# The effect of a Bacterial Extract on Asthma Control (BEAC)

Submission date 12/03/2011	<b>Recruitment status</b> No longer recruiting	Prospectively registered
12/03/2011	No longer recruiting	[] Protocol
Registration date	Overall study status	[] Statistical analysis plan
15/04/2011	Completed	[_] Results
Last Edited 18/04/2011	Condition category Respiratory	Individual participant data
		[] Record updated in last year

### Plain English summary of protocol

Not provided at time of registration

## **Contact information**

**Type(s)** Scientific

**Contact name** Prof Antonios Christopoulos

**Contact details** 157 Mezonos Street Patras Greece 262 21

## Additional identifiers

EudraCT/CTIS number

**IRAS number** 

ClinicalTrials.gov number

**Secondary identifying numbers** 007

## Study information

Scientific Title

The effect of the oral bacterial extract OM-85 BV on asthma control a real life study

#### BEAC

#### **Study objectives**

Evaluating the additive effect of oral OM-85 BV, Bronho-Vaxom OM Pharma, Geneva, Switzerland), to the combination of inhaled glucocorticosteroids (ICS) plus long-acting beta 2agonist (LABA), upon the level of asthma control in young adolescents and adult patients. Our hypothesis was that OM-85 BV would provide additional benefit, as measured by the proportion of patients who would achieve control of their asthma in the lowest step and dose of treatment necessary.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

1. University of Patras Reference number 443 from 15.05/004.

2. University of Patras, School of Health Sciences, Greece - Program of Postgraduated Studies in Clinical & Clinical-Laboratory Specialties which function under the Ministerial decision B7/458 π.ε /8.2.02, ΦΕΚ 191/20.2.02, as part of the MSc Thesis 443/17.5.04

#### Study design

Randomized double blind parallel group prospective study

#### 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

Atopy associated mild to moderate bronchial asthma

#### Interventions

 Eligible patients received non-blinded the appropriate maintenance treatment (inhaled budesonide 200-800 μg/day plus formoterol 18mcg/day, administered twice daily).
 The selection of the budesonide dosage was determined by the patients level of asthma

control and the treatment already commenced 3. Patients were inhaled budesonide and formoterol from a Turbohaler (Pulmicort 200µg and Oxez 9µg respectively, AstraZeneca Liquid Production, Sweden) 4. During the last 2 weeks of this period, single blind placebo OM-85 BV (saccharin) was added 5. In the end of the run-in period patients were reassessed to establish their adherence to the current regimen and level of asthma control. Following, eligible patients were randomized in three strata: Stratum I (uncontrolled, NCA), stratum 2 (partly controlled asthma, PCA) and

stratum 3 (controlled asthma, CA). 6. In NCA patients the dose of budesonide was stepped up to 4 times the dose used (up to 1600

μg/day) 7. In PCA patients the dose of budesonide was increased by 50%, while in CA patients

7. In PCA patients the dose of budesonide was increased by 50%, while in CA patients budesonide dosage was stepped down by 50%.

8. Following patients in each stratum were randomized according to a central computer generated schedule, to receive either 7mg of OM-85 BV (Bronho-Vaxom; OM PHARMA;Geneva; Switzerland)) or matching placebo saccharin once daily, orally, fasting in the morning

9. Treatment assignments (1:1) were stratified in every stratum according 3 budesonide dose levels (200-400, 400-800 and 800-1600 mcg/day)

10. In the absence of exacerbations and/or adverse events, patients were reassessed every 12 weeks and the dose of budesonide was titrated each time, as prescribed above.

11. During the study, use of theophylline, leukotriene modifiers and extra formoterol was not permitted

12. Nedocromyl nasal spray and eye drops were permitted, in order to treat allergic rhinitis and conjunctivitis respectively

13. The study consistent of two treatment periods: a 4 week run-in and a 24 week double blind 14. Lung Function Tests (spirometry), Skin Prick Tests for aero-allergens and 2 blood samples (1+1 ml) for serum interferon- γ (INF-γ) measurements

#### Intervention Type

Drug

**Phase** Not Applicable

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

OM-85 BV - a bacterial extract

#### Primary outcome measure

The percentage of patients with:

- 1. Non Controlled Asthma
- 2. Partly Controlled Asthma

3. Controlled Asthma in every stratum, in the two treatment groups, at the end of the active treatment period

#### Secondary outcome measures

- 1. Percentage change from baseline in budesonide dosage
- 2. Mean FEV1 before using a beta 2 agonist
- 3. Mean PEF, diurnal variability of peak expiratory flow (PEF)
- 4. Daytime asthma symptoms score
- 5. Number of night awakenings
- 6. Total daily as-needed  $\beta 2$  agonist use and serum interferon-  $\gamma$  (INF-  $\gamma$ ) levels

#### Overall study start date

01/10/2010

## Eligibility

#### Key inclusion criteria

1. Patients were aged 15-57 years and had a history of persistent asthma for a year or longer, associated with allergy

2. All patients were in regular treatment with combinations of ICS plus LABA, for at least 8 weeks before entering the study

3. Enrolled patients had a Forced Expiratory Volume in one second (FEV1) 60% to 80% of predicted normal, at least 12% reversible to inhaled salbutamol and 15% to 30% diurnal change of Peak Expiratory Flow (PEF)

#### Participant type(s)

Patient

Age group

Adult

#### Sex Both

Both

Target number of participants

Above 100 patients

#### Key exclusion criteria

1. Smoking history of  $\geq$  10 pack per year and systemic use of corticosteroids

2. Patients with a respiratory tract infection affecting asthma and those who received oral or parental corticosteroids during the 4 week run-in period, chromones, leukotriene receptor antagonists or inhaled anticholinergics during the last 2 weeks, and theophylline or antihistamines during the last week of the run in period were not eligible for randomization 3. As variations in the exposure to domestic mite allergens have a significant impact on asthma related symptoms, patients with history and/or positive skin prick tests for indoor allergens were not included to the study

Date of first enrolment 01/10/2010

Date of final enrolment 30/04/2011

## Locations

**Countries of recruitment** Greece

Study participating centre

**157 Mezonos Street** Patras Greece 262 21

## Sponsor information

**Organisation** University of Patras (Greece)

**Sponsor details** Faculty of Medicine University of Patras Patras Greece 265 00

**Sponsor type** University/education

Website http://www.med.upatras.gr

ROR https://ror.org/017wvtq80

## Funder(s)

**Funder type** University/education

**Funder Name** University of Patras (Greece)

## **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