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To evaluate efficacy and tolerability of deferred androgen deprivation therapy +/- upfront CRyOtherapy in men with localised radiation recurrent Prostate cancer (RRPC)

Submission date 26/07/2011	**Recruitment status** No longer recruiting	[_] Prospectively registered [_] Protocol
Registration date 26/07/2011	**Overall study status** Stopped	[_] Statistical analysis plan [X] Results
Last Edited 26/10/2022	**Condition category** Cancer	[_] Individual participant data [_] Record updated in last year

Plain English summary of protocol
https://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/a-trial-cryotherapy-and-hormone-therapy-for-prostate-cancer-come-back-after-radiotherapy-crop

Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
10051

Study information

Scientific Title
randomised controlled trial of deferred androgen deprivation therapy +/- upfront CRyOtherapy in men with localised radiation recurrent Prostate cancer (RRPC) to evaluate efficacy and tolerability

Acronym
CROP

Study objectives
This is an open, multi-centre, phase III randomised controlled trial (RCT) to investigate the role of salvage prostate cryotherapy in patients with localised recurrent prostate cancer following radiotherapy. Recruited patients will be randomised into one of two arms: an intervention arm with salvage prostate cryotherapy followed by non-surgical management at failure (deferred ADT) or a control arm with non-surgical management (deferred ADT) only.

The proposed RCT will evaluate the outcome among patients managed with deferred androgen ablation with or without upfront salvage prostate cryotherapy for their RRPC. The endpoint will be distant metastasis free survival (DMFS). The toxicity profile, assessment of patient quality of life and health economic analysis also form integral parts of the study.

Primary Objective
To determine the efficacy of salvage prostate cryotherapy in RRPC in combination with deferred androgen deprived therapy (ADT) in patients with radiation recurrent prostate cancer

1. To evaluate the safety and tolerability of prostate cryotherapy in RRPC
2. To determine the side effect profile of salvage cryotherapy and its impact on the quality of life for patients
3. To determine within this study the optimal health economic model for cost-effectiveness analysis to assess cryotherapy against current management plans
4. To determine the likely costs to the NHS if prostate cryotherapy is adopted widely for RRPC

Ethics approval required
Old ethics approval format

Ethics approval(s)
West of Scotland REC1 approved on 07 April 2011, ref: 11/S0703/2

Study design
Randomised; Interventional; Design type: Treatment

Primary study design
Interventional

Secondary study design
Randomised controlled trial

Study setting(s)
Hospital

Study type(s)
Treatment

Participant information sheet
Patient information sheet can be found at http://www.prostatecryotherapy.scot.nhs.uk/index.php/new-developments

Health condition(s) or problem(s) studied
Prostate cancer

Interventions
Patients will be randomised equally across the two study treatment arms. 270 patients will receive upfront salvage prostate cryotherapy followed by deferred androgen deprivation therapy. 270 patients will receive deferred androgen deprivation therapy alone

Deferred ADT, The option of intermittent or continuous ADT is permitted at the discretion of the Investigator, but the intention is to be declared at randomisation.

Salvage prostate cryotherapy, Salvage prostate cryotherapy will be given upfront to those patients randomised to Arm B (cryotherapy + deferred ADT);

Follow Up Length: 90 month(s); Study Entry : Single Randomisation only

Intervention Type
Other

Phase
Phase III

Primary outcome measure
Distant Metastasis Free Survival (DMFS); Timepoint(s): DMFS assessed annually by MRI and bone scan

Secondary outcome measures
1. Acute and late side effects of cryotherapy; Timepoint(s): Meausred using NCI CTCAE; Efficacy; Timepoint(s): PSA 3 monthly in year 1, annually thereafter
2. Prostate biopsy at 6 months post cryotherapy; Functional Status; Timepoint(s): validated questionnaires at 3, 6, 12 months and annually thereafter

Overall study start date
01/06/2011

Completion date
01/06/2020

Reason abandoned (if study stopped)
Lack of efficacy

Eligibility

Key inclusion criteria
1. Histologically confirmed relapsed prostate cancer following previous treatment with radiation therapy (either external beam or brachytherapy) for either organ confined or non-metastatic locally advanced prostate cancer, namely T1-3aN0M0 disease
2. Life expectancy of at least 5 years
3. Clinical/radiological T1c-T3a
4. Prostrate specific antigen (PSA) level = 20 ng/ml
5.. Aged 18 years or over
6. Eastern Cooperative Oncology Group Performance Status Scale (ECOG PS) = 0 or 1 or 2
7. Ability to provide informed consent
8. Adequate haematological function as defined by haemoglobin (Hb) = 100g/L; platelets = 100 x 109/L; neutrophils =1.5 x109/L
9. Adequate biochemical function as defined by bilirubin = 1.5 upper limit of normal (ULN); alanine aminotransferase (ALT), aspartate aminotransferase (AST) = 2.5 x ULN, alkaline phosphatase = 2.5 x ULN and adequate renal function defined as either serum creatinine = 1.5 x ULN OR calculated/measured creatinine clearance = 60mls/min (as defined by Cockcroft and Gault formula); Target Gender: Male ; Lower Age Limit 18 years

Participant type(s)
Patient

Age group
Adult

Lower age limit
18 Years

Sex
Male

Target number of participants
Planned Sample Size: 540; UK Sample Size: 540

Key exclusion criteria
1. Lymph node >10mm short axis on magnetic resonance imaging (MRI) abdomen and pelvis
2. Previous transurethral resection of prostate gland with evidence of a significant defect (>10mm in width) on transrectal ultrasound scan
3. Significant lower urinary tract symptoms, including bladder outflow obstructive symptoms
4. History of abdomino-perineal resection of rectum.
5. Known coagulation disorder
6. Complex perianal fistula
7. Previous combined external beam radiotherapy and brachytherapy to the prostate
8. Significant symptoms/toxicity related to the rectum following radiotherapy National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) grade 3 or above
9. Failed androgen deprivation therapy as second line therapy for radiation recurrent prostate cancer
10. Prior cryotherapy to the prostate
11. Any evidence of severe or uncontrolled systemic conditions (e.g. severe hepatic impairment,

interstitial lung disease [bilateral, diffuse, parenchymal lung disease]) or current unstable or uncompensated respiratory or cardiac conditions which make it undesirable for the patient to participate in the study or which could jeopardise compliance with the protocol
12. Other prior malignancy with estimated =30% chance of relapse within 5 years

Date of first enrolment
01/06/2011

Date of final enrolment
01/06/2020

Locations

Countries of recruitment
Scotland

United Kingdom

Study participating centre
1053 Great Western Road
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Sponsor information

Organisation
NHS Greater Glasgow & Clyde (UK)

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Sponsor type
Government

ROR
https://ror.org/05kdz4d87

Funder(s)

Funder type
Charity

Funder Name
Clinical Trials Awards and Advisory Committee (CTAAC) (UK)

Results and Publications

Publication and dissemination plan
Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan
Not provided at time of registration

IPD sharing plan summary
Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	19/10/2015		Yes	No
Plain English results			26/10/2022	No	Yes