

# T4 immunotherapy of head and neck cancer

<b>Submission date</b>	<b>Recruitment status</b>	<input type="checkbox"/> Prospectively registered
15/07/2015	No longer recruiting	<input checked="" type="checkbox"/> Protocol
<b>Registration date</b>	<b>Overall study status</b>	<input checked="" type="checkbox"/> Statistical analysis plan
15/07/2015	Completed	<input checked="" type="checkbox"/> Results
<b>Last Edited</b>	<b>Condition category</b>	<input type="checkbox"/> Individual participant data
02/12/2025	Cancer	

## Plain English summary of protocol

<http://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/a-trial-looking-at-t4-immunotherapy-for-people-with-head-and-neck-cancer>

## Contact information

### Type(s)

Public

### Contact name

Dr John Maher

### Contact details

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## Additional identifiers

### Clinical Trials Information System (CTIS)

2012-001654-25

### ClinicalTrials.gov (NCT)

NCT01818323

### Protocol serial number

19183

## Study information

**Scientific Title**

Phase 1 trial: T4 immunotherapy of head and neck cancer

**Study objectives**

Intra-tumoural delivery of T4 immunotherapy will provide a safe and efficacious immunotherapy for locally advanced / recurrent squamous cell carcinoma of head and neck.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

NRES committee west London, 20/11/2012, ref: 12/LO/1834

**Study design**

Non-randomised; Interventional; Design type: Treatment

**Primary study design**

Interventional

**Study type(s)**

Treatment

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

Topic: Cancer; Subtopic: Head and Neck Cancer; Disease: Head and Neck

**Interventions**

Intratumoural T4 immunotherapy, delivered at a single setting to multiple points in a locally advanced or recurrent tumour.

Study Entry : Registration only

**Intervention Type**

Biological/Vaccine

**Phase**

Phase I

**Drug/device/biological/vaccine name(s)**

T4

**Primary outcome(s)**

To define dose limiting toxicities for T4 immunotherapy in SCCHN.

**Key secondary outcome(s)**

1. To determine a safe and feasible recommended dose for phase II testing of intra-tumoural T4 Immunotherapy
2. To investigate serum cytokine levels after administration of T4 immunotherapy
3. To investigate persistence of T4+ T-cells at the site of administration and in the peripheral circulation
4. To achieve preliminary assessment of anti-tumour activity, using cross-sectional imaging to quantify objective responses

5. To investigate tumour ErbB receptor phenotype, before and after administration of T4 immunotherapy
6. To investigate immunomodulatory effects of low dose cyclophosphamide on T4 immunotherapy.
7. To investigate effect of T4 immunotherapy upon immune reactivity against endogenous tumour antigens

#### Completion date

31/12/2024

## Eligibility

#### Key inclusion criteria

1. Histologically and/ or cytologically confirmed SCCHN
2. 18 years or older
3. Locally advanced and/ or recurrent head and neck cancer with or without metastatic disease (excluding brain metastases) for whom no standard therapy remains or is suitable
4. Regarding previous treatment, patients may have received prior systemic therapy, including platinum chemotherapy, at least one month earlier. In the presence of metastatic disease, recent short-course palliative radiotherapy to non-target site(s) is allowed
5. Those who refuse palliative treatment may be eligible for participation. However, their reasons for not opting for palliative treatment must be explored thoroughly
6. At least one loco-regional target lesion measurable by RECIST v1.1 criteria on CT or MRI scanning within four weeks of enrolment, and amenable to intra-tumoral injection
7. Eastern Co-operative Oncology Performance Status of 0-2
8. Normal cardiac function as assessed by electrocardiography and either echocardiography (ECHO), or multi-gated aquisition (MUGA) scanning. Left ventricular ejection fraction must be >50%. Assessment must take place within four weeks of enrolment
9. Haematology results within seven days of enrolment: neutrophils >1.5 x 10<sup>9</sup>/L, platelets >100 x 10<sup>9</sup>/L, haemoglobin >9g/dl, INR <1.5
10. Biochemistry results within seven days of enrolment:
  - 10.1. Serum creatinine <1.5 upper limit of normal
  - 10.2. Bilirubin <1.25 times normal
  - 10.3. ALT/ AST <2.5 times upper limit of normal (<5 times upper limit of normal if liver metastases present)
11. Female patients must be postmenopausal (12 months of amenorrhea), surgically sterile or they must agree to use a physical method of contraception. Oral or injectable contraceptive agents cannot be the sole method of contraception. Women of childbearing potential (WOCB) who receive cyclophosphamide must adhere to these contraceptive requirements during the trial and until 3 months after the last dose of cyclophosphamide. Male patients, even if sterilized, must agree to use a barrier method of contraception. Male subjects must also commit to use a barrier method of contraception until at least 3 months after the end of study treatment
12. Written informed consent prior to registration

#### Participant type(s)

Patient

#### Healthy volunteers allowed

No

#### Age group

Mixed

**Lower age limit**

18 years

**Upper age limit**

100 years

**Sex**

All

**Total final enrolment**

20

**Key exclusion criteria**

1. The presence of or imminent occurrence of airway obstruction, unless tracheostomy in place
2. The presence of or imminent occurrence of tumour-mediated infiltration of major blood vessels
3. Positive history of HIV-1, HIV-2, HTLV-1, HTLV-2, Hepatitis B, Hepatitis C or syphilis infection.
4. Prior splenectomy
5. Clinically active autoimmune disease. Sub-clinical or quiescent autoimmune disease does not exclude from participation
6. Treatment in the preceding week with systemic corticosteroids (> 20mg prednisolone/ day), any systemic immunomodulatory agent, radiotherapy, chemotherapy or investigational medicinal product
7. Concurrent use of anticoagulant therapy is not permissible
8. The presence of major co-morbidity likely to impair ability to undergo trial therapy, such as recent myocardial infarction, congestive cardiac failure or uncontrolled hypertension
9. The presence of any psychological, familial, sociological or geographical condition potentially hampering compliance with the study protocol and follow-up schedule
10. Cyclophosphamide allergy - Final (sixth) cohort only
11. Pregnancy
12. Prior T4 immunotherapy

**Date of first enrolment**

05/06/2015

**Date of final enrolment**

15/10/2024

## Locations

**Countries of recruitment**

United Kingdom

England

**Study participating centre**

**Department of Research Oncology, Guy's Hospital**  
Great Maze Pond  
London  
England  
SE1 9RT

## Sponsor information

**Organisation**  
King's College London

**ROR**  
<https://ror.org/0220mzb33>

## Funder(s)

**Funder type**  
Government

**Funder Name**  
Jon Moulton Charitable Foundation

**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**

## IPD sharing plan summary

Data sharing statement to be made available at a later date

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Interim results article</a>		15/06/2023	12/12/2023	Yes	No
<a href="#">Other unpublished results</a>		29/11/2025	02/12/2025	No	No
<a href="#">Protocol file</a>	version 2.5	31/05/2015	12/12/2023	No	No
<a href="#">Protocol file</a>	version 10	29/01/2024	24/11/2025	No	No
<a href="#">Statistical Analysis Plan</a>	version 5.0	20/05/2025	02/12/2025	No	No