

Hifu Treatment For Prostate Cancer

Hifu For Prostate Cancer

A Minimally Invasive, Targeted Approach To Treating Localised Prostate Cancer

At Birmingham Urology Centre, we are committed to offering our patients access to the **latest treatment options** for prostate cancer.

High-intensity focused ultrasound (HIFU) is one such option – a minimally invasive focal therapy that allows our consultants to treat cancerous tissue within the prostate **without the need for surgical incision or removal of the gland**.

HIFU may be particularly well suited to men with localised prostate cancer who wish to explore alternatives to radical prostatectomy or radiotherapy, with the aim of **preserving urinary and sexual function** wherever possible.

Understanding Hifu

HIFU uses **concentrated ultrasound** waves to generate heat at a precise point within the prostate. When these focused sound waves converge on the targeted tissue, they raise the temperature to approximately **80-100°C**, which **destroys** the **cancer** cells and disrupts the local blood supply. Over time, the body naturally absorbs the treated tissue as part of its recovery process.

The procedure is carried out **under general anaesthetic**. A specialised ultrasound probe is carefully positioned to allow the treating consultant to visualise the prostate in real time, map the treatment area using advanced imaging, and deliver controlled ultrasound energy directly to the affected tissue.

Because HIFU does not require an external incision and the prostate gland itself is not removed, patients typically experience a **shorter recovery period** than with conventional surgery.

Unlike radical prostatectomy or radiotherapy, both of which treat the entire prostate gland, HIFU can be delivered as a focal therapy, targeting only the area where cancer has been identified. This **precision-based** approach may help **reduce the risk of longer-term side effects** such as urinary incontinence, erectile dysfunction and bowel complications, although careful patient selection remains essential to achieving the best outcomes.

Who Is Suitable For Hifu?

HIFU is most commonly considered for men whose prostate cancer is localised – meaning it has not spread beyond the gland. Your consultant will carry out a thorough assessment, including a review of MRI imaging and biopsy results, before determining whether HIFU is appropriate for your individual case.

You may be a suitable candidate if your cancer is clearly visible on MRI and can be precisely targeted, it is confined to a defined area or one side of the prostate, your Gleason score and PSA levels fall within an appropriate range (typically Gleason 7 or below), and you are seeking a focal therapy approach that aims to

preserve healthy tissue.

HIFU may also be considered in selected cases of recurrent prostate cancer following previous radiotherapy.

It is important to remember that HIFU is offered to carefully selected men in specialist centres, and your consultant will explain the possible benefits, risks and current evidence before you decide.

When Hifu May Not Be Appropriate

HIFU is not suitable for every patient. It may not be recommended if the cancer has spread beyond the prostate, there are multiple aggressive areas throughout the gland, imaging does not clearly define the location of the tumour, or your risk category suggests that surgery or radiotherapy would provide more effective long-term cancer control.

At **Birmingham Urology Centre**, our consultants will always discuss the full range of available treatments with you, ensuring you have the information you need to make an informed decision about your care.

Comparing Hifu With Other Treatment Options

When weighing up your prostate cancer treatment, it is helpful to understand how HIFU differs from other approaches.

Radical prostatectomy involves the surgical removal of the entire prostate gland, including both cancerous and healthy tissue. It is a well-established treatment for localised and locally advanced prostate cancer, and our centre offers robotic-assisted laparoscopic prostatectomy (RALP) for suitable patients.

Radiotherapy, including external beam radiotherapy and brachytherapy, delivers radiation to the whole prostate gland. It is another effective treatment pathway, particularly for men who may not be suitable for surgery.

HIFU, when delivered as focal therapy, treats only the identified cancerous tissue. This targeted approach may offer advantages in terms of preserving urinary continence and erectile function, though long-term outcomes, cancer characteristics and individual anatomy all play a role in determining the most appropriate treatment.

There is no single treatment that is right for every patient. Our multidisciplinary approach ensures that your case is reviewed thoroughly, and all available options are presented to you so that your treatment plan is tailored to your specific needs.

What To Expect During And After Treatment

HIFU is performed as a day-case or short-stay procedure under general anaesthetic. Most patients are able to return home the same day or shortly afterwards. A temporary urinary catheter may be required for a brief period following treatment, and light activities can usually be resumed relatively quickly.

Your consultant will provide you with detailed, personalised guidance on recovery and follow-up based on your individual circumstances. As with any prostate cancer treatment, ongoing PSA monitoring and follow-up imaging are essential. In some cases, further treatment – whether additional HIFU or an alternative approach – may be recommended if there is evidence of recurrence.

Why Choose Birmingham Urology Centre For Hifu?

At **Birmingham Urology Centre**, your case will be discussed at multidisciplinary meetings, ensuring you receive expert opinions and are presented with all available treatment options. Our consultants are among the most experienced in the Midlands, and our unified patient record system means that all clinicians involved in your care are kept fully up to date with your treatment progress.

We are pleased to offer HIFU alongside our existing range of prostate cancer treatments, including robotic-assisted laparoscopic prostatectomy (RALP), radiotherapy and active surveillance. For further information about HIFU and how it fits within the broader landscape of prostate cancer management, Get Well Soon provides additional patient resources on focal therapy options across the UK.

Our goal is always to ensure that you receive the best possible care, with treatment decisions guided by clinical evidence and your personal priorities.



OUR HIFU SPECIALIST

Consultant urological surgeon

Mr Keval Patel is a consultant urological surgeon specialising in robotic pelvic surgery, prostate cancer and minimally invasive treatments including HIFU. He holds a PhD and a Master of Surgical Education, and is committed to providing patients with clear, evidence-based guidance on their treatment options.

BSc, MBBS, PhD, FRCS(Urol)
Robotic surgery
HIFU focal therapy
Prostate cancer

Practises at
HCA The Harborne Hospital
The Priory Hospital, Birmingham
GMC number
6129418
Experience
21+ years

[View full profile](#)

[Book a consultation](#)