

ProstaPalp®: Non-Invasive Pre-Biopsy Screening for Clinically Significant Prostate Cancer

Led by: Heriot Watt University

In Collaboration with: University of Edinburgh

Summary:

IntelliPalp Dx Ltd was established in 2020 as a spin-out from Heriot-Watt University and University of Edinburgh. Our team is researching, designing and manufacturing diagnostic devices for a world market. Our first product, ProstaPalp®, simplifies and accelerates screening for clinically significant prostate cancer.

Technology development was initiated in 2012 via an £801k EPSRC research grant, followed by a series of translational funding awards with combined value exceeding £700k. We were Scottish Edge High Growth Potential award winners in 2020. Our interdisciplinary approach involves clinicians, experienced in assessing patients using digital rectal examination, collaborating with engineers to produce an objective test, based on engineering measurement.

Currently, a positive diagnosis with a prostate-specific antigen (PSA) test and subjective Digital Rectal Exam (DRE) leads to multi-parametric magnetic resonance imaging (mpMRI) scan and then biopsy for suspected cancer. ProstaPalp® is an objective, instant and simple test which supplements DRE and avoids the expense and delay of mpMRI.

ProstaPalp® uses a patented method of dynamic mechanical measurement obtained from a finger-mounted probe, giving instant results in primary care. Our product has 3 elements: a disposable (10-use) probe, a unit for controlling the probe and acquiring the raw data, and an app which merges raw data with patient-specific data and produces a diagnostic map of the palpable surface of the prostate.

We are currently near the end of a 450-patient study and, with help from the Medical Device Manufacturing Centre (MDMC), are designing and making a prototype for use in a multi-centre validation trial.



Contact:

Professor Bob Reuben, Professor of Materials Engineering, School of Engineering and Physical Sciences, Heriot-Watt University
bobreuben@intellipalp.com

Websites:

Intellipalp Dx www.intellipalp.com

Medical Device Manufacturing Centre <https://mdmc.hw.ac.uk/>

College of Medicine & Veterinary Medicine <https://www.ed.ac.uk/medicine-vet-medicine>

Scottish Research Partnership in Engineering www.srpe.ac.uk

