

Characterisation of the management pathway for muscle-invasive urothelial carcinoma from physicians’ perspectives in France, Germany, Italy, Spain, UK, US, Canada, China, and Japan

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Background

- Platinum-based neoadjuvant chemotherapy is the standard of care for platinum-eligible patients with muscle-invasive urothelial carcinoma (MIUC) followed by radical resection^{1,2}.
- For patients at high risk of disease recurrence, current guidelines suggest the use of adjuvant chemotherapy³. The novel PD-1 immune checkpoint inhibitor, nivolumab, has shown significant benefits versus placebo in clinical trials such as improved disease-free survival⁴. However, despite the availability of adjuvant treatment options, it is not universally used in MIUC⁵.
- Therefore, there is a need to understand and characterise the MIUC management pathway in clinical practice from physicians’ perspectives.

Objectives

- This survey aimed to understand the MIUC management pathway from physicians’ perspectives in 9 countries

Methods

- Real-world descriptive data were drawn from Adelphi’s MIUC Disease-Specific Programme™ – a point-in-time survey,⁶ conducted January-June 2021 with clinical/medical oncologists/urologists across France, Germany, Italy, Spain, UK, US, Canada, China, and Japan.
- Physician select have met the following inclusion criteria:
 - Specialty in medical oncology or urology
 - Providing medical consultations to a minimum of 4 MIUC patients per month
 - Personal responsibility for prescribing decisions
- Eligible physicians completed a quantitative survey capturing their demographics, workload, treatment use, and perspectives on MIUC management.

Results

Physician demographics

- A total of 320 physicians (61% medical/clinical oncologists, 80% qualified < 25 years ago, and 34% in university hospital practice) provided data. The mean number of MIUC patients managed by each physician at the time of data collection was 45 (Table 1).

Table 1. Baseline Physician Demographics

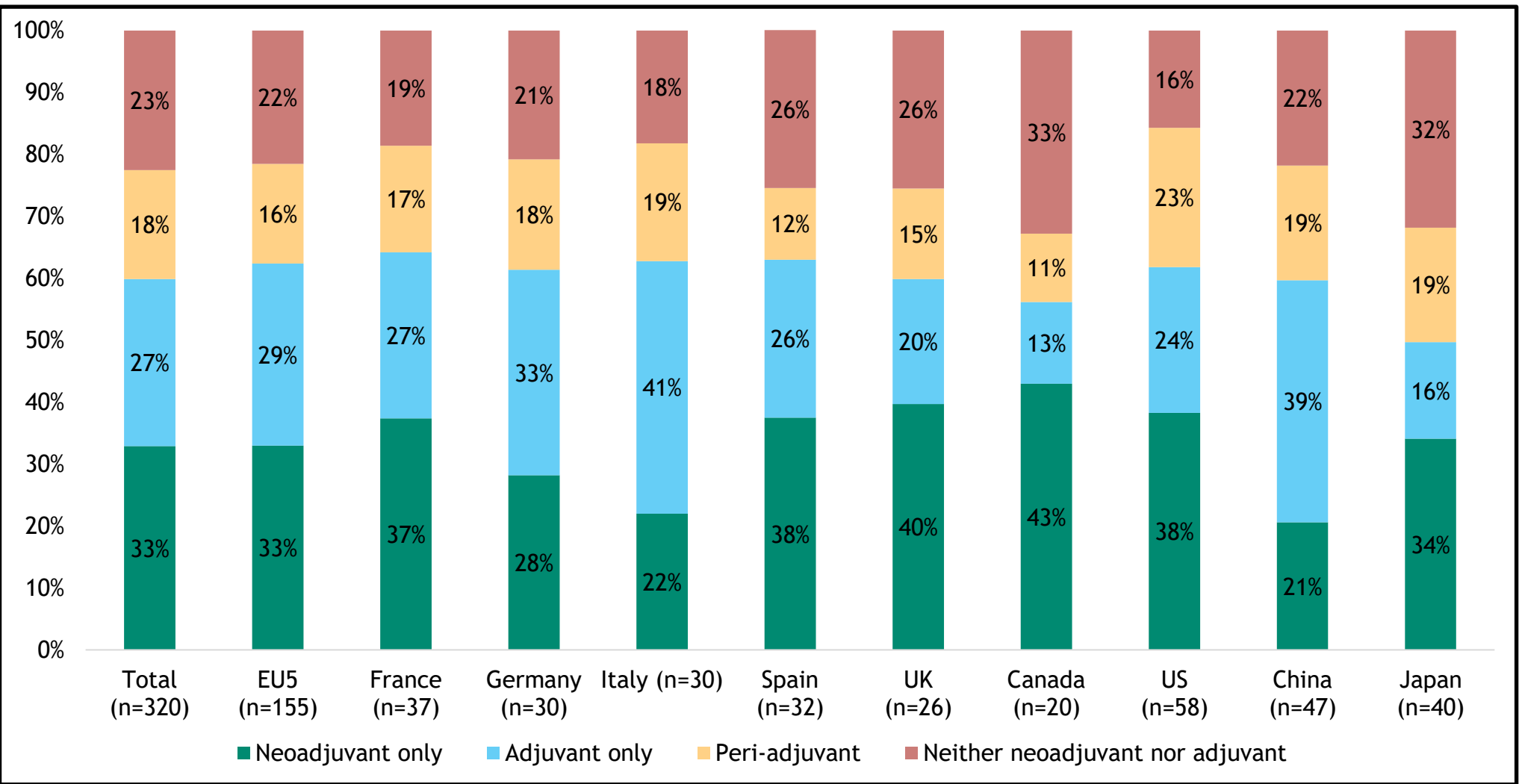
	Total n=320	EU5 n=155	France n=37	Germany n=30	Italy n=30	Spain n=32	UK n=26	Canada n=20	US n=58	China n=47	Japan n=40
Physician speciality, n (%)											
Medical/ Clinical oncologist	196 (61)	118 (76)	32 (86)	16 (53)	27 (90)	22 (69)	21 (81)	6 (30)	45 (78)	19 (40)	8 (20)
Urologist/Uro-Oncologist	124 (39)	37 (24)	5 (14)	14 (47)	3 (10)	10 (31)	5 (19)	14 (70)	13 (22)	28 (60)	32 (80)
Time since qualification, n (%)											
Before 1984	8 (2)	4 (3)	1 (3)	0 (0)	0 (0)	1 (3)	2 (8)	0 (0)	3 (5)	1 (2)	0 (0)
1984-1996	57 (18)	19 (12)	6 (16)	4 (13)	1 (3)	3 (9)	5 (19)	5 (25)	14 (24)	11 (23)	8 (20)
1997-2006	148 (46)	80 (52)	23 (62)	19 (63)	14 (47)	13 (41)	11 (42)	9 (45)	23 (40)	22 (47)	14 (35)
2007-2017	99 (31)	46 (30)	6 (16)	6 (20)	12 (40)	14 (44)	8 (31)	6 (30)	17 (29)	13 (28)	17 (42)
After 2017	8 (2)	6 (4)	1 (3)	1 (3)	3 (10)	1 (3)	0 (0)	0 (0)	1 (2)	0 (0)	1 (2)
Hospital type*, n (%)											
Base	n = 227	n = 94	n = 28	n = 9	n = 10	n = 30	n = 12	n = 13	n = 39	n = 44	n = 37
University hospital	109 (34)	55 (35)	13 (35)	0 (0)	6 (20)	27 (84)	9 (35)	10 (50)	9 (16)	25 (53)	10 (25)
General hospital	69 (22)	26 (17)	15 (41)	0 (0)	7 (23)	2 (6)	2 (8)	2 (10)	3 (5)	18 (38)	20 (50)
Community hospital	25 (8)	4 (3)	0 (0)	3 (10)	1 (3)	0 (0)	0 (0)	1 (5)	15 (26)	0 (0)	5 (13)
Cancer centre	22 (7)	8 (5)	0 (0)	6 (20)	1 (3)	0 (0)	1 (4)	0 (0)	12 (21)	1 (2)	1 (3)
Other	2 (1)	1 (1)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)
Mean number of MIUC patients managed at time of data collection											
Mean	45	44	40	29	36	43	78	101	58	23	28

EU5, France, Germany, Italy, Spain, and UK. *This question was only asked to physicians who stated they see ambulatory/outpatients in either a public or private hospital setting.

Use of neoadjuvant, adjuvant and per-adjuvant treatment

- Physicians reported, on average, 61% of their patients with MIUC managed at the time of data collection received surgery.
- Physicians also reported an average of 48% of their patients with MIUC received radical surgery .
- Physicians further reported that 61% of all their patients with MIUC were eligible for platinum-based neoadjuvant treatment.
- Physicians estimated 33% of their MIUC patients only received neoadjuvant treatment, 27% only received adjuvant treatment, 18% received both and 23% received neither.
 - Across all countries neoadjuvant usage ranged from 21% in China to 43% in Canada. Neoadjuvant therapy was frequently used in Canada (43%), the UK (40%), US (38%), Spain (38%), France (37%), and Japan (34%).
 - Adjuvant usage ranged from 20% in the UK to 41% in Italy. Adjuvant was also frequently used in China (39%).
 - There was minimal difference between the use of neoadjuvant therapy vs. adjuvant therapy in Germany (28% vs. 33%, respectively) (Figure 1).
- Across all countries, 23% of patients did not receive adjuvant or neoadjuvant therapy. This rate ranged from 18% in Italy to 33% in Canada. The countries with the highest proportion who did not receive treatment were Canada (33%) and Japan (32%) (Figure 1).

Figure 1. Neoadjuvant and Adjuvant Therapy prescribing by Country by physicians for eligible patients

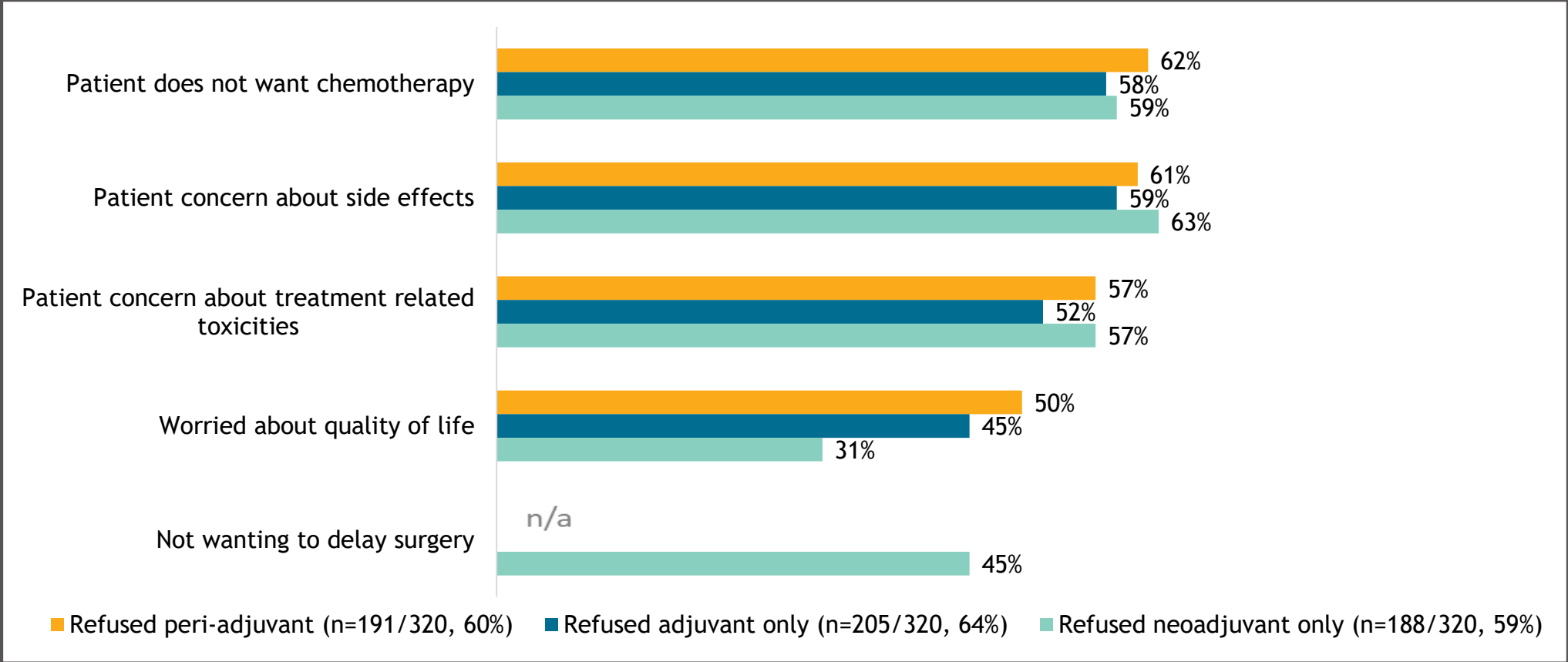


Percentages may not add up to 100% due to rounding.

Physician reported reasons for patient refusal to receive treatment

- Refusal of neoadjuvant or adjuvant therapy was reported for 12% of eligible patients across countries, which ranged from 9% in France, Germany, Spain and the UK, to 13% in Canada and US, 14% in China and 17% in Italy
 - Regardless of type of therapy, physicians reported more than half of eligible patients refused treatment due to not wanting chemotherapy (62%), and concern about side-effects (61%) or toxicities (57%) (Figure 2).
 - Half of patients who refused peri-adjuvant treatment (50%) and nearly half (45%) who refused adjuvant were concerned about QoL (Figure 2).
 - Nearly half of patients (45%) refused neoadjuvant treatment as they did not want to delay surgery (Figure 2).
- In Italy, physicians reported only 8% of eligible patients refused neoadjuvant treatment and 29% refused adjuvant treatment due to not wanting chemotherapy. Patient refusal due to concern about side effects was particularly high in Italy also (88%) (Figure 3,4).
- Refusal of neoadjuvant treatment and adjuvant treatment due to patient concern about treatment related toxicities was highest in Spain (89% and 94% respectively) (Figure 3,4).
- Refusal of neoadjuvant and adjuvant treatment due to concerns about QoL were lowest in France (0% and 21% respectively) (Figure 3,4).
- Refusal of peri-adjuvant treatment due to patient concern about treatment related toxicities was lowest in the US (24%) and highest in Spain (81%) (Figure 5).
- Refusal of peri-adjuvant treatment due to patient concern about side effects was lowest in France (29%) (Figure 5).

Figure 2. Physician-Reported Reasons for Eligible Patient Refusal to Receive Treatment



Please note 'n's in this figure refer to the number of physicians sampled who stated they had patients who refused the treatment(s) in question.

Figure 3. Physician-Reported Reasons for Eligible Patient Refusal to Receive Neoadjuvant Treatment

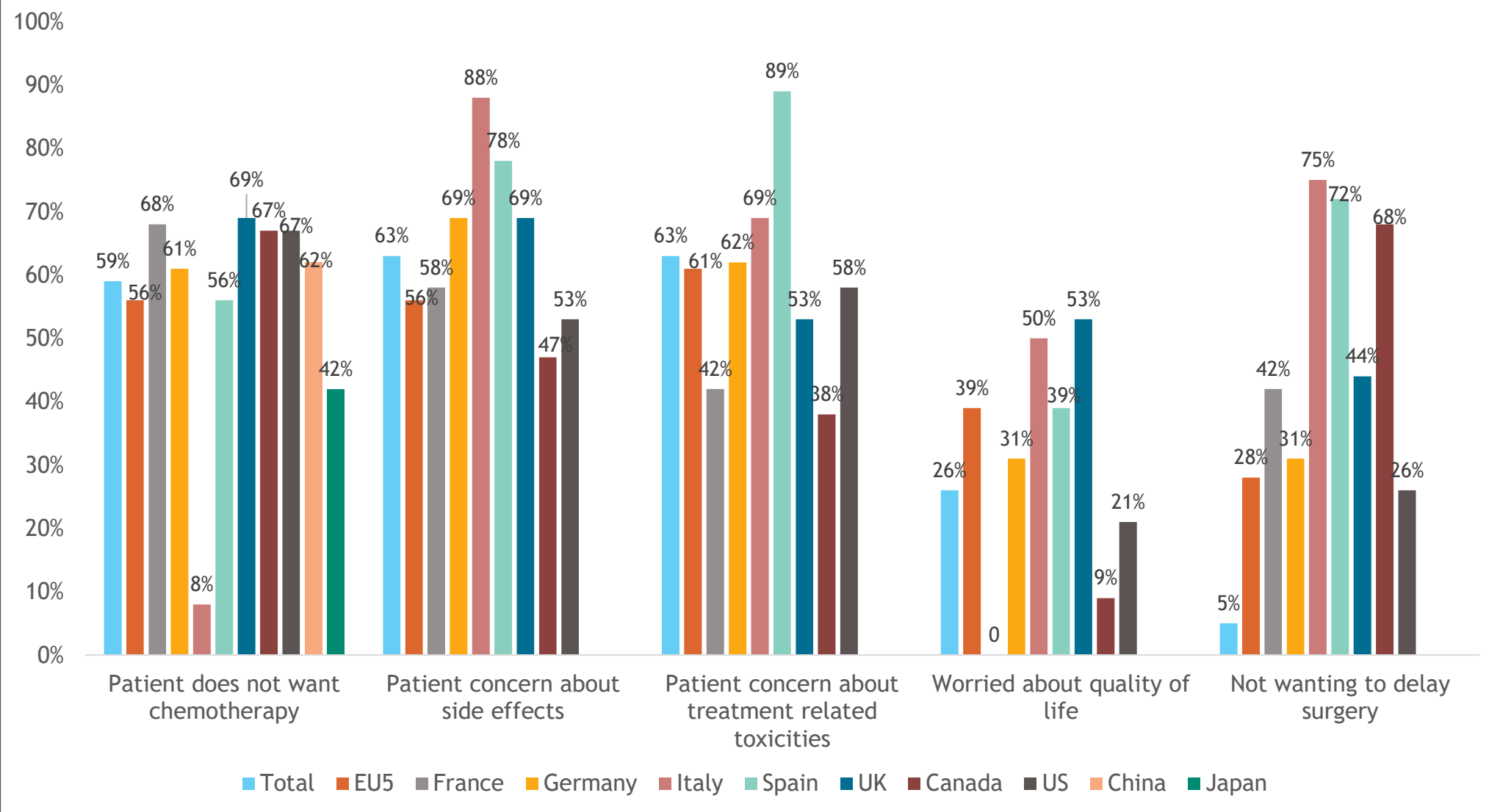


Figure 4. Physician-Reported Reasons for Eligible Patient Refusal to Receive Adjuvant Treatment

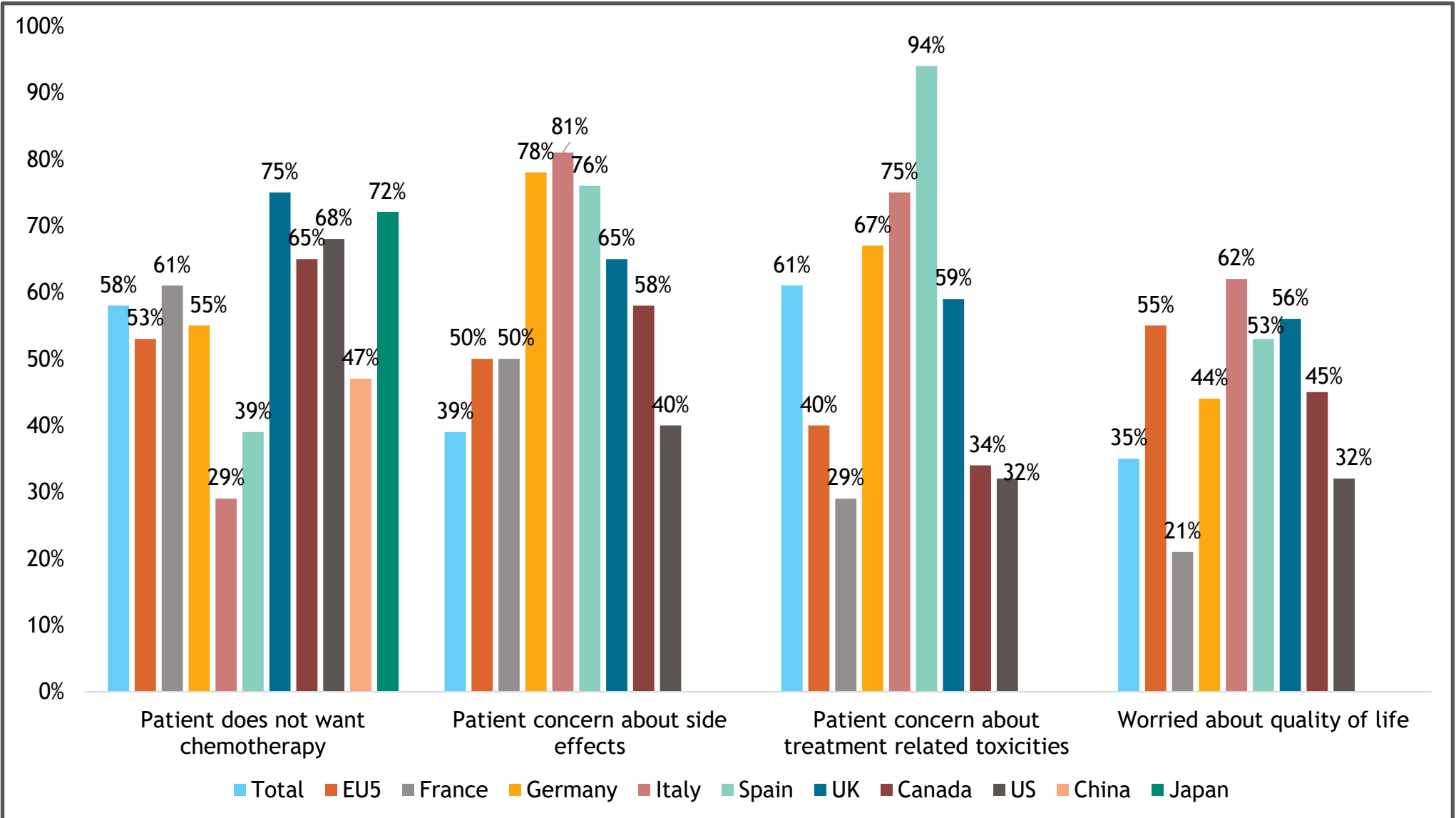
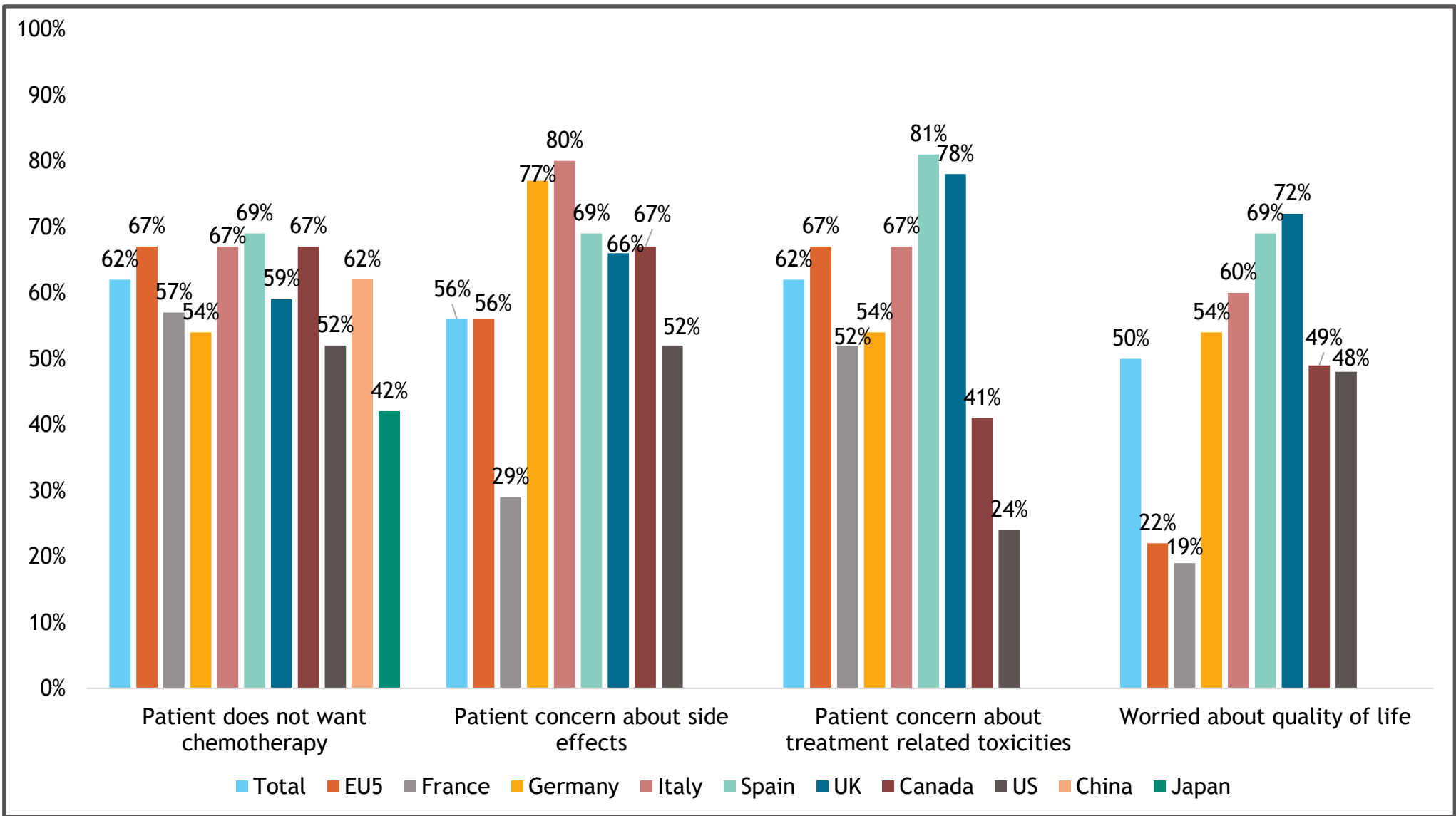


