National Cancer Control Programme

HSE National Clinical Guideline

# The Use of Focal Therapy in Patients with Prostate Cancer

April 2025

**HSE National Clinical Guideline:**

The Use of Focal Therapy in Patients with Prostate Cancer

National Policy ☐ National Procedure ☐ National Protocol ☐ National Guideline ☐

National Clinical Guideline ☒

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| The purpose of this National Clinical Guideline is to provide evidence-based recommendations for the use of focal therapy in patients with prostate cancer by integrating the best research evidence with clinical expertise, patient values and experiences. |

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## Disclaimer

*This guideline ("the Guideline") was developed by a multidisciplinary Guideline Development Group ("the Group") and is based upon the best clinical evidence available together with the clinical expertise of the Group members. The Guideline supersedes all previous Health Service Executive (HSE), National Cancer Control Programme (NCCP), and National Clinical Effectiveness Committee (NCEC) guidelines for the use of focal therapy in patients with prostate cancer. The NCCP is part of the HSE and any reference in this disclaimer to the NCCP is intended to include the HSE. Please note, the Guideline is for guidance purposes only. The appropriate application and correct use of the Guideline is the responsibility of each health professional. The Group's expectation is that health professionals will use clinical knowledge and judgment in applying the principles and recommendations contained in this guideline. These recommendations may not be appropriate in all circumstances and it may be necessary to deviate from this guideline. Clinical judgment in such a decision must be clearly documented. Care options should be discussed with the patient, his/her significant other(s), and the multidisciplinary team on a case-by-case basis as necessary. The NCCP accepts no liability nor shall it be liable, whether arising directly or indirectly, to the user or any other third party for any claims, loss or damage resulting from any use of the Guideline.*

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# 1 Background

## 1.1 Purpose

The purpose of this National Clinical Guideline is to provide evidence-based recommendations for the use of focal therapy in patients with prostate cancer through the integration of the best research evidence with clinical expertise, patient values and experiences.

This guideline aims to address areas of care with new and emerging evidence, reduce variation in practice, and improve patient experience and service delivery.

## 1.2 Mandate

The National Cancer Strategy 2017-2026 (DoH, 2017) recommendation 37 states that: “The NCCP will develop further guidelines for cancer care in line with National Clinical Effectiveness Committee (NCEC) standards”.

## 1.3 Scope

The scope of the guideline is to provide clinical recommendations for the use of focal therapy in patients with prostate cancer. Any other treatment was considered to be out of scope.

## 1.4 Target audience

This guideline is intended for all health professionals involved in the diagnosis, staging and treatment of patients with prostate cancer. While the CEO, General Manager and Clinical Director of the hospital have corporate responsibility for the implementation of the recommendations in this Clinical Guideline, each member of the multidisciplinary team is responsible for the implementation of the individual guideline recommendations relevant to their discipline.

Whilst the guideline is focused on clinical care, it is expected to be of interest to patients with prostate cancer and their significant others. An accompanying Plain Language Summary of this guideline is available in Appendix V Plain Language Summary.

## 1.5 Target population

Patients that are covered by this guideline are:

- Adults (18 years or older) diagnosed with localised prostate cancer

# 2 Clinical Guideline and Recommendations

## 2.1 Clinical Question: In men with localised prostate cancer what is the evidence for focal therapy compared to standard of care?

### Evidence Summary

Seven prospective studies (Guillaumier et al., 2018, van Son et al., 2021, Marra et al., 2022, Matsuoka et al., 2022, Reddy et al., 2022, Habashy et al., 2023, Ladjevardi et al., 2024), one retrospective study (Bass et al., 2019), one randomised control trial (Zhang et al., 2023) and four international guidelines (EAU-Guidelines, 2023, Cornford et al., 2024, Eastham et al., 2022, NICE, 2023, Schaeffer et al., 2024) were identified. The overall quality of the evidence was low.

Focal therapy modalities include the image-guided delivery of different types of energy: high-intensity focused ultrasound (HIFU), cryotherapy, vascular targeted photodynamic therapy, laser ablation, thermal ablation, focal brachytherapy, radiofrequency waves, microwave ablation, focal external beam radiotherapy, or irreversible electroporation (IRE). Of all of the modalities, HIFU and cryotherapy are the most studied focal therapy modalities. In this guideline, focal therapy refers to HIFU and/or cryotherapy as there is insufficient data to discuss the other modalities in the management of localised prostate cancer.

Focal therapy is a relatively new treatment. As a result, there is a lack of long-term prospective and comparative data for these treatment modalities. The studies discussed by the Guideline Development Group had multiple confounding factors which must be considered when interpreting the results and assessing their generalisability. Some of the confounding issues identified include:

- Patient stage of presentation and treatment history were different
- The age of patients treated with focal therapy in the included studies was broad
- The variety of modes of focal therapy and continuous technological advancements in its administration make it challenging to evaluate individual procedures
- Different types and lengths of follow-up strategies
- Different stages of clinically significant prostate cancer
- There is limited comparative data available in the literature, particularly for research that compares this process with radical treatments or active surveillance
- Diagnostic and staging techniques have changed over the time frame of studies

The one randomised control trial did not compare focal therapy with radical treatments or active surveillance (Zhang et al., 2023), however the Guideline Development Group agreed that conducting a randomised control trial comparing focal therapy with radical treatment would be unlikely due to enrolment challenges.

