



AI for prostate cancer screening based on IMR imaging

Design and commercialisation of artificial intelligence algorithms for image and clinical data analysis.

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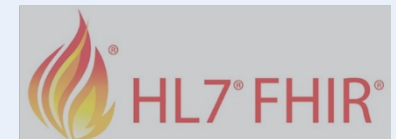
REGULATIONS

ENS

ISO 13485, 27001, 9000

EC DECLARATION OF CONFORMITY
ACCORDING TO MEDICAL DEVICE DIRECTIVE
93/42/EEC AND ITS AMENDMENT 2007/47/EC

HL7 FHIR



AN UNMET CLINICAL NEED

We have developed an artificial intelligence algorithm, trained on pathological data, to quickly and accurately identify significant prostate cancer lesions from biparametric data (T2W, ADC and DWI). This approach aims to optimise diagnostic efficiency by automatically detecting such lesions.

quantusPR is an innovative artificial intelligence-based tool created to optimise the work of radiologists, automates the assessment of compliance with PI-RADS v2.1 guidelines, performs prostate gland segmentation and detects potential suspicious lesions*, allowing radiologists to perform faster and more accurate analyses.

This solution contributes to improved patient care by shortening diagnostic times and increasing accuracy interpretations.



NON INVASIVE



SAFE



FAST



COMPATIBLE

How to use **quantusPR**?



1. Acquiring MRI images



2. Upload the cuts to the web application



3. Getting the results

Step 1: At least 3 image sequences are needed

- Axial T2W: Provides anatomical details of the prostate.
- Axial DWI: Highlights areas of diffusion restriction, indicative of possible tumours (high b-value).
- Axial ADC: A DWI-derived map that quantifies diffusion restriction.

How to use quantusPR?

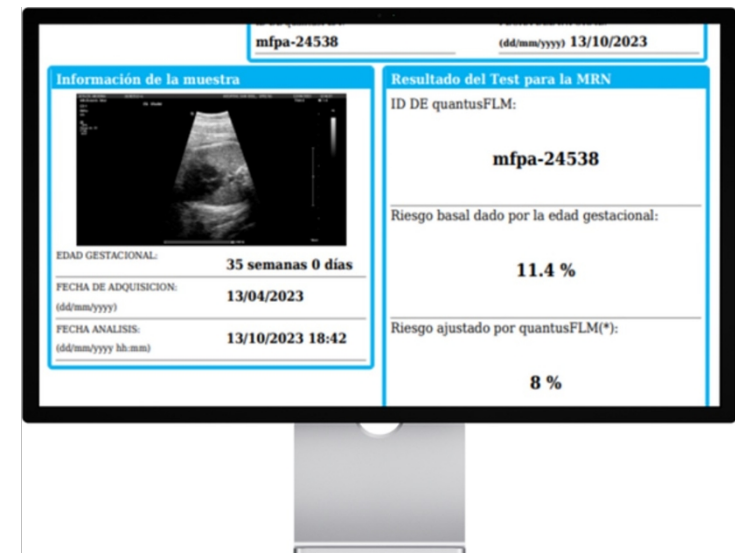
Step 2: Use the web application to analyse the images

This application is a simple tool that allows you to send the images you want to analyse to the system. To do this, you only have to follow three simple steps to complete the analysis:



Upload images to the web
 (The) (images)
 desired
 to be analysed

The sample to be analysed



Step 3: Get the result of the application via a results report within a few minutes.

When to use quantusPR

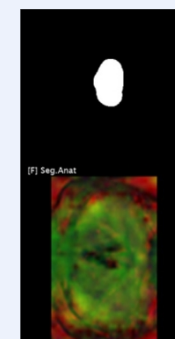
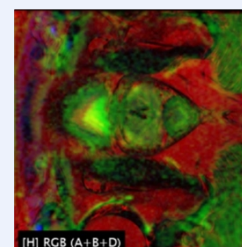
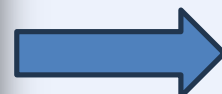
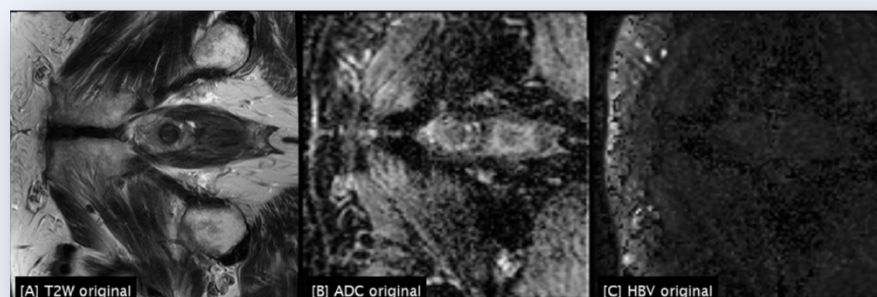
quantusPR offers automatic assessment of prostate cancer detection based on biparametric RMI images.

