

# Study group – Pancreatic Cancer

Development of a Data Integration System (DIS) for better understanding of pancreatic ductal adenocarcinoma (PDAC) heterogeneity and improvement of personalized therapy approaches in order to instruct innovative clinical trials.

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## Concept & Achievements

### Background and Concept

Pancreatic cancer is a devastating disease with the lowest five-year survival rate among all cancers, mainly due to lack of effective therapeutic options. Tumor heterogeneity is considered a critical factor in primary resistance to therapy. Improving the prognosis of pancreatic cancer requires, on the one hand, the development of individualized tumor therapy strategies and, in addition, the generation of large, harmonized patient collectives to reflect inter-individual heterogeneity. To better understand the impact of therapy on tumor evolution, tumors and disease progression must be characterized in long-term longitudinal detail.



With the foundation of the **Pancreatic Cancer Alliance Bavaria (PCAB)** and the corresponding **Data Integration System (DIS)**, a pancreatic cancer patient cohort that is unique in Germany can be generated to overcome this greatest challenge in modern oncology to date.

### Achievements

To establish this prospective pancreatic cancer cohort, the IT structures at the six sites in Bavaria had to be harmonized. Now a web-based DIS has been created to collect patient-reported outcomes, standardized clinical parameters and experimental model systems including PDAC patient-derived organoids as well as availability of corresponding omics data sets.

The DIS, developed by Bitcare, guarantees a structured recording of medical data based on freely configurable forms, secures management of biospecimens and features a search, import and export function. This modular character of the DIS will allow to keep up with the rapid technological progress and to implement novel technologies and disease models systems.

### Achieved Milestones:

- » **Foundation of the Pancreatic Cancer Alliance Bavaria (PCAB)**
- » **Implementation of a harmonized Data Integration System (DIS)**
- » **Begin of Data collection**
- » **First coordinated data export (upcoming)**

Due to structured and harmonized data reporting for pancreatic cancer patients, the PCAB DIS will foster exchange and referral of patients between individual BZKF site and thereby improve patient care.

## Future Milestones

- » **Generation of a „real-time“ cohort comprising approx. 500 pancreatic cancer patients yearly.**
- » **Integration of functional data from PDAC patient-derived organoids (PDOs).**
- » **Fostering standardized establishment of PDOs in a multicentric setting.**
- » **Initiation of translational and co-clinical trials in pancreatic cancer across all BZKF-sites.**

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