The Guideline Development Group believes that while there is sufficient evidence to support the safety of focal therapy with HIFU for localised prostate cancer, there is insufficient data to support its oncological efficacy. Studies showed that patients who received focal therapy had continence rates ranging from 95 to 100% (Guillaumier et al., 2018, Bass et al., 2019, Matsuoka et al., 2022, Ladjevardi et al., 2024), however, these studies were deemed low-quality due to multiple confounding factors mentioned above. Ladjerve et al (2024), addressing functional outcomes including urinary continence, erectile function, and bowel function, showed these outcomes remained stable or improved over time. Matsuoka et al (2022) showed that ejaculation was preserved in 67% of men who received focal therapy. Focal therapy may be a safe alternative for a highly selected group of localised prostate cancer patients due to its side effect profile, however, there is a lack of evidence on the oncological outcomes for patients. As there is insufficient data on long-term oncological outcomes, any patient being considered for focal therapy must be enrolled in a centralised prospective registry with a surveillance protocol or participate in a clinical trial.

## Benefits and Harms

### Benefits

The potential benefits of focal therapy treatments for localised prostate cancer include:

- Better functional outcomes – Despite uncertainty on the oncological outcomes, low-quality studies show that some focal therapies have better functional outcomes for patients compared to radical treatments.

### Harms

The potential harms of focal therapy treatments for localised prostate cancer include:

- The long-term oncological outcomes of focal therapy are currently unknown.
- Failure of focal therapy may result in undetected disease progression and metastases.

## Preferences and Values

Patient preferences and values are central to the management of localised prostate cancer, particularly when considering novel treatments. Since there is no long-term data on the oncological outcomes for focal therapy, effective communication and patient education are essential. Patients prioritise understanding their options,

including the balance between potential risks and benefits, and the evidence supporting different treatments.

Shared decision-making is most effective when patients are well-informed. Adequate time for consultations and discussions is crucial to equip patients with the knowledge needed to make decisions aligned with their values and health goals. For this reason, some patients value the involvement of family and loved ones in these discussions and should be encouraged to involve them in consultations if they so wish.

Patients also prioritise quality of life alongside oncological outcomes. Addressing potential side effects and toxicities transparently while providing supportive care fosters trust and confidence in the medical team.

The Guideline Development Group believes that most patients would prefer the reassurance of treatment (radical prostatectomy or radiotherapy) with proven oncological efficacy. However, some patients may prefer focal therapy despite the lack of long-term oncological outcome data due to the better functional outcomes. By emphasising a patient-centred approach that includes clear communication, healthcare providers can ensure patients feel empowered to make informed decisions about their treatment.

## Resources, capacity, equity and other considerations

### Resources and Capacity

Cost-effectiveness data on focal therapies are limited. (Reddy et al., 2023) suggest that focal therapies may reduce costs associated with systemic treatments and long-term adverse effects. However, more robust economic evaluations are needed to confirm these findings.

The implementation of focal therapy on a case-by-case basis would require consideration of the resources and infrastructure needed for both patient selection, treatment and ongoing surveillance.

Key resource requirements for implementing focal therapies would include:

- **Magnetic resonance imaging (MRI):** MRI plays an important role in patient selection, treatment planning, and post-treatment monitoring in focal therapy. Patients who are eligible for focal therapy will require access to MRI. The Guideline Development Group highlighted that this may require updating MRI scanners and increasing MRI capacity. MRIs must be read by in-house radiologists who are experienced in the process and regularly attend the prostate tumour conference.
- **Prospective registry:** Focal therapy should only be performed and monitored through a prospective registry or a clinical trial to enable data collection, quality assurance, and international benchmarking. Establishing and maintaining a registry would require both financial and administrative investment.

- **Training and infrastructure:** Adequate training for healthcare professionals and the availability of high-volume centres equipped for focal therapy would be essential to ensure optimal outcomes.

## Equity

Equity is a critical consideration in the implementation of focal therapy. Potential inequities include geographical variation and social inequities.

Implementing focal therapy should not divert critical resources from other healthcare services without a clear evidence-based rationale. A comprehensive assessment of resource allocation would be needed to avoid compromising care for other patient groups.

## Other considerations

- **Registry:** Participation in the HIFU Evaluation and Assessment of Treatment (HEAT) registry or a similar national/international registry would facilitate quality assurance, research, and data sharing. However, this would require robust data governance and compliance with privacy regulations.
- **Imaging access:** The need for pre- and post-treatment MRIs necessitates investment in imaging capacity and personnel. Standardised imaging protocols would need to be developed to ensure consistency.
- **Compliance and communication:** Patients would need clear communication about the potential benefits and harms of focal therapy, the need for ongoing surveillance, and the requirements for registry participation.
- **Capacity and training:** Establishing focal therapy as a treatment option would require training programmes for clinicians and investment in high-volume centres to ensure sufficient capacity.

## Recommendation 2.1.1

For patients with localised prostate cancer, focal therapy* is not routinely recommended due to the lack of long-term oncological data.

Focal therapy* may only be considered for patients with localised prostate cancer on a case-by-case basis following shared decision-making with the patient.

Any patients undergoing focal therapy* should be enrolled in a prospective registry or participate in a clinical trial.

*Focal therapy refers to HIFU and cryotherapy

**Quality of Evidence: Low** **Grade of recommendation: Conditional**

## Good practice points

- Long-term oncological outcomes of focal therapy are unknown, and this must be communicated to the patient.
- A follow-up protocol should be in place for any patients undergoing focal therapy, and this should be communicated to the patient.
- Focal therapy should only be performed by appropriately trained urologists.
- MRIs must be read by in-house radiologists experienced in reading prostate MRIs who regularly attend the prostate tumour conference.

## Practical considerations for patient care

- Any patient undergoing focal therapy should receive written information on what is involved in the therapy, the follow-up protocol, and details regarding their enrolment in a prospective registry or clinical trial.

# 3 Methodology

## 3.1 Establishment of a Guideline Development Group

A Guideline Development Group was responsible for the development and delivery of this National Clinical Guideline and included representatives from relevant medical professionals and stakeholders (see Appendix I Members of the Guideline Development Group).

## 3.2 Clinical Question

Clinical question code: PCa_AS_HIFU1

In men with localised prostate cancer, what is the evidence for focal therapy compared to standard of care?

| | |
|---|---|
| **Population:** | Men with localised prostate cancer |
| **Intervention:** | Focal therapy:<br>High-intensity focused ultrasound (HIFU) (MRI influenced/US guided)<br>Radiofrequency ablation<br>Cryoablation<br>Irreversible electroporation<br>Focal laser ablation<br>Photodynamic therapy |
| **Comparison:** | Radical prostatectomy or Radiotherapy or Active Surveillance |
| **Outcome:** | Overall survival (OS), Disease-specific survival, Biochemical recurrence, Quality of life (incontinence, sexual function, impotence, Patient Related Outcome Measures (PROMs), Quality-Adjusted Life Years (QALY) |
| **Rationale:** | Potential to have an impact on patient outcomes |

## 3.3 Describe and document the evidence search

The clinical question outlined above was used to conduct a literature search of primary literature. A systematic literature review protocol was developed for the guideline development process by the HSE librarians in conjunction with the NCCP and is available upon request. The literature search strategy for this question is available upon request.

## 3.4 Describe the method of screening and evidence appraisal

An evidence methodologist and two research officers screened the literature searches independently to identify relevant primary papers. Any disagreements on primary paper inclusion were agreed through discussion.

All included primary papers were appraised using validated checklists developed by the Scottish Intercollegiate Guideline Network (SIGN).

There were three main points considered when appraising the research evidence:

- Are the results valid? (internal validity)
- What are the results? (statistical and clinical significance)
- Are the results applicable/generalisable to the patient/population of the guideline? (external validity)

### 3.5 Formulation and grading of recommendations

The evidence to address the clinical question, both from primary literature and international guidelines, was extracted into evidence tables.

Recommendations were formulated through a formal structured process. An 'Evidence to Decision Framework' was completed for the clinical question. The following domains were discussed by the Guideline Development Group:

- **Evidence Summary:** The body of evidence was reviewed and discussed taking into account the types of studies available, the quality of those studies and their degree of bias, the precision of the results, and whether all studies were consistent in their findings. The directness of the evidence and generalisability to the target population were also considered.
- **Benefits and harms:** The balance of potential benefits versus potential harms of the proposed recommendations was considered.
- **Preferences and Values:** The preferences and values of the patient were discussed and considered, noting particularly the acceptability of the proposed recommendations to patients and their carers in the context of the balance of benefits and harms.
- **Resource, capacity, equity and practical considerations:** Any factors which may affect the implementation of the proposed recommendations were discussed and documented. Potential issues around equity were explicitly considered.

Following discussion on the four domains above the recommendations were agreed upon by the Guideline Development Group and the following terms were considered for use in the recommendations:

- is recommended
- should be considered
- may be considered
- is not recommended

The use of these terms is dependent on all four domains outlined above. Each recommendation was assigned a quality of evidence and a grade of recommendation by the Guideline Development Group. Good practice points and

practical considerations for patient care were also agreed by the Guideline Development Group. Further information on the grading systems used is documented in Appendix VI grading the recommendations in this guideline.

## 3.6 Consultation

### National Review

The draft guideline was signed off by the Guideline Development Group before going to national stakeholder review.

It was placed on the NCCP website and circulated to relevant organisations and individuals for comment between 14th February and 14th March 2025.

Stakeholders were asked to comment on the comprehensiveness of evidence used to form the recommendations. Stakeholders were required to submit feedback with supporting evidence on a form provided along with a completed conflict of interest form.

### International review

The draft guideline was also submitted for international expert review. The Guideline Development Group nominated the following experts to provide feedback on the draft guideline:

- Professor Hashim U. Ahmed, MD, Chair in Urology (Clinical), Department of Surgery & Cancer, Faculty of Medicine, Imperial College London
- Professor Philip Cornford, MD, Chair of the EAU Prostate Cancer Guidelines Committee, Consultant Urologist, Bon Secours Hospital, Cork, and Honorary Professor, University of Liverpool

The reviewers were chosen by the Guideline Development Group based on their in-depth knowledge of the subject area and guideline development processes. The review followed the same procedure as the National Review.

All feedback received was reviewed by the Guideline Development Group. Suggested amendments and supporting evidence were reviewed and a consensus was reached to accept or reject the amendments. All modifications were documented and the report is available upon request.

## 3.7 National Implementation Plan

An implementation plan was developed based on the NCEC Implementation Guide (DoH, 2018). It outlines the actions required to implement each recommendation, who has lead responsibility for delivering the action, the timeframe for completion and the expected outcomes of implementation (see Appendix III National Implementation Plan).

This National Clinical Guideline including the implementation plan should be reviewed by the multidisciplinary team and senior management in the cancer centre/hospital as it outlines the actions required to implement the recommendations.

The CEO, General Manager and Clinical Director of each cancer centre/hospital have corporate responsibility for the implementation of the National Clinical Guideline and to ensure that all relevant staff are appropriately supported to implement the guideline.

The National Clinical Guideline will be circulated and disseminated through the professional networks that participated in developing and reviewing this document.

### 3.8 Governance and Approval

The final draft of the guideline was quality-assured internally by a member of the NCCP Evidence and Quality Team to confirm adherence to the National Standards for Policies, Procedures, Protocols and Guidelines (DoH, 2015).

The guideline, along with confirmation of the outcome of the Quality Assurance process, was then submitted to the NCCP Executive on 7th April 2025 for approval.

A full list of the members can be found in Appendix II: Membership of NCCP Executive.

### 3.9 Communication and Dissemination Plan

This National Clinical Guideline is available on the HSE National Central Repository.

A Communication and Dissemination Plan was developed by the Guideline Development Group to raise awareness of the development of this guideline, to ensure effective communication and collaboration with all key stakeholders throughout the various stages of the guideline development process and to maintain momentum for the widespread adoption of the guideline.

