The OligoPanc project: an interdisciplinary expert consensus statement on oligometastatic pancreatic cancer

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Currently, no consensus exists regarding the definition of oligometastatic pancreatic ductal adenocarcinoma, its necessary diagnostic measures, and potential treatment approaches. To address these knowledge gaps, the OligoPanc project brought together an interdisciplinary group of experts to establish consensus using a modified Delphi process and clinical vignettes. Participants agreed that the number of metastatic lesions and the number of affected organs are key elements in defining oligometastatic pancreatic ductal adenocarcinoma. Specifically, up to three lesions in a single organ, either the liver or the lung, define oligometastatic pancreatic ductal adenocarcinoma and could be either synchronous or metachronous. Necessary diagnostics include a triple-phase contrast-enhanced CT scan of the chest and abdomen and MRI of the liver with a hepatocyte-specific contrast agent. In unclear cases, [18F]fluorodeoxyglucose-PET CT or MRI can be considered. A multidisciplinary tumour board is essential. Patient-intrinsic factors, including age, do not define oligometastatic disease but should be considered for any treatment decision. Systemic treatment before any local consolidative treatment, including surgery, stereotactic ablative radiotherapy, or other locally ablative techniques, is mandatory. The proposed definition should be incorporated into future trials to improve comparability and enable validation.

Introduction

Pancreatic ductal adenocarcinoma is a deadly disease in which incidence closely parallels mortality.[1] While locally confined tumours are treated with a combination of surgery and neoadjuvant and adjuvant chemotherapy or radiotherapy, the presence of metastasis is considered a contraindication for local treatment.[2,3] However, there is increasing interest in the treatment of so-called oligometastatic pancreatic ductal adenocarcinoma and evidence from the 2024 EXTEND trial points to a potential benefit of systemic therapy in combination with local consolidative treatment compared with systemic treatment alone.[4] Local consolidative treatment can encompass various local treatments for metastases, including stereotactic body radiotherapy (SBRT), radiofrequency ablation, and surgical resection.[4] Several prospective trials, including randomised controlled trials (RCTs) have been launched to explore treatment strategies for this proposed disease state.[5–11]

Oligometastasis as a concept was initially suggested as an intermediate state in cancer biology, where local consolidative treatment might be beneficial due to a restricted metastatic capacity.[12] Guckenberger and colleagues proposed three major scenarios of oligometastasis: de novo diagnosed oligometastasis, induced oligometastasis, and repeat oligometastasis.[13] De novo diagnosed oligometastasis can either be synchronous or metachronous, depending on the timepoint of diagnosis. Induced oligometastasis occurs after treatment of an initially polymetastatic state and describes where a partial response of metastases occurs, which can manifest with an interval free of systemic treatment (ie, induced oligoprogression) or without (ie, induced oligorecurrence). Repeat oligometastasis describes recurrence after treatment of an initially oligometastatic state and can be further differentiated into repeat oligorecurrence and repeat oligoprogression, depending on whether a systemic treatment-free interval is present.

However, no consensus exists on the definition of oligometastatic pancreatic ductal adenocarcinoma, and studies, including ongoing RCTs, differ considerably in their definition and corresponding inclusion criteria.[14] This lack of standardisation hampers cross-study comparability and clinical progress.

To address these challenges, we convened the OligoPanc project, aiming to establish a consensus definition for oligometastatic pancreatic ductal adenocarcinoma. First, we conducted a systematic review on definitions of oligometastatic pancreatic ductal adenocarcinoma.[14] Then, using a modified Delphi technique and clinical vignettes, the project pursued two primary objectives: (1) develop a definition of oligometastatic pancreatic ductal adenocarcinoma and (2), evaluate potential diagnostic and treatment considerations of oligometastatic pancreatic ductal adenocarcinoma based on an expert consensus.

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Methods

Consensus development process

Consensus was assessed using a modified Delphi method and clinical vignettes to improve internal and external validity.[15] The reporting of the consensus process followed the ACCORD and DELPHISTAR guidelines, whenever applicable.[16,17] An interdisciplinary expert group was assembled. Experts were invited based on their scientific track record, especially as lead authors in topic-related publications on oligometastatic disease (eg, primarily pancreatic surgeons and radiation oncologists), and their contribution to clinical guidelines. Additionally, the board members of the International Study Group of Pancreatic Surgery, the Gastrointestinal Cancers faculty of the European Society of Medical Oncology (ESMO), the Guideline Committee Subgroup Upper GI of the European Society for Radiotherapy and Oncology, and the European Organisation for Research and Treatment of Cancer Gastrointestinal Tract Cancer Group were asked to participate. Two reminders were sent requesting participation. Notably, no involvement of patients, patient advocates, or members of the public was sought due to the technical nature of the study questions.

Modified Delphi technique

The modified Delphi technique is inconsistently defined.[18,19] For the purposes of this study, we refer to a modified Delphi technique where the initial questionnaire was primarily developed from a systematic review and input by the steering committee, rather than iterative development using open-ended questions in a first round.[14] After several modifications, a final questionnaire was agreed upon by the steering committee. For questions on diagnostics and treatment of oligometastatic pancreatic ductal adenocarcinoma, the level of evidence according to the GRADE recommendations was provided.[20] Questionnaires were sent to experts via Google Forms and a formal reminder was sent after 2 weeks.

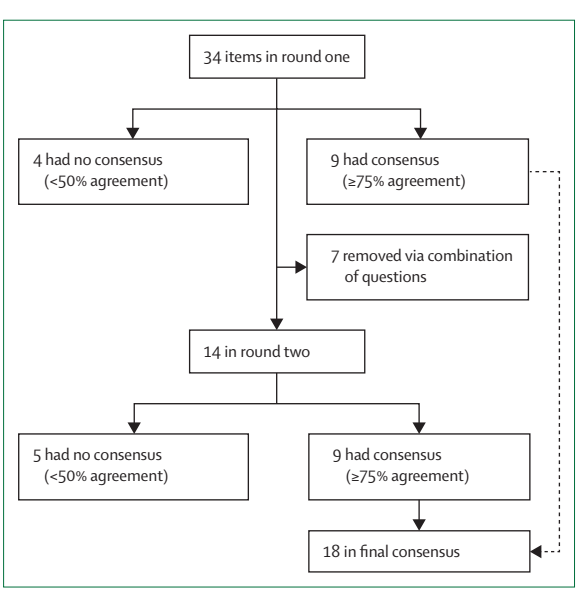

Figure 1: **Overview of the modified Delphi technique**

Besides demographic questions, 34 items were presented in the first round and 14 items were presented in the second round (figure 1); the number of rounds was predefined to two. Round one took place in the third quarter of 2024 and round two in the fourth quarter of 2024 (between Aug 3, 2024 and Dec 30, 2024). Additionally, an in-person meeting with the possibility to join virtually was held during the ESMO Gastrointestinal Cancer Conference in Munich, Germany on June 26, 2024. The voting process was anonymised in compliance with the Delphi method. A 5-point Likert scale indicating agreement (ie, 1 for very low and 5 for very high) was used for ratings. Criteria for the definition of consensus were predefined and provided to the participants in the questionnaire instructions. If more than 75% of participants indicated agreement (score 4 and 5) or disagreement (score 1 and 2), it was judged as consensus.[18,21] Statements that reached consensus were excluded from the subsequent round. Similarly, statements that reached less than 50% agreement were dropped. Statements with levels of agreement between 50% and 75% were again presented in the subsequent round. During the first round, the participants' comments were incorporated into the questions to improve clarity. Feedback was provided to the participants as aggregated group response in the second round based on the results of the first round. Furthermore, the questions regarding the number of metastases and the number of organs that most likely constitutes oligometastatic pancreatic ductal adenocarcinoma were combined and changed from the 5-point Likert scale to a matrix question for the second round, based on the participants' feedback. In a post hoc deviation from the study protocol, percent agreement to define consensus for this question was based on a relative majority instead of a greater than 75% agreement due to the complexity of evaluating two inter-related variables. Similarly, the questions on synchronous and metachronous oligometastasis were combined into a single question for round 2.

Clinical vignettes

Members of the steering committee were asked to contribute real-life clinical cases that potentially could be considered oligometastatic pancreatic ductal adenocarcinoma. Based on these cases and key items identified in the systematic literature review, clinical vignettes were designed and pilot-tested by the steering committee. After agreeing on the final vignettes, participants were invited to vote (appendix pp 3–10). Voting took place in parallel with the Delphi process; therefore, the participants were not aware of the results of the Delphi consensus when they voted on the clinical vignettes.

Each vignette followed a structured format with conditional logic guiding the sequence of the questions. Initially, participants were asked whether the patient presented in the vignette could be considered to have oligometastatic pancreatic ductal adenocarcinoma. If the response was yes, they were next asked to identify the most appropriate primary treatment for this patient. If the answer was no, the next vignette was presented, otherwise, we continued to question if and what kind of local consolidative treatment in addition to systemic treatment might be appropriate for the particular case.

The vignettes included the following variables for manipulation to assess their effects on response: the organ site of the metastatic lesion, timing of the metastasis (eg, synchronous versus metachronous), length of disease-free interval, resectability of the primary tumour according to National Comprehensive Cancer Network (NCCN) criteria, location of the primary tumour (eg, head, body, or tail), Eastern Cooperative Oncology Group status, age, CA19-9 and CEA serum biomarker levels, anatomical location of metastasis within the organ, size of the metastatic lesion, type of systemic treatment, biomarker and imaging response to systemic treatment, and selected mutational status (ie, *KRAS* and *BRCA*). Some vignettes refer to the same patient before and after induction chemotherapy (eg, vignettes 4 and 5, vignettes 7 and 8, and vignettes 9 and 10). Agreement was based on a relative majority.

Statistical analysis

Descriptive statistics are presented and no statistical inference was performed. No measures of inter-rater reliability were used for this study. The graphical abstract was created using BioRender (Toronto, Canada). All other analyses and visualisations were generated using R (version 4.3.2, R Foundation, Vienna, Austria).

Results

Of the 74 invited experts, 55 (74%) of 20 different countries from across five continents participated in all rounds of the modified Delphi process (appendix p 1). 20 (36%) of the 55 experts were medical oncologists, 16 (29%) were surgical oncologists, and 15 (27%) were radiation oncologists. 44 (80%) of participants practiced

	Item (number of respondents, n)	Agreement (number agreed, %)	Consensus agreement round
1	The number of affected organs is important for the definition of oligometastatic pancreatic ductal adenocarcinoma (n=55)	49 (89%)	Round 1
2	The number of metastatic lesions is important for the definition of oligometastatic pancreatic ductal adenocarcinoma (n=55)	54 (98%)	Round 1
3	The length of disease-free interval is important for the definition of metachronous oligometastatic pancreatic ductal adenocarcinoma (n=55)	43 (78%)	Round 1
4	A chest and abdominal CT is necessary for the diagnosis of oligometastatic pancreatic ductal adenocarcinoma (n=55)	53 (96%)	Round 1
5	An MRI with hepatocyte-specific agent is necessary for the diagnosis of oligometastatic pancreatic ductal adenocarcinoma (n=55)	41 (75%)	Round 1
6	A [^{18}F]fluorodeoxyglucose PET CT or PET MRI can be useful for the diagnosis of oligometastatic pancreatic ductal adenocarcinoma in unclear cases (n=55)	45 (82%)	Round 2
7	A peritoneal lavage cytology is not necessary for the diagnosis of oligometastatic pancreatic ductal adenocarcinoma (n=55)	46 (84%)	Round 2
8	A multidisciplinary tumour board decision is necessary for the diagnosis of oligometastatic pancreatic ductal adenocarcinoma (n=55)	51 (93%)	Round 1
9	The performance status in daily life is important for the treatment of oligometastatic pancreatic ductal adenocarcinoma (n=55)	45 (82%)	Round 1
10	The possibility of local consolidative treatment in addition to systemic treatment is important for the treatment of oligometastatic pancreatic ductal adenocarcinoma (n=55)	43 (78%)	Round 1
11	The resectability of the primary tumour according to National Comprehensive Cancer Network criteria is important for the treatment of oligometastatic pancreatic ductal adenocarcinoma (n=55)	42 (76%)	Round 1
12	Oligometastatic pancreatic ductal adenocarcinoma can be synchronous and metachronous disease (n=55)	42 (76%)	Round 2
13	A maximum of three lesions is oligometastatic pancreatic ductal adenocarcinoma (n=32)	19 (58%)	Round 2
14	A maximum of one organ site is oligometastatic pancreatic ductal adenocarcinoma (n=23)	10 (42%)	Round 2
15	The metastatic sites can be either the liver or lungs (n=47, n=50)	40 (86%) and 46 (91%)	Round 2
16	The response to preoperative systemic treatment based on imaging or tumour marker levels is important for the diagnosis of oligometastatic pancreatic ductal adenocarcinoma (n=55)	42 (76%)	Round 2
17	Patient-intrinsic factors (eg, age) are important for the treatment of oligometastatic pancreatic ductal adenocarcinoma (n=55)	43 (78%)	Round 2
18	Systemic treatment before local consolidative treatment of the primary and the metastasis is obligatory for the treatment of synchronous oligometastatic pancreatic ductal adenocarcinoma (n=55)	48 (87%)	Round 2

Table: **Consensus statements with agreement levels**

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within a university hospital and seven (13%) at a cancer institute.

Definition of oligometastatic pancreatic cancer

Consensus statements are presented in the table. 49 (89%) of 55 agreed that the number of affected organs and 54 (98%) of 55 agreed that the number of metastatic lesions are important for a definition of oligometastatic pancreatic ductal adenocarcinoma. Additionally, 42 (76%) of 55 agreed that synchronous and metachronous metastases can both be regarded as oligometastatic pancreatic ductal adenocarcinoma. For metachronous metastasis, 43 (78%) of 55 agreed that the length of the disease-free interval should be considered. 19 (58%) of 32 considered a maximum of three metastatic lesions. Ten (42%) of 23 agreed that oligometastatic pancreatic ductal adenocarcinoma involves a maximum of one organ site. As organ sites, 40 (86%) of 47 agreed with the liver and 46 (91%) of 50 agreed with the lungs.

Diagnosis of oligometastatic pancreatic cancer

A multidisciplinary tumour board decision was considered essential by 51 (93%) of 55 experts. Furthermore, 53 (96%) agreed that a contrast-enhanced abdominal and chest CT scan is necessary to diagnose oligometastatic pancreatic ductal adenocarcinoma. In addition, MRI of the liver with a hepatocyte-specific contrast agent was regarded as necessary by 41 (75%) of 55 experts. In unclear cases, 45 (82%) of 55 experts agreed that an [^{18}F]fluorodeoxyglucose PET CT or MRI can be considered. In comparison, 46 (84%) of 55 experts were in agreement that peritoneal lavage is not necessary for the diagnosis of oligometastatic pancreatic ductal adenocarcinoma. No consensus was reached on the role of diagnostic laparoscopy or if the size of the metastatic lesions and their growth dynamics should be considered in the diagnosis.

Treatment of oligometastatic pancreatic cancer

Consensus was reached on several items for the treatment of oligometastatic pancreatic ductal adenocarcinoma. Patient-intrinsic factors, such as age (43 [78%] of 55) and performance status in daily life (45 [82%] of 55), were deemed important by the participants. 48 (87%) of 55 considered systemic treatment necessary before local consolidative treatment of the primary tumour and the metastasis in cases of synchronous oligometastatic pancreatic ductal adenocarcinoma. Additionally, the response to systemic therapy, as assessed by imaging and serum levels of the tumour markers CA19-9 and CEA, is important in the treatment according to 42 (76%) of 55 experts. Also, the technical possibility of local consolidative treatment in addition to systematic treatment (43 [78%] of 55) and the resectability of the primary tumour according to NCCN criteria (42 [76%] of 55) were deemed important for the treatment of oligometastatic pancreatic ductal adenocarcinoma. No agreement was reached on the importance of genetic testing or absolute levels of CA19-9 and CEA for treatment decisions.

Case vignettes

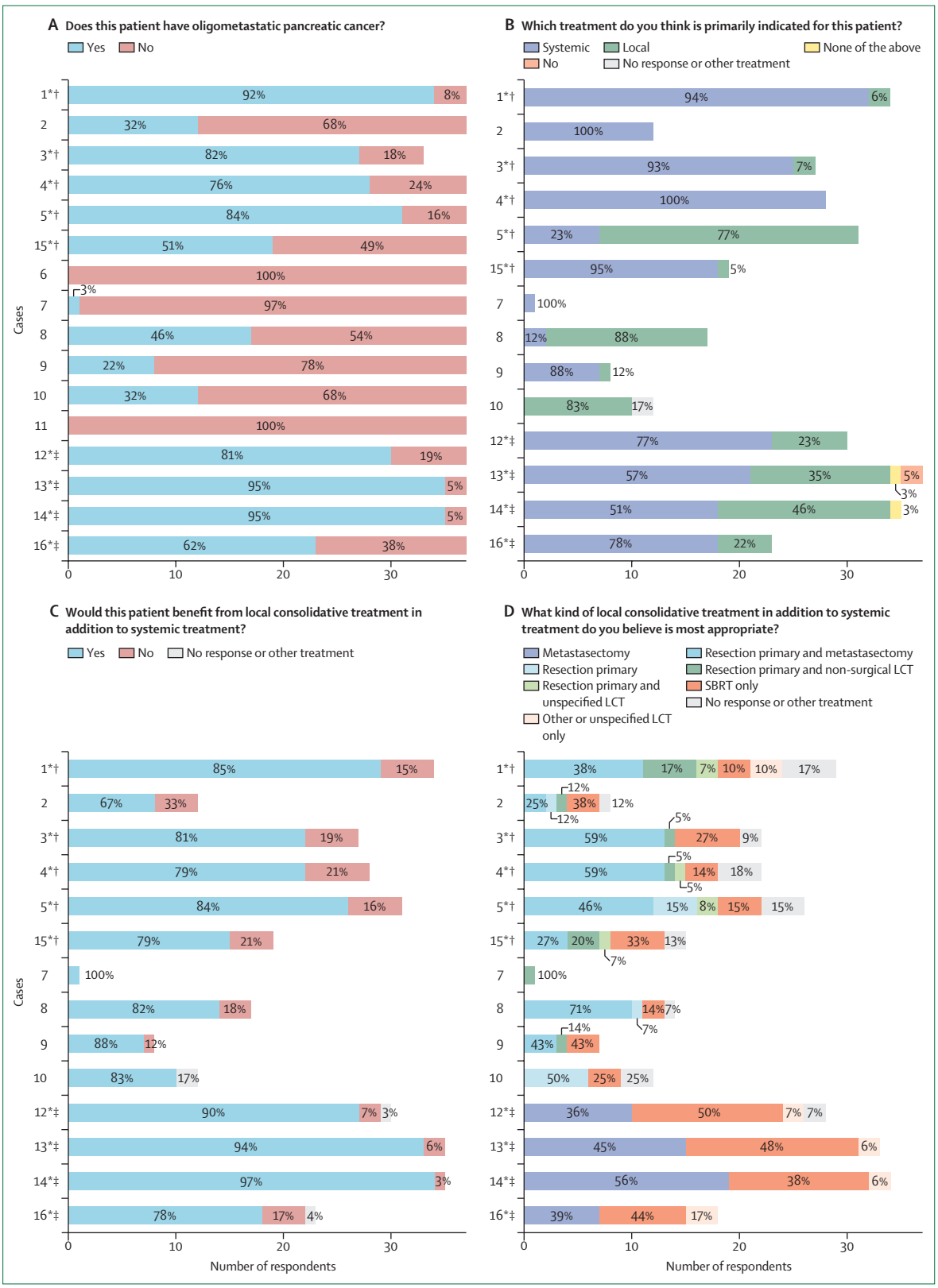
A total of 37 participants answered 16 clinical vignettes (figure 2). Of these, nine vignettes (vignettes 1, 3–5, and 12–16) were considered oligometastatic pancreatic ductal adenocarcinoma, with agreement ranging from 19 (51%) to 35 (95%) participants (appendix p 2). Vignettes included five synchronous and four metachronous metastases (figure 2A). Of these nine vignettes, local consolidative treatment was recommended by 24 (77%) of 31 experts as the primary treatment in one case (vignette 5) after a complete response to systemic treatment while systemic treatment was the preferred treatment strategy for the remaining cases (figure 2B). Across the nine vignettes, 78–97% of respondents agreed that all patients would benefit from local consolidative treatment in addition to systemic treatment, depending on the specific vignette (figure 2C). The type of recommended local consolidative treatment varied widely across the vignettes (figure 2D). For synchronous metastases (vignettes 1 and 3–5), metastasectomy combined with resection of the primary tumour was most frequently suggested following systemic treatment. In comparison, for metachronous metastases (vignettes 12, 13, 14, and 16), SBRT was most recommended, except for vignette 14 where metastasectomy was recommended. Compared with the other cases of metachronous disease, this case described a very long disease-free survival of 38 months.

