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Decision-Making preferences in advanced cancer patients: associations with sociodemographic and psychological factors

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Abstract

Background Patients with advanced cancer often wish to be involved in medical decisions but may vary according to sociodemographic and clinical factors. This study examined how these variables relate to patients' preferred roles in decision-making.

Methods Data from 1198 advanced cancer patients were collected via self-administered questionnaires and clinical records. The Control Preferences Scale was used to classify patients into three profiles: *Patient Control* (decisions mainly made by the patient), *Shared Control* (decisions made jointly with the physician), and *Physician Control* (decisions primarily led by the physician). Associations with sociodemographic and psychological variables were analyzed.

Results Among participants, 53% were in the Patient Control group, 10% in the Shared Control group, and 37% in the Physician Control group. Sociodemographic variables were significantly associated with decision-making profiles: men and participants with higher education (secondary or above) were more represented in the Physician Control group (41% and 43%), while women and unemployed participants predominated in the Patient Control group (both 57%). In contrast, clinical variables such as tumor site, treatment type, and disease stage showed no significant associations. Regarding psychological characteristics, the Physician Control group reported lower levels of distress and higher levels of positive adjustment ($p < .05$) compared to the other groups.

Conclusion Decision-making preferences among advanced cancer patients depend predominantly on sociodemographic and psychological factors, rather than clinical variables. Patients deferring decisions to physicians experience lower distress and better psychological adjustment. Personalized communication informed by patient background and coping styles may improve patient-centered care and outcomes.

Keywords Advanced cancer, Palliative care, Medical decisions, Psychological distress, Patient control, End of life

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Introduction

Patients with advanced cancer often face complex treatment decisions that can significantly impact both the quality and duration of their lives [1–3]. Shared decision-making has been recognized as the preferred model for engaging and supporting patients in the decision-making process regarding diagnosis, treatment, and care [4–6]. Studies suggest that patients who prefer an active role in medical decision-making experience higher levels of satisfaction with their care and, in some cases, better psychological and health outcomes [7–9]. These findings have led to recommendations that patient-centered care be prioritized within healthcare systems, ensuring that all patients receive the necessary information and the opportunity to participate to the extent they desire in decisions affecting their care [2, 10, 11].

Various studies have evaluated the preferences of cancer patients in medical decision-making, indicating that factors such as gender, age, and educational level influence the degree of desired participation [11, 12]. Research shows that women prefer greater involvement in shared decision-making compared to men [9, 12, 13]. Younger patients, those with higher education levels, and those actively employed tend to prefer a more active role in treatment decisions [14, 15]. However, less is known about how these and other factors, such as patients' health literacy or the clinical context, influence the roles they assume in medical decision-making.

Most previous research has focused on breast cancer patients, leaving gaps in knowledge regarding other cancer types and demographic groups [16, 17]. For instance, studies have found that university-educated patients under the age of 65 take a more active role in treatment decisions compared to older patients or those with lower education levels [15, 18]. Additionally, patients who perceive support from their physicians to actively participate in decision-making are more likely to be involved [2, 10, 12]. However, there is limited data on whether these preferences and roles differ based on clinical characteristics, such as tumor type or disease stage.

Table 1 Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
Age ≥ 18 years	Severe mental illness affecting comprehension (e.g., psychosis, major cognitive decline)
Histologically confirmed advanced solid tumor (unresectable/metastatic)	Physical condition preventing participation
Candidate for systemic cancer treatment	Participation in another clinical or psychosocial research study
Able to understand and complete questionnaires in Spanish	Receipt of oncologic treatment for a different advanced cancer within the past 2 years
First consultation in Medical Oncology or consultation within the previous month for decision-making about first-line antineoplastic treatment	

Given the growing emphasis on patient-centered care in oncology, it is essential to better understand the factors that influence patients' roles in medical decision-making. Therefore, the aim of this study was to examine how sociodemographic and clinical variables are associated with decision-making preferences among patients with advanced cancer.

Methods

Study design and patients

This was a prospective, observational, multi-institutional study supported by the Bioethics Group of the Spanish Society of Medical Oncology (SEOM). It was conducted across 15 tertiary hospitals in Spain, between February 2020 to October 2024.

Participants were eligible if they were aged 18 years or older, had a histologically confirmed diagnosis of advanced, unresectable cancer, and were candidates for systemic cancer treatment. Exclusion criteria included severe mental illness or cognitive impairment that prevented informed consent or questionnaire completion. Detailed inclusion and exclusion criteria are summarized in Table 1.

Patients were invited to participate during their initial oncology visit. Those who provided written informed consent received self-administered questionnaires to complete at home and return at their next appointment. Clinical and sociodemographic data were obtained from medical records or directly from patients and entered into a secure online platform (www.neoetic.es).

Study variables

We collected sociodemographic data (age, sex, marital status, education level, and employment status) and clinical information (tumor site, histological type, disease stage, ECOG performance status, and survival prognosis). In addition, psychological variables were assessed via validated self-administered questionnaires and included coping strategies, perceived dignity, resilience, satisfaction with healthcare, preferences for participation under uncertainty, and the quality of the therapeutic alliance with physicians.

Measures

Sociodemographic and psychological data were collected using self-administered questionnaires that patients completed at home and returned to the study support staff at their next visit to the Medical Oncology Department. Clinical information was obtained by oncologists through review of medical records and patient interviews. All data were entered into an anonymized online case report form.

Control Preferences Scale were assessed using a scale that asked patients [19, 20]: “Which statement best describes the role you played in the decision about [modality] for your cancer?” Response options included: “You made the decision with little or no input from your doctors,” “You made the decision after considering your doctors’ opinions,” “You and your doctors made the decision together,” “Your doctors made the decision after considering your opinion,” and “Your doctors made the decision with little or no input from you.” Responses 1–2 were categorized as Patient Control, response 3 as Shared Control, and responses 4–5 as Physician Control [21]. This three-profile classification—Patient Control (predominantly patient-driven decisions), Shared Control (joint decision-making), and Physician Control (predominantly physician-driven decisions)—enabled exploration of how individual characteristics shape decision-making preferences. We hypothesized that sociodemographic factors (e.g., gender, education, employment) would have a stronger influence on these preferences than clinical variables.

Cancer coping strategies were assessed using the Mini-Mental Adjustment to Cancer (Mini-MAC) scale [22]. This scale comprises 28 items that measure four coping factors: anxious preoccupation, helplessness, positive attitude, and cognitive avoidance. Responses are given on a 4-point Likert scale, with higher scores on each subscale indicating a greater reliance on that specific coping strategy. The Spanish version of the Mini-MAC has a Cronbach’s alpha of 0.88 to 0.90 [23].

Dignity was assessed using the Palliative Patient Dignity Scale (PPDS) [24]. This instrument consists of eight items that evaluate the preservation of dignity, defined as respect for oneself, others, and the right to decide peacefully how one wishes to be treated. Conversely, threats to or loss of dignity are assessed through feelings of insecurity, violation of personal values, and personal or social support exhaustion. Items are scored on a 9-point Likert scale, with total scores ranging from 0 to 72; higher scores indicate greater perceived dignity. The value of Cronbach’s alpha was 0.75 [24].

Resilient coping strategies were assessed using the Brief Resilient Coping Scale (BRCS) [25]. This scale consists of 4 items that evaluate the ability to cope with stress in a resilient manner. Responses are scored on a 5-point Likert scale, where 1 indicates “does not describe you at all” and 5 indicates “describes you very well.” The total score ranges from 4 to 20, with higher scores reflecting greater resilience. The value of Cronbach’s alpha in Spanish version was 0.85 [26].

Participation in Uncertain Contexts was assessed by asking patients [27]: “If the evidence about the benefits of a treatment is unclear or uncertain, what level of participation would you prefer in the decision?” Patients rated their preference on a scale from 0 to 100, where 0 indicated “I prefer to make the decision myself” and 100 indicated “I prefer the physician to make the decision entirely.”

Patient satisfaction with healthcare was assessed using nine items derived from the Consumer Assessment of Healthcare Providers and Systems (CAHPS) [26, 28]. Six items focused on physician communication (e.g., listening carefully, explaining things clearly, providing information about treatments, encouraging questions, and showing courtesy and respect), while three items measured satisfaction with decision-making (e.g., satisfaction with the information provided, the decision-making process, and the decisions made). Each item was rated on a 5-point Likert scale, with higher scores indicating better communication with physicians and greater satisfaction with decision-making [21]. In our sample the value of internal Cronbach’s alpha was 0.86.

Physician-patient relationship was assessed using the Scale to Assess the Therapeutic Relationship (STAR-P), designed to evaluate the therapeutic alliance between patients and their physicians [29]. The scale consists of 12 items, each rated on a 5-point Likert scale ranging from 0 (never) to 4 (always). Higher scores indicate a stronger physician-patient relationship. The value of internal Cronbach’s alpha was 0.85 [29].

Data analysis

Demographic, clinical, and psychological variables were described using means, standard deviations (SD), numbers (N), and percentages (%) as appropriate. Differences among the three decision-making profiles—Patient Control (PC), Shared Control (SC), and Physician Control (PhC)—were analyzed using Chi-square tests for categorical variables and ANOVA for continuous variables. Post hoc comparisons were conducted with Bonferroni correction. Effect sizes were calculated using Eta squared (η^2), interpreted as small (0.01–0.06), medium (0.07–0.14), or large (≥ 0.14) [30]. All statistical tests were two-sided and the significance level was set at $p < .05$. Data were statistically analyzed using the Statistical Package for Social Sciences (SPSS) for Windows 26.0 (SPSS Inc, Chicago, Illinois).

Ethical considerations

The study was conducted in accordance with the principles of the Declaration of Helsinki and Good Clinical Practice. It received approval from the research ethics committees of all participating centers and was classified by the Spanish Agency of Medicines and Medical Devices (AEMPS; Code: ES1402015). All participants provided written informed consent prior to enrollment.

Results

Patient sociodemographic and clinical characteristics and Decision-Making preferences

Of the 1,257 patients initially recruited, 1,198 (95.3%) met eligibility criteria and were included in the final analysis. Fifty-nine participants were excluded: 14 did not meet inclusion criteria, 11 met an exclusion criterion, and 34 had incomplete data.

The final sample (*N* = 1,198) showed a balanced sex distribution (54% male, 46% female) and an age distribution of 43% ≤65 years and 57% >65 years. Most participants were married or in a partnership (70%), while 30% were not partnered. Regarding education, 59% had a primary-level education, and 41% had completed high school or higher. In terms of employment status, 65% were unemployed, and 35% were employed. Clinically, the most common tumor sites were bronco-pulmonary (30%), colorectal (15%), and pancreas (10%), while tumors at other sites accounted for smaller proportions. Adenocarcinoma was the predominant histological type (65%), and most participants were in the metastatic stage of the disease (76%). Regarding functional status, 65% had an ECOG score of 0 or 1, while 35% had a score of 2 or more. Finally, survival prognosis was evenly distributed, with 50% of participants estimated to survive < 18 months and the remaining 50% expected to survive ≥ 18 months.

In this study, participants were classified into three profiles based on their role in medical decision-making: Patient Control (PC), where individuals primarily direct their own care decisions; Shared Control (SC), characterized by a collaborative approach between the patient and physician; and Physician Control (PhC), in which decisions are predominantly guided by the physician with minimal patient involvement, see Table 2. The analysis revealed that sociodemographic variables, such as sex (p =.004), educational level (p =.001) and employment status (p =.001), were significantly associated with control profiles. Specifically, men were more represented in the Physician Control group (41%) compared to women (31%). Conversely, women had greater representation in the Patient Control group (57%) compared to men (49%). Regarding educational level, participants with secondary or higher education were more represented in the Physician Control group (43%) compared to those with primary education (31%). Finally, in terms of employment status, unemployed participants were more represented in the Patient Control group (57%) compared to employed participants (46%). On the other hand, clinical variables, such as tumor site, histology, disease stage, and treatment type, did not show significant differences across control profiles (p >.05). Similarly, prognostic variables, such as estimated survival (< 18 months versus ≥ 18 months), were evenly distributed among the groups (p =.142).

Psychological characteristics and Decision-Making preferences

The psychological characteristics of the sample were assessed using multiple scales, revealing significant differences across decision-making roles, see Table 3. Regarding coping with cancer (measured by the Mini-Mental Adjustment to Cancer Scale, M-MAC), participants in the Physician Control group reported significantly lower levels of anxious preoccupation (49.1 ± 22.0) compared to the Patient Control (52.4 ± 21.8) and Shared Control groups (53.1 ± 20.7; p =.026, η^2 = 0.006). Helplessness scores were also significantly lower in the Physician Control group (25.9 ± 22.9) compared to the Patient Control (32.6 ± 27.5) and Shared Control groups (32.5 ± 26.9; p =.001, η^2 = 0.015). Conversely, the Physician Control group demonstrated significantly higher scores for positive attitude (81.3 ± 15.7) compared to the Patient Control (78.0 ± 17.0) and Shared Control groups (76.3 ± 20.5; p =.001, η^2 = 0.011). Cognitive avoidance did not differ significantly across groups (p =.434).

