

# 3D PRECISION PROSTATE DIAGNOSTICS - IMPROVES CANCER TREATMENT

**P**rostate cancer affects one in eight men and is the second most common cancer in the UK. Men who are worried about their cancer risk or fear treatment can take reassurance from a highly accurate fusion biopsy service now being offered at Nuffield Health Bristol Hospital, The Chesterfield. Prof Raj Persad, consultant urologist is leading the way in Bristol with a new 3D urological diagnostic tool, recently developed in London.

The state-of-the-art minimally invasive technique of targeted prostate biopsy represents a paradigm shift in the accuracy of diagnosing prostate cancer, a reduction in overtreatment and improves both the experience and treatment options. Having accuracy levels of 90% compared with 30% previously, where other diagnostic methods are used, the precision technology is made possible by fusing MRI scans with ultrasound to pinpoint and investigate areas of concern in the prostate. The prostate gland, just over the size of a walnut, is notoriously difficult to access and to assess accurately, so this represents a revolution in improving diagnosis, large scale reductions in unnecessary treatment and the associated side effects plus resulting in improved survival rates. Being so recent, currently only 10% of men are benefitting from this UK innovation.



*Professor Raj Persad, consultant urologist leading precision prostate diagnostics in Bristol*

Prof Persad explains, "I am very excited about the onsite fusion biopsy service we have started here in Bristol in partnership with Nuada Medical. It is fantastic news for patients. The technique has a scientific base and proven effectiveness. Clinical trials, such as PRECISION and PROMIS have shown the effectiveness of targeted biopsies and the fusion technique takes developments one step further. There are so many good things to say about this day case minimally invasive procedure. There is a reduction in infection risk, less discomfort, a huge improvement in accuracy and it gives urologists the ability to precisely locate the cancer and to determine anatomically the location and aggressiveness to inform whether it requires targeted treatment or can just undergo active surveillance. It is very reassuring for patients, reducing their anxiety and helping them to better understand prostate cancer and the implications, enabling them to be more informed and improving their quality of life."

Treatment for prostate cancer very much depends on the size, stage and aggressiveness of the cancer. To avoid unnecessary treatment, active surveillance of the slow growing prostate cancer can be appropriate. Other options for more aggressive forms include removing the prostate gland, called prostatectomy – nowadays often involving the advanced method of robotic technology or, in other or more advanced cases, radiotherapy may be the treatment of choice.

Private patients under Prof Persad's care are now booked in from August for fusion biopsy at Nuffield Health Bristol Hospital, The Chesterfield. Technology partner Nuada Medical has been at the forefront of fusion biopsy for several years, working with the developers of the technique at UCLH, including consultant radiologist Dr Clare Allen who prepares the biopsy plans for all of Nuada's clients. Raj Persad and his team will use this plan to guide the biopsy procedure ensuring each patient receives an accurate and precise biopsy and from this a personalised treatment plan. Where cancerous, the resulting 3D model and biopsies allows the urological surgeon to make an accurate assessment of exactly what type of treatment options are best suited to the individual patient.

Currently across the UK there is a very good mammography breast screening service



*MRI and ultrasound fusion biopsy technology for prostate cancer detection, with Brian Lynch CEO Nuada Medical and Prof Hashim Ahmed, Imperial College, London*

for women. Whilst desirable, the new prostate fusion biopsy service brings men's early diagnosis of prostate cancer into line but it has yet to be adopted in a widespread manner nationally.

Prof Raj Persad has worked as a consultant urologist since 1995, with NHS posts at Addenbrookes, Bristol Royal Infirmary and Southmead Hospitals. He has expertise in early detection of prostate and bladder cancer, erectile dysfunction, male infertility, minimally invasive procedures on the prostate (urolift, greenlight laser and rezum) and robotic radical prostatectomy.

For more information or referrals to Nuffield Health Bristol Hospital, please ring 0117 906 4870 or see [www.bristolurology.com](http://www.bristolurology.com)



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