

Radiotherapy with weekly gemcitabine (GEM)

Submission date 30/07/2010	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 30/07/2010	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 19/10/2018	Condition category Cancer	☐ Individual participant data

Plain English summary of protocol

<http://cancerhelp.cancerresearchuk.org/trials/a-trial-looking-at-radiotherapy-and-gemcitabine-for-people-with-bladder-cancer>

Contact information

Type(s)

Scientific

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Additional identifiers

Protocol serial number

1368

Study information

Scientific Title

Phase II study of radiotherapy with concurrent weekly gemcitabine in muscle-invasive bladder cancer

Study objectives

The aim of this prospective phase II trial was to determine the response of muscle invasive bladder cancer (MIBC) to concurrent chemoradiotherapy using weekly gemcitabine with four weeks' radiotherapy (RT) (GemX).

Ethics approval required

Old ethics approval format

Ethics approval(s)

South Manchester Local Research and Ethics Committee approved (ref: 03/SM/097)

Primary study design

Interventional

Study design

Multicentre non-randomised interventional treatment trial

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Topic: National Cancer Research Network; Subtopic: Bladder Cancer; Disease: Bladder (advanced)

Interventions

Each cycle of concurrent chemotherapy comprised 100 mg/m² gemcitabine given as an intravenous infusion over 30 minutes 2 - 4 hours before radiotherapy (RT) on day 1. Conformal radiotherapy using four fields and multi-leaf collimators was delivered to the whole bladder with a minimum 2 cm margin at the involved wall. A total dose of 52.5 Gy was given as 20 fractions within 28 days. Gemcitabine was administered once weekly during RT on days 1, 8, 15 and 22.

Study entry: Registration only

Intervention Type

Drug

Phase

Phase II

Drug/device/biological/vaccine name(s)

Gemcitabine

Primary outcome(s)

Tumour response, measured three months after completion of treatment

Key secondary outcome(s)

1. Toxicity
2. Survival

Completion date

07/08/2007

Eligibility

Key inclusion criteria

1. Histologically confirmed T2-3 N0M0 transitional cell carcinoma (TCC) of the bladder*
2. Life expectancy greater than 3 months
3. World Health Organization (WHO) performance status 0-2
4. Patients opting for bladder preservation who are able and motivated to comply with follow up
5. Maximal achievable transurethral resection of bladder tumour (TURBT)
6. Serum creatinine less than 1.5 x upper limit of normal (ULN)
7. Haemoglobin (Hb) greater than 10 g/dl, platelets greater than 100,000/mm³, white cell count (WCC) greater than 2000/mm³
8. Aged greater than 18 years
9. Provided informed consent

*Patients with TCC in whom biopsy fails to demonstrate histological evidence of muscle invasion but where magnetic resonance (MR) demonstrates unequivocal evidence of deep muscle invasion can be accepted for trial entry

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 Years

Sex

Not Specified

Key exclusion criteria

1. Residual tumour with any unidimensional measurement greater than or equal to 7 cm following TURBT
2. Poor bladder function:
 - 2.1. Any WHO bladder symptom score equalling 3 or greater than or equal to two bladder symptom scores equalling 2
 - 2.2. Documented bladder capacity less than or equal to 200 ml
3. Abnormal liver function tests (LFT) (bilirubin greater than 1.3 x ULN, alkaline phosphatase greater than 5 x ULN, transaminases greater than 5 x ULN)
4. Previous radiotherapy to pelvis
5. More than one instillation of intravesical cytotoxic chemotherapy or immunotherapy
6. Any previous systemic chemotherapy
7. Radiotherapy planning target volume (PTV) greater than 1000cm³
8. Any prior malignancy (excluding basal cell carcinoma [BCC])
9. Pre-existing medical conditions that preclude this treatment
10. Pregnant or breast-feeding
11. Not able to use appropriate and/or adequate contraception during and for 3 months after the study

Date of first enrolment

01/07/2003

Date of final enrolment

07/08/2007

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

550 Wilmslow Road

Manchester

United Kingdom

M20 4BX

Sponsor information

Organisation

Christie Hospital NHS Foundation Trust (UK)

ROR

<https://ror.org/03v9efr22>

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

Christie Hospital NHS Foundation Trust (UK)

Results and Publications

Individual participant data (IPD) sharing plan

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	20/02/2011		Yes	No
Plain English results				No	Yes