

# Immune effects of dehydroepiandrosterone (DHEA) in adrenal insufficiency (IDHEAL)

<b>Submission date</b> 30/09/2004	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 30/09/2004	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 17/08/2015	<b>Condition category</b> Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Prof P M Stewart

**Contact details**  
Endocrinology  
University of Birmingham  
Birmingham  
United Kingdom  
B15 2TT

## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
N0265126494

## Study information

**Scientific Title**

## Immune effects of dehydroepiandrosterone (DHEA) in adrenal insufficiency (IDHEAL)

### Study objectives

The central hypothesis to be tested is that the pathologic DHEA deficiency that invariably accompanies adrenal insufficiency is the primary factor responsible for previously observed impairment of immune function in these patients. Arising from this hypothesis the study aims to answer two questions:

1. Will immune function in patients with adrenal insufficiency show beneficial changes following DHEA replacement therapy?
2. Will DHEA replacement therapy alter endocrine-immune interactions as exemplified by steroidogenesis in immune cells?

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Not provided at time of registration

### Study design

Randomised controlled trial

### Primary study design

Interventional

### Secondary study design

Randomised controlled trial

### Study setting(s)

Not specified

### 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

Nutritional, Metabolic, Endocrine: Adrenal insufficiency

### Interventions

25 patients with Addison's disease and 25 patients with hypopituitarism including secondary adrenal insufficiency will receive daily treatment with either 50 mg of DHEA or placebo orally for 16 weeks. At baseline and at the end of the treatment period patients will provide blood samples for analysis of T cell and neutrophil function, serum steroid hormones and steroid conversion in peripheral blood mononuclear cells. During the course of the study patients will undergo routine safety checks including clinical assessment and measurement of steroid hormone levels in monthly to bimonthly intervals.

The procedures described will be done for research purposes and are not normal clinical practice.

**Intervention Type**

Drug

**Phase**

Not Applicable

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

Dehydroepiandrosterone (DHEA)

**Primary outcome measure**

Not provided at time of registration

**Secondary outcome measures**

Not provided at time of registration

**Overall study start date**

17/07/2003

**Completion date**

17/07/2008

**Eligibility****Key inclusion criteria**

25 patients with primary adrenal insufficiency and 25 patients with hypopituitarism including secondary adrenal insufficiency will be recruited from the Endocrine Clinics at the Queen Elizabeth Hospital and at the Selly Oak hospital. Patients will be on stable hormone replacement therapy including glucocorticoids and will have confirmed serum DHEAS levels below the lower limit of the sex-specific reference range. Age will be between 18 and 50 years.

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

50

**Key exclusion criteria**

Not provided at time of registration

**Date of first enrolment**

17/07/2003

**Date of final enrolment**

17/07/2008

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

England

United Kingdom

**Study participating centre**

**University of Birmingham**

Birmingham

United Kingdom

B15 2TT

**Sponsor information****Organisation**

Department of Health

**Sponsor details**

Richmond House

79 Whitehall

London

United Kingdom

SW1A 2NL

**Sponsor type**

Government

**Website**

<http://www.dh.gov.uk/Home/fs/en>

**Funder(s)****Funder type**

Government

**Funder Name**

University Hospital Birmingham NHS Trust (UK)

# 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