Regarding dignity (PPDS), the Physician Control group showed the highest scores (58.5 ± 9.6), followed by Shared Control (57.5 ± 9.6) and Patient Control (54.6 ± 12.0), with significant differences (p =.001, η^2 = 0.027). Similarly, Resilience (BRCS) was also greater in the Physician Control group (14.4 ± 3.9) compared to the Shared Control (13.6 ± 4.1) and Patient Control groups (13.7 ± 4.2; p =.015, η^2 = 0.007). Participants in the Physician Control group had higher scores in Participation in Uncertain Contexts (PUC: 86.2 ± 27.3) and decision satisfaction (CAPHS: 10.4 ± 3.0) compared to Shared Control (PUC: 83.5 ± 29.6; CAPHS: 10.3 ± 2.9) and Patient Control groups (PUC: 81.2 ± 28.6; CAPHS: 10.1 ± 3.5; respectively, p =.017, p =.001). Satisfaction with physicians (STAR) was also significantly higher in the Physician Control group (39.3 ± 7.3) compared to the Shared Control (37.9 ± 6.5) and Patient Control groups (36.8 ± 8.8; p =.001, η^2 = 0.021). The results indicate psychological differences between decision-making profiles. Participants in the Physician Control group report lower levels of distress (e.g., anxious preoccupation and helplessness) and higher levels of positive adjustment (e.g., positive attitude, dignity, resilience, and satisfaction), suggesting an association between physician-guided decision-making and more favorable psychological outcomes.

Discussion

In this study, sociodemographic characteristics, particularly gender, educational level, and employment status, emerged as the primary determinants of decision-making preferences among patients with advanced cancer, whereas clinical parameters (tumor site, disease stage, performance status) showed no significant influence.

Table 2 Sociodemographic and clinical characteristics according to Decision-Making preferences *(n* = 1,198*)*

Variable	Patient Control (*n* = 633, 53%)	Shared Control (*n* = 126, 10%)	Physician Control (*n* = 439, 37%)	χ^2	*p*-value
Sex				10.885	0.004
Male	342 (54)	68 (54)	280 (64)		
Female	291 (46)	58 (46)	159 (36)		
Age				2.192	0.334
≤ 65 y	273 (43)	44 (35)	177 (40)		
> 65 y	360 (57)	82 (65)	262 (60)		
Marital status				4.412	0.110
Married or partnered	443 (70)	81 (64)	323 (74)		
Not partnered	190 (30)	45 (36)	116 (26)		
Educational level				19.404	0.001
Primary	371 (59)	63 (50)	198 (45)		
High school or more	262 (41)	63 (50)	241 (55)		
Employment				13.101	0.001
Unemployed	410 (65)	68 (54)	240 (55)		
Employed	223 (35)	58 (46)	199 (45)		
Tumor site				9.516	0.484
Bronco-pulmonary	189 (30)	31 (25)	144 (33)		
Colorectal	95 (15)	23 (18)	69 (16)		
Pancreas	66 (10)	14 (11)	30 (7)		
Breast	78 (12)	12 (10)	47 (11)		
Stomach	43 (7)	11 (9)	28 (6)		
Others	162 (26)	35 (28)	121 (28)		
Histology				1.896	0.388
Adenocarcinoma	414 (65)	84 (67)	271 (62)		
Others	219 (35)	42 (33)	168 (38)		
Stage				2.885	0.236
Locally advanced	154 (24)	32 (25)	89 (20)		
Dis. metastases (IV)	479 (76)	94 (75)	350 (80)		
Type of treatment				3.788	0.876
Chemotherapy	329 (52)	68 (54)	223 (51)		
Immunotherapy	47 (7)	7 (6)	31 (7)		
Targeted therapies	33 (5)	6 (5)	17 (4)		
Others	224 (35)	45 (36)	168 (38)		
ECOG				1.943	0.378
0 or 1	410 (65)	86 (68)	272 (62)		
2 or more	223 (35)	40 (32)	167 (38)		
Estimated survival				3.898	0.142
< 18 months	319 (50)	63 (50)	195 (44)		
≥ 18 months	314 (50)	63 (50)	244 (56)		

Women, individuals with lower education levels, and unemployed patients were more likely to prefer an active or shared role, whereas men and those with higher education levels tended to favor physician-led decisions. Overall, more than half of the participants preferred an active role, and about one-third preferred physician control. These proportions are higher than those reported in a German study where preferences were more evenly distributed [14]. Cultural, contextual, and systemic healthcare differences may explain these discrepancies.