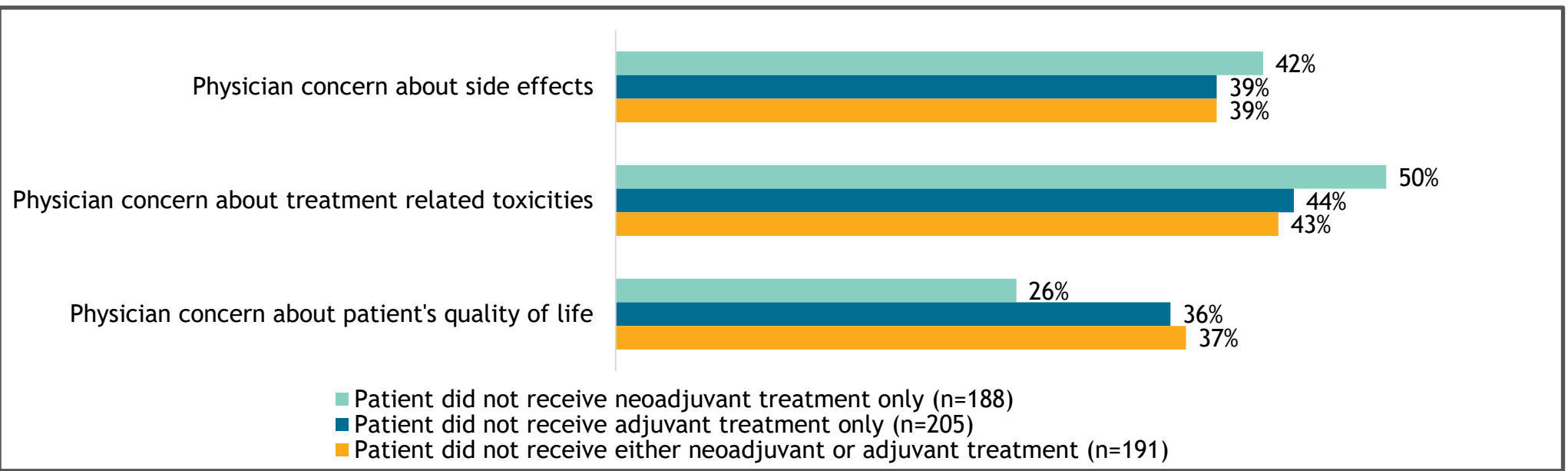
Figure 5. Physician-Reported Reasons for Eligible Patient Refusal to Receive Peri-Adjuvant Treatment



Physician reported reasons for not prescribing neoadjuvant and adjuvant treatment in eligible patients

- Among physicians who did not prescribe neoadjuvant and adjuvant treatment to eligible patients, the primary reason for not prescribing was physician concern about treatment related toxicities in both instances (50% and 44% respectively) (Figure 6).

Figure 6. Physician-Reported Reasons for Not Prescribing Neoadjuvant or Adjuvant Treatment in Eligible Patients

