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A study to assess the safety and the effects of using a growth factor, keratinocyte growth factor (KGF), in patients with moderate asthma

Submission date 16/06/2009	**Recruitment status** No longer recruiting	[_] Prospectively registered [_] Protocol [_] Statistical analysis plan [_] Results [_] Individual participant data [_] Record updated in last year
Registration date 07/10/2009	**Overall study status** Completed	
Last Edited 24/05/2016	**Condition category** Respiratory	

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
BRU 3.1, Sponsor no. RHM MED 0879

Study information

Scientific Title
Safety and efficacy of parenteral keratinocyte growth factor (KGF) in moderate asthma subjects: a double-blind placebo-controlled randomised parallel group trial

Study objectives
That restoration of the bronchial epithelial barrier in asthma by treatment with KGF will reduce the responsiveness of the lungs to bronchoconstrictor agents, reduce airway inflammation and improve clinical disease expression.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Pending as of 17/06/2009 from the Southampton and South West Hampshire Local Research Ethics Committee (LREC)

Study design
Randomised double blind placebo controlled parallel group trial

Primary study design
Interventional

Secondary study design
Randomised controlled trial

Study setting(s)
Hospital

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
Asthma

Interventions
The study population will be screened including medical history, examination, spirometry, diary card monitoring, exhaled nitric oxide measurement, skinprick testing, mannitol and metacholine provocation tests and baseline bronchoscopy. The intervention group will receive intravenous keratinocyte growth factor (KGF) in a 'collapsed dose' regime, at a dose of 180 µg/kg, given as an infusion on days 0 and day 11 of the trial. The control group will receive saline infusions. In between the doses and following the second doses the subjects will have further provocation

tests and a further bronchoscopy. Subjects will be followed up for 36 days following the initial dose of the study drug/placebo.

Intervention Type
Drug

Phase
Not Applicable

Drug/device/biological/vaccine name(s)
Keratinocyte growth factor

Primary outcome measure
Change in provocative concentration in mannitol causing a 20% fall in FEV1 (PC20), measured in screening and on days 3, 14, 18 and 36

Secondary outcome measures
1. Asthma symptoms, assessed continuously during the trial
2. Short acting B-2-agonist usage, assessed continuously during the trial
3. Lung function (home peak expiratory flow rate [PEFR] recording and clinic FEV1 and forced vital capacity [FVC])
4. Change in PC20 methacholine, assessed in screening and on day 17 and 35
5. Change in exhaled NO (eNO), assessed in screening and on days 3, 14, 18 and 36
6. Expression of ZO-1 and occludin in the bronchial epithelium
7. Bronchial biopsy epithelial integrity
8. Mucosal cellular inflammation (eosinophils, mast cells, neutrophils T-cells), assessed from bronchocopy in screening and on day 21
9. Epithelial activation markers (interleukin-8 [IL-8], regulated upon activation, normal T cell expressed and secreted [RANTES], macrophage inflammatory protein-1alpha [MIP-1a], macrophage chemotactic protein-1 [MCP-1], transforming growth factor alpha [TGF-a], epidermal growth factor receptor [EGFR]), assessed from bronchocopy in screening and on day 21
10. Safety readouts (clinical adverse event reporting), assessed continuously
11. Safety-related histochemistry readouts (epithelial Ki 61), assessed continuously

Overall study start date
01/08/2009

Completion date
01/11/2009

Eligibility

Key inclusion criteria
1. Aged 18 - 50 years, either gender
2. Confirmed diagnosis of asthma for greater than 1 year as defined by British Thoracic Society (BTS) guidelines, requiring treatment with high dose inhaled corticosteroids in combination with long acting beta-2-agonists, with persisting symptoms requiring use of short-acting beta agonist therapy greater than 3 x/week
3. Lifelong non-smoker

4. Forced expiratory volume in one second (FEV1) greater than 40%
5. Subject must understand the procedures of the study and agree to participation in the study by providing written informed consent
6. Subject considered fit enough to undergo lung function testing including provocation tests, and bronchoscopy
7. Subject must not be participating in another clinical trial or have done so within the last 12 weeks

Participant type(s)
Patient

Age group
Adult

Lower age limit
18 Years

Upper age limit
50 Years

Sex
Both

Target number of participants
20

Key exclusion criteria
1. Pregnancy (where pregnancy is defined as the state of a female after conception and until the termination of gestation, confirmed by a positive human chorionic gonadotrophin [hCG] laboratory test greater than 5 mIU/ml), an intention to become pregnant or breast-feeding (lactating)
2. Subjects with active lung disease other than asthma
3. Significant medical (cardiopulmonary, neurological, renal, endocrine, gastrointestinal, psychiatric, hepatic or haematological) co-morbidity which in the view of the investigator could impact on the interpretation of results or participation in the trial, or which is uncontrolled with standard treatment
4. Current participation in another clinical trial or previous participation within the last 12 weeks
5. Alcohol or active drug abuse
6. Ongoing allergen desensitisation therapy
7. Regular use of sedatives, hypnotics, tranquilisers
8. Cancer or previous history of cancer
9. Inability to understand directions for dosing and study assessment
10. Inability to be contacted in case of emergency

Date of first enrolment
01/08/2009

Date of final enrolment
01/11/2009

Locations

Countries of recruitment
England

United Kingdom

Study participating centre
IIR (RCMB) MP810
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Sponsor information

Organisation
Southampton University Hospitals NHS Trust (UK)

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Sponsor type
Hospital/treatment centre

Website
http://www.suht.nhs.uk/home.aspx

ROR
https://ror.org/0485axj58

Funder(s)

Funder type
Hospital/treatment centre

Funder Name
Southampton General Hospital (UK) - Internal funding by Biomedical Research Unit

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