AssessmenT of smalL Airways involvemeNT In aSthma (ATLANTIS)

Published: 19-01-2015
Last updated: 20-04-2024

Major objectives:- To determine the role of small airways abnormalities in the clinical manifestations of asthma;- To evaluate which (combination of) clinical methods best assesses the abnormalities of small airways and large airways disease in...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Respiratory disorders NEC
Study type	Observational invasive

Summary

ID

NL-OMON41215

Source
ToetsingOnline

Brief title
AssessmenT of smalL Airways involvemeNT In aSthma (ATLANTIS)

Condition

- Respiratory disorders NEC

Synonym
asthma, small airways abnormalities

Research involving
Human

Sponsors and support

Primary sponsor: Chiesi Farmaceutici S.p.A.
Source(s) of monetary or material Support: bedrijf

Intervention

Keyword: Asthma, Asthma diagnostic tool, Small airways dysfunction

Outcome measures

Primary outcome

- To determine the role of small airways abnormalities in the clinical manifestations of asthma.

- To evaluate which (combination of) clinical methods best assess the abnormalities of small airways and large airways disease in asthma and best relates to asthma severity, control, and future risk of exacerbations, both cross-sectionally and longitudinally.

- To assess if a questionnaire (Small Airways Dysfunction Tool) could be offered to physicians in diagnosing Small Airways Disease (SAD) in asthma, and thus characterize asthma patients with small airways diseases as determined by physiologic and radiographic assessments and measurement of specific biomarkers.

Secondary outcome

- To define the physiologic characteristics that correlate with small airways function in asthma as compared to healthy controls.

- To define the radiographic characteristics that correlate with small airways function in asthma as compared to healthy controls.

- To determine which direct and indirect measures of inflammation best correlate with inflammation in the large and small airway compartments.

- To determine if questionnaires such as ACQ-6 and ACT assess small airways function.

- To determine the correlation between SAD and asthma control.

- To determine if SAD is associated with exacerbations requiring prescription

of oral corticosteroids.

Study description

Background summary

the overall hypothesis of this study is that small airways disease (SAD) in asthma significantly contributes to asthma pathobiology, and measures of small airways function will correlate with asthma control and exacerbations. To test this hypothesis, we will recruit 800 subjects with mild, moderate and severe asthma, and 100 healthy controls (to provide normal reference values for the study variables). We will follow them longitudinally with periodic assessments to determine small and large airway function by using physiologic and radiographic techniques as well as direct and indirect measures of inflammation above described. We will determine if either of these tests or combination of tests not only define small airways dysfunction in asthma, but whether SAD modulates asthma control and risk of exacerbations.

Study objective

Major objectives:

- To determine the role of small airways abnormalities in the clinical manifestations of asthma;
- To evaluate which (combination of) clinical methods best assesses the abnormalities of small airways and large airways disease in asthma and best relates to asthma severity, control, and future risk of exacerbations, both cross-sectionally and longitudinally;
- To assess if a questionnaire (Small Airways Dysfunction Tool) could be offered to physicians in diagnosing Small Airways Disease (SAD) in asthma, and thus characterize asthma patients with small airways diseases as determined by physiologic and radiographic assessments and measurement of specific biomarkers.

Study design

This is a multinational, multicentre, non-pharmacological intervention study made up of a cross-sectional and a longitudinal phase. The Investigator is directly or indirectly (via GP) responsible for the appropriate individual treatment for the subject. The assignment of the patient to a particular therapeutic strategy falls within current practice and the prescription of the medicine is clearly separated from the decision to include the patient in the

study. The study is not intended to collect information on a single, specific drug. The prescribed treatment will be reported with the pharmacological name of each component.
The study plan foresees 3 clinic visits and 2 telephone contacts during a 1-year observation period. Asthmatic patients and healthy controls satisfying all the inclusion and none of the exclusion criteria will enter the study cross-sectional phase visit (V1, baseline visit) and the 12-month longitudinal phase. Follow-up visits to apply the study procedures (see Table 1: Study Schedule) will take place after 6 (V2) and 12 (V3) months from the cross-sectional phase visit (V1, baseline visit). In addition, after 3 and 9 months from baseline, all subjects will be contacted by phone calls for the evaluations described in Table 1. The end of the trial is defined as the last visit of the last subject in the trial.

Study burden and risks

This study is designed to minimize risk through observance of strict site and investigator selection criteria, careful subject selection and management.
Drawing blood may cause temporary discomfort from the needle stick, bruising or infection.
The amount of radiation of the CT scan is very low. Should the patient have already had many X-Rays, this should be discussed with the doctor.
There are no direct benefits to participate to this study for the patients. The information gained from the conduct of this study may benefit in the future to the patients with the same medical conditions.

