# A randomised parallel group trial to investigate the effect of seretide withdrawal in Chronic Obstructive Pulmonary Disease (COPD) using non-invasive biomarkers and physiological measurements

Submission date	Recruitment status No longer recruiting	<ul><li>Prospectively registered</li></ul>		
30/09/2005		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
30/09/2005	Completed	[X] Results		
<b>Last Edited</b> 05/04/2011	Condition category Respiratory	[] Individual participant data		

### **Plain English Summary**

Not provided at time of registration

## Contact information

## Type(s)

Scientific

#### Contact name

Dr David Singh

#### Contact details

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## Additional identifiers

EudraCT/CTIS number

**IRAS** number

### ClinicalTrials.gov number

## Secondary identifying numbers

N0226156349

## Study information

#### Scientific Title

### Study hypothesis

To investigate the effect of withdrawal of inhaled seretide on airway inflammation and airflow limitation in Chronic Obstructive Pulmonary Disease (COPD) patients using non-invasive measurement methods and lung function tests.

Please note that this record was extensively updated on the 9th November 2007. Updates were performed to the ethics, inclusion criteria, interventions and secondary outcome measures, as some of this information was not provided in the original record. Where changes have been made, the update date (09/11/2007) has been mentioned. Also please note that previous to this update, the anticipated end date of this trial was 03/07/2006.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Added on 09/11/2007: Ethics approval received from the Central Manchester Local Research Ethics Committee on 25/02/2005.

### Study design

Randomised controlled 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

### Condition

Chronic Obstructive Pulmonary Disease (COPD)

### **Interventions**

- 1. Seretide withdrawal group (withdrawal of Seretide dose for six weeks)
- 2. Continuation group

### Added on 09/11/2007:

Patients will undergo spirometry, impulse oscillometry, body plethysmography, exhaled breath condensate, exhaled nitric oxide, induced sputum and questionaires at two occasions 2 weeks apart prior to randomisation and then at 2 weekly intervals for 6 weeks.

### Intervention Type

Drug

### Phase

Not Specified

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

Seretide

### Primary outcome measure

Induced sputum inflammatory cell counts

### Secondary outcome measures

Added on 09/11/2007:

- 1. Exhaled breath condensate pH
- 2. Exhaled breath condensate Leukotriene B4, 8-isoprostane and other metabolites
- 3. Exhaled breath condensate and serum metabolite profiling by mass spectrometry
- 4. Exhaled nitric oxide in parts per billion (at 50 mls/sec, Caw, Calvin and Diffusing Capacity)
- 5. Induced sputum messenger Ribonucleic Acid (RNA) and protein for inflammatory mediators (e.
- g., Interleukin-8 [IL-8], Interleukin-6 [IL-6])
- 6. Sputum and blood gene expression (e.g., glucocorticoid receptor)
- 7. FEV1, Maximal Expiratory Flow (MEF), FVC (measured by spirometry)
- 8. Total Lung Capacity (TLC), Residual Volume (RV), Functional Residual Capacity (FRC), Inspiratory Capacity (IC), specific airways conductance (sGaw), airway flow resistance (Raw) (measured by body plethysmography)
- 9. Resonant Frequency (RF), Respiratory resistance at 5 Hz (R5), reactance at 5 Hz (X5) (measured by impulse oscillometry)

## Overall study start date

01/03/2005

## Overall study end date

31/07/2007

## Eligibility

### Participant inclusion criteria

12 in withdrawal group and 12 in continuation group, patients aged 40 - 75 years

### Added on 09/11/2007:

1. Males or females aged 40 - 75 years inclusive

- 2. Ex smokers or current smokers with a cigarette smoking history of pack years (1 pack-year = 20 cigarettes smoked per day for 1 year or the equivalent)
- 3. Subjects with Forced Expiratory Volume in one second (FEV1) 50 80% of predicted normal for height, age and sex at screening visit
- 4. Subjects with FEV1/Forced Vital Capacity (FVC) ratio less than 70% at screening visit
- 5. Patients taking inhaled seretide or combined fluticasone/salmeterol at a dose of 200 1000 µg fluticasone and 50 100 µg serevent per day
- 6. Subjects on a stable dose of all COPD treatment over the 4 weeks prior to starting the study
- 7. Subjects capable of providing signed written consent to participate

### Participant type(s)

**Patient** 

### Age group

Adult

#### Sex

Both

### Target number of participants

24

### Participant exclusion criteria

- 1. Subjects taking regular oral leukotriene receptor antagonists, oral cortiscosteroids, inhaled nasal corticosteroids, oral theophylline or inhaled tiotropium for 4 weeks prior to the study start
- 2. Subjects having one or more exacerbations of COPD in the past 12 months requiring treatment with oral corticosteroids
- 3. Subjects who have had a previous admission for exacerbation of COPD requiring non-invasive or endo-tracheal intubation or admission to the Intensive Care Unit (ICU)
- 4. History of asthma or significant atopy/rhinitis (requiring medication)
- 5. Subjects with uncontrolled angina, myocardial infarction within the last 12 months or congestive cardiac failure
- 6. Subjects with other significant pulmonary, cardiovascular, neurological, hepatic, renal, endocrine or haematological diseases
- 7. Female subjects who intend to become pregnant
- 8. Subjects who have experienced cold or flu-like symptoms or a respiratory infection within 4 weeks of the study start
- 9. Subjects who have received an investigational drug within 30 days or within 5 drug half-lives of the drug
- 10. Subjects with a history (or suspected history) of alcohol misuse or any other recreational substance abuse

#### Recruitment start date

01/03/2005

### Recruitment end date

31/07/2007

## Locations

### Countries of recruitment

### England

**United Kingdom** 

Study participating centre Medicines Evaluation Unit Manchester United Kingdom M23 9GP

## Sponsor information

### Organisation

Department of Health

### Sponsor details

Richmond House 79 Whitehall London United Kingdom SW1A 2NL +44 (0)20 7307 2622 dhmail@doh.gsi.org.uk

### Sponsor type

Government

### Website

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

## Funder(s)

## Funder type

Government

### **Funder Name**

South Manchester University Hospitals NHS Trust (UK)

### **Funder Name**

NHS R&D Support Funding (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

## **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/11/2009		Yes	No