

# A Cancer Research UK phase I trial of adoptive transfer of autologous tumour antigen specific T-cells with pre-conditioning chemotherapy and intravenous interleukin-2 (IL2) in patients with advanced carcinoembryonic antigen (CEA) positive tumours

<b>Submission date</b> 30/06/2010	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 30/06/2010	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 06/03/2018	<b>Condition category</b> Cancer	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

<http://cancerhelp.cancerresearchuk.org/trials/a-trial-looking-at-mfez-t-cells-chemotherapy-and-il2-for-cancers-that-test-positive-for-carcinoembryonic-antigen>

## Contact information

### Type(s)

Scientific

### Contact name

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## Additional identifiers

ClinicalTrials.gov (NCT)

NCT01212887

## Clinical Trials Information System (CTIS)

2005-004085-16

### Protocol serial number

6499

## Study information

### Scientific Title

A Cancer Research UK phase I trial of adoptive transfer of autologous tumour antigen specific T-cells with pre-conditioning chemotherapy and intravenous interleukin-2 (IL2) in patients with advanced carcinoembryonic antigen (CEA) positive tumours

### Acronym

MFEz Study

### Study objectives

This trial proposes to use engineered T cells (MFEz T cells) comprising polyclonal CD4 and CD8 populations in place of the selected, specific TILs and combines these with 'supportive therapies' of pre-conditioning chemotherapy and high dose intravenous IL2.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

MREC approved (ref: GTAC096)

### Study design

Single centre non-randomised interventional treatment trial

### Primary study design

Interventional

### Study type(s)

Treatment

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

Topic: National Cancer Research Network; Subtopic: All Cancers/Misc Sites; Disease: All

### Interventions

Patients will receive pre-conditioning chemotherapy followed by MFEz T cells and then intravenous IL2. The pre-conditioning chemotherapy regime and the dose of MFEz T cells will be determined by the dose escalation scheme. Chemotherapy will only be commenced if adequate transduction and expansion of MFEz T cells has occurred. One cycle only of chemotherapy and MFEz T cells will be given. Further cycles of IL2 may be considered if specified criteria are met.

Study entry: registration only

## **Intervention Type**

Other

## **Phase**

Phase I

## **Primary outcome(s)**

To evaluate the feasibility of using MFEz T cells

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

1. To determine dose of MFEz T cells that gives the highest frequency in the circulation as measured
2. Adverse event assessment for as long as the patient is able to attend clinic according to CTCAE

## **Completion date**

17/05/2010

## **Eligibility**

### **Key inclusion criteria**

1. Have histologically confirmed malignancy that is CEA positive that is metastatic or unresectable and for which standard curative or palliative measures:
  - 1.1. Do not exist
  - 1.2. Are no longer effective
  - 1.3. Have been completed
  - 1.4. Have been refused
2. Provide written (signed and dated) informed consent and be capable of co-operating with treatment and follow-up
3. Be 18 years or over, either sex
4. Have a life expectancy of at least 3 months
5. Have a World Health Organization (WHO) performance status of 0 or 1
6. Female patients of child-bearing potential are eligible, provided they have a negative serum or urine pregnancy test prior to enrolment and agree to use appropriate medically approved contraceptive precautions for four weeks prior to leukapheresis, during the trial, and for six months afterwards
7. Male patients must agree to use barrier method contraception during the trial and for six months afterwards
8. Patients receiving cyclophosphamide must have a left ventricular ejection fraction (LVEF) of greater than or equal to 50% on multiple gated acquisition (MUGA) scan (within 4 weeks prior to leukapheresis)
9. Patients must have haematological and biochemical indices within the following ranges at screening. These measurements must be repeated to confirm eligibility between leukapheresis and commencing chemotherapy.

### **Participant type(s)**

Patient

### **Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Key exclusion criteria**

1. Radiotherapy (except for palliative reasons), endocrine therapy, immunotherapy or chemotherapy during the previous four weeks (six weeks for nitrosureas and Mitomycin-C) prior to treatment with chemotherapy in the trial or during the course of the trial.
2. Toxic manifestations of previous treatments. Exceptions to this are alopecia or certain grade 1 toxicities which in the opinion of the Investigator and CRUK should not exclude the patient (grade 1 neuropathy or grade 1 fatigue).
3. Primary brain tumours or brain metastases
4. Major thoracic and/or abdominal surgery from which the patient has not yet recovered
5. At high medical risk because of non-malignant systemic disease including active uncontrolled infection
6. Known to be serologically positive for hepatitis B, hepatitis C, human immunodeficiency virus (HIV) or human T cell lymphotropic virus (HTLV)
7. History of autoimmune disease
8. Inflammatory bowel disease
9. Concurrent congestive heart failure or prior history of class III - IV cardiac disease (New York Heart Association [NYHA])
10. Prior bone marrow transplant or have had extensive radiotherapy to greater than 25% of bone marrow
11. Patients who are taking, or likely to require systemic steroids or other immunosuppressive therapy
12. Current malignancies originating from other primary sites, with the exception of adequately treated cone-biopsied in situ carcinoma of the cervix uteri and basal or squamous cell carcinoma of the skin
13. Participation in any other clinical trial within the previous 30 days prior to leukapheresis or during the course of this trial
14. Concurrent serious infections within the 28 days prior to leukapheresis
15. Any other condition which in the Investigator's opinion would not make the patient a suitable candidate for the clinical trial

**Date of first enrolment**

29/11/2007

**Date of final enrolment**

17/05/2010

**Locations****Countries of recruitment**

United Kingdom

England

**Study participating centre**  
**Department of Medical Oncology**  
Manchester  
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## Sponsor information

**Organisation**  
Christie Hospital NHS Foundation Trust (UK)

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

## Funder(s)

**Funder type**  
Charity

**Funder Name**  
Cancer Research UK (CRUK) (UK)

**Alternative Name(s)**  
CR\_UK, Cancer Research UK - London, Cancer Research UK (CRUK), CRUK

**Funding Body Type**  
Private sector organisation

**Funding Body Subtype**  
Other non-profit organizations

**Location**  
United Kingdom

## Results and Publications

Individual participant data (IPD) sharing plan

## IPD sharing plan summary

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	01/11/2017		Yes	No