Our findings support the implementation of shared decision-making (SDM) models tailored to patients' sociodemographic profiles, especially in advanced cancer and palliative care. Such approaches may help align treatment decisions with patient values, improving both care experience and psychological outcomes, as supported by previous literature [14, 31, 32].

Patient preferences in medical decision-making were significantly associated with sociodemographic and psychological characteristics, while clinical factors, such as tumor location, stage, and survival, showed no significant impact. Variables such as gender, educational level, and employment status had a notable influence [33, 34]. Specifically, men in our study tended to prefer

Table 3 Psychological characteristics and Decision-Making preferences

Variable	Patient Control ($n=633$) M (SD)	Shared Control ($n=126$) M (SD)	Physician Control ($n=439$) M (SD)	χ^2	*p*-value	η^2
MAC. Anxious Preoccupation	52.4 (21.8)	53.1 (20.7)	49.1 (22.0)	3.670	0.026	0.006
MAC. Helplessness	32.6 (27.5)	32.5 (26.9)	25.9 (22.9)	9.280	0.001	0.015
MAC. Positive attitude	78.0 (17.0)	76.3 (20.5)	81.3 (15.7)	6.840	0.001	0.011
MAC. Cognitive avoidance	66.0 (24.5)	63.7 (22.9)	66.9 (24.4)	0.834	0.434	---
PPDS. Dignity	54.6 (12.0)	57.5 (9.6)	58.5 (9.6)	16.822	0.001	0.027
BRCS. Resilience	13.7 (4.2)	13.6 (4.1)	14.4 (3.9)	4.215	0.015	0.007
PUC. Participation in Uncertain Context	81.2 (28.6)	83.5 (29.6)	86.2 (27.3)	4.087	0.017	0.007
CAPHS. Satisfaction with decision	10.1 (3.5)	10.3 (2.9)	10.4 (3.0)	7.889	0.001	0.013
STAR. Satisfaction with physician	36.8 (8.8)	37.9 (6.5)	39.3 (7.3)	12.542	0.001	0.021

Abbreviations: SD = Standard Deviation; MAC = Mini-Mental Adjustment to Cancer; PPDS = Palliative Patient Dignity Scale; BRCS = Brief Resilient Coping Scale; PUC = Participation in Uncertain Context; CAHPS = Consumer Assessment of Healthcare Providers and Systems; STAR = Scale to Assess the Therapeutic Relationship; η^2 = Eta squared (effect size); --- = Not applicable

delegating decisions to physicians, whereas women were more inclined to take an active role. These differences may reflect variations in how men and women perceive their roles in healthcare and physician-patient relationship. Previous studies suggest that men may place greater trust in physician authority and feel more comfortable adopting a less participatory role [10, 13, 33]. However, this interpretation should be approached with caution, as such preferences could also be influenced by generation norms or healthcare experiences. In contrast, women often show a greater tendency to engage in shared or active decision-making, possibly driven by stronger communications expectations and desire to ensure that care aligns with their values [35, 36].

Similarly, participants with higher education and active employment were more likely to delegate decisions to the physician. This tendency may indicate greater confidence in the physician's expertise and a preference for relying on professional judgment when facing complex or emotionally charged decisions, rather than reflecting a lack of interest in participation. This interpretation aligns with findings from a large international study involving 1,490 advanced cancer patients across 11 countries, in which higher education levels were significantly associated with a preference for physician-led decision-making [11]. It has been suggested that more educated patients may recognize the limitations of their own medical knowledge and value clear guidance from specialist in uncertain clinical context [32, 37].

Nonetheless, other studies emphasize the need to support patients' autonomy and ensure that their values and preferences are recognized, regardless of educational level or who leads the decision-making progress [2, 10]. Physicians who actively engage with patients' beliefs and information needs are more likely to build trusting relationship and facility open discussion about preferred roles in decision-making [37, 38]. Such approaches may be especially valuable for patients with lower health literacy, who are often less empowered to participate meaningfully in decisions [10, 11].

Psychological characteristics further highlighted the differences in decision-making preferences. Patients who preferred to delegate decisions to their physician exhibited better psychological outcomes, including lower levels of distress (e.g., reduced anxious preoccupation and helplessness) and higher levels of positive adjustment (e.g., dignity, resilience, and satisfaction). These findings align with previous research suggesting that when patients trust their physicians to guide decisions, they may experience reduced psychological burden, particularly in contexts where medical evidence is strong or decisions are complex [1, 33, 39]. In contrast, participants who preferred to retain control themselves showed higher levels of distress, lower resilience, and reduced satisfaction, possibly reflecting the challenges of autonomous decision-making in high-risk medical contexts.