In conjunction with the HSE Communications Division, key stakeholders were identified and a list of strategies was developed to inform them of the new guideline (see Appendix IV: Communication and Dissemination Plan). The implementation of the guideline will also be supported by communication and dissemination.

### 3.10 Monitoring, evaluation and audit

#### Monitoring and evaluation

Each cancer centre/hospital should implement a systematic process of gathering information and tracking over time to achieve the objectives of this guideline.

The Prostate Tumour Conference in each cancer centre/hospital should monitor the implementation of recommendations specific to their practice.

### Audit

The implementation of this National Clinical Guideline must be audited to ensure that this guideline positively impacts patient care. Each cancer centre/hospital should audit the implementation of this guideline at least annually.

An audit tool is available upon request by contacting guidelines@cancercontrol.ie.

## 3.11 Review/update

This guideline was issued in 10/04/2025 and will be considered for review by the NCCP in three years.

Surveillance of the literature base will be carried out periodically by the NCCP. Any updates to the guideline in the interim period or as a result of a three-year review will be noted in the guidelines section of the NCCP websites.

# 4 Abbreviations

| | |
|---|---|
| **AS** | Active Surveillance |
| **CEO** | Chief Executive Officer |
| **DoH** | Department of Health |
| **EAU** | European Association of Urology |
| **GRADE** | Grading of Recommendations Assessment Development and Evaluation |
| **HEAT** | High-Intensity Focused Ultrasound Evaluation and Assessment of Treatment (registry) |
| **HIFU** | High-Intensity Focused Ultrasound |
| **ICE** | International Cryotherapy Evaluation (registry) |
| **IRE** | Irreversible Electroporation |
| **HSE** | Health Service Executive |
| **ISUP** | International Society of Urological Pathology |
| **MDT** | Multidisciplinary Team |
| **MRI** | Magnetic Resonance Imaging |
| **NCCP** | National Cancer Control Programme |
| **NCEC** | National Clinical Effectiveness Committee |
| **NICE** | National Institute for Health and Care Excellence |
| **PSA** | Prostate-Specific Antigen |
| **SIGN** | Scottish Intercollegiate Guideline Network |

# 5 Glossary of Terms

**Active Surveillance**
Closely watching a patient's condition but not giving any treatment unless there are changes in test results that show the condition is getting worse. Active surveillance may be used to avoid or delay the need for treatments such as radiation therapy or surgery, which can cause side effects or other problems. During active surveillance, certain exams and tests, such as blood tests, imaging tests, and biopsies, are done on a regular schedule to monitor the condition. Active surveillance may be used in certain types of prostate cancer and some other types of cancer. It is a type of expectant management.

**Benefits and Harms**
Benefits refer to improved quality of life and reductions in mortality and morbidity. There are physical risks of harm such as exposure to radiation and there are also emotional and psychological risks of harm such as anxiety and depression.

**Disease-Specific Survival (DSS)**
People in a study or treatment group who have not died from a specific disease in a defined period of time. The time period usually begins at the time of diagnosis or at the start of treatment and ends at the time of death. Patients who died from causes other than the disease being studied are not counted in this measurement.

**Gleason score**
A way of describing prostate cancer is based on how abnormal the cancer cells in a biopsy sample look under a microscope and how quickly they are likely to grow and spread. Most prostate cancers contain cells that are in different grades. The Gleason score is calculated by adding together the two grades of cancer cells that make up the largest areas of the biopsied tissue sample. The Gleason score usually ranges from 6 to 10. The lower the Gleason score, the more the cancer cells look like normal cells and are likely to grow and spread slowly. The Gleason score is used to help plan treatment and determine prognosis (outcome).

**Good practice points**
Good practice points are based on the clinical expertise of the Guideline Development Group.

**Grade Group**
A way of describing prostate cancer is based on how abnormal the cancer cells in a biopsy sample look under a microscope and how quickly they are likely to grow and spread. It is based on the Gleason score, which is another type of prostate cancer grading system. Grade Group scores range from 1 to 5. The lower the Grade Group score, the more the cancer cells look like normal cells and are likely to grow and

spread slowly. The Grade Group system is used to help plan treatment and determine prognosis (outcome).

**Localised Prostate Cancer**
Localised prostate cancer is cancer that is completely inside the prostate gland. It hasn't spread outside of the prostate gland or to any other parts of the body.

**Magnetic Resonance Imaging**
A procedure that uses radio waves, a powerful magnet, and a computer to make a series of detailed pictures of areas inside the body. A contrast agent, such as gadolinium, may be injected into a vein to help the tissues and organs show up more clearly in the picture. Magnetic resonance imaging may be used to help diagnose disease, plan treatment, or find out how well treatment is working. It is especially useful for imaging the brain and spinal cord, the heart and blood vessels, the bones, joints, and other soft tissues, the organs in the pelvis and abdomen, and the breast. Also called MRI, NMRI, and nuclear magnetic resonance imaging.

**Meta-analysis**
A process that analyses data from different studies done about the same subject. The results of a meta-analysis are usually stronger than the results of any study by itself.

**Multidisciplinary meeting (MDM) / Multidisciplinary Team (MDT) Meeting**
Multidisciplinary meetings (MDMs) play an essential part in the management of many diseases, including cancer. At a cancer MDM, the relevant specialists discuss each patient's clinical presentation, radiological (scans/ imaging), histopathological (examination of tissue or surgical specimen) and other relevant findings, to draw up an appropriate individual treatment plan based on current best practices. To ensure that the MDM process is safe and effective, the patient and all their relevant data need to be discussed by the appropriate professionals. An agreed care plan must then be recorded, communicated and put in place. This requires the allocation of clearly defined roles and responsibilities to key members of the multidisciplinary team (MDT).

