Top ten research priorities for the treatment of pancreatic cancer

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Pancreatic cancer

- Fourth leading cause of cancer deaths in the USA and Europe
- Global incidence and mortality is predicted to rise by almost 80% by 2040[1]
- Treatment limited: only 10–20% of all patients qualify for curative resection, rate of recurrence high, treatment-associated toxicities and reduced quality of life[2]

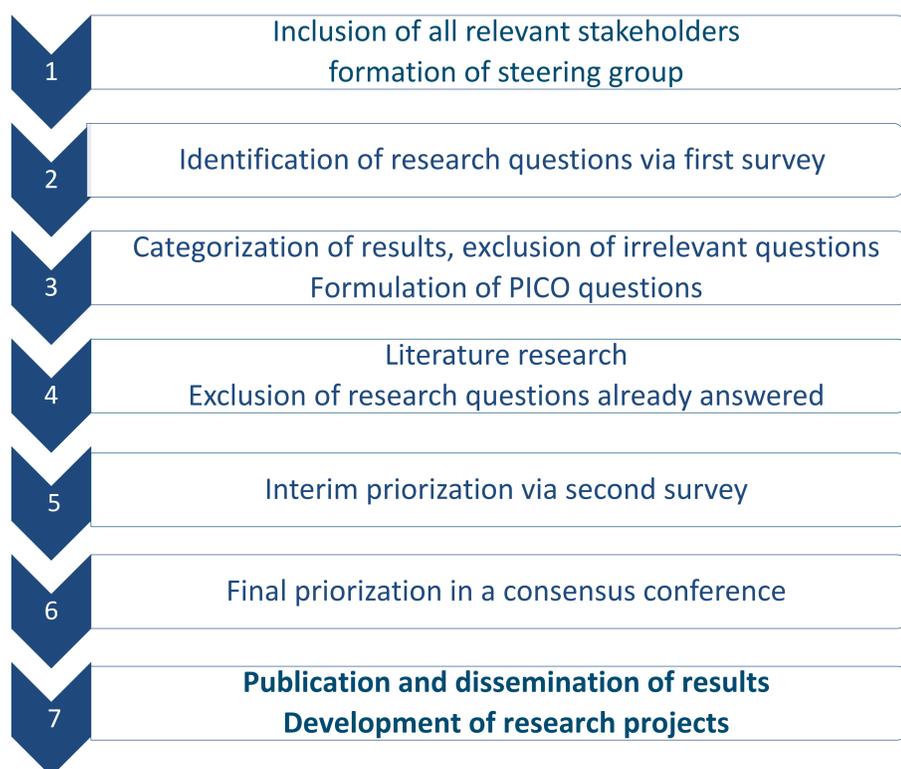## Priority setting partnership

Why?
To address the existing mismatch between research questions considered important by researchers and those important to patients, carers and health-care professionals[3]

How?
Patients, carers and clinicians work together to identify and prioritize the 10 most important unanswered questions for a specific disease.

Methods

according to the modified nominal group method introduced by the James Lind Alliance

1	Inclusion of all relevant stakeholders / formation of steering group
2	Identification of research questions via first survey
3	Categorization of results, exclusion of irrelevant questions / Formulation of PICO questions
4	Literature research / Exclusion of research questions already answered
5	Interim priorization via second survey
6	Final priorization in a consensus conference
7	**Publication and dissemination of results / Development of research projects**

First survey

- 519 questions from 140 participants
- 47 uncertainties out of guidelines (AWMF, NCCN)
- → **566 treatment uncertainties overall**

Participants
- Patients
- Relatives/Carers
- Health care professionals
- No information
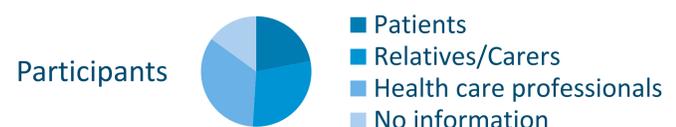
Second survey

- 211 participants (50.7% patients/carers)
- Priorization of 20 out of 63 questions

Final consensus conference

- 7 patients, 6 relatives/carers, 12 health-care professionals
- Identification of TOP 10 unanswered questions

Participants of final consensus conference

TOP 10

1. How can the best treatment for each individual patient with pancreatic cancer be identified (e.g. regarding surgery and chemotherapy)?
2. Does the extent of resection (e.g. extent of lymph-node removal, extent of pancreatic resection, extent of resection of tissue on the vessels) influence survival time and quality of life?
3. How are complications after pancreatic surgery best treated?
4. What is the most effective treatment for metastases of pancreatic cancer?
5. How can adverse effects and long-term damage from medicinal treatment be avoided?
6. Does nutrition influence the survival and/or quality of life of patients with pancreatic cancer (e.g. after surgery or during chemotherapy?
7. How can patients with pancreatic cancer be offered a holistic treatment package (survival time, quality of life, mobility, autonomy...)?
8. What chemotherapy protocol is best for what pancreatic cancer tumour stage?
9. How can the treatment goals (quality versus prolongation of life) best be explained to patients in the palliative scenario (incurable disease)?
10. Which of the new treatment options for pancreatic cancer [e.g. CRISPR/Cas9 (gene scissors), KRAS, personalised peptide vaccination, hormone treatment] are effective?

Conclusion

First PSP for pancreatic cancer, one of the first PSPs outside the English-speaking world
→ basis for researchers/funding bodies in determining the directions of future research

UKHD

1 Globocan, WHO International Agency for Research in CAncer. Cancer tomorrow [Internet]. [cited 2019 Dec 9]. Available from: http://gco.iarc.fr/tomorrow/home
2 Tanaka M. et al. Meta-analysis of recurrence pattern after resection for pancreatic cancer. Br J Surg. 2019 Nov;106(12):1590–601.
3 Crowe S. et al. Patients', clinicians' and the research communities' priorities for t4 reatment research: there is an important mismatch. Res Involv Engagem. 2015;1:2.