Our findings also align with studies indicating that decision-making preferences vary depending on the clarity and availability of medical evidence [3, 7, 38]. When the evidence supporting a treatment is strong, patients are more likely to engage in shared decision-making, characterized by collaborative discussions between patients and physicians [13, 40]. In contrast, when the evidence is unclear or absent, preferences for delegating decisions to the physician become more frequent, suggesting that patients may rely on their physicians in these uncertain contexts [41, 42]. This dynamic may reflect a desire to minimize personal responsibility for decisions when the benefits are ambiguous or when facing terminal conditions with limited curative options [7, 35].

Interestingly, the association between decision-making preferences and psychological well-being has significant implications for clinical practice. The higher satisfaction and better psychological outcomes observed in the physician-control group suggest that some patients may feel comfortable relinquishing control over complex decisions [1, 35]. This aligns with previous studies indicating that patients with more advanced illnesses often prefer less involvement in decision-making, possibly due to the emotional burden of managing a terminal diagnosis [33, 35]. These findings highlight the importance of healthcare providers tailoring their communication and decision-making strategies to the preferences and psychological needs of each patient.

Limitations

Despite the strengths of a large, multi-institutional cohort and a thorough assessment of sociodemographic, clinical and psychological variables, several limitations warrant consideration. First, the cross-sectional design—combined with the lack of stratification by disease progression or functional decline—precludes causal inference and leaves unresolved whether changes in severity directly modulate decision-making preferences. Second, variability in the interval between diagnosis and questionnaire completion may have introduced recall bias, as patients farther removed from their initial decision could recall their experiences differently. Third, we did not assess patients' prognostic awareness, a factor known to shape their desire for involvement in care decisions, nor did we systematically evaluate oncologists' communication styles or the framing of treatment options and prognostic information, both of which might have meaningfully influenced patient responses.

Clinical implications

These findings underscore the importance of tailoring decision-making support to each patient's background and emotional needs. Clinicians should recognize that sociodemographic factors—such as gender, education and work status—are stronger predictors of how patients wish to participate than are clinical or prognostic variables. In practice, this means offering more structured guidance and clear recommendations to those who prefer—or may benefit from—a physician-led approach, while actively inviting questions, discussing options in depth, and encouraging engagement among patients who seek greater autonomy. Screening for psychological distress and resilience at the outset of consultations can help identify individuals at risk of decisional overload; those reporting high anxious preoccupation or low resilience may require additional coaching or referral to supportive services before confronting complex choices.

Flexible patient-centered care models, especially in palliative and uncertain contexts, should therefore integrate routine assessment of both personal background and emotional resources. Embedding decision aids that adapt to a patient's preferred level of input, training clinicians in communication strategies that match these preferences, and establishing multidisciplinary support (including psycho-oncology) can enhance trust, satisfaction and overall well-being. Future interventions ought to test whether this stratified approach reduces decisional regret and improves quality of life in advanced cancer populations.

This multi-institutional study suggests that patients' decision-making preferences are influenced more by sociodemographic and psychological characteristics than by clinical or disease-related factors. While half of patients favor an active or shared role, one third prefer to defer decisions to their physicians—and those who do so show lower distress and better adjustment. By systematically assessing patients' backgrounds, coping styles and resilience, oncology teams can better align their communication and shared-decision processes with individual needs. Such personalization holds promise for optimizing patient experience and psychological outcomes across the trajectory of advanced cancer care.

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Author contributions
Conception and study design were done by P.J.F, and C.C. Data collection was made by A.F.M., L.R., J.P.L., E.A.M., and M.M.S. Data analysis was carried out by M.G. and C.C. All the authors participated in the writing of the article and approved the final manuscript.

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Data availability
The data used and analyzed during the current study are available from the corresponding author upon reasonable request.

Declarations

Ethics approval and consent to participant
This study was conducted in compliance with The Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects. The study was approved by the Research Ethics Committee of the Principality of Asturias (May 17, 2019) and by the Spanish Agency of Medicines and Medical Devices (AEMPS) (identification code: L34LM-MM2GH-Y925U-RJDHQ). The study is an observational, non-interventionist trial. All methods were carried out in accordance with relevant guidelines and regultations. Informed consent was obtained from all participants.

Consent for publication
Not applicable.

Competing interests
The authors declare no competing interests.

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