

# Local cytoreductive treatments for men with newly diagnosed metastatic prostate cancer in addition to standard of care treatment

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<b>Registration date</b> 21/11/2018	<b>Overall study status</b> Ongoing	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 24/09/2025	<b>Condition category</b> Cancer	<input type="checkbox"/> Individual participant data <input checked="" type="checkbox"/> Record updated in last year

## Plain English summary of protocol

<https://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/a-trial-comparing-different-treatments-for-prostate-cancer-that-has-spread-ip2-alanta>

## Contact information

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Scientific

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**Additional identifiers****ClinicalTrials.gov (NCT)**

NCT03763253

**Protocol serial number**

18HH4804

**Study information****Scientific Title**

Additional Treatments to the Local tumour for metastatic prostate cancer: Assessment of Novel Treatment Algorithms

## Acronym

IP2 - ATLANTA

## Study objectives

The trialists hypothesise that men with metastatic disease who undergo treatment of the local tumour in the form of either radical therapy (prostatectomy or radiotherapy) or minimally invasive ablative therapy (MIAT), combined with metastases directly therapy, will have improved survival compared to those who receive standard of treatment alone. They will be investigating this newly evolving treatment paradigm in a formal randomised control trial (RCT).

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Approved 22/01/2019, Wales Research Ethics Committee 5 Bangor (Health and Care Research Wales Castlebridge 4, 15-19 Cowbridge Road East, Cardiff, CF11 9AB; +44(0)2920 785736; WalesREC5@wales.nhs.uk), ref: 19/WA/0005

## Study design

Three-arm unblinded randomized controlled trial using a positive control

## Primary study design

Interventional

## Study type(s)

Treatment

## Health condition(s) or problem(s) studied

Prostate cancer; metastatic disease (Any T, Any N, M1+) of any grade, stage or Prostate Specific Antigen (PSA) level

## Interventions

Current interventions as of 23/08/2023:

Stratified randomisation via the electronic platform REDCap database.

### Intervention Arm 1:

Minimally Invasive Ablative Therapy (MIAT) to prostate in addition to SOC systemic treatment. The exact treatment protocol and modality used (cryotherapy or high intensity focused ultrasound, HIFU) will be set within the MIAT SOP. For those patients who are undergoing MIAT no local prostate radiotherapy will be given as part of the intervention. Radiotherapy can be given subsequently for palliative reasons. MIAT can be provided by a site other than the recruiting site with follow-up visits at recruiting site.

### Intervention Arm 2:

Radical therapy (prostatectomy or external beam radiotherapy [Prostate radiotherapy using a dose of external beam radiotherapy of 60Gy/20Fr over 27 days OR 74-78Gy in 2Gy per fraction with or without simultaneous nodal radiotherapy, as defined in Local Radiotherapy SOP]) in addition to SOC systemic treatment. Modality based on physician and patient preference and patient co-morbidities. Radiotherapy or surgery can be provided by a site other than the recruiting site with follow-up visits at the recruiting site. The surgical technique is at the discretion and expertise of the surgical team but will be laid down in the Prostatectomy SOP. For

those patients who are undergoing radical prostatectomy no local prostate radiotherapy will be given as part of the intervention. Radiotherapy can be given subsequently for palliative reasons. The radiotherapy doses and protocol in this arm will be higher defined in the Radiotherapy Intervention Arm 2 SOP.

Metastases Directed Therapy (Intervention Arm 1 and 2):

In both intervention arms 1 and 2, metastases directed therapy (MDT) may be used but intent to use MDT to be declared prior to randomisation. In the case of a metastatic recurrence after MDT, a re-treatment with MDT would be allowed if there were new metastatic areas/locations.

The imaging reporting of metastases as well as doses and protocol for MDT as defined in and determined by an Imaging Reporting SOP and a Metastases-Directed Therapy SOP.

Treatment duration of trial therapies: Prostatectomy 1 day; Radiotherapy 4 to 7.5 weeks; Minimally invasive therapy (MIAT) 1 day

[68Ga]PSMA-11 PET-CT Sub study--Now completed:

The trialists will also ask men in the pilot part of ATLANTA if they are willing to undergo a PSMA PET scan. They want to see if this scan might be as accurate in detecting residual disease as prostate biopsies and standard body scans, like MRI, CT or bone scans. This however is optional and participants will be told that they do not have to agree to take part in this optional research, but can still take part in the ATLANTA study. The tests required for this exploratory research will be explained to patients prior to consent in the Patient Information Sheet and verbally by clinician. The target recruitment for this study is 25 patients.