**Overall Survival (OS)**
Overall survival (OS) is defined as the length of time from either the date of diagnosis or the start of treatment for a disease, such as cancer, that patients diagnosed with the disease are still alive. It is a crucial measure used in clinical trials to assess the efficacy of a new treatment. The calculation of overall survival does not take into account the cause of death; it simply measures the time a patient lives after diagnosis or initiation of treatment regardless of whether the death was due to cancer or another cause.

**Patient-reported outcome measures (PROMs)**
Patient-reported outcome measures (PROMs) are used to assess a patient's health status at a particular point in time. PROMs are standardised, validated survey tools that assess health outcomes reported by patients, in areas such as general health and quality of life, or around specific symptoms, functional ability and physical, mental and social health. They can be completed either during an illness or while treating a health condition. In some cases, using pre- and post-event PROMs can help measure the impact of an intervention.

**PICO**
The PICO model is a method for framing an evidence-based clinical question. PICO stands for patient/population, intervention, comparison and outcomes.

**PSA**
Prostate-specific antigen, or PSA, is a protein produced by normal, as well as malignant cells of the prostate gland. Both prostate cancer and several benign conditions can cause PSA levels in the blood to rise. The PSA test measures the level of PSA in the blood. This test is used in several different ways: to monitor the progression of prostate cancer in men who have already been diagnosed with the disease; to follow up on prostate symptoms, such as painful or frequent urination, blood in urine or semen, and pelvic and/or back pain; to screen for prostate cancer in men who do not have symptoms of the disease.

**Practical considerations regarding patient care**
These are statements developed with the patient Guideline Development Group members on issues that were important to them with regard to their own experience.

**Preferences and values**
The patient preferences and values statements were developed by the multidisciplinary Guideline Development Group including patient representatives. Patient members were given priority during guideline meetings to discuss preferences and values.

The Guideline Development Group tried to identify what an informed patient and their families would prefer. The value statements refer to what the Guideline Development Group believe are the values that are driving patient and family preferences.

**Prospective cohort study**
A research study that follows over time groups of individuals who are alike in many ways but differ by a certain characteristic (for example, female nurses who smoke and those who do not smoke) and compares them for a particular outcome (such as lung cancer).

**Retrospective study**
A study that compares two groups of people: those with the disease or condition under study (cases) and a very similar group of people who do not have the disease or condition (controls). Researchers study the medical and lifestyle histories of the people in each group to learn what factors may be associated with the disease or condition. For example, one group may have been exposed to a particular substance that the other was not. Also called case-control study.

**Shared decision-making approach**
A shared decision-making approach is between the healthcare professional and the patient. It provides patients with a measure of understanding and control over their treatment. Clinicians should disclose the potential benefits and harms of a treatment to the patient. Clinicians should also help elicit patients' values regarding treatment. Patients should be allowed to have family members present during shared decision-making if they would like to. Written information on the items relevant to shared decision-making, including the benefits and harms of the treatment options, should be provided to all patients.

**Tumour conference**
Also known as multidisciplinary team (MDT) meeting or multidisciplinary meeting (MDM). A tumour conference involves a group of people from different healthcare disciplines, who meet together at a given time (whether physically in one place or by video or teleconferencing) to discuss a given patient and who are each able to contribute independently to the discussion on diagnosis and to make recommendations on patient management. It provides a forum for multidisciplinary teams to regularly convene and discuss the diagnosis and management of cancer patients.

# 6 Appendix

## Appendix I Members of the Guideline Development Group

A conflict of interest form was signed by all members of the Guideline Development Group.

There was one declared conflict of interest. Mr Mohammud Shakeel Inder, a consultant urologist at St. Vincent's University Hospital and Beacon Hospital, contributed his expertise and experience on the quality of evidence, benefits and harms, patient values and resources and other considerations as a member of the Guideline Development Group. He absented himself from the generation of final recommendations to resolve any conflict of interest.

| Name | Title/position | Role in guideline group |
|---|---|---|
| **Chairs of the Guideline Development Group** | | |
| Mr. David Galvin | Consultant Urologist, Mater Misericordiae University Hospital, St. Vincent's University Hospital | Co-chair, writing member |
| Dr. Eve O'Toole | Head of Evidence & Quality Hub, NCCP | Co-chair, writing member |
| **Patient representatives** | | |
| Mr. Tom Hope | Patient/Service User Partner | Writing member |
| Mr. Paul Power | Patient/Service User Partner | Writing member |
| **Urology** | | |
| Mr. Peter Lonergan | Consultant Urologist, St. James's Hospital | Writing member |
| Mr. Paul Sweeney | Consultant Urologist, Mercy University Hospital | Writing member |
| Mr. Kieran Breen | Consultant Urologist, St. Vincent's University Hospital | Writing member |
| Mr. Mohammud Shakeel Inder | Consultant Urologist, St. Vincent's University Hospital, Beacon Hospital | Writing member |
| **Radiology** | | |
| Prof. Conor Collins | Consultant Radiologist, St. Vincent's University Hospital | Writing member |
| Dr. Ruth Dunne | Consultant Radiologist, Beaumont Hospital | Writing member |
| **Pathology** | | |
| Dr. Tom Crotty | Consultant Pathologist, St. Vincent's University Hospital | Writing member |

| | | |
|---|---|---|
| **Nursing** | | |
| Ms. Catherine McGarvey | Advanced Nurse Practitioner, The Mater Misericordiae University Hospital | Writing member |
| Ms. Anna Loughlin | Advanced Nurse Practitioner, St. James's Hospital | Writing member |
| **Evidence** | | |
| Dr. Ozlem McDonnell | Senior Research Officer, NCCP | Project manager, researcher, writing member |
| Mr. Paul Flood | Research Officer, NCCP | Researcher, writing member |
| Ms. Louise Murphy | Senior Research Officer, NCCP | Writing member |
| Dr. Helena Gibbons | Senior Research Officer, NCCP | Writing member |
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| **NCCP** | | |
| Ms. Eileen Nolan | National Programme Manager for Urological Cancers, NCCP | Writing member |
| Ms. Cathleen Osborne | Assistant Director of Nursing, NCCP | Writing member |

