

H2020 project fact sheet:

Pancreatic cancer AI for genomics and personalized Medicine

PANCAIM

Project ambition:

The PANCAIM ambition is to perform high impact research in Integrated AI of genomics and phenomics to further the understanding of PDAC. PANCAIM will develop AI-assisted clinical applications that efficiently merge genomics and imaging phenomics to assist clinicians in each of the personalized medicine diagnostics areas (Prognostication, Prediction, Monitoring). The aim is to improve prognostication, prediction and monitoring by respectively 20%, 30% and 3 months.

The aimed effect is to improve treatment outcomes of pancreas cancer patients avoiding the current costly trial-and-error use of expensive drugs with strong side-effects. Artificial Intelligence (AI) is currently transforming the field of healthcare. Worldwide interest in AI is high and snowballing, fuelled by the availability of large digital datasets ("big data"). AI is the current most promising technology to integrate and optimize evidence-based decision tools.



Project facts:

Start date: 01/01/2021
End date: 31/12/2024

Duration in months: 48

Project budget: €8,24 M

H2020 Research and Innovation Action

Grant Agreement: 101016851

Call: H2020-SC1-FA-DTS-2020-1

Topic: DT-TDS-04-2020
AI for Genomics and Personalised Medicine

Keywords:

Pancreatic cancer; Repositories; Personalized medicine; Genomic, radiomics, pathomics, clinical data

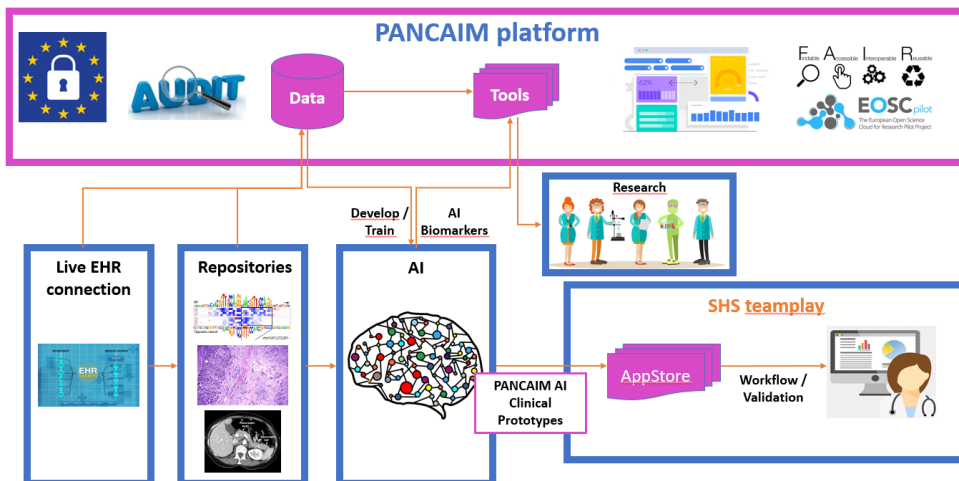


Figure 1. PANCAIM overall concept

Project description:

PANCAIM will combine genomics and imaging phenomics using AI to generate breakthrough knowledge to increase understanding of PDAC biology and patient stratification. It will develop trusted impactful AI applications for regular clinical use to help clinical decision-makers to give the right treatment to the right patients at the right time, and at the right cost and improve treatment outcomes of PDAC patients.

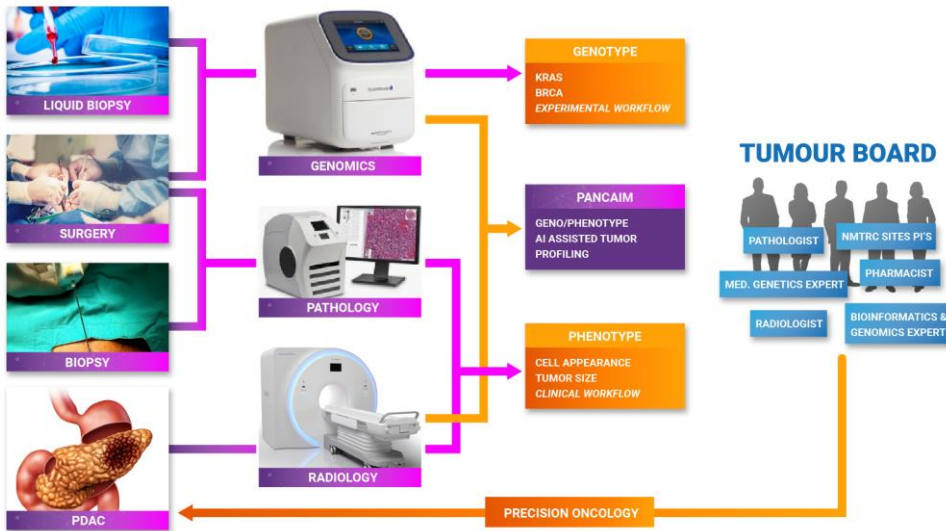


Figure 2. PANCAIM enabled PDAC precision oncology

Expected impact:

PANCAIM builds on four key concepts of AI in Healthcare: clinical expertise and high amounts of carefully documented data, AI experts, and MedTech companies to collect the data and bring AI to healthcare. By delivering easily interpretable and highly transparent models for clinical decision support and conducting a thorough deployment and validation, PANCAIM will deliver a proof of reliable and trustworthy digital solution addressing a global societal challenge. It will also pool data from across EU which have been prepared by earlier grant projects and leverage them to fuel the digitization. Translation of PDAC AI-enabled solutions will be facilitated by a complete value chain driven by industries, clinicians, and members of EAB: European Alliance for Personalized Medicine and Pancreatic Cancer Europe.

Consortium:

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OUS	NO
CNIO	ES
UOG	UK
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