

The Role of Gastroenterologists in Providing Initial Information on Treatment Options for Patients With Pancreatic Cancer in the United States and Europe: A Global Quantitative Survey

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INTRODUCTION

- Globally, it is estimated that in 2015, > 337,000 patients (pts) will be diagnosed with pancreatic cancer (PC), with mortality rates nearly equaling the incidence^{1,2}
- Gastroenterologists (GIs) are involved in PC diagnosis, generally as a consequence of pt presentation of nonspecific symptoms, such as abdominal, epigastric, or back pain; asthenia; weight loss; anorexia; jaundice; nausea; diarrhea; or vomiting³
- Following diagnosis, pts are frequently referred to medical oncologists or oncological surgeons⁴
- As the diagnosing physician in many cases, GIs are often the first physicians with an opportunity to describe treatment options to pts⁴
- Several systemic therapeutic options exist for treating pts with PC
 - Gemcitabine (Gem) and 5-FU ± leucovorin are recommended adjuvant treatments for patients with resectable PC^{5,6}
 - Gem, nab-paclitaxel + Gem, erlotinib + Gem, and FOLFIRINOX are recommended treatments for pts with metastatic PC (mPC)^{5,6}
- Healthcare systems and patterns of patient care differ by country
- We analyzed survey results from US and EU GIs to understand their interactions with pts about PC diagnosis and GI awareness of PC treatment options

OBJECTIVES

- To evaluate the roles of US and EU GIs in diagnosing PC and discussing and providing PC treatment

METHODS

Physicians (GIs [n = 695], primary care physicians [n = 700], surgeons [n = 522], palliative care specialists [n = 333], and emergency physicians [n = 236]) from the United States, United Kingdom, France, Germany, Spain, and Italy completed an online questionnaire between March and May 2014

GIs (EU [n = 495] and US [n = 200])

- Board certified or board eligible
- Currently in full-time practice with 2-35 years of in-practice experience
- Spend ≥ 50% of professional time treating pts
- Must have seen ≥ 3 pts with (diagnosed or suspected) PC in the last 6 months

RESULTS

Table 1. GI Practice Characteristics

| Characteristics | US | | EU | | | | | |
|--|-----------|-----------------|--------------|---------------------|---------------------|--------------------|--------------|--|
| | (n = 200) | Total (n = 495) | UK (n = 100) | FR (n = 100) | DE (n = 100) | ES (n = 95) | IT (n = 100) | |
| Time in practice, mean, years | 16 | 15 | 15 | 16 | 13 | 14 | 19 | |
| Patients seen in a typical month, mean, n | 305 | 252 | 223 | 223 | 315 | 274 | 229 | |
| Patients with (diagnosed or suspected) PC in the last 6 months, mean, n | 21 | 24 | 22 | 31 | 30 | 20 | 17 | |
| Primary practice location, % | | | | | | | | |
| Urban/city | 39 | 83 | 66 | 90 | 77 | 88 | 94 | |
| Suburban | 56 | 13 | 27 | 6 | 19 | 5 | 6 | |
| Rural | 6 | 4 | 7 | 4 | 4 | 6 | — | |
| Primary practice setting (select), % | | | | | | | | |
| Academic/teaching hospital | 23 | 46 | 40 | 32 | 51 | 75 | 35 | |
| Community hospital | 19 | 33 | — | 50 | 31 | 23 | 61 | |
| Nonteaching hospital | — | 10 | 49 | — | — | — | — | |
| Private group practice | 47 | 4 | — | 8 | 11 | 1 | — | |
| Physicians whose primary practice setting is multidisciplinary, % ^a | n = 99 | n = 26 | n = 0 | n = 13 ^b | n = 11 ^b | n = 2 ^b | n = 0 | |
| | 33 | 62 | — | 38 | 82 | 100 | — | |

