

# A pilot proposal to determine the effect of the airsonett airshower on sleep quality

<b>Submission date</b> 22/03/2011	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 25/03/2011	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 12/05/2017	<b>Condition category</b> Respiratory	<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

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**

## Study information

### Scientific Title

A single-blind placebo-controlled trial to determine the effect of the airsonett airshower on sleep quality

### Study objectives

1. In adults with allergic rhinitis sensitised to dust mite, cat or dog and with significant rhinitis-related sleep disturbance (NRQLQ=3), treatment with nocturnal temperature-controlled laminar airflow (TLA) results in improved total symptom score compared to placebo device, on the second night of treatment.
2. In adults with allergic rhinitis sensitised to dust mite, cat or dog and with significant rhinitis-related sleep disturbance (NRQLQ=3), nocturnal TLA results in reduced nasal IL-5, reduced diurnal variation in peak nasal inspiratory flow, reduced nasal nitric oxide (NO), reduced modified NRQLQ score (i.e. scored over past 48 hours rather than 1 week), improved sleep parameters as measured by polysomnography and the Somnomat.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Scotland A Research Ethics Committee, 28/02/2011, ref: 11/MRE00/6

### Study design

Single-blind placebo-controlled trial

### Primary study design

Interventional

### Secondary study design

Randomised controlled trial

### Study setting(s)

Other

### Study type(s)

Treatment

### Participant information sheet

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

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

Allergic rhinitis

### Interventions

1. Four nights of study two with placebo Protexo device and two with active Protexo device
2. Allerguard pillow protectors to be used on all four nights

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome measure**

Total nasal symptom score (itching, sneezing, rhinorrhoea, congestion rated as none=0, mild=1, moderate=2, severe=3)

**Secondary outcome measures**

1. Arousal index as measured by polysomnography
2. Other polysomnography parameters
3. Spirometry
4. Exhaled NO, nasal NO as measured by NIOX MINO device
5. Peak nasal inspiratory flow
6. Nasal inflammometry nasal secretions collected bilaterally using filter paper strips (7x30 mm)
7. Somnomat
8. Visual analogue scale for sleepiness 100 mm scale from extremely sleepy (0 mm) to not sleepy at all (100 mm)
9. Visual analogue scale for sleep quality 100 mm scale from worst nights sleep ever (0 mm) to best nights sleep ever (100 mm)

**Overall study start date**

24/03/2011

**Completion date**

26/05/2011

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

1. Age 18-65
2. Doctor-diagnosed allergic rhinitis
3. Sensitised to house dust mite, cat or dog
4. Nocturnal Rhinoconjunctivitis Quality of Life Questionnaire more than or equal to 3

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Upper age limit**

65 Years

**Sex**

Both

**Target number of participants**

10

**Key exclusion criteria**

1. Current smoker
2. Moderate/severe asthma
3. Current medication which cannot be stopped and may affect allergic inflammation or sleep
4. Body mass index (BMI) > 30
5. Known sickle cell disease
6. Adenotonsillar hypertrophy
7. Current immunotherapy

**Date of first enrolment**

24/03/2011

**Date of final enrolment**

26/05/2011

## **Locations**

**Countries of recruitment**

England

United Kingdom

**Study participating centre**

**Imperial College London**

London

United Kingdom

W2 1PG

## **Sponsor information**

**Organisation**

Airsonett AB (Sweden)

**Sponsor details**

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**Sponsor type**

Industry

**Website**

<http://www.airsonett.com/>

## **Funder(s)**

**Funder type**

University/education

**Funder Name**

Imperial College London (UK)

**Alternative Name(s)**

Imperial College of Science, Technology and Medicine, Imperial College London, UK, Imperial College London, London, England, Imperial College London in United Kingdom, imperialcollege, ICL

**Funding Body Type**

Government organisation

**Funding Body Subtype**

Universities (academic only)

**Location**

United Kingdom

## **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