www.quantusPR.org

Its technology is based on the analysis of magnetic resonance images by studying 3 types of image sequences. The 3 sequences are used and an RGB is created, for which an imresize is made to the size of the T2W image, then cropped.

Once we have the sequence of the 3 images, the results obtained show the degree of risk that the patient has of having a possible prostate cancer. This degree is illustrated numerically on a scale of 1-5, with 5 being the highest risk degree.

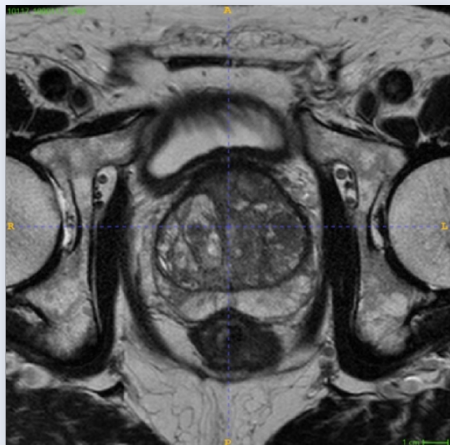
quantusPR has been designed with a clear focus on helping the population, being of great help in the screening of patients with risk factors, the follow-up of patients and the prioritisation of waiting lists.



Why does **quantusPR** work?

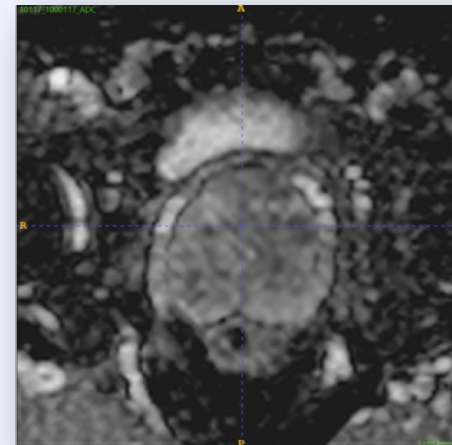
An automated support tool is defined as one that requires minimal or no input from the clinician to obtain a result. Over the past few years, research has focused on automated algorithms to improve current clinical diagnosis from images.

The rise of Artificial Intelligence techniques and especially Deep Learning techniques has increased the number of studies using these types of algorithms in urology.



Several recently published studies show that prostate cancer detection based on biparametric RMI images using trained Deep Learning models can achieve high accuracy in diverse populations and provide quantitative comparisons of how model performance may vary across different disease severity and ethnicity datasets.

quantusPR is presented as a novel Artificial Intelligence method, based on state-of-the-art Deep Learning.



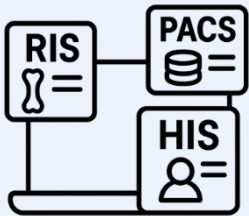
An experience without limits



Unrestricted **access**: Through an internet connection it is possible to use quantusPR and review the results at any time and from anywhere.



No installation: no software download required.



Our service enables seamless integration between **HIS**, **RIS** and **PACS** systems, optimising clinical work and ensuring centralised and secure access to medical information.



Broad compatibility: quantusPR is compatible with most web browsers as well as devices used in primary care practice.



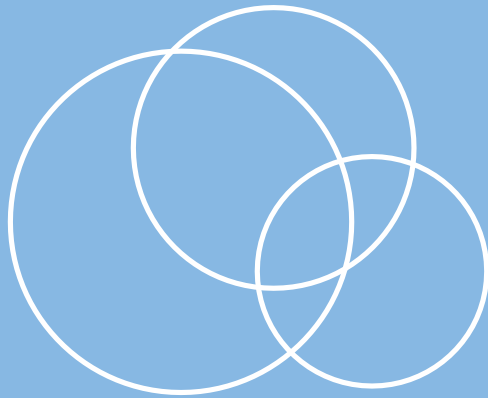
RESTful web services: HL7 FHIR compliant



Pay-as-you-go: Pay only for each test you order

They collaborate with us







Developing tomorrow's medical technologies today



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