# Investigation of the effects and mechanisms of action of different wavelengths of ultraviolet B (UVB) radiation in the treatment of psoriasis

Submission date	Recruitment status	Prospectively registered
12/05/2010	No longer recruiting	[_] Protocol
<b>Registration date</b>	Overall study status	[] Statistical analysis plan
12/05/2010	Completed	[_] Results
Last Edited	Condition category	[_] Individual participant data
13/12/2019	Skin and Connective Tissue Diseases	[_] Record updated in last year

### Plain English summary of protocol

Not provided at time of registration

## **Contact information**

**Type(s)** Scientific

**Contact name** Dr Sophie Weatherhead

### **Contact details**

Newcastle University Dermatology 2nd Floor William Leech Building Medical School Newcastle United Kingdom NE2 4HH

## Additional identifiers

EudraCT/CTIS number

**IRAS number** 

ClinicalTrials.gov number

Secondary identifying numbers 5623; 079504

## Study information

#### Scientific Title

Investigation of the effects and mechanisms of action of different wavelengths of ultraviolet B (UVB) radiation in the treatment of psoriasis: a single centre non-randomised treatment trial

### Acronym

MECH-UVB-PSOR

### Study objectives

To test the hypothesis that keratinocyte apoptosis is an important mechanism of action of ultraviolet B (UVB) phototherapy in the clearance of psoriasis, and to investigate the correlation between effectiveness of different wavelengths of UV and apoptotic response in the clearance of psoriasis.

### Ethics approval required

Old ethics approval format

**Ethics approval(s)** County Durham and Tees Valley (1) REC, ref: 06/Q1003/78

**Study design** Single centre non-randomised interventional treatment trial

**Primary study design** Interventional

**Secondary study design** Non randomised controlled trial

**Study setting(s)** Other

**Study type(s)** Treatment

**Participant information sheet** Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied Topic: Skin; Subtopic: Skin (all Subtopics); Disease: Dermatology

**Interventions** Compare the apoptotic effect of different wavelengths of UVB in psoriatic epidermis in vivo.

Intervention Type Other

### Phase

Not Specified

### Primary outcome measure

Whether the number of apoptotic cells seen within the epidermis is sufficient to allow plaque remodelling. Measured up to 48 hours (4 hours, 8 hours, 12 hours, 15 hours, 18 hours, 24 hours, and 48 hours).

### Secondary outcome measures

Effect of skin type
UV dose
Age and gender

Measured up to 48 hours (4 hours, 8 hours, 12 hours, 15 hours, 18 hours, 24 hours, and 48 hours).

Overall study start date 01/10/2006

### Completion date

30/04/2010

## Eligibility

### Key inclusion criteria

1. Aged 18 years and over, with no sex specific criteria

2. All patients who are prescribed routine UVB (TL01) for their psoriasis at our centre

3. Give informed consent to participate

### Participant type(s)

Patient

**Age group** Adult

**Lower age limit** 18 Years

**Sex** Both

**Target number of participants** Planned sample size: 121

### Key exclusion criteria

- 1. Aged under 18 years
- 2. Systemic immunosupression within 3 months
- 3. UVB exposure to lower back within 3 months of recruitment
- 4. Topical treatments other than emollients for 2 weeks

### Date of first enrolment

01/10/2006

**Date of final enrolment** 30/04/2010

## Locations

**Countries of recruitment** England

United Kingdom

**Study participating centre Newcastle University** Newcastle United Kingdom NE2 4HH

## Sponsor information

**Organisation** Newcastle upon Tyne Hospitals NHS Foundation Trust (UK)

**Sponsor details** Queen Victoria Road Newcastle Upon Tyne England United Kingdom NE1 4LP

**Sponsor type** Hospital/treatment centre

Website http://www.newcastle-hospitals.org.uk/

ROR https://ror.org/05p40t847

## Funder(s)

Funder type Charity

### Funder Name

The Wellcome Trust (UK) (grant ref: 079504)

## **Results and Publications**

**Publication and dissemination plan** Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration