

# Treatment with AKL1 in obstructive airways disease

<b>Submission date</b> 30/03/2009	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 28/08/2009	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 10/09/2019	<b>Condition category</b> Respiratory	<input type="checkbox"/> Individual participant data

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

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

ClinicalTrials.gov (NCT)  
NCT00920127

**Protocol serial number**  
2008RESP09

## Study information

**Scientific Title**

An investigation of the safety and efficacy of oral AKL1 in patients diagnosed with obstructive lung disease: a randomised, double blind, placebo-controlled parallel group study

**Acronym**

TAKL

**Study objectives**

AKL1 will improve cough in patients with obstructive airways disease.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Cambridge 4 Research Ethics Committee approved on the 2nd February 2009 (ref: 08/H0305/54)

**Study design**

Placebo-controlled randomised parallel group trial

**Primary study design**

Interventional

**Study type(s)**

Treatment

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

Obstructive airways disease

**Interventions**

Patients will be randomised at visit 2 (week 0) to receive either AKL1 or placebo for a total of 8 weeks duration. They will be asked to take two 500 mg capsules of AKL1/placebo at approximately the same time each morning between 07:00 am and 10:00 am and then repeated again between 19:00pm and 22:00 pm.

Visit 3 is 4 weeks later and is purely a safety visit to check for any adverse events or compliance issues.

Final visit 4 is 8 weeks from visit 2. If there are any unresolved adverse events a further follow-up visit will be scheduled.

**Intervention Type**

Drug

**Phase**

Not Applicable

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

AKL1

**Primary outcome(s)**

Leicester Cough Questionnaire between baseline (week 0) and week 8

## **Key secondary outcome(s)**

Change from baseline to week 8:

1. St George's Respiratory Questionnaire (SGRQ) score
2. European Quality of Life (EQ-5D) score
3. Spirometry (peak expiratory flow [PEF], FEV1, FVC, forced expiratory flow [FEF] 25 - 75 as percent predicted)
4. Forced Oscillation Technique
5. Differential spontaneous sputum cell count; tumour necrotising factor alpha (TNF $\alpha$ ), interleukin-8 (IL-8), interleukin-10 (IL-10) concentration
6. Modified Medical Research Council (MRC) dyspnoea score
7. Six-minute walk test
8. Oxygen saturation (O<sub>2</sub> Sats) (pre- and post-six-minute walk test)

There will also be exploratory endpoints comparing baseline to week 8:

9. COPD clinical questionnaire
10. Blood eosinophils and neutrophils
11. Blood C reactive protein (CRP)
12. Airways resistance using the interrupter technique (RI<sub>NT</sub>)
13. Other blood and sputum markers: MIPI $\alpha$ , TGF $\beta$ 1, neutrophil elastase, reactive oxygen species

## **Completion date**

01/04/2010

## **Eligibility**

### **Key inclusion criteria**

1. Males or females, aged between 18 to 80 years, inclusive
2. The patient has received verbal and written study information, all questions have been answered satisfactorily and a consent form has been personally signed and dated by the patient and the investigator
3. A diagnosis of obstructive lung disease (with reference to the International Primary Care Respiratory Group [IPCRG] guidelines). This being evidenced as a post-bronchodilator ratio of forced expiratory volume in one second (FEV1)/forced vital capacity (FVC) less than 0.7 at visit 1 or 2
4. The patient has a post-bronchodilator FEV1 of greater than 40% and less than 80% at visit 1 or 2
5. Patients have a history of regular sputum production (greater than 3 days per week)
6. Leicester Cough Questionnaire (LCQ) score of less than 17 (higher score indicates improvement)
7. A Medical Research Council (MRC) dyspnoea score of 3 or more
8. Females must be post-menopausal (greater than 1 year), surgically sterilised or using adequate hormonal contraception, intrauterine device), not breast feeding and have a negative serum pregnancy test
9. The patient must have a satisfactory health with the exception of obstructive lung disease as determined by the investigator on the basis of medical history and physical examination
10. In the Investigator's judgement, the patient is able and willing to comply with study visits and procedures (including laboratory tests, lung function tests)
11. Subjects must be able to demonstrate ability to use salbutamol metered-dose inhaler (MDI) during the screening period

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Key exclusion criteria**

1. The patient has currently poorly controlled disease defined as requiring a course of oral or parenteral corticosteroids or an exacerbation of their obstructive lung disease in the three months prior to visit 2
2. The patient has had a recent change in maintenance therapy (i.e. within 6 weeks)
3. Maintenance oral corticosteroid treatment or use of unlicensed doses of inhaled corticosteroid medication (greater than 2000 µg beclomethasone dipropionate/day or equivalent)
4. The patient has seasonal disease alone
5. The patient has any known laboratory abnormality, which in the opinion of the investigator, would contraindicate study participation, including, aspartate aminotransferase (AST) or alanine aminotransferase (ALT) greater than 1.5 x upper limit of normal (ULN) or creatinine greater than 1.5 mg/dL
6. The patient is unable to discontinue short-acting beta-2-adrenergic agonists for at least 4 hours, long-acting beta agonists (12 hours) and tiotropium (24 hours) prior to visit 2 (week 0)
7. The patient has chronic heart failure class III or IV (New York Heart Association) or a recent (less than six months) history of stroke, transient ischaemic attack or myocardial infarction
8. The patient is not able to follow study procedures (e.g., language problems, psychological disorders) or is considered to be non-compliant according to the investigator
9. The patient has a history of known alcohol or substance abuse (excluding cigarettes) within the one-year prior to visit 1
10. The patient has an active malignancy of any type or history of a malignancy (with the exception of patients with malignancy surgically removed with no evidence of recurrence within five years before enrolment, and patients with history of treated basal cell carcinoma)
11. The patient has any other severe or acute or chronic medical or psychiatric conditions that may increase the risk associated with study participation or study drug administration or may interfere with the interpretation of study results and, in the judgment of the investigator, would make the patient inappropriate for entry into this study. Subjects with a malignancy and who are currently undergoing radiation therapy or have had chemotherapy within 5 years.
12. The patient has difficulty swallowing capsules or tablets, dysphagia or is unable to tolerate oral medication
13. The patient has been previously admitted to the study or currently participating or have recently participated in another trial with an investigational drug within 90 days of the start of this study

**Date of first enrolment**

01/04/2009

**Date of final enrolment**

01/04/2010

## **Locations**

**Countries of recruitment**

United Kingdom

England

**Study participating centre**

**Biomedicine Group**

Norwich

United Kingdom

NR4 7TJ

## **Sponsor information**

**Organisation**

AKL Technologies Ltd (UK)

**ROR**

<https://ror.org/04mcppw82>

## **Funder(s)**

**Funder type**

Charity

**Funder Name**

International Primary Care Research Group (UK)

## **Results and Publications**

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?
<a href="#">Results article</a>	results	09/07/2014	10/09/2019	Yes	No
<a href="#">HRA research summary</a>			28/06/2023	No	No
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes