

Safety and efficacy of insoluble (1,3)-(1,6)-beta-glucan made from brewers yeast (*Saccharomyces cerevisiae*)

Submission date 30/07/2012	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 03/08/2012	Overall study status Completed	☐ Statistical analysis plan ☐ Results
Last Edited 05/10/2016	Condition category Infections and Infestations	☐ Individual participant data ☐ Record updated in last year

Plain English summary of protocol

Background and study aims

Beta-glucans are sugars found in the cell walls of brewers' yeast, fungi, and some bacteria. Due to its immune system stimulating properties, beta-glucan may have an effect on the incidence of common cold (a mild viral infection of the nose, throat, sinuses and upper airways). The aim of this study is to investigate the effectiveness and safety of the beta-glucan extract Yestimun® in people who are more susceptible to the common cold.

Who can participate?

Healthy males and females aged 18-70 who have had at least three common cold infections within the last 6 months

What does the study involve?

During the study period of 16 weeks, participants are randomly allocated to consume a capsule of either Yestimun or a placebo (dummy tablet) each with breakfast and supper. Participants attend three visits: at the start of the study, after 8 weeks and at the end after 16 weeks. The number, severity and duration of colds, use of antibiotics and analgesics (painkillers), and side effects are assessed in both groups.

What are the possible benefits and risks of participating?

Participants may benefit from a reduced incidence of common cold, and there are no risks expected.

Where is the study run from?

The study is conducted in seven study centres in Berlin, Germany

When is the study starting and how long is it expected to run for?

October 2010 to May 2011

Who is funding the study?

Leiber GmbH (Germany)

Who is the main contact?
Dr Annegret Auinger
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Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
LEI/K/00810

Study information

Scientific Title
Double-blind, randomized, placebo-controlled clinical study to evaluate efficacy and safety of Yestimun® in subjects with increased susceptibility to common cold

Study objectives
Due to the immune-modulating properties of yeast beta-glucan, the number of common cold episodes is expected to be decreased during the study period in the verum study arm compared to the placebo study arm.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Charité - Universitaetsmedizin Berlin, Campus Charité Mitte), 14/10/2010, ref: EA1/221/10

Primary study design
Interventional

Study design
Double-blind randomized placebo-controlled multi-centre clinical study

Study type(s)

Prevention

Health condition(s) or problem(s) studied

Immune function

Interventions

Subjects were randomly assigned to receive a total of 900 mg of either Yestimun® or placebo, each provided in two capsules per day, which were consumed at breakfast and supper.

During the study period of 16 weeks, a total of three routine visits were performed: at baseline, after 8 weeks and at the end after 16 weeks. In addition, one episode visit was conducted on the 5th day of each cold episode.

A cold episode was defined by having (any of) the following symptoms: headache, joint pain, sore throat, difficulty swallowing, hoarseness, coughing, watery nasal discharge, nasal congestion, cold related sleeping difficulties, and body temperature above 38°C. During an episode, the subjects recorded and assessed their cold symptoms in the subject diary, for a period of 14 days. The diaries were checked by the investigators at the Episode Visits of each episode.

At study end (Termination Visit), the investigators and the subjects assessed the global efficacy and tolerability of the investigational product. At the start and end of the study, subjects recorded their eating habits in a diet diary.

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Yestimun®

Primary outcome(s)

Reduction of number of cold episodes during the study period in the Yestimun® study arm compared to placebo study arm

Key secondary outcome(s)

1. Severity of cold episodes (total sum score during the entire episode)
2. Duration of cold episodes (based on subject diary)
3. Severity of colds at episode start (total score on day 1 and day 2)
4. Severity of colds on the day of the Episode Visit (CRF)
5. Use of antibiotics and analgesics (subject's diary)
6. Global assessment of efficacy and tolerability
7. Assessment of adverse events
8. Assessment of sick leave days

Completion date

12/05/2011

Eligibility

Key inclusion criteria

1. Age: ≥ 18 years (child-bearing females had to agree to use appropriate birth control methods)
2. At least three common cold infections within the last six months
3. Written consent of the subject to study participation, subject understands the requirements and is willing to comply

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 Years

Sex

All

Key exclusion criteria

1. Acute infection of the upper airways (e.g. acute bronchitis)
2. Chronic upper airway disease (e.g. chronic bronchitis, tonsillitis or asthma)
3. Chronic cough of any origin
4. Chronic rhinitis (vasomotor or allergic rhinitis)
5. Congenital or acquired immunodeficiency disease (e.g. HIV infection)
6. Acute or chronic diarrhea
7. Severe organ or systemic diseases
8. Suspected swine flu or influenza
9. Body temperature above 37.5°C
10. Vaccination against influenza or swine flu within 21 days prior to study start
11. Known hypersensitivity to ingredients of the investigational product
12. Pregnancy and lactation
13. Use of immunosuppressants
14. Use of immunostimulants (e.g. Echinacea) within the last 14 days prior to study start
15. Use of antibiotics within the last 14 days prior to study start
16. Alcohol/drug abuse; drug addiction
17. Simultaneous participation in another clinical trial or participation in a clinical trial within the last 4 weeks
18. Regular use of other yeast preparations
19. Uncertainty regarding compliance

Date of first enrolment

15/10/2010

Date of final enrolment

12/05/2011

Locations

Countries of recruitment

Germany

Study participating centre

analyze & realize ag

Berlin

Germany

13467

Sponsor information

Organisation

Leiber GmbH (Germany)

ROR

<https://ror.org/011bzst67>

Funder(s)

Funder type

Industry

Funder Name

Leiber GmbH (Germany)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration