

# Factors associated with adjuvant treatment preference from a patient and physician perspective, using the discrete choice experiment method in resected stage III melanoma (PAMELA Study)

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## INTRODUCTION

In oncology, the dialogue between a patient and his physician is key to lead to the right treatment decision. Both have to consider in the discussion the trade-offs of benefits and risks between treatment options.

Last years innovations have changed the therapeutic landscape, particularly in earlier stages of cancers. In “non-advanced” settings, criteria for decision and patient’s preference may be different from those of advanced disease. In the era of rapidly evolving treatment options in early stage cancer, it’s essential to better explore patients preferences and confront their perspectives with physicians’. To this end, the Discrete Choice-Experiment (DCE) method is a suitable approach in trade-off situations.

## OBJECTIVES

The main objective of this study is to understand criteria governing preferences of earlier stage cancer treatment from both the patient's and the onco(dermato)logist's perspective, based on the experience of resected stage III melanoma setting.

## MATERIALS AND METHODS

**PAMELA** is a transversal observational study conducted in 16 French hospitals, enrolling onco(dermato)logists and patients with resected stage III melanoma, from November 2021 to March 2023.

A DCE method was conducted among onco(dermato)logists and patients. In a serie of scenarios, respondents had to choose between hypothetical treatment alternatives including active surveillance. Each had seven attributes preselected via a literature review, patient interviews and expert consensus: risk of recurrence after 3 years (RFS); of melanoma-related premature death (MSS); that the treatment disrupts the everyday life; that the treatment leads to another long-term or permanent condition that may require long-term or even life-long treatment; that the treatment may cause very severe toxicity; method of administration and frequency of hospital visits. Then respondents were also asked to rate attributes in a non-trade-off setting.

