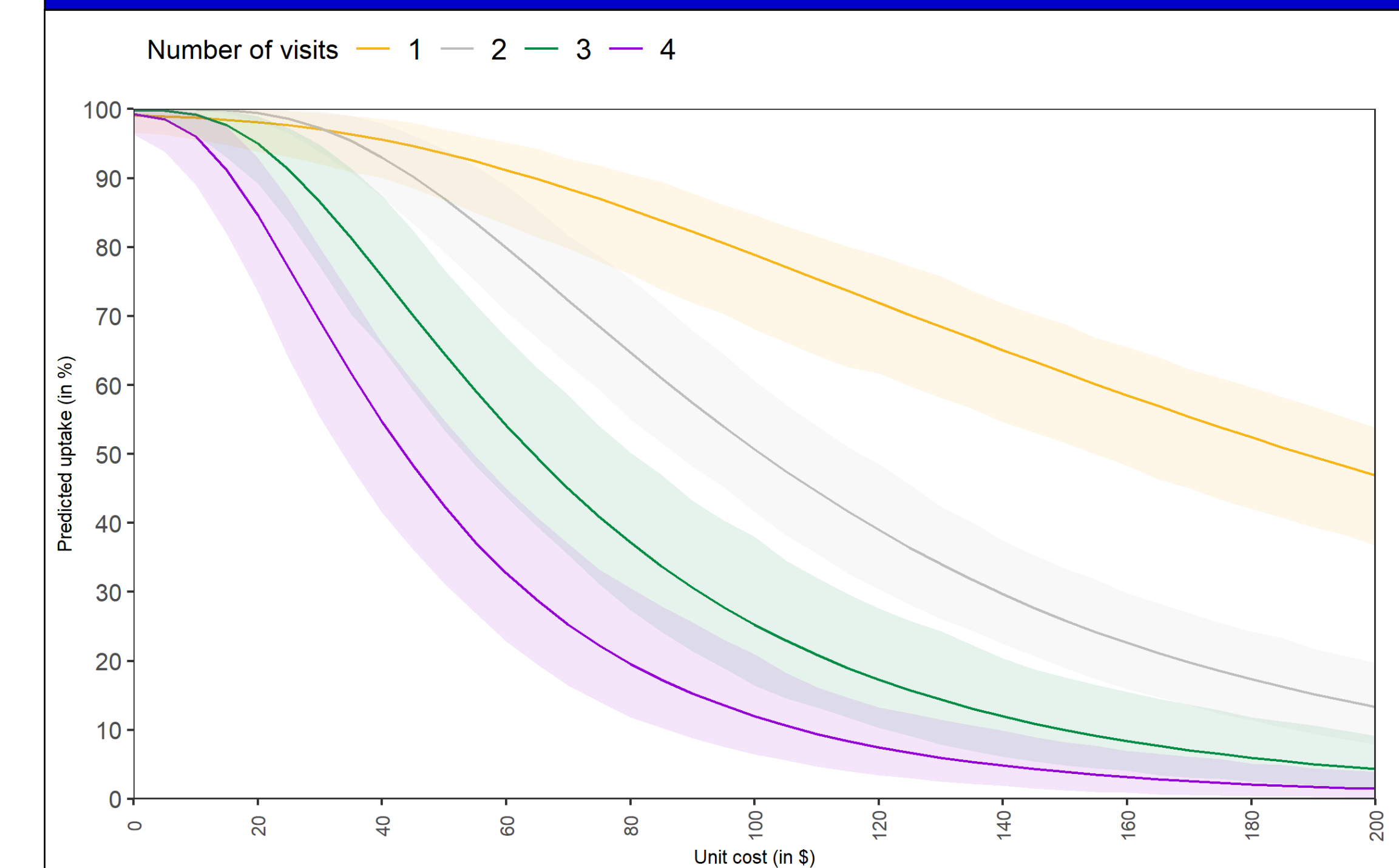
Table 1. Sociodemographic and Clinical Characteristics

| Characteristics                                       | Overall (N= 150) |
|---|------------------|
| <b>Age (in years)</b>                                 |                  |
| Mean (SD)   | 50.10 (7.82)     |
| <b>Ethnic background</b>                              |                  |
| Hispanic or Latino                                    | 43 (29%)         |
| Not Hispanic or Latino                                | 97 (65%)         |
| Prefer not to say                                     | 10 (7%)          |
| <b>Racial background</b>                              |                  |
| White   | 80 (53%)         |
| Black or African American                             | 32 (21%)         |
| Asian or Asian American                               | 6 (4%)           |
| Native Hawaiian or other Pacific Islander             | 12 (8%)          |
| American Indian or Alaska Native                      | 6 (4%)           |
| Prefer not to say                                     | 14 (9%)          |
| <b>Insurance status</b>                               |                  |
| Employer-provided insurance                           | 46 (31%)         |
| Self-provided insurance                               | 68 (45%)         |
| Veterans Affairs/ military healthcare                 | 15 (10%)         |
| Medicare  | 6 (4%)           |
| Medicaid  | 18 (12%)         |
| <b>General area where you live</b>                    |                  |
| Urban (in a town or city)                             | 42 (28%)         |
| Suburban (outside district of a city)                 | 78 (52%)         |
| Rural (countryside, agricultural community, farmland) | 30 (20%)         |

Abbreviations: ECOG, Eastern Cooperative Oncology Group; SD, standard deviation

- The study participants represented a diverse r/mCC patient population in the US (Table 1).

Figure 3. Predicted Uptake for Treatment with Care Plan



## Conclusions

- Whilst respondents were willing to make trade-offs when selecting a novel treatment for r/mCC, increases in DCR and OS were considered most important relative to treatment-related risks.
- The results suggest that patients were willing to accept modest logistical demands in order to receive treatment benefits.