Discussion

Oligometastatic disease is a poorly defined clinical concept, as evidenced by the heterogeneous criteria used within the past 5 years for RCTs investigating oligometastatic pancreatic ductal adenocarcinoma.[14] The OligoPanc project was initiated to formulate an international, interdisciplinary expert consensus on oligometastatic pancreatic ductal adenocarcinoma. Using a modified Delphi technique, we identified 18 items for which consensus was achieved. Additionally, clinical vignettes were used to capture real-life decision making. While the Delphi method facilitates structured consensus, responses to vignettes have been shown to predict real-life behaviours in similar scenarios and closely correlate with clinical practice.[15,22]

***Figure 2*: Expert responses for the clinical vignettes**

Clinical vignettes were presented to the 37 experts: (A) Does this patient have oligometastatic pancreatic ductal adenocarcinoma? (B) Which treatment do you think is primarily indicated for this patient? (C) Would this patient benefit from local consolidative treatment in addition to systemic treatment? (D) What kind of local consolidative treatment in addition to systemic treatment do you believe is most appropriate? For a more intuitive presentation, vignette 15 was grouped with the remaining synchronous metastasis vignettes. LCT=local consolidative treatment. SBRT=stereotactic body radiotherapy. *Cases that were considered by most experts as oligometastatic pancreatic ductal adenocarcinoma. †Synchronous. ‡Metachronous.



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See **Online** for appendix

Several consensus items are noteworthy. Concerning the definition of oligometastatic pancreatic ductal adenocarcinoma, there was agreement that the number of lesions and affected organs are important. The agreement for a maximum of three metastatic lesions in one organ, either in the lungs or the liver, is supported by a 2023 systematic review and has been applied in some ongoing RCTs.[10,14,23] Of note, the EXTEND trial included patients with more metastases at more than one site.[4] Although no separate results were reported for this group, the study suggested that scenarios deviating from the Delphi consensus could still benefit from local consolidative treatment.

In terms of possible treatment, systemic treatment before any local consolidative treatment was regarded as obligatory for synchronous oligometastasis and the resectability of the primary tumour according to the NCCN classification was considered important. Additionally, performance status and patient-intrinsic factors, including age, were regarded as important for the potential treatment of oligometastatic pancreatic ductal adenocarcinoma, highlighting the interplay between the tumour and the macroenvironment.

Notably, a specific number of lesions might not accurately reflect tumour biology and interactions between the tumour and the host.[14,24] Therefore, clinically assessable variables, including the number of lesions and tumour biomarker levels can only be regarded as surrogate markers of a complex disease. Theoretically, an optimal threshold for the number of metastatic lesions should result in a bimodal distribution of outcomes.[25] As such, modern treatment principles for borderline and locally-advanced pancreatic ductal adenocarcinoma, as recently described in the 2024 REDISCOVER guidelines, emphasise systemic treatment—reflecting the idea of disease continuum, ranging from occult metastasis to clinically overt oligometastasis and finally polymetastasis.[26,27]

Of note, there was no consensus on the importance of the size of metastases. Detection of small metastatic lesions greatly depends on the spatial resolution of imaging, and clinical CT scans have a resolution of up to 0·5 mm.[28] Presumably, almost all patients classified as having oligometastasis have widespread micrometastatic disease that could progress in the future.[29] In particular, advances in artificial intelligence could redefine diagnosis and treatment of pancreatic ductal adenocarcinoma. A study from 2025 showed that a convolutional neural network-based model had an area under the receiver operating characteristic of up to 0·895 (95% CI 0·853–0·937) for the prediction of distant metastasis based on features of the primary tumour on contrast-enhanced CT imaging.[30] Similarly, the development of metastasis after treatment could be predicted with high level of accuracy as well.

No consensus was reached on whether limited peritoneal metastasis could be classified as oligometastatic pancreatic ductal adenocarcinoma, both in the Delphi consensus and in the clinical vignettes. This finding is noteworthy, given that a multicentre phase 2 trial points toward a potential benefit of intravenous and intraperitoneal paclitaxel with the oral fluoropyrimidine derivative S1 and subsequent conversion surgery in highly selected cases.[31,32] Furthermore, NCCN guidelines recommend genetic testing for germline mutations including *BRCA*.[33] However, no consensus was reached for genetic testing being important in the treatment of oligometastatic pancreatic ductal adenocarcinoma.

In total, nine (56%) of 16 vignettes were regarded as oligometastatic pancreatic ductal adenocarcinomas and a combination of systemic treatment and local consolidative treatment was recommended for all cases. Opinions on the specific type of local consolidative treatment varied widely, possibly reflecting the absence of high-quality evidence supporting any particular local consolidative treatment strategy, except findings from the 2024 EXTEND trial.[4] After random assignment, the interventional group (who received systemic treatment plus local consolidative treatment) had a significantly longer progression-free survival compared with the control group, who received systemic treatment only. Most local consolidative treatment consisted of dose-escalated radiation therapy (SBRT or similar), and none were treated with surgical resection.

Of note, vignette 3 (synchronous para-aortic lymph node metastasis) was considered oligometastatic pancreatic ductal adenocarcinoma, while in the Delphi consensus, only liver or lungs were considered oligometastatic, highlighting discrepancies between Delphi consensus and clinical vignettes. Similarly, vignettes 15 and 16 were considered oligometastatic pancreatic ductal adenocarcinoma with synchronous and metachronous de novo metastasis in both liver and lungs, respectively, whereas the Delphi consensus agreed to metastasis restricted to either the liver or the lungs only. However, since voting on clinical vignettes occurred concurrently with the Delphi process, participants were unaware of the final consensus when evaluating the vignettes.

This expert statement has several strengths. We used clear predefined criteria for how consensus was defined, which is supported by previous statements and American Society for Clinical Oncology guidance.[13,18,21] Additionally, participants were from a wide range of different professional backgrounds and regions, reflecting the diverse medical expertise required to address the multifaceted nature of oligometastatic pancreatic ductal adenocarcinoma. Evidence indicates that ratings of items vary between single specialty and multispecialty panels.[18,34] Thus, a high panel diversity is particularly important when a consensus is expected to have an impact beyond a single medical specialty, which is the case in oligometastatic pancreatic ductal adenocarcinoma.[35]

Several limitations should be acknowledged. While experts from 20 different countries and five continents participated, most were from Europe, which might have influenced the consensus items, thus, global acceptance can be questioned. Additionally, the number of rounds was predefined to two rounds, therefore, evaluation of the stability of responses was not possible. While this approach might be less indicative of stability, it reflects the feasibility of conducting a consensus process, similar to previous consensus processes.[36] We defined stability as an agreement or disagreement of 75% and greater on responses measured using a 5-point Likert scale. However, other thresholds and different rating scales are possible, potentially influencing the resulting consensus items.[37,38]

In summary, this analysis represents an expert consensus statement addressing a clinically relevant question based on the available current diagnostic and therapeutic possibilities in clinical practice. Of note, the aim of this project was not to define or recommend a specific type of local consolidative treatment for scenarios, consistent with the current lack of high-quality evidence. At present, there is no evidence in pancreatic ductal adenocarcinoma to support a more refined definition incorporating genomic, transcriptomic, or epigenomic signatures alongside patient-intrinsic factors, including the immune system. Notably, in the EXTEND trial, patients receiving systemic treatment plus local consolidative treatment showed greater T cell receptor expansion and T cell activation compared with systemic treatment alone.[4] Additionally, immune cell activation was associated with improved overall survival in colorectal cancer based on subtype classification using integrative analysis of mRNA and miRNA expression data.[39] Similarly, ctDNA might be useful for monitoring molecular metastastic disease.[40] Some evidence indicates that ctDNA can predict recurrence and presence of ctDNA after adjuvant chemotherapy might indicate a higher likelihood of developing metastasis.[41,42] Of note, single nucleotide sequencing revealed that primary cancer cells that give rise to liver-only or lung-only metastasis have transcriptional profiles similar to normal liver or lung parenchymal cells, highlighting further advances in understanding the development of metastasis pancreatic ductal adenocarcinoma. [43]

Conclusion

Drawing on the foundational work by Hellmann and Weichselbaum, the relevance of oligometastatic pancreatic ductal adenocarcinoma will ultimately depend on the number of patients who benefit from locoregional therapy.[12] The OligoPanc project is, to our knowledge, the first interdisciplinary consensus on oligometastatic pancreatic ductal adenocarcinoma that identifies 18 items for which consensus was achieved. These items aim to standardise definitions and study designs, facilitating more robust research in this area. Furthermore, the retrospective and prospective validation of the proposed thresholds is strongly encouraged. The OligoPanc project aims to incorporate future clinical evidence, including advances in artificial intelligence and molecular markers in an updated consensus definition.

Search strategy and selection criteria

References identified for this Policy Review were based on the search strategy of a 2024 published systematic review using the PubMed, Web of Science, and Cochrane CENTRAL registries from inception until June 1, 2024.[14] Only articles published in English were considered. MeSH terms and free-text words for each registry primarily included the following terms in different combinations using Boolean operators: "pancreatic cancer", "pancreatic adenocarcinoma", "pancreas adenocarcinoma", "pancreatic ductal adenocarcinoma", "metastatic", "liver metastases", "hepatic metastases", "oligometastasis", "oligometastatic", "surgery", "resection", "ablation", "radiotherapy", "metastasectomy", "local therapy", "local treatment", "irreversible electroporation", "stereotactic body radiotherapy", "microwave ablation", and "selective internal radiation therapy". Clinical vignettes were designed based on real-life cases contributed by members of the OligoPanc steering committee and key items identified in the systematic review.

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AC, AGM, AS, AT, BDB, CE, CLW, CRF, CV, DP, ECS, EV, FC, FH, HDH, JH, JMR, JT, JW, KH, KT, LD, MA, MAT, MG, MH, MPWI, MSch, MSv, NST, OJMT, OM, PP, RGHB-T, SB, SDD, SG, SS, SVS, TBB, TEK, and UB: writing—review and editing, data collection, data analysis, and data interpretation. EBL, ER-G, IB-A, IF, MD, PL-P, and TG: conceptualisation and writing—review and editing, data collection, data analysis, and data interpretation. C-SL: conceptualisation, data curation, formal analysis, investigation, methodology, project administration, software, visualisation, and writing—original draft. EMO'R and EVC: Conceptualisation, supervision, resources, and writing—review and editing, data collection, data analysis, and data interpretation. FL, FR, JOP, SM, UK, and ZAW: resources and writing—review and editing, data collection, data analysis, and data interpretation. GWP: conceptualisation, data curation, formal analysis, investigation, methodology, resources, project administration, and writing—review and editing. IG, MSco, RRW, and TS: conceptualisation, resources, and writing—review and editing, data collection, data analysis, and data interpretation. MF and TM: supervision, conceptualisation, and writing—review and editing, data collection, data analysis, and data interpretation. OS: supervision, conceptualisation, project administration, resources, and writing—review and editing. PH: conceptualisation, supervision, investigation, formal analysis, validation, visualisation, and writing—review.

Data sharing

Data of the consensus process and analytical code will be shared upon reasonable methodological request by contacting the corresponding author and after signing a data access agreement. Data will be available immediately following publication.

Declaration of interests

SB received grants or contracts from Roche and Merck; payment or honoraria from Merck Sharp & Dohme, Merck, AstraZeneca, Esai, Johnson & Johnson, Hikma, Novartis, and Bristol Myers Squibb; and support for attending meetings and travel from Merck and AstraZeneca. TBB received payment or honoraria from Varian. AC received consulting fees from Blue Earth Diagnostics, Telix Pharmaceuticals, and InnovaRadi

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