## Appendix II Membership of NCCP Executive

| Name | Role and position |
|---|---|
| Professor Risteárd Ó Laoide | Chair; National Director NCCP |
| Dr. Triona McCarthy | Assistant National Director, NCCP |
| Ms. Fiona Bonas | Assistant National Director, NCCP |
| Ms. Terry Hanan | National Clinical Lead for Cancer Nursing, NCCP |
| Ms. Patricia Heckmann | Assistant National Director, NCCP |
| Dr. Tony Holohan | Head of Cancer Intelligence, NCCP |
| Professor Arnold Hill | National Surgical Oncology Programme Clinical Advisor |
| Professor Maccon Keane | National Medical Oncology Programme Clinical Advisor |
| Professor Clare Faul | National Radiation Oncology Programme Clinical Advisor |
| Dr. Derville O'Shea | National Haemato-oncology Programme Clinical Advisor |
| Dr. Liam Smyth | National Haemato-oncology Programme Clinical Advisor |

### Sign-off by Chair of Approval Governance Group

National Clinical Guideline: The Use of Focal Therapy in Patients with Prostate Cancer was formally ratified and recorded in the minutes of the Approval Governance Group on 7th of April 2025.

| | |
|---|---|
| **Name: (print)** | Prof. Risteárd Ó Laoide |
| **Title:** | National Director, NCCP |
| **Signature:**<br>**(e-signatures accepted)** |  |

## Appendix III National Implementation Plan

National Clinical Guideline: The Use of Focal Therapy in Patients with Prostate Cancer
Date National Clinical Guideline approved: 07 April 2025
Expected date of full implementation: 2028
Lead responsibility for national implementation: Hospital/Cancer Centre/Prostate Tumour Conference

| Implementation action | Implementation barriers / enablers | List of tasks to implement the action | Lead responsibility for delivery of the action | Expected completion date | Expected outcomes |
|---|---|---|---|---|---|
| Develop a communication and dissemination plan to ensure that cancer centres are aware of guideline recommendations | Enablers: Assistance of HSE Communications and HSE Digital<br><br>Potential Barriers: Patient perceptions and treatment preferences. | Please see Appendix IV Communication and Dissemination Plan | NCCP | Following guideline publication | Increased awareness of National Clinical Guideline recommendations. |

## Appendix IV Communication and Dissemination Plan

Key stakeholders were identified by the Guideline Development Group and in conjunction with the HSE Communications Division, a list of strategies was developed to inform these stakeholders of the new guideline. Some strategies will include:

- Official publication and launch of the guideline
- Direct communication from NCCP Director to hospital and cancer network managers raising awareness and setting out expectations/actions
- Circulation to the networks who participated in developing and reviewing the guideline
- Circulation to NCCP staff
- Liaison with HSE Clinical Programmes, academic faculties and professional bodies for dissemination to their members
- Inform relevant voluntary organisations and patient advocacy groups that the guideline has been updated and is available for representation in their patient and public information
- Promotion through the HSE/NCCP website, internal HSE media, social and print media
- NCCP to include details of the guideline in presentations by clinical leads, sub-group chairs, NCCP Director
- NCCP to promote the guideline at conferences, workshops, and CPD sessions

A plain language summary of the guideline is included as a key element of the Communication and Dissemination Plan for patients, their families and other non-specialists who may be interested in the potential implications of the recommendations within the guideline and what it may mean for them.

| Description of stakeholder communications | Communication method | Owner | Timeline |
|---|---|---|---|
| Patients | | | |
| Plain language summary | Guideline | Project team | Pre 'go live' |
| Guideline Development Group | | | |
| New guideline alert | Email | Project team | Pre 'go live' |
| National stakeholders | | | |
| New guideline to Hospital Managers/Cancer Network Managers | Email | National Director, NCCP | Pre 'go live' |

| | | | |
|---|---|---|---|
| New guideline to relevant stakeholders (incl. National groups, organisations, faculties, patient support & advocacy groups, international reviewers) | Email | Project team | Pre 'go live' |
| New guideline to NCCP staff | Email | Project team | Pre ‘go live’ |
| Press Release (HSE website) | Article | Project team/HSE Comms | Official launch |
| Social media coverage (Irish and English) | “X” posts | Project team | ‘go live’ & official launch |
| News articles | Article | Project team/ HSE Comms | Within 2 months of 'go live' |

## Appendix V Plain Language Summary

### Summary of National Clinical Guideline

This National Clinical Guideline contains evidence-based recommendations.

This guideline is for patients diagnosed with localised prostate cancer and discusses the use of “focal therapy” as a treatment option.

Focal therapy has been shown to have less side effects than surgery and radiotherapy.

This document states that focal therapy is not routinely recommended for patients with prostate cancer because the long term cancer outcomes are unknown.

If you want to know more about focal therapy and if this might be an option for you ask your doctor or any member of your treating team.

### What does this guideline mean for you?
### Questions you may want to ask your healthcare professionals?

- What is my current Gleeson Grade (grade group) of prostate cancer?
- Is the cancer tumour localised in the prostate gland?
- What are my options for treatment?
- What are the potential benefits and harms of my treatment options?
- What are the possible side effects of the treatment options and what are the risks of these side effects?
- How long will the treatment take?
- How often will I see my doctor or nurse?
- What symptoms should I look out for and report?
- Who do I contact if something doesn’t feel right or I am feeling unwell?
- What is the follow up protocol after focal therapy?
- What treatment could I have if my cancer grows?

### Understanding the language

| Medical Term | Plain language explanation |
|---|---|
| Focal therapy | Focal therapy is a treatment for localised prostate cancer that targets only the area of your prostate where the tumour is located. |
| HIFU | High-intensity focused ultrasound (HIFU) uses ultrasound waves to treat your tumour. |
| Cryotherapy | Cryotherapy is the use of extreme cold to freeze your tumour and remove abnormal tissue. |

## Appendix VI grading the recommendations in this guideline

The Guideline Development Group assigned each recommendation a quality of evidence and grade of recommendation. The Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach provides an explicit system for rating the quality of evidence and whether the recommendation is strong or conditional (Guyatt et al., 2008).

### Quality of evidence

It is recognised that when developing guidelines, assessing the level of evidence alone does not consider the methodological quality of each study or the quality of the body of evidence as a whole (Harbour and Miller, 2001). The Guideline Development Group used an amended GRADE system which considers the following factors when classifying the quality of evidence; high, moderate or low (Guyatt et al., 2008):

- Study design
- Study design limitations
- Consistency of results
- Directness of the evidence
- Imprecision of results
- Reporting bias

### Table 1: Quality of evidence adapted from GRADE working group 2013

| | |
|---|---|
| High | We are very confident that the true effect lies close to that of the estimate of the effect. |
| Moderate | We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different |
| Low | Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect. |
| Very Low | We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect. |

### Grade of recommendation

There are two grades of recommendation: strong or conditional. These reflects the balance of the following items:

- The quality of the body of evidence
- The balance between benefit and harm to patient
- Patient preferences and values
- Resources/cost

### Table 1: Grade of recommendation adapted from GRADE working group 2013

| | |
|---|---|
| Strong | A strong recommendation is one for which the Guideline Development Group is confident that the desirable effects of an intervention outweigh its undesirable effects (strong recommendation for an intervention) or that the undesirable effects of an intervention outweigh its desirable effects (strong recommendation against an intervention).<br><br>Strong recommendations are not necessarily high-priority recommendations. A strong recommendation implies that most or all individuals will be best served by the recommended course of action. |
| Conditional | A conditional recommendation is one for which the desirable effects probably outweigh the undesirable effects (conditional recommendation for an intervention) or undesirable effects outweigh the desirable effects (conditional recommendation against an intervention) but appreciable uncertainty exists.<br><br>A conditional recommendation implies that not all individuals will be best served by the recommended course of action. There is a need to consider more carefully than usual the individual patient's circumstances, preferences, and values.<br><br>When there are conditional recommendations, caregivers need to allocate more time to shared decision-making, making sure that they clearly and comprehensively explain the potential benefits and harms to a patient. |

# 7 References

BASS, R., FLESHNER, N., FINELLI, A., BARKIN, J., ZHANG, L. & KLOTZ, L. 2019. Oncologic and Functional Outcomes of Partial Gland Ablation with High Intensity Focused Ultrasound for Localized Prostate Cancer. *The Journal of Urology,* 201**,** 113-119.

CORNFORD, P., VAN DEN BERGH, R. C. N., BRIERS, E., VAN DEN BROECK, T., BRUNCKHORST, O., DARRAUGH, J., EBERLI, D., DE MEERLEER, G., DE SANTIS, M., FAROLFI, A., GANDAGLIA, G., GILLESSEN, S., GRIVAS, N., HENRY, A. M., LARDAS, M., VAN LEENDERS, G. J. L. H., LIEW, M., LINARES ESPINOS, E., OLDENBURG, J., ... & TILKI, D. 2024. EAU-EANM-ESTRO-ESUR-ISUP-SIOG Guidelines on Prostate Cancer-2024 Update. Part I: Screening, Diagnosis, and Local Treatment with Curative Intent. *Eur Urol*.

DOH 2015. National Clinical Effectiveness Committee: Standards for Clinical Practice Guidance. *In:* HEALTH, D. O. (ed.).

DOH 2017. National Cancer Strategy 2017 - 2026. https://www.gov.ie/en/publication/a89819-national-cancer-strategy-2017-2026/.

DOH 2018. Implementation Guide and Toolkit for National Clinical Guidelines.

EASTHAM, J. A., AUFFENBERG, G. B., BAROCAS, D. A., CHOU, R., CRISPINO, T., DAVIS, J. W., EGGENER, S., HORWITZ, E. M., KANE, C. J., KIRKBY, E., LIN, D. W., MCBRIDE, S. M., MORGANS, A. K., PIERORAZIO, P. M., RODRIGUES, G., WONG, W. W. & BOORJIAN, S. A. 2022. Clinically Localized Prostate Cancer: AUA/ASTRO Guideline, Part I: Introduction, Risk Assessment, Staging, and Risk-Based Management. *The Journal of Urology,* 208**,** 10-18.

EAU-GUIDELINES 2023. EAU - EANM - ESTRO - ESUR - ISUP - SIOG Guidelines on Prostate Cancer *Edn. presented at the EAU Annual Congress Milan*

GUILLAUMIER, S., PETERS, M., ARYA, M., AFZAL, N., CHARMAN, S., DUDDERIDGE, T., HOSKING-JERVIS, F., HINDLEY, R. G., LEWI, H., MCCARTAN, N., MOORE, C. M., NIGAM, R., OGDEN, C., PERSAD, R., SHAH, K., VAN DER MEULEN, J., VIRDI, J., WINKLER, M., EMBERTON, M. & AHMED, H. U. 2018. A Multicentre Study of 5-year Outcomes Following Focal Therapy in Treating Clinically Significant Nonmetastatic Prostate Cancer. *European Urology,* 74**,** 422-429.

GUYATT, G. H., OXMAN, A. D., VIST, G. E., KUNZ, R., FALCK-YTTER, Y., ALONSO-COELLO, P., SCHÜNEMANN, H. J. & GROUP, G. W. 2008. GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. *BMJ,* 336**,** 924-6.

HABASHY, D., REDDY, D., PETERS, M., SHAH, T. T., VAN, S. M., VAN, R. P. S. N., TANAKA, M. B., CULLEN, E., ENGLE, R., MCCRACKEN, S., GREENE, D., HINDLEY, R. G., EMARA, A., NIGAM, R., ORCZYK, C., SHERGILL, I., PERSAD, R., VIRDI, J., MOORE, C. M., ... & DUDDERIDGE, T. 2023. Evaluation of Outcomes Following Focal Ablative Therapy for Treatment of Localized Clinically Significant Prostate Cancer in Patients >70 Years: A Multi-institute, Multi-energy 15-Year Experience. *Journal of Urology,* 210**,** 108-116.

HARBOUR, R. & MILLER, J. 2001. A new system for grading recommendations in evidence based guidelines. *BMJ,* 323**,** 334-6.

LADJEVARDI, S., EBNER, A., FEMIC, A., HUEBNER, N. A., SHARIAT, S. F., KRALER, S., KUBIK-HUCH, R. A., AHLMAN, R. C., HÄGGMAN, M. & HEFERMEHL, L. J. 2024. Focal high-intensity focused ultrasound therapy for localized prostate cancer: An interim analysis of the multinational FASST study. *European Journal of Clinical Investigation,* n/a**,** e14192.

MARRA, G., SOETERIK, T., OREGGIA, D., TOURINHO-BARBOSA, R., MOSCHINI, M., FILIPPINI, C., VAN MELICK, H. H. E., VAN DEN BERGH, R. C. N., GONTERO, P., CATHALA, N., MACEK, P., SANCHEZ-SALAS, R. & CATHELINEAU, X. 2022. Long-term Outcomes of Focal Cryotherapy for Low- to Intermediate-risk Prostate Cancer:

Results and Matched Pair Analysis with Active Surveillance. *European Urology Focus,* 8**,** 701-709.

MATSUOKA, Y., UEHARA, S., TODA, K., FUKUSHIMA, H., TANAKA, H., YOSHIDA, S., YOKOYAMA, M., YOSHIMURA, R., KIHARA, K. & FUJII, Y. 2022. Focal brachytherapy for localized prostate cancer: 5.7-year clinical outcomes and a pair-matched study with radical prostatectomy. *Urologic Oncology: Seminars and Original Investigations,* 40**,** 161.e15-161.e23.

NICE 2023. Focal therapy using highintensity focused ultrasound for localised prostate cancer. *In:* EXCELLENCE, N. I. F. H. A. C. (ed.) Interventional procedures guidance [IPG756] ed.

REDDY, D., PETERS, M., SHAH, T. T., VAN SON, M., TANAKA, M. B., HUBER, P. M., LOMAS, D., RAKAUSKAS, A., MIAH, S., ELDRED-EVANS, D., GUILLAUMIER, S., HOSKING-JERVIS, F., ENGLE, R., DUDDERIDGE, T., HINDLEY, R. G., EMARA, A., NIGAM, R., MCCARTAN, N., VALERIO, M., ... & AHMED, H. U. 2022. Cancer Control Outcomes Following Focal Therapy Using High-intensity Focused Ultrasound in 1379 Men with Nonmetastatic Prostate Cancer: A Multi-institute 15-year Experience. *European Urology,* 81**,** 407-413.

REDDY, D., VAN SON, M., PETERS, M., BERTONCELLI TANAKA, M., DUDDERIDGE, T., CULLEN, E., HO, C. L. T., HINDLEY, R. G., EMARA, A., MCCRACKEN, S., ORCZYK, C., SHERGILL, I., MANGAR, S., NIGAM, R., VIRDI, J., MOORE, C. M., ARYA, M., SHAH, T. T., WINKLER, M., ... & AHMED, H. U. 2023. Focal therapy versus radical prostatectomy and external beam radiotherapy as primary treatment options for non-metastatic prostate cancer: results of a cost-effectiveness analysis. *J Med Econ,* 26**,** 1099-1107.

SCHAEFFER, E. M., SRINIVAS, S., ADRA, N., AN, Y., BITTING, R., CHAPIN, B., CHENG, H. H., D'AMICO, A. V., DESAI, N., DORFF, T., EASTHAM, J. A., FARRINGTON, T. A., GAO, X., GUPTA, S., GUZZO, T., IPPOLITO, J. E., KARNES, R. J., KUETTEL, M. R., LANG, J. M., ... & FREEDMAN-CASS, D. A. 2024. NCCN Guidelines® Insights: Prostate Cancer, Version 3.2024. *J Natl Compr Canc Netw,* 22**,** 140-150.

VAN SON, M. J., PETERS, M., REDDY, D., SHAH, T. T., HOSKING-JERVIS, F., ROBINSON, S., LAGENDIJK, J. J. W., MANGAR, S., DUDDERIDGE, T., MCCRACKEN, S., HINDLEY, R. G., EMARA, A., NIGAM, R., PERSAD, R., VIRDI, J., LEWI, H., MOORE, C., ORCZYK, C., EMBERTON, M., ... & FALCONER, A. 2021. Conventional radical versus focal treatment for localised prostate cancer: a propensity score weighted comparison of 6-year tumour control. *Prostate Cancer and Prostatic Diseases,* 24**,** 1120-1128.

ZHANG, K., TEOH, J., LAGUNA, P., DOMINGUEZ-ESCRIG, J., BARRET, E., RAMON-BORJA, J. C., MUIR, G., BOHR, J., DE REIJKE, T. M., PELECHANO GÓMEZ, P., NG, C.-F., SANCHEZ-SALAS, R. & DE LA ROSETTE, J. 2023. Effect of Focal vs Extended Irreversible Electroporation for the Ablation of Localized Low- or Intermediate-Risk Prostate Cancer on Early Oncological Control: A Randomized Clinical Trial. *JAMA Surgery,* 158**,** 343-349.

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