At a glance

In Europe, prostate cancer (PC) is the second most frequent type of cancer in men and the third most lethal. Current clinical practices often lead to overdiagnosis and overtreatment, necessitating more effective tools for optimal management of the disease.

The EU-funded ProCAncer-I project proposes to develop advanced artificial intelligence models to address unmet clinical needs: diagnosis, metastases detection and prediction of response to treatment.

ProCAncer-I has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 952159 http://ec.europa.eu/digital-single-market/ehealth



MORE ABOUT THE PROJECT







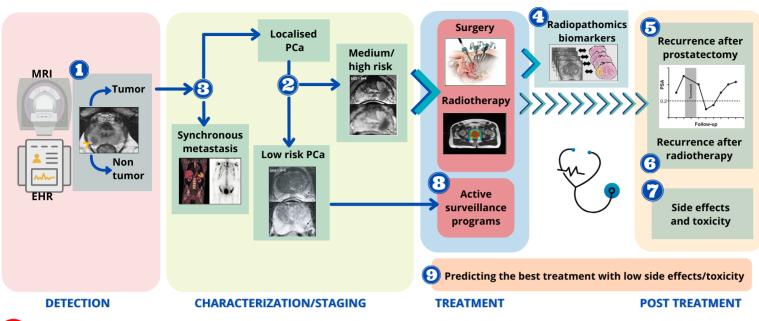




TroCAncer-I



Use cases mapped along the prostate cancer management continuum



UC1 Detection with high accuracy

UC2 Tumor aggressiveness characterization

Identification of metastatic cases

UC4 Radiologic - histopathologic

UC5 Risk of recurrence after prostatectomy

UC6 Risk of recurrence after radiotherapy

UC7 Predicting side effects and toxicity

UC8 Patients stratification in active surveillance programs

UC9 Predicting the best treatment with low side effects/toxicity



patient timeline

Project ID Challenges Impact

The ProCAncer - I Project brings together 20 world-renowned partners in prostate cancer imaging, world leaders in Artificial Intelligence and innovative SMEs. Their key objective is to design and deliver an AI Platform, integrating imaging data and models, in order to accelerate the progress in PCa precision care through prostate cancer's continuum.

Clinical

Identify prostate cancer with high accuracy, as early as possible, to stratify patients according to disease aggressiveness and to tailor therapy (or non-therapy) based on the risk of progression, comorbidities and life expectancy

Technical

Create a unique dataset in terms of data quantity, quality and diversity to be used for model development and validation The goal is to address crucial clinical questions related to prostate cancer management through the disease continuum and to deliver a novel cloud based infrastructure enabling improved diagnosis, treatment and follow-up with the use of AI based solutions that contribute more precise and personalised management of prostate cancer.