Previous interventions from 08/07/2021 to 23/08/2023:

Stratified randomisation via the electronic platform known as the InForm database.

Intervention Arm 1:

Minimally Invasive Ablative Therapy (MIAT) to prostate in addition to standard of care systemic treatment. The exact treatment protocol and modality used (cryotherapy or high intensity focused ultrasound, HIFU) will be set within the MIAT SOP. For those patients who are undergoing MIAT no local prostate radiotherapy will be given as part of the intervention. Radiotherapy can be given subsequently for palliative reasons.

Intervention Arm 2:

Radical therapy with either prostatectomy or external beam radiotherapy (high radical dose set out in Radiotherapy Intervention Arm 2 SOP) in addition to standard of care systemic treatment. Modality based on physician and patient preference and patient co-morbidities. The surgical technique is at the discretion and expertise of the surgical team but will be laid down in the Prostatectomy SOP. For those patients who are undergoing radical prostatectomy no local prostate radiotherapy will be given as part of the intervention. Radiotherapy can be given subsequently for palliative reasons.

Metastases Directed Therapy (Intervention Arm 1 and 2):

In both intervention arms 1 and 2, metastases directed therapy (MDT) may be used but intent to use MDT to be declared prior to randomisation. In the case of a metastatic recurrence after MDT, a re-treatment with MDT would be allowed if there were new metastatic areas/locations. The imaging reporting of metastases as well as doses and protocol for MDT will be defined and determined by an Imaging Reporting SOP and a Metastases-Directed Therapy SOP.

In total, 80 men will be approached in 10 UK centre to estimate recruitment rate, acceptability of the trial randomisation, reported toxicities and adherence to trial interventions in a pilot phase- this phase has now been successfully completed. They will also be included into the main phase where 918 will be recruited over 30 UK centres- current phase. Participants will remain in the study for a maximum of 4 years. The aims are to see whether men will participate in this trial (pilot) before a larger trial (main) is run, and the impact of these treatments on quality of life.

#### [68Ga]PSMA-11 PET-CT substudy:

The trialists will also ask men in the pilot part of ATLANTA if they are willing to undergo a PSMA PET scan. They want to see if this scan might be as accurate in detecting residual disease as prostate biopsies and standard body scans, like MRI, CT or bone-scans. This however is optional and participants will be told that they do not have to agree to take part in this optional research, but can still take part in the ATLANTA study. The tests required for this exploratory research will be explained to patients prior to consent in the Patient Information Sheet and verbally by clinician. Target recruitment for this study is 25 patients. This substudy has now successfully been completed and we are not recruiting into this as we are now in the main phase of the trial.

#### Previous interventions:

Stratified randomisation via the electronic platform known as the InForm database.

#### Intervention Arm 1:

Minimally Invasive Ablative Therapy (MIAT) to prostate in addition to standard of care systemic treatment. The exact treatment protocol and modality used (cryotherapy or high intensity focused ultrasound, HIFU) will be set within the MIAT SOP. For those patients who are undergoing MIAT no local prostate radiotherapy will be given as part of the intervention. Radiotherapy can be given subsequently for palliative reasons.

#### Intervention Arm 2:

Radical therapy with either prostatectomy or external beam radiotherapy (high radical dose set out in Radiotherapy Intervention Arm 2 SOP) in addition to standard of care systemic treatment. Modality based on physician and patient preference and patient co-morbidities. The surgical technique is at the discretion and expertise of the surgical team but will be laid down in the Prostatectomy SOP. For those patients who are undergoing radical prostatectomy no local prostate radiotherapy will be given as part of the intervention. Radiotherapy can be given subsequently for palliative reasons.

#### Metastases Directed Therapy (Intervention Arm 1 and 2):

In both intervention arms 1 and 2, metastases directed therapy (MDT) may be used but intent to use MDT to be declared prior to randomisation. In the case of a metastatic recurrence after MDT, a re-treatment with MDT would be allowed if there were new metastatic areas/locations. The imaging reporting of metastases as well as doses and protocol for MDT will be defined and determined by an Imaging Reporting SOP and a Metastases-Directed Therapy SOP.

In total, 80 men will be approached in 10 UK centre to estimate recruitment rate, acceptability of the trial randomisation, reported toxicities and adherence to trial interventions in a pilot phase. They will also be included into the main phase where 918 will be recruited over 30 UK centres. Participants will remain in the study for a maximum of 4 years. The aims are to see whether men will participate in this trial (pilot) before a larger trial (main) is run, and the impact of these treatments on quality of life.