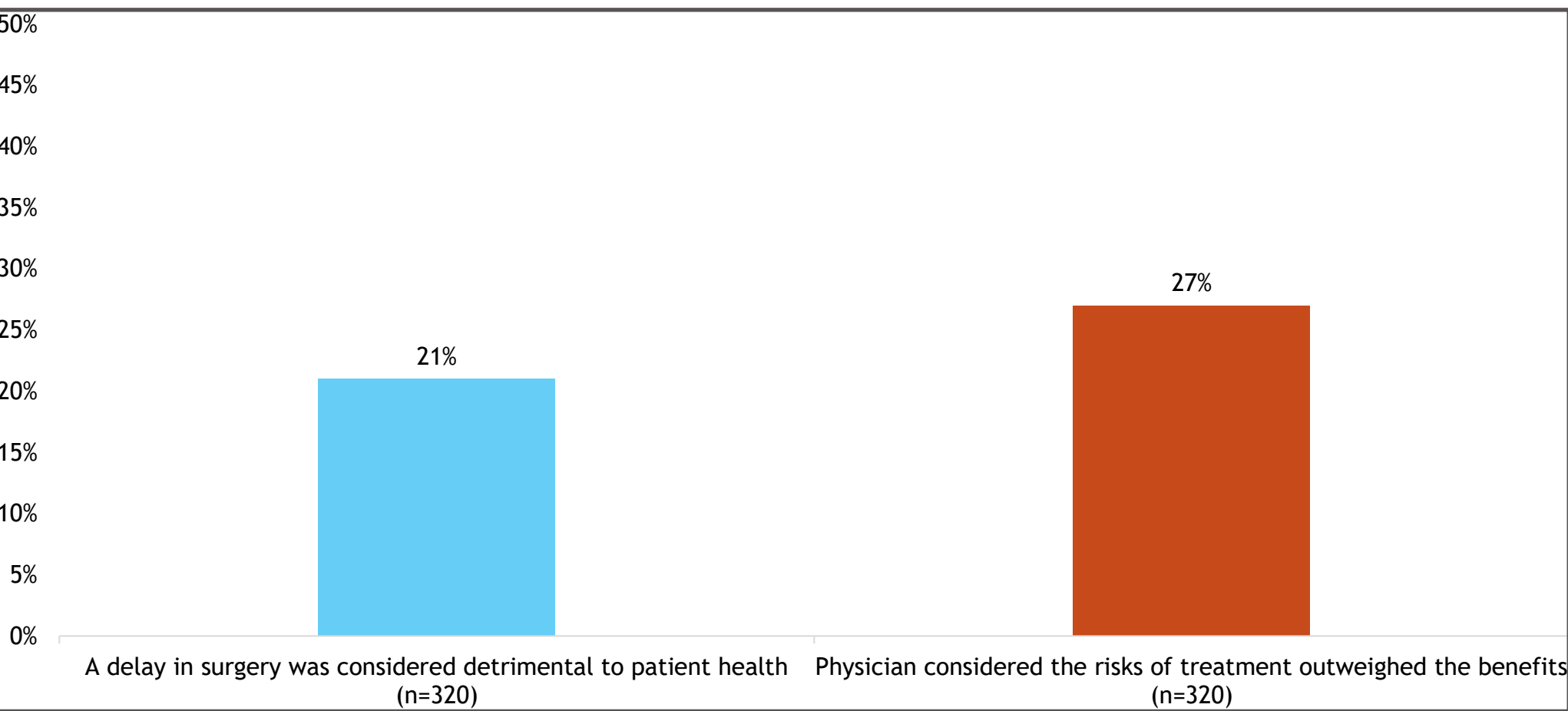


Please note 'n's in this figure refer to the number of physicians sampled who stated they had patients who did not receive the treatment(s) in question.

Primary reason for not prescribing neoadjuvant and adjuvant treatment in eligible patients who have received surgery

- Among physicians who did not prescribe neoadjuvant and adjuvant treatment to eligible patients, the primary reason for not prescribing was physician concern about treatment related toxicities in both instances (50% and 44% respectively) (Figure 7).

Figure 7. Physician-Reported Reasons for Not Prescribing Neoadjuvant or Adjuvant Treatment to Eligible Patients Who Have Received Surgery



Full sample for physicians is shown as this question was posed to all physicians. Percentages refer to the proportion of their patients in which physicians did not prescribe treatment.

Limitations

- The countries included in this research have distinct healthcare models and guidelines, and as such, differences in treatment use may reflect country specific healthcare considerations.
- The physicians surveyed represent a unique population within this sample and may not be representative of all physicians globally.

Conclusions

- There is substantive variation across countries regarding uptake of adjuvant and neoadjuvant therapy.
- Many eligible patients with MIUC are currently not receiving adjuvant or neoadjuvant therapy for various reasons.
- Fear of side-effects from chemotherapies, and unfavorable risk/benefit profile are the driving factors behind physician treatment choices and patient refusals.
- This is likely to perpetuate significant ongoing disease burden, highlighting a significant unmet need for therapies with increased benefits and reduced side-effects profiles, that do not impact QoL for patients, to improve outcomes.

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