

# Evaluation of the efficacy and tolerance of a throat spray based on essential oil of *Cymbopogon giganteus*

<b>Submission date</b> 03/02/2023	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 11/03/2023	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 22/10/2024	<b>Condition category</b> Signs and Symptoms	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

*Cymbopogon giganteus* essential oil has long been used in traditional medicine to treat various respiratory conditions, including sore throat. To date, no modern formulation of this essential oil is available to treat sore throat. The objective of this study is therefore to evaluate the effectiveness and safety of use of a formulation of this oil in the form of a mouth spray in order to treat sore throat.

### Who can participate?

137 volunteer participants, men and women, aged 18 to 65 years, who came for consultation at the CHDZ SURULERE in Cotonou, having been diagnosed with sore throat, will be recruited.

### What does the study involve?

After signing the free and informed consent, they will be given the spray and the use and treatment regimen will be explained to them. They will be followed on an outpatient basis. Every day, we will call them to find out about their state of health and the adverse effects they may have had. On the 4th day, they will be reviewed and examined at the health center to assess efficacy and tolerance. In case of signs of aggravation, they will be immediately treated according to local standards. In case of improvement, they will continue the treatment until the 7th day. We will see them again on the 8th day for a final exit exam.

### What are the possible benefits and risks of participating?

The advantage of participating in this study is their contribution to the development of local herbal medicines. The potential downside is that they will be followed on an outpatient basis, but the entire research team is informed and ready to support them in the event of serious adverse effects.

### Where is the study run from?

Hospital and University Center of SURU-LERE area of Cotonou (Benin)

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

May 2022 to August 2023

Who is funding the study?

Pharmacy Training and Research Unit of the Faculty of Health Sciences of the University of Abomey-Calavi (Benin)

Who is the main contact?

Prof Habib Ganfon, hganfon@yahoo.fr

## Contact information

### Type(s)

Principal investigator

### Contact name

Prof Habib GANFON

### ORCID ID

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## Additional identifiers

### Clinical Trials Information System (CTIS)

Nil known

### Protocol serial number

phyto/essaiclin 001/22

## Study information

### Scientific Title

Evaluation of the efficacy and tolerance of a throat spray based on essential oil of *Cymbopogon giganteus* on sore throat at the Hospital and University Center of SURU-LERE area of Cotonou

### Study objectives

Mouthwash based on *Cymbopogon giganteus* essential oil is effective and well tolerated for treating sore throat

### Ethics approval required

Old ethics approval format

## **Ethics approval(s)**

Approved 22/12/2022, Research Ethics Committee of the ISBA (Institute of Applied Bio-medical Sciences, 01 B.P., COTONOU, République du Bénin; +229 21 30 55 65; isba@intnet.bj), ref: 157

## **Study design**

Prospective interventional non randomized

## **Primary study design**

Interventional

## **Study type(s)**

Treatment

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

Sore throat

## **Interventions**

Participants will be treated with the traditional plant preparation as mouthwash for 7 days

## **Intervention Type**

Supplement

## **Primary outcome(s)**

Clinical signs of sore throat at baseline and 3 days measured by the treating physician:

1. Throat pain at the level of the oropharynx
2. Fever
3. Redness of the oropharynx
4. Oropharyngeal exudate
5. Hypertrophy of the tonsil
6. Lymphoid formation on the pharyngo-posterior wall
7. Cervical adenopathy

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

1. Clinical signs of sore throat at 7 days measured by the treating physician
2. Tolerance of the throat spray measured by patient report at 7 days

## **Completion date**

31/08/2023

## **Eligibility**

### **Key inclusion criteria**

Current participant inclusion criteria as of 22/10/2024:

1. 18 to 65 years old
2. Sign the informed consent form
3. Outpatient with sore throat with the 7 clinical signs: Throat pain in the oropharynx  
Fever, Oropharyngeal redness, Oropharyngeal exudate, Tonsil hypertrophy, Lymphoid formation on the posterior pharyngeal wall, Cervical lymphadenopathy

Previous participant inclusion criteria:

1. 18 to 50 years old
2. Sign the informed consent form
3. Outpatient with sore throat with the 7 clinical signs: Throat pain in the oropharynx  
Fever, Oropharyngeal redness, Oropharyngeal exudate, Tonsil hypertrophy, Lymphoid formation on the posterior pharyngeal wall, Cervical lymphadenopathy

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Upper age limit**

65 years

**Sex**

All

**Total final enrolment**

30

**Key exclusion criteria**

1. Having ongoing conventional treatment for angina
2. Having a known allergy to one of the constituents of the investigational product
3. Pregnant women
4. People with respiratory problems

**Date of first enrolment**

06/02/2023

**Date of final enrolment**

31/03/2023

**Locations**

**Countries of recruitment**

Benin

**Study participating centre**

Hospital and University Center of SURU-LERE area of Cotonou  
RUE 1305 Cotonou. 1er arrondissement

Cotonou  
Benin  
06BP 2664

## Sponsor information

### Organisation

Ufr Pharmacie/ Faculte des Sciences de la Sante de Cotonou

## Funder(s)

### Funder type

University/education

### Funder Name

Pharmacy Training and Research Unit of the Faculty of Health Sciences of the University of Abomey-Calavi

## Results and Publications

### Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request  
hganfon@yahoo.fr

### IPD sharing plan summary

Available on request

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Other unpublished results</a>			22/10/2024	No	No
<a href="#">Protocol file</a>			20/02/2023	No	No