PROVIZ
– Quicker and Cheaper Cancer Diagnosis

Today, prostate cancer can be detected through qualitative interpretation of MR images. By using Artificial Intelligence (AI) the full potential of the quantitative information that lies in these images can be utilized, enabling quicker and cheaper interpretation and diagnosis, which will benefit patients and society.

Based on a unique data set from Norwegian patients, PROVIZ is developing an AI decision support system that will lead to better diagnostic performance to detect prostate cancer. It will aid efficient interpretation of MR images, contributing to decrease the cost and time needed. It will also improve the situation for the patients. Many of those with low risk disease currently receive unnecessary radical treatment, when instead they should be in active surveillance programs. With more accurate diagnostics, personalized treatment and follow-up will be easier. The patients will experience fewer side effects and it will improve their quality of life.

PROVIZ combines transparent AI methods, deep learning, model based imaging features and clinical information to make the MRI analysis more accurate, transparent and interpretable. It will make it possible to differentiate between risk factors in the disease and target prostate biopsies. The result will be a cheaper, more accurate and efficient way to diagnose prostate cancer through MR images.

Value proposition
A more efficient and cost effective tool to diagnose prostate cancer.

Opportunities for collaboration
We welcome collaboration with academia and industry for data exchange and exploitation.

Scientific fields and technology
AI, MRI, radiology and oncology

Resources and partners
• The project has been granted €1.7 Million from RCN for 2019-2022 and is part of the Centre for Digital Life Norway.
• Total budget is €1.9 Million
• Collaboration with Trondheim University Hospital, Norwegian University of Life Sciences, Radboud University Medical Centre and Chang Gung Memorial Hospital
• IPR is handled by NTNU Technology Transfer

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