

# [18F]-tetrafluoroborate in patients with primary thyroid cancer or salivary cancer

<b>Submission date</b> 19/11/2015	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 20/11/2015	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 26/10/2022	<b>Condition category</b> Cancer	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

<https://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/a-study-using-pet-ct-scans-to-detect-thyroid-cancer-and-salivary-gland-cancer>

## Contact information

### Type(s)

Scientific

### Contact name

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### Contact details

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## Additional identifiers

### Clinical Trials Information System (CTIS)

2014-001925-33

### Protocol serial number

19094

## Study information

**Scientific Title**

A phase I trial of [18F]-tetrafluoroborate in patients with primary thyroid cancer or salivary cancer to study biodistribution and uptake in tumours and normal NIS expressing tissue

**Acronym**

BF4

**Study objectives**

The aim of this study is to investigate whether tetrafluoroborate has any side effects and if it specifically targets cancers that express the hNIS transporter.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

London - Surrey Borders Research Ethics Committee, 29/12/2014, ref: 14/LO/1247

**Study design**

Non-randomised; Interventional; Design type: Not specified

**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**

Cannula inserted into each arm for the administration of the radioactive material and the taking of blood samples.

**Intervention Type**

Drug

**Phase**

Phase I

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

Tetrafluoroborate

**Primary outcome(s)**

To assess the biodistribution of [18F]tetrafluoroborate in vivo

**Key secondary outcome(s)**

Not provided at time of registration

**Completion date**

02/08/2017

# Eligibility

## Key inclusion criteria

1. Aged 18-80 years
2. Women of childbearing potential must have documented negative pregnancy test on day 1, prior to (18F)BF4-administration
3. Diagnosis of a malignancy of the thyroid or a malignancy of a salivary gland
4. All patients have to be suitable for surgical treatment as part of their normal management
5. Able to comply with treatment plans, scheduled visits, all study PET imaging and follow-up
6. Willing to give informed consent
7. Not be taking thyroid medication or iodine containing medication

## Participant type(s)

Patient

## Healthy volunteers allowed

No

## Age group

Adult

## Lower age limit

18 years

## Upper age limit

80 years

## Sex

All

## Total final enrolment

5

## Key exclusion criteria

1. Previous ionising radiation exposure for research purposes or exposure to any previous experimental medicine that might affect the uptake of BF4 would exclude the patient from this ionising radiation study
2. Patients without adequate understanding of written or spoken English would not be able to participate in this study as translation of the patient information sheet will not be possible
3. Any prior treatment for the thyroid or salivary gland tumours
4. Pregnancy or lactation
5. Any other problems that may make the patient unable to tolerate the PET scans or translational biopsies
6. Ingestion of iodine containing medication (eg amiodarone) within preceding 12 months, administration of iv contrast media within 6 months or thyroid hormones within 2 months

## Date of first enrolment

14/09/2015

## Date of final enrolment

02/08/2017

## Locations

### Countries of recruitment

United Kingdom

England

### Study participating centre

#### St Thomas' Hospital

The Rayne Institute

4th Floor Lambeth Wing

Westminster Bridge Road

London

United Kingdom

SE1 7EH

## Sponsor information

### Organisation

King's College London

### ROR

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

## Funder(s)

### Funder type

University/education

### Funder Name

King's Health Partners

## Results and Publications

### 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?
<a href="#">Results article</a>	results	06/04/2017	07/08/2020	Yes	No
<a href="#">HRA research summary</a>			28/06/2023	No	No
<a href="#">Plain English results</a>		26/07/2021	29/07/2021	No	Yes