#### [68Ga]PSMA-11 PET-CT substudy:

The trialists will also ask men in the pilot part of ATLANTA if they are willing to undergo a PSMA

PET scan. They want to see if this scan might be as accurate in detecting residual disease as prostate biopsies and standard body scans, like MRI, CT or bone-scans. This however is optional and participants will be told that they do not have to agree to take part in this optional research, but can still take part in the ATLANTA study. The tests required for this exploratory research will be explained to patients prior to consent in the Patient Information Sheet and verbally by clinician. Target recruitment for this study is 25 patients.

## **Intervention Type**

Mixed

## **Primary outcome(s)**

Internal Pilot:

1. Compliance to randomised arm, measured using the electronic Case Report Form on a monthly basis.
2. Recruitment and randomisation rate, measured using the electronic Case Report Form on a monthly basis.
3. Safety (adverse events), measured using the electronic Case Report Form at baseline, week 12, week 26, week 28, week 32, week 34 then every 12 weeks for first year and every 24 weeks for remaining years 2 to 4 for all patients.
4. Proportion of patients with complete pathological response, measured on post SOC systemic therapy prostate biopsies at 6-9 months.

Phase II:

1. Progression-free survival (PFS), with progression defined as a composite outcome of biochemical failure (PSA progression value) or local progression or lymph node progression or bone metastases progression (new sites) or progression or development of new distant metastases, defined as lymph nodes outside the pelvis, bone or organ involvement or skeletal-related events confirmed as progression as in the Systemic Therapy in Advancing Or Metastatic Prostate Cancer: Evaluation Of Drug Efficacy (STAMPEDE) RCT. PFS will be assessed from the time of enrollment to the end of the study. Depending on when the patient is recruited, the follow-up duration will be 2-4 years.

## **Key secondary outcome(s)**

1. Urinary, sexual and rectal side effects, measured using the IPSS, IIEF15 and EPIC questionnaires at baseline, week 26, week 28, week 34, then every 12 weeks for first year and every 24 weeks for remaining years 2 to 4
2. Patient-reported outcomes, measured using the IPSS, IIEF15, EPIC Bowel and Bladder, EQ-5D-5L, EORTC QLQ-FA12 (Fatigue), EORTC QLQ-ELD14 (Elderly), EORTC QLQ-C30 (General), EORTC QLQ PR25 (Prostate), EORTC QLQ-BM22 (Bone Metastases) questionnaires at baseline, week 26, week 28, week 34, then every 12 weeks for first year and every 24 weeks for remaining years 2 to 4
3. Progression on PSA and imaging and impact of clinical features on progression, measured using PSA blood tests at baseline, week 12, 26, 34 then every 12 weeks for first year and every 24 weeks for remaining years 2 to 4 and Imaging tests at baseline and if progression is suspected by a clinician
4. Health-related quality-of-life, measured using the IPSS, IIEF15, EPIC Bowel and Bladder, EQ-5D-5L, EORTC QLQ-FA12 (Fatigue), EORTC QLQ-ELD14 (Elderly), EORTC QLQ-C30 (General), EORTC QLQ PR25 (Prostate), EORTC QLQ-BM22 (Bone Metastases) questionnaires at baseline, week 26, week 28, week 34, then every 12 weeks for first year and every 24 weeks for remaining years 2

to 4

5. Data on costs and resource utilisation for future cost-effectiveness analysis, measured as defined in the statistical analysis plan at trial completion

**Completion date**

31/08/2026

**Eligibility**

**Key inclusion criteria**

1. Diagnosed with prostate cancer within 6 months of screening visit
2. Metastatic disease (Any T, Any N, M1+) of any grade, stage or Prostate Specific Antigen (PSA) level
3. Fit to undergo standard of care treatment for metastatic disease and both minimally invasive therapy and prostate radiotherapy/prostatectomy
4. Performance status 0-2
5. Histologically proven local tumour

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Sex**

Male

**Total final enrolment**

433

**Key exclusion criteria**

Added 23/08/2023: Current exclusion criteria as of 06/10/2021:

1. Patient did not undergo and/or is unable to undergo standard of care baseline imaging tests for confirmation of metastatic status (CT abdomen/pelvis AND chest X-ray (or CT chest) AND radioisotope bone scan (or whole body imaging such as MRI or PET imaging as alternative to all preceding scans mentioned here) AND prostate MRI.
2. Prior exposure to long-term androgen deprivation therapy or hormonal therapy for the treatment of prostate cancer unless started within 6 months of screening visit.
3. Prior chemotherapy or local or systemic therapy for treatment of prostate cancer (apart from ADT or hormonal therapy as outlined above)

