

Gold Standard Phantoms, a University College London's Queen Square Institute of Neurology spinout company which is globally known for developing, marketing, and selling calibration services for Quantitative Medical Imaging, has developed a revolutionary solution to improve cancer diagnosis through Magnetic Resonance Imaging (MRI).

MRI scanners produce detailed images that must be interpreted by qualified radiologists, and every scanner is slightly different, which can lead to misdiagnosis. To address this issue, radiologists need a means to calibrate scanners so that the images produced remain consistent across scanners and time. Gold Standard Phantoms has developed CARE™, a state-of-the-art health-care solution based on an advanced embedded phantom scanned with the patient, combined with a traceable calibration software solution.



The PREDICT project, aimed at enhancing prostate cancer diagnosis using calibration technology, will develop the CARE™ phantom to market readiness, funded by a €1.6m grant from Horizon Europe's EIC Accelerator programme.

The project will help reduce the number of MRI scans required, thereby saving money. In addition, by improving diagnostic accuracy, the PREDICT project will act as a linchpin to promote widespread use of AI for prostate MRI, through accurate data calibration and reduced variability in scan interpretation. This will, in turn, lead to increased early cancer detection, saving lives and avoiding unnecessary, invasive procedures.

The experts from the European Commission stated that: "The PREDICT project is indeed a very innovative approach in cancer detection" and that the "innovation could transform MRI imaging, vastly improving the accuracy of scans".

Of particular importance is that the PREDICT project is set to lower healthcare costs and ease the strain on critical resources. Thanks to this grant, that was secured with support from Ixion Innovation, Gold Standard Phantoms will be able to accelerate market entry, creating a €20 million per annum business opportunity and making a real difference for cancer diagnosis.

The PREDICT project has a particular focus on Prostate cancer, the most common non-cutaneous cancer in men, and the third most common cause of cancer death. Prostate cancer biopsies are both costly and invasive, so improving MRI will help reduce the number of unnecessary biopsies, thus having a massive impact on patients and healthcare in general.