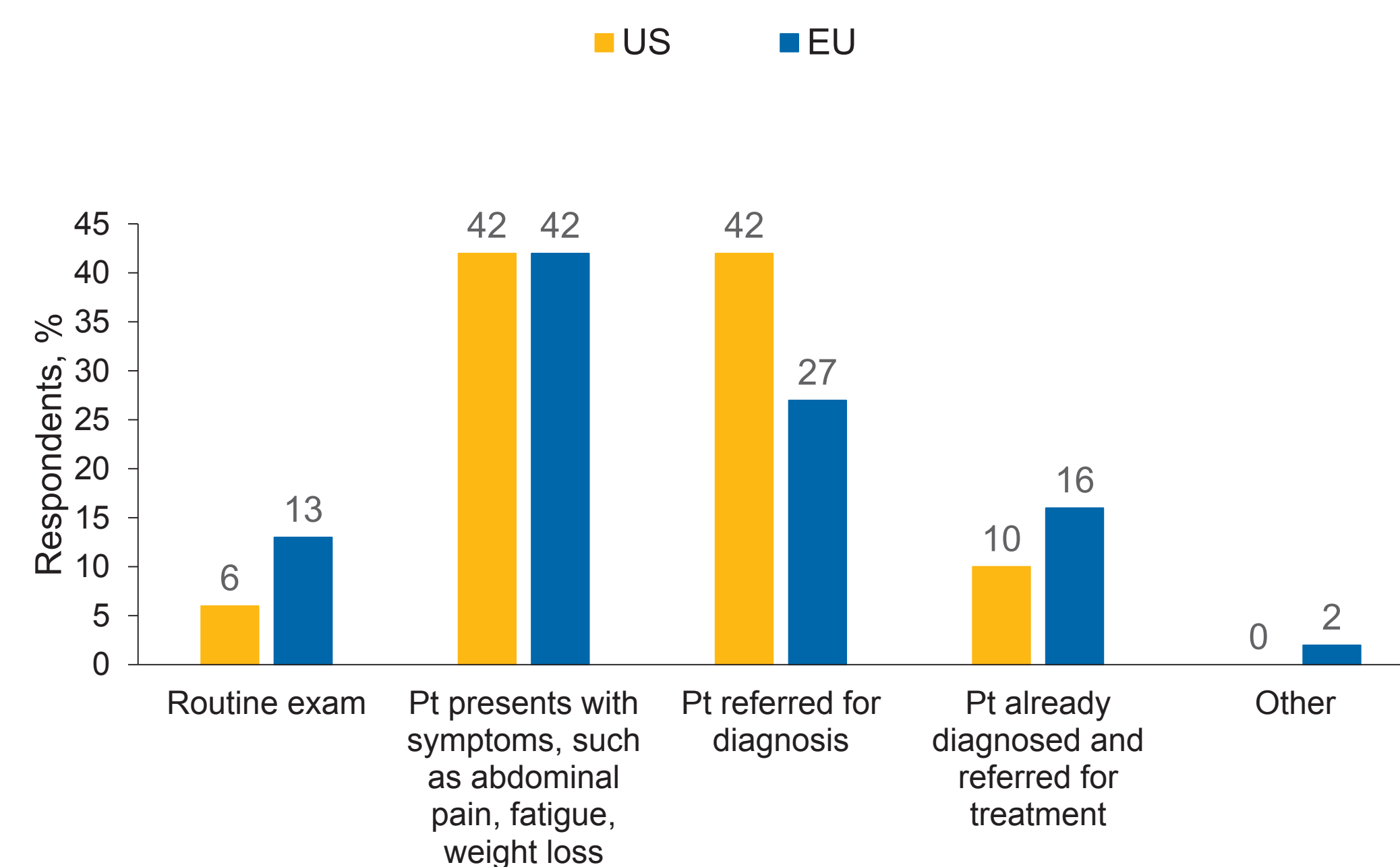
DE, Germany; ES, Spain; FR, France; IT, Italy.
^a Among physicians whose primary practice setting is a group practice.
^b Please note the small sample size.

- GI experience and pt interactions were similar, with a few exceptions
 - GIs in the United States reported seeing slightly more pts per month than those in the European Union (with the exception of Germany; Table 1)
 - GIs in France and Germany reported diagnosing or suspecting PC more often in the last 6 months compared with other countries (Table 1)
- In the European Union, GIs reported more frequent affiliation with academic/teaching or community hospitals, whereas GIs in the United States are more often part of a private group practice (Table 1)

5-FU, 5-fluorouracil; Cape, Capecitabine; FOLFIRINOX, leucovorin, 5-FU, irinotecan, oxaliplatin; FOLFOX, leucovorin, 5-FU, oxaliplatin.

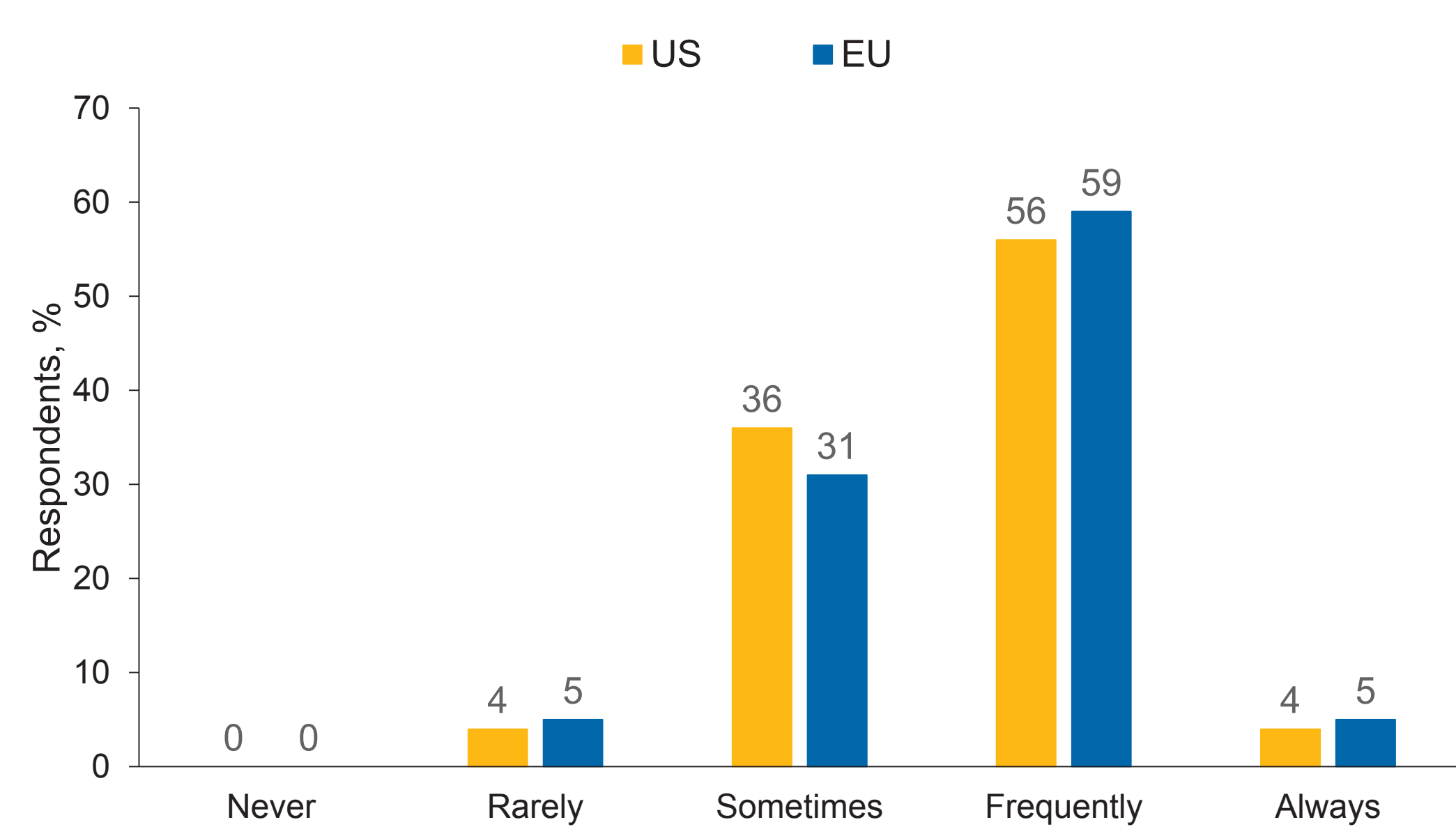
- In both the United States and European Union, GIs reported that their initial interaction with pts is typically as a result of PC symptoms or as a referral from another physician for PC diagnosis (Figure 1)
- In both the United States and European Union, GIs reported that they routinely make the initial PC diagnosis (Figure 2)

Figure 1. Initial Presentation of Pts With PC to GIs



Q: Over the last 6 months, how did your patients with known or suspected pancreatic cancer first present themselves to you?

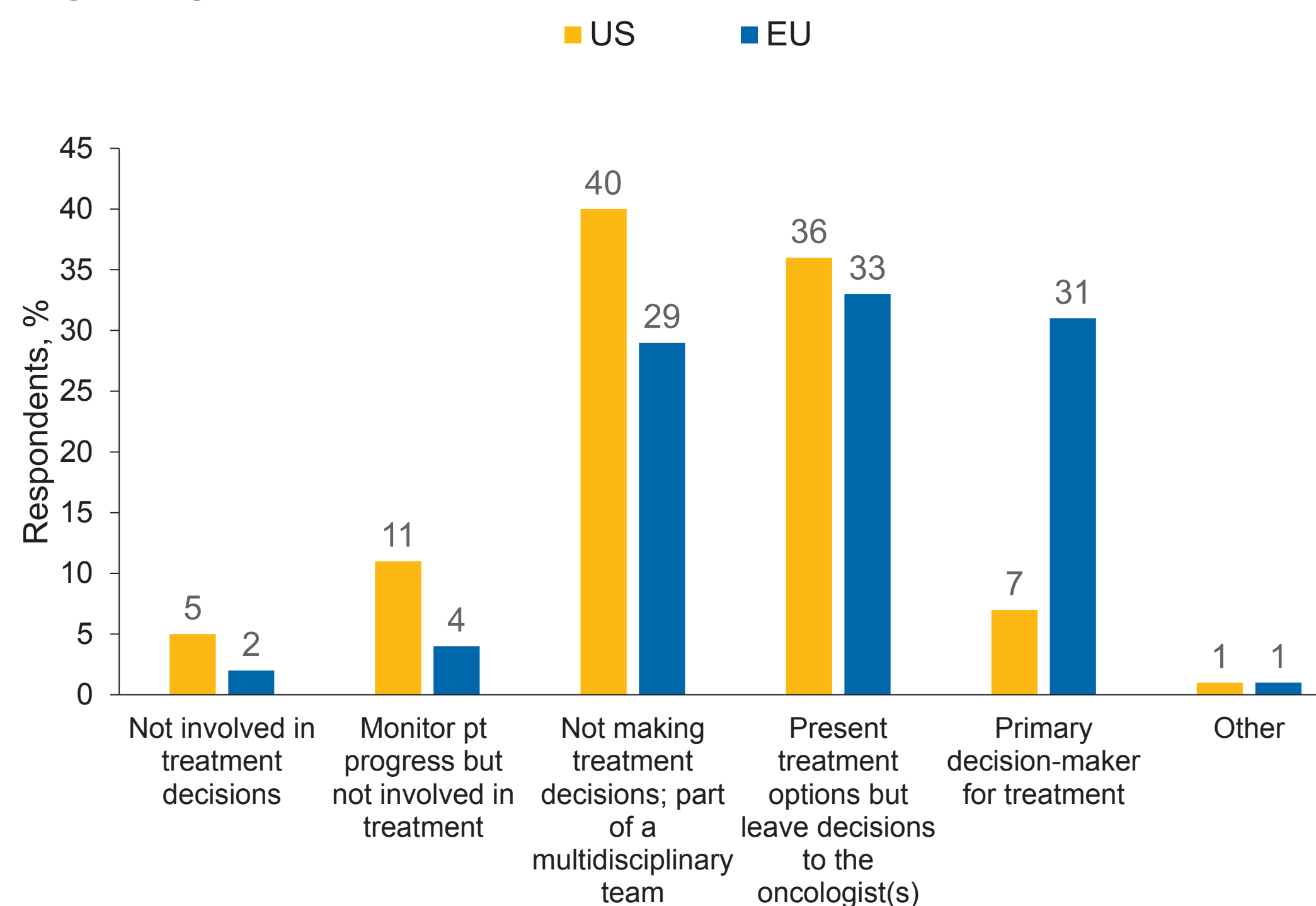
Figure 2. GIs frequently make the diagnosis of PC



Q: How often do you typically make the initial diagnosis of pancreatic cancer?

- A similar proportion of GIs in the European Union and United States reported presenting treatment options to their pts but leaving treatment decisions to the oncologist(s) (Figure 3)
- More GIs in the European Union than United States identified themselves as the primary decision-maker for the treatment of their pts with PC (Figure 3)
- More GIs in the United States than European Union reported being part of a multidisciplinary team of physicians involved in the treatment of pts with PC (Figure 3)

Figure 3. Significant numbers of GIs provide initial information regarding PC treatment.



Q: Please select the response that best describes your typical role in the treatment of your patients with pancreatic cancer.

- Overall, GIs in France and Germany most frequently reported prescribing chemotherapy (61% and 60%, respectively, compared with 27% to 30% in the remaining EU countries; Table 2)

Table 2. Treatments Prescribed by GIs in the European Union^a

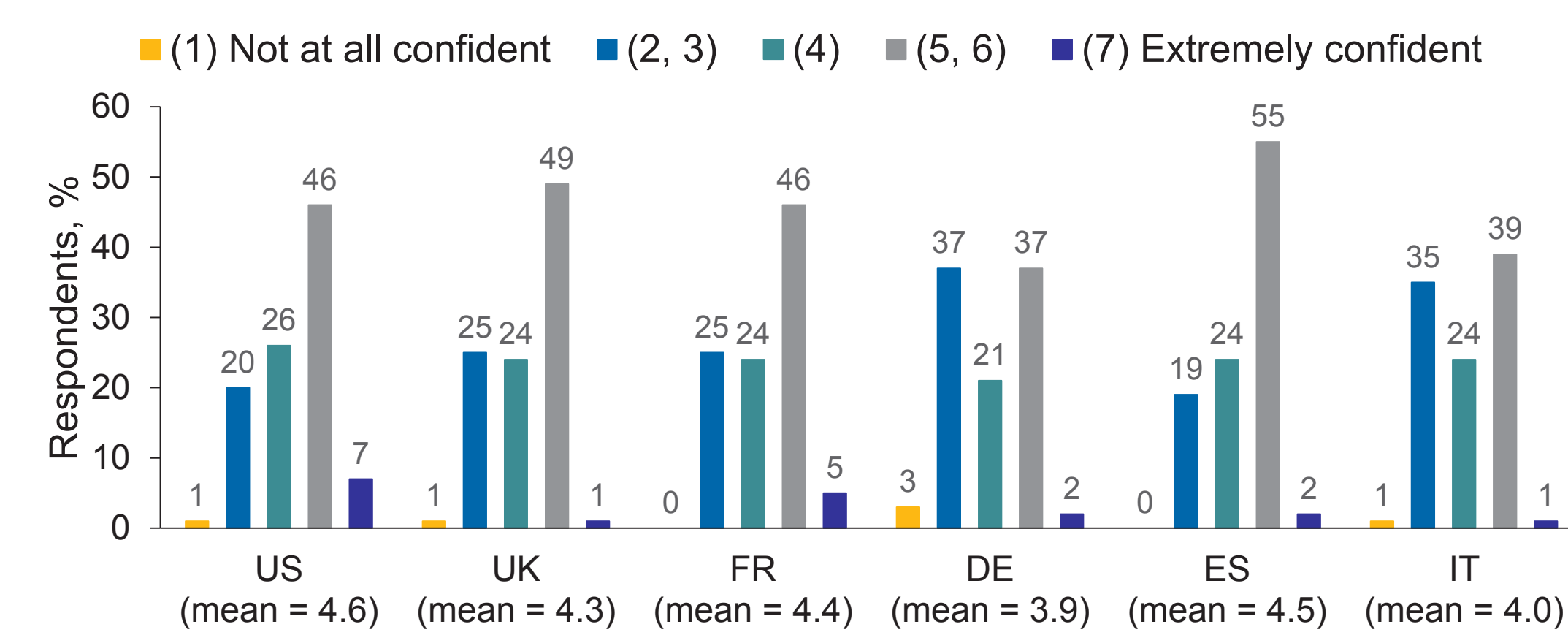
| Treatment, % | Total (n = 155) | UK (n = 12 ^b) | FR (n = 47) | DE (n = 56) | ES (n = 18) | IT (n = 22) |
|--------------------------|-----------------|---------------------------|-------------|-------------|-------------|-------------|
| Chemotherapy | 50 | 28 | 61 | 60 | 30 | 27 |
| Best supportive care | 21 | 34 | 20 | 18 | 28 | 18 |
| Chemotherapy + radiation | 12 | 19 | 9 | 8 | 23 | 16 |
| Surgery | 25 | 18 | 17 | 29 | 32 | 32 |
| Radiation therapy | 5 | 6 | 4 | 4 | 9 | 8 |
| Clinical trial | 6 | 5 | 6 | 6 | 5 | 5 |
| Observation only | 3 | 8 | 3 | 3 | 3 | 5 |
| Immunotherapy | 3 | 5 | 1 | 6 | 3 | 3 |

^a US respondents were not included in this analysis because they are unlikely to be prescribers.
^b Please note the small sample size.

Q: Thinking of your patients with pancreatic cancer, for what percentage of these patients do you utilize each of the following?

- Confidence in benefit provided by treatment options was moderate among GIs from all countries (Figure 4)
- US and EU respondents most frequently mentioned single-agent Gem (57% and 68%, respectively) and 5-FU (24% each) as treatment options for mPC
- Few US (23%) and EU (39%) GIs were aware of combination chemotherapy as a treatment option for mPC (Table 3). In addition, 29% and 18% of respondents, respectively, could not name a chemotherapy option for treatment of mPC
- Among US and EU respondents, contemporary regimens such as FOLFIRINOX (14% and 22%, respectively) and Gem-based combinations (7% and 22%, respectively) were mentioned infrequently
- GIs in France and Germany were more aware of commonly recommended treatment options for mPC compared with GIs from other EU countries (Table 3)

Figure 4. Many GIs do not feel confident regarding survival benefit from current treatments



Q: On a scale of 1 to 7, where 1 is "Not At All Confident" and 7 is "Extremely Confident," how confident are you that the treatment options for pancreatic cancer provide a meaningful benefit for your patients?

Table 3. Vast majority of GIs are unaware of current PC treatment regimens

| Total Mentions, % | US | | EU | | | | | |
|---|-----------|-----------------|--------------|--------------|--------------|-------------|--------------|--|
| | (n = 200) | Total (n = 495) | UK (n = 100) | FR (n = 100) | DE (n = 100) | ES (n = 95) | IT (n = 100) | |
| Nucleoside metabolic inhibitors | 63 | 73 | 64 | 89 | 92 | 55 | 64 | |
| Gem | 57 | 68 | 57 | 88 | 90 | 49 | 57 | |
| 5-FU | 24 | 24 | 31 | 12 | 30 | 25 | 23 | |
| Cape | 9 | 11 | 23 | 5 | 9 | 11 | 7 | |
| Combination chemotherapy | 23 | 39 | 23 | 70 | 63 | 15 | 23 | |
| FOLFIRINOX | 14 | 22 | 12 | 52 | 40 | 4 | 3 | |
| Gem-based combinations | 7 | 22 | 9 | 41 | 37 | 12 | 13 | |
| FOLFOX | 7 | 9 | 2 | 25 | 11 | 3 | 3 | |
| Platinum based | 12 | 18 | 16 | 6 | 21 | 21 | 24 | |
| Tyrosine kinase inhibitors | 7 | 12 | 6 | 9 | 27 | 7 | 8 | |
| No chemotherapies for the treatment of mPC come to mind | 29 | 18 | 27 | 6 | 3 | 37 | 18 | |

Q: What chemotherapies or combination of chemotherapies are you aware of for the treatment of metastatic pancreatic cancer?

CONCLUSIONS

- GIs in both the European Union and United States very commonly make the diagnosis of PC and initially counsel pts about their treatment options
- An appreciable proportion of GIs expressed low confidence in the benefit of treatment options
 - GIs frequently diagnose PC; hence, this lack of confidence in treatment benefit may negatively influence pt perspectives
- GI respondents demonstrated a relatively poor grasp of standard-of-care PC treatment regimens
- There is a clear need to educate GIs about PC treatment options
- The findings presented herein suggest a follow-up survey targeting GIs and educational initiatives for GIs are needed

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KKD: nothing to disclose; LK: employment, stock ownership, Celgene; ADR: nothing to disclose.