Previous exclusion criteria from 08/02/2021 to 06/10/2021:

1. Patient did not undergo and/or is unable to undergo standard of care baseline imaging tests for confirmation of metastatic status (CT abdomen/pelvis AND chest X-Ray (or CT chest) AND radioisotope bone scan (or whole body imaging such as MRI or PET imaging as alternative to all preceding scans mentioned here) AND prostate MRI
2. Prior exposure to long-term androgen deprivation therapy or hormonal therapy for the

treatment of prostate cancer unless started within 4 months of screening visit

3. Prior chemotherapy or local or systemic therapy for treatment of prostate cancer (apart from ADT or hormonal therapy as outlined above in Exclusion Criteria 2)

Previous exclusion criteria:

1. Patient did not undergo and/or is unable to undergo standard of care baseline imaging tests for confirmation of metastatic status (CT abdomen/pelvis AND chest X-Ray (or CT chest) AND radioisotope bone scan (or whole body imaging such as MRI or PET imaging as alternative to all preceding scans mentioned here) AND prostate MRI

2. Prior exposure to long-term androgen deprivation therapy or hormonal therapy for the treatment of prostate cancer unless started within 3 months of randomisation

3. Prior chemotherapy or local or systemic therapy for treatment of prostate cancer (apart from ADT or hormonal therapy as outlined above in Exclusion Criteria 2)

**Date of first enrolment**

10/04/2019

**Date of final enrolment**

31/08/2024

## **Locations**

**Countries of recruitment**

United Kingdom

England

Wales

**Study participating centre**

**Charing Cross Hospital, Imperial College Healthcare NHS Trust**

Fulham Palace Road, Hammersmith

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United Kingdom

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**Study participating centre**

**Southampton General Hospital**

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Southampton

United Kingdom

SO16 6YD

**Study participating centre**

**Sunderland Royal Hospital**

Kayll Road  
Sunderland  
United Kingdom  
SR4 7TP

**Study participating centre****Cambridge Queen Elizabeth Hospital, Kings Lynn**

Gayton Road, King's Lynn  
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United Kingdom  
PE30 4ET

**Study participating centre****Northwick Park, London North West Healthcare NHS Trust**

Watford Rd  
Harrow  
United Kingdom  
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**Study participating centre****Freeman Hospital**

Newcastle upon Tyne Hospitals NHS Foundation Trust  
Freeman Rd  
High Heaton  
Newcastle upon Tyne  
United Kingdom  
NE7 7DN

**Study participating centre****Wirral University Teaching Hospital**

Wirral University Teaching Hospital NHS Foundation Trust  
Arrowe Park Rd  
Birkenhead  
United Kingdom  
CH49 5PE

**Study participating centre****Royal Devon and Exeter NHS Trust**

Barrack Road  
Exeter

United Kingdom  
EX2 5DW

**Study participating centre**  
**Croydon University Hospital**  
530 London Road  
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United Kingdom  
CR7 7YE

**Study participating centre**  
**Royal Marsden Hospital**  
203 Fulham Road  
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London  
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**Study participating centre**  
**Glan Clwyd Hospital**  
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**West Middlesex University Hospital**  
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**Study participating centre**  
**Kings College Hospital**  
Denmark Hill  
London  
United Kingdom  
SE5 9RS

**Study participating centre**  
**The Clatterbridge Cancer Centre NHS Foundation Trust**  
Clatterbridge Hospital  
Clatterbridge Road  
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**Study participating centre**  
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Darenth Wood Road  
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DA2 8DA

**Study participating centre**  
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**Study participating centre**  
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Churchill Hospital  
Old Road  
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**Study participating centre**  
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250 Euston Road  
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**Study participating centre**  
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## **Sponsor information**

**Organisation**  
Imperial College London

**ROR**  
<https://ror.org/041kmwe10>

## **Funder(s)**

**Funder type**  
Research organisation

**Funder Name**  
Wellcome Trust

**Alternative Name(s)**

**Funding Body Type**  
Private sector organisation

**Funding Body Subtype**  
International organizations

**Location**  
United Kingdom

# Results and Publications

## Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Prof. Hashim U Ahmed (hashim.ahmed@imperial.ac.uk).

## IPD sharing plan summary

Available on request

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">HRA research summary</a>			26/07/2023	No	No
<a href="#">Study website</a>	Study website	11/11/2025	11/11/2025	No	Yes