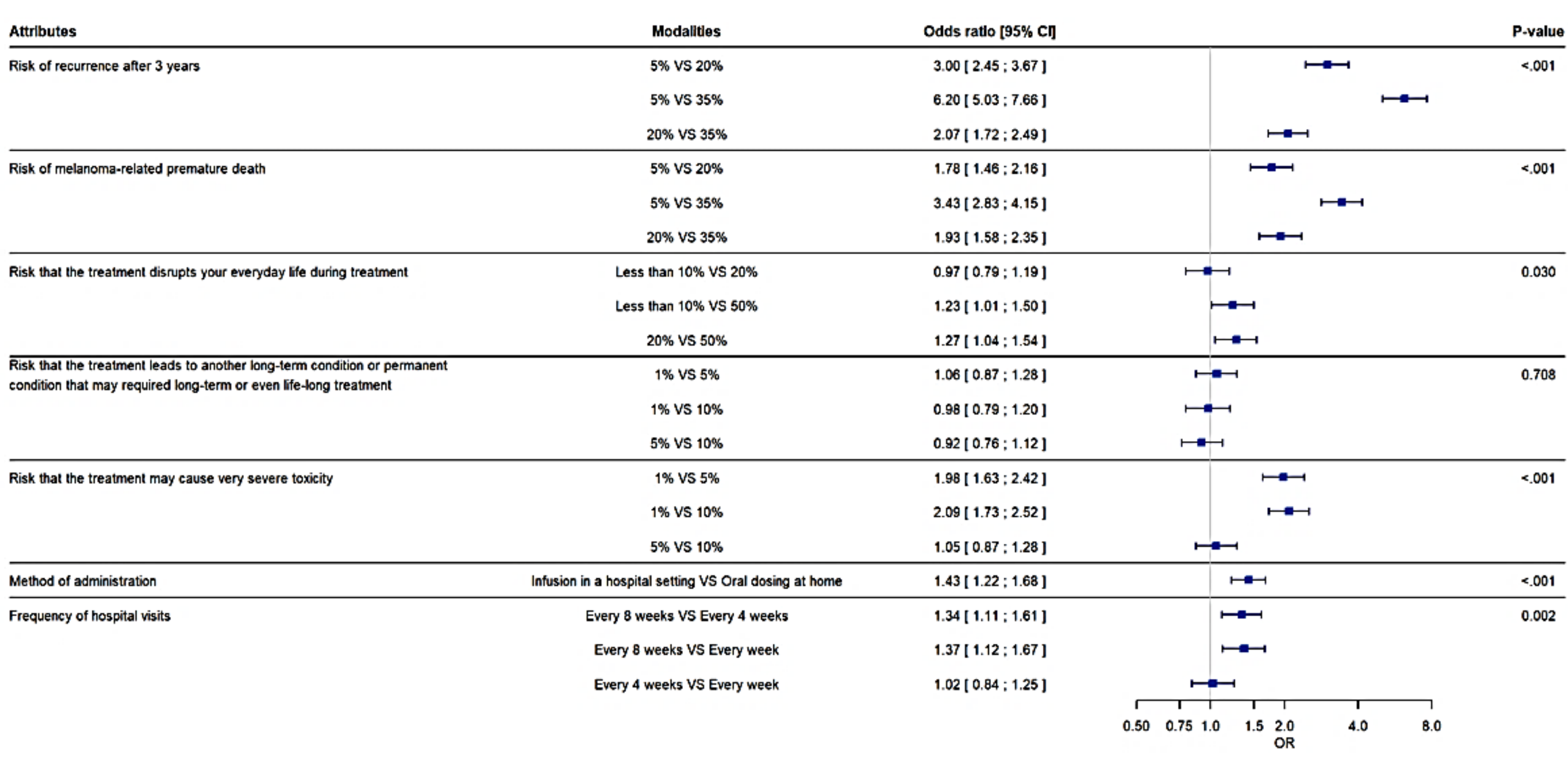
## RESULTS

47 physicians and 126 patients (mean age 61.4±14, 62% of men), were involved in the study.

### Patients' preferences in trade-off situation

Using DCE, results are shown on (**Figure 1\***). Based on OR estimates, attributes that emerged as having the highest influence on the patient's choice were efficacy criteria (*risk of recurrence after 3 years* followed by *the risk of premature death from melanoma*). Among the different tested attributes, only *the risk that the treatment leads to another long-term condition* did not statistically influence the choice of treatment.

Figure 1: Forest plot for patient’s preferences (N = 3160 observations)



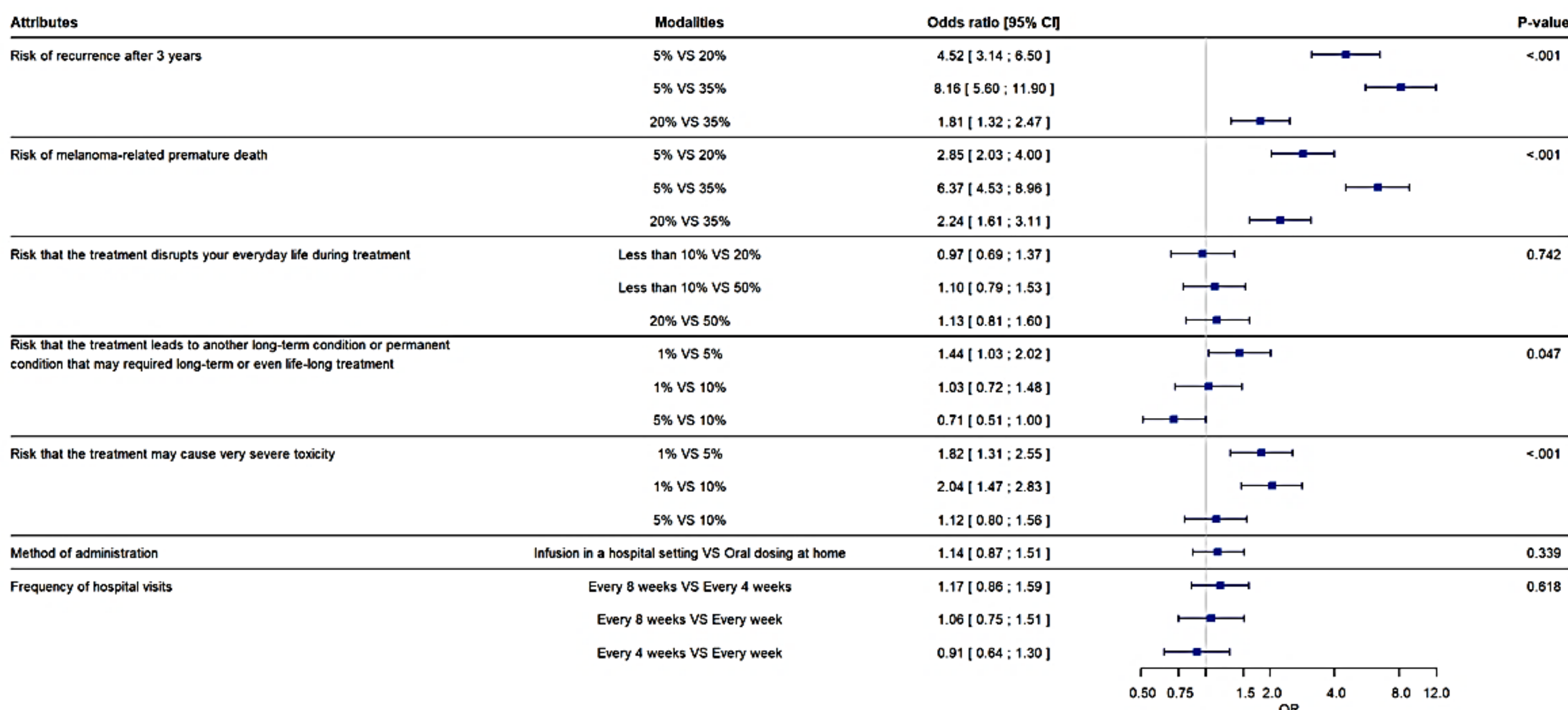
\* Statistically significant for p-value < 0.05

### Physicians' preferences in trade-off situation

Using DCE, results are shown on **Figure 2**. Attributes that emerged as having the highest influence on physician’s choice of treatment were also efficacy criteria (*risk of recurrence after 3 years* followed by *the risk of premature death from melanoma*). The *method of administration*, the *frequency of hospital visits* and *the risk that the treatment disrupts everyday life* do not influence the choice of treatment (**Figure 2\***).

**For both patients and physicians, active surveillance was not sufficiently chosen as a preferred option to be analyzed (respectively 57 and 15 observations).**

Figure 2 : Forest plot for physicians' preferences (N = 1180 observations)



\* Statistically significant for p-value < 0.05

### Patients’ and physician’s preferences comparisons

Based on our ranking method\*, physicians and patients converge in their preference for efficacy criteria first. Interestingly, in this trade-off situation, the study shows divergent results on other criteria :

- The importance of RFS compared to MSS is more pronounced for the patients.
- Patients didn’t value in their decision *the risk that the treatment leads to another long-term condition*, while physicians do.
- Physicians didn’t value the ways of administering the treatment (I.V vs *Per Os*) nor frequency of administration, whereas patients do (favoring I.V, or the longest frequency of visit (Q8W)).

Figure 3 : Order of preference of attributes for patients and for physicians in a trade-off situation

Patient’s trade-off situation (OR)	+ important	Physician’s trade-off situation (OR)
Risk of recurrence after 3 years (6,20)		Risk of recurrence after 3 years (8,16)
Risk of melanoma-related premature death (3,43)		Risk of melanoma-related premature death (6,37)
Risk that the treatment may cause very severe toxicity (2,09)		Risk that the treatment may cause very severe toxicity (2,04)
Method of administration (1,43)		Risk that the treatment leads to another long-term condition (1,44)
Frequency of hospital visits (1,37)		Frequency of hospital visits (NS)
Risk that the treatment disrupts your everyday life (1,27)		Risk that the treatment disrupts your everyday life (NS)
Risk that the treatment leads to another long-term condition (NS)	- important	Method of administration (NS)

\* Higher odds ratio for each attribute (in brackets) is used to rank attributes.

### Patients’ and physician’s preferences in a non-trade-off situation

Results are presented in **Figure 4** . For both patients and physicians, MSS had the highest score, and the second highest valued attributes were RFS. Except modalities of administration, all attributes were rated six or higher. (**Figure 4**).

Figure 4 :Score and order of preference of attributes for patients and for physicians in a non-trade-off situation

Order of preference Xth* (mean)	Risk of recurrence after 3 years	Risk of melanoma-related premature death	Risk that the treatment disrupts your everyday life	Risk that the treatment leads to another long-term condition	Risk that the treatment may cause very severe toxicity	Method of administration	Frequency of hospital visits
Patients	2ème (7.9)	1er (8.3)	5ème (6.3)	4ème (6.9)	3ème (7.5)	7ème (5.6)	6ème (5.7)
Physicians	2ème (8.3)	1er (9.2)	5ème (6.3)	4ème (7.1)	3ème (7.9)	7ème (4.1)	6ème (4.7)

## CONCLUSION

PAMELA confirms the high weight of efficacy criteria in the decision compared to other attributes and reveals particularly the effect of the treatment on “recurrence” as an important endpoint for both patients and clinicians that takes precedence over survival in early-stage settings.

When faced with treatment options, monitoring is very rarely chosen as the preferred option.

Interestingly, confronting patients and physicians' results in other attributes shows slight differences which can guide treatment’s choice discussions. This also enhances the importance of going further in understanding patients' preference and going beyond physician believes.