Contacts

Public
Chiesi Farmaceutici S.p.A.

Via Palermo 26/A
Parma 43122
IT
Scientific
Chiesi Farmaceutici S.p.A.

Via Palermo 26/A
Parma 43122
IT

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

Asthmatic patient inclusion criteria
1. Male or female patients aged >= 18 and <= 65 years, who have signed an Informed Consent form prior to initiation of any study-related procedure.
2. Clinical diagnosis of asthma for at least 6 months confirmed by a chest physician according to international guidelines (GINA 2012) supported by objective evidence of any of the following at the baseline visit or in the previous 5 years.
a) Positive response to methacholine challenge test [PC20 < 8 mg/mL or PD20 < 0.7 mg for those subjects not using inhaled corticosteroids (ICS), and PC20 < 16 mg/mL or PD20 < 1.4 mg for subjects using ICS]
or
b) Positive response to a reversibility test, defined as ΔFEV1 >= 12% and >= 200 mL over baseline FEV1, within 30 minutes after administration of 400 µg of salbutamol pMDI administered with or without Spacer
or
c) Peak Flow variability (i.e. highest - lowest PEF over the day/mean value of the two, × 100) > 20%, measured over a follow-up period of 7 days
or
d) Documented response (defined as ΔFEV1 >= 12% and >= 200 mL) after a cycle (e.g., 4 weeks) of regular maintenance anti-asthma treatment.
3. Patients with stable asthma, on any previous regular asthma treatment (*rescue* β2-agonists alone included) at a stable dose, for at least 8 weeks prior to baseline visit.
4. Current smoker, ex-smoker (since the past 12 months) or lifelong non-smoker (total lifetime smoking history < 10 packyears defined as [(number of cigarettes smoked per day) x(number of years of smoking)] / 20).
Healthy subject inclusion criteria
1. Male or female patients aged >= 18 and <= 65 years, who have signed the Informed Consent form prior to initiation of any study-related procedure.
2. No clinical history of asthma or COPD (no respiratory symptoms compatible to asthma or COPD in the past 2 years).

3. Current smoker, ex-smoker (since the past 12 months) or lifelong non-smoker (total lifetime smoking history < 10 packyears).
4. Normal spirometry: baseline FEV1 >= 80% of the predicted normal value, FEV1/FVC > LLN (lower limit of normal).
5. Normal airways responsiveness: PC20 >= 16 mg/mL, PD20 >= 1.4 mg.

Exclusion criteria

Asthmatic patient exclusion criteria
1. Cigarette smoking > 10 packyears defined as [(number of cigarettes smoked per day) x (number of years of smoking)] / 20.
2. diagnosis of COPD confirmed by a chest physician.
3. Asthma exacerbation in the 8 weeks prior to baseline visit (defined as a significant deterioration of asthma and signalled by any or more of the following: need for a systemic corticosteroid course (>= 3 days); hospitalisation for asthma; emergency room attendance for asthma).
4. Clinical or functional uncontrolled respiratory, haematological, immunologic, renal, neurologic, hepatic, endocrinal or other disease, or any condition that might, in the judgment of the investigator, compromise the results or interpretation of the study.
5. Pregnant or lactating women (a urine pregnancy test will be performed).
6. Participation in an interventional clinical trial with intake of the last dose of any investigational drug <12 weeks preceding baseline visit (last dose < 5 half-lives prior to baseline visit for biologics).
7. Inability to comply with study procedures.
8. Alcohol or drug abuse.;Healthy subject exclusion criteria
1. Cigarette smoking history > 10 packyears defined as [(number of cigarettes smoked per day) x (number of years of smoking)] / 20.
2. Diagnosed upper and/or lower respiratory disease(s).
3. Clinical or functional uncontrolled haematological, immunologic, renal, neurologic, hepatic, endocrinal or other disease, or any condition that might, in the judgment of the investigator, compromise the results or interpretation of the study.
4. Pregnant or lactating women (a urine pregnancy test will be performed).
5. Participation in an interventional clinical trial with intake of the last dose of any investigational drug <12 weeks preceding baseline visit (last dose < 5 half-lives prior to baseline visit for biologics).
6. Inability to comply with study procedures.
7. Alcohol or drug abuse.

Study design

Design

Study type:	Observational invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Basic science

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	03-02-2015
Enrollment:	104
Type:	Actual

Ethics review

Approved WMO Date:	19-01-2015
Application type:	First submission
Review commission:	METC Universitair Medisch Centrum Groningen (Groningen)
Approved WMO Date:	20-04-2015
Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Groningen (Groningen)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
ClinicalTrials.gov	NCT02123667
CCMO	NL47847.042.14