Standard open radical cystectomy (ORC) versus robotically assisted radical cystectomy (RARC)

| Submission date | Recruitment status No longer recruiting | Prospectively registered | | |
|-------------------|---|--|--|--|
| 19/04/2017 | | [X] Protocol | | |
| Registration date | Overall study status | Statistical analysis plan | | |
| 25/04/2017 | Completed | [X] Results | | |
| Last Edited | Condition category | [] Individual participant data | | |
| 02/08/2024 | Cancer | | | |

Plain English summary of protocol

https://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/a-study-of-robotic-assisted-keyhole-surgery-for-bladder-cancer-iroc

Contact information

Type(s)

Public

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Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

NCT03049410

Protocol serial number

33071

Study information

Scientific Title

A phase III multicentre randomised controlled trial to compare the efficacy of Robotically Assisted Radical Cystectomy (RARC) and intracorporeal urinary diversion with Open Radical Cystectomy (ORC) in patients with bladder cancer

Acronym

iROC

Study objectives

The aim of this study is to compare robotic assisted radical cystectomy versus standard open radical cystectomy to see if one gives better recovery times and less complications than the other.

Ethics approval required

Old ethics approval format

Ethics approval(s)

NRES Committee North East - Newcastle & North Tyneside 1, 18/01/2017, ref: 16/NE/0418

Study design

Randomised; Interventional; Design type: Treatment, Surgery

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Bladder cancer

Interventions

Participants are randomised in a 1:1 ratio to one of two groups.

Arm A: Participants undergo a robotically assisted radical cystectomy (RARC).

Arm B: Participants undergo a open radical cystectomy (ORC).

Patients in both groups will be followed up at 5 weeks, 12 weeks, 24 weeks and 1 year post surgery.

Intervention Type

Procedure/Surgery

Primary outcome(s)

Number of days alive and out of hospital within 90 days from surgery is assessed by reviewing patient's medical notes and conducting follow-up visits at 5 weeks and 12 weeks after surgery.

Key secondary outcome(s))

- 1. Self-administered WHODAS-2 (12 point) questionnaire at baseline (pre-operative), 5 weeks, 12 weeks, 24 weeks and 1 year after surgery
- 2. Self-administered EORTC QLQ-BLM30 questionnaire at baseline (pre-operative), 5 weeks, 12 weeks, 24 weeks and 1 year after surgery
- 3. Self-administered EQ-5D-5L questionnaire at baseline, 5 weeks, 12 weeks, 24 weeks and 1 year after surgery
- 4. Quantified activity levels: Total steps taken over 7 consecutive days (measured using a wearable tracking device e.g. Fitbit) at baseline (pre-operative), 5 days post-op, 5 weeks, 12 weeks, 24 weeks and 1 year after surgery
- 5. 30 Second Chair to Stand test: Number of times the patient can stand from sitting in a 30 second interval. This will be conducted in clinic at baseline (pre-operative), 5 weeks, 12 weeks, 24 weeks and 1 year after surgery

The following tools will be used to measure complications: Adverse events recorded using the Clavien-Dindo classification.

Completion date

30/09/2021

Eligibility

Key inclusion criteria

Current inclusion criteria as of 04/07/2017:

- 1. Participants must be over 18 years of age
- 2. Male or female
- 3. Histopathological confirmation of bladder cancer (UCC, SCC, adenocarcinoma or rare variant)
- 4. CIS or stage pTa or pT1 or ≥pT2 or mobile bladder mass on bimanual examination under anaesthesia
- 5. Node status ≤ N1 on imaging criteria or PET –ve outside pelvis
- 6. ECOG grade 0, 1, 2 or 3
- 7. Able to give informed written consent to participate

Previous inclusion criteria:

- 1. Participants must be over 18 years of age
- 2. Male or female
- 3. Histopathological confirmation of bladder cancer (UCC, SCC, adenocarcinoma or rare variant)
- 4. CIS or stage pTa or pT1 or ≥pT2 or mobile bladder mass on bimanual examination under anaesthesia
- 5. Node status ≤ N1 on imaging criteria or PET –ve outside pelvis
- 6. ASA grade 1,2,3 or 4
- 7. Able to give informed written consent to participate

Participant type(s)

Patient

Healthy volunteers allowed

Age group

Adult

Lower age limit

18 years

Sex

All

Total final enrolment

338

Key exclusion criteria

Current exclusion criteria as of 04/07/2017:

- 1. Unwilling to undergo cystectomy
- 2. Previous abdominal surgery rendering them unsuitable for either iRARC or ORC
- 3. Patients with upper urinary tract disease
- 4. Concomitant disease that would render the patient unsuitable for the trial
- 5. Pregnant or lactating females
- 6. Previous radiotherapy for bladder cancer

Previous exclusion criteria:

- 1. Unwilling to undergo cystectomy
- 2. Previous abdominal surgery other than hernia repair or cholecystectomy
- 3. Patients with upper urinary tract disease
- 4. Concomitant disease that would render the patient unsuitable for the trial
- 5. Pregnant or lactating females

Date of first enrolment

01/03/2017

Date of final enrolment

31/03/2020

Locations

Countries of recruitment

United Kingdom

England

Study participating centre University College Hospital

235 Euston Road London United Kingdom NW1 2BU

Study participating centre Royal Hallamshire Hospital

Glossop Road Sheffield United Kingdom S10 2JF

Sponsor information

Organisation

University College London

ROR

https://ror.org/02jx3x895

Funder(s)

Funder type

Charity

Funder Name

The Urology Foundation

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study will be available upon request from situ.iroc@ucl.ac.uk

IPD sharing plan summary

Available on request

Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|-------------------------------|-------------------------------|--------------|------------|----------------|-----------------|
| Results article | | 15/05/2022 | 16/05/2022 | Yes | No |
| Protocol article | protocol | 08/08/2018 | 23/10/2019 | Yes | No |
| HRA research summary | | | 28/06/2023 | | No |
| Participant information sheet | Participant information sheet | 11/11/2025 | 11/11/2025 | No | Yes |

 Plain English results
 02/08/2024 No
 Yes

 Study website
 11/11/2025 No
 Yes