In Vivo Evaluation of Antibacterial Toothpaste Efficiency and Patients' Satisfaction: a Double-blind Randomised Controlled Trial

NCT05569850

November, 20th 2024

Information Sheet and Informed Consent Form for Patients Participating in a Clinical Trial

Official title of the trial:
Antibacterial efficacy of a toothpaste: randomized double-blind clinical trial.

Simplified title for patients:
Evaluation of the ability of a toothpaste to reduce the bacterial load in the mouth.

Location of the trial:
Conservative Dentistry Department, Dental Clinic (DIBINEM), University of Bologna, via S. Vitale 59, 40125, Bologna.

Trial Coordinator:
Prof. Lorenzo Breschi

Lead Investigator:
Name: Prof. Lorenzo Breschi
Affiliation: DIBINEM, University of Bologna

Sponsor/Funder:
DIBINEM, University of Bologna

Ethics Committee:
CE-AVEC

Introduction

Dear Sir/Madam,
The information contained in this document is detailed. Please consider participating in the trial **only** after carefully reading this information sheet and having a comprehensive conversation with a member of the trial team, who will take the necessary time to ensure you fully understand what is being proposed.

A. Background

Dear Sir/Madam,
We invite you to participate in the clinical trial described below. You have the right to be informed about the purpose and characteristics of the trial so that you can make a conscious and free decision about participating.
This document aims to inform you about the nature of the trial, its objectives, and what participation entails for you, including your rights and responsibilities.
Please read this document carefully. The researchers involved in this project, listed at the beginning of the document, are available to answer any questions you may have. No question is too small—do not hesitate to ask!
In addition to discussing the trial with us, you can also talk to your general practitioner, family members, or others you trust. Take as much time as you need to decide. You can take home an unsigned copy of this document to think about it or to discuss it with others before making a decision.
Participation in the trial is voluntary. If you decide not to participate, you will still receive the best possible care for your condition. Refusing to participate will not be interpreted as a lack

of trust.
Once you have read this document, had your questions answered, and decided to participate, you will be asked to sign a consent form, and you will receive a paper copy.
Sincerely,
Prof. Lorenzo Breschi
Lead Investigator

B. Key Information About the Trial
This section provides a brief overview of the key aspects of the trial. The following sections will provide more details to allow you to make an informed decision about whether to participate.
Why are you being asked to participate in this trial?
You are being asked to participate in a clinical trial funded by Unilever to evaluate the ability of two commercial toothpastes to reduce oral bacterial load. The mouth contains bacteria that, under certain conditions (poor oral hygiene, gastrointestinal issues, specific diets, etc.), can cause diseases affecting the teeth (cavities) and gums (gingivitis). Controlling these bacteria is essential for oral health. Specific products, depending on their formulation, can help prevent the progression of these diseases or reduce their effects. Cosmetic products like innovative toothpaste formulations can be widely used for this purpose. Therefore, we aim to verify whether a toothpaste with a combined antibacterial and remineralizing effect is more effective than a traditional antibacterial toothpaste in reducing oral bacterial load.
You have been selected to participate in this trial because you meet certain clinical criteria, which will be further explained in section C.
What are the objectives of the trial? How many centers and patients will participate?
This trial seeks to answer the question: “Is it possible to reduce bacterial load with a toothpaste that has both antibacterial and remineralizing effects?” We are conducting this clinical study to evaluate whether an antibacterial and remineralizing toothpaste is as effective or more effective than a traditional antibacterial toothpaste in reducing oral bacterial load.
What is the standard care for preventing cavities and gum diseases?
When oral bacteria cause conditions like cavities or gingivitis, the clinical approach focuses on removing the microorganisms and performing restorative treatments to restore lost dental and/or periodontal tissues. Depending on the severity of the conditions, these clinical interventions may be invasive, costly, and time-consuming, potentially negatively impacting the patient’s quality of life. Therefore, preventing these diseases is essential to maintaining good health. Toothpaste is one of the tools available to patients to help achieve this goal, complementing the preventive care provided by professionals.
Controlled studies:
In this study, after an initial evaluation of your oral health, you will undergo a professional dental cleaning session. A saliva sample will then be collected to assess the amount of bacteria present. You will then be given one of the two toothpastes to use for four weeks. At the end of this period, a second saliva sample will be collected and analyzed to evaluate the effectiveness of the toothpaste used.
Is participation voluntary?
Yes, you can freely choose whether or not to participate in the trial. Even if you agree to participate, you can change your mind at any time.
What are your options if you choose not to participate?
If you decide not to participate in the trial, you will continue to be treated at the clinic using the best available non-experimental methods for your condition. You may also be eligible to participate in another ongoing trial.

What happens if you decide to participate in the trial?
If you choose to participate, you will undergo a professional dental cleaning session. After one week, you will return for a follow-up oral evaluation, and a saliva sample will be collected. You will then be given one of the two toothpastes being studied, which you will use for your regular oral hygiene routine. After four weeks, you will return for a final evaluation, and a second saliva sample will be collected to assess the bacterial load after using the toothpaste.
Before participating, the doctor will conduct an initial oral exam to ensure you meet the eligibility criteria for the trial.
The complete schedule of visits and tests required during the trial is detailed in the following section: "What tests, exams, and procedures are included in the trial?

B. Key Information About the Trial (continued)
What are the risks and benefits of participating in the trial?
Participation in this trial may result in both risks and benefits. It is important to carefully consider them before making a decision.
Expected Benefits By participating in this clinical study, you may:

1. Receive dental treatment with a toothpaste that may be more effective than those currently on the market.
2. Contribute to the development of new products and protocols for the prevention of oral diseases such as cavities and gingivitis, potentially benefiting future patients.
3. Experience reduced dental sensitivity, prevention of cavities, and better protection against gum diseases, leading to improved aesthetic and functional results.

The aim of this clinical study is to determine whether the antibacterial and remineralizing toothpaste is as effective or more effective than a traditional antibacterial toothpaste. To achieve this, you will be randomly assigned one of the two toothpastes, which you will use for four weeks. Microbiological analysis will be conducted on your saliva samples to evaluate the results.
Potential Risks It is important that you are aware of the potential risks:

- As with any dental product, adverse events such as allergic reactions, dental sensitivity, or changes in taste may occur.
  You will be closely monitored for any of these reactions, and once an issue is identified, it will be treated appropriately.

Is consent final? Can I withdraw from the trial (voluntary exit)?
You may withdraw from the trial at any time and for any reason without needing to justify your decision.
If you decide to withdraw, please inform one of the trial doctors as soon as possible to ensure a safe discontinuation of the treatment. The doctor may recommend a final follow-up visit or test.
The doctor will keep you informed of any changes in the trial that may affect your willingness to participate.
Can the trial be terminated without my consent (early termination)?
Yes, the lead investigator may decide to terminate your participation in the trial if:

- Your health conditions change and continuing the trial may be harmful.
- New information becomes available, and continuing the trial is no longer in your best interest.
- You do not follow the agreed-upon guidelines for participating in the trial.
- The trial is terminated by the sponsor or regulatory authorities (with examples provided as to why the sponsor might stop the trial).

In any case, it is always recommended to undergo regular dental check-ups, regardless of whether you withdraw from the trial or the trial is discontinued.

C. Detailed Information Section

3. What tests, exams, and procedures are included if I participate in the trial?

- **First Enrollment Visit**: This will be a maximum one-hour meeting where your medical history, dental history, and a thorough oral examination will be carried out.
- **Second Visit**: This session, lasting about 1 hour and 30 minutes, will include a professional dental cleaning and instructions on how to perform home oral hygiene.
- **Third Visit**: Scheduled after one week (30 minutes), you will be asked to return for an oral health check-up, and a sample of your saliva will be collected (you will spit into a sterile container).
- **Fourth Visit**: Scheduled after four weeks, this session will last about 1 hour. Your oral health will be reassessed, and a second saliva sample will be collected in the same way as during the third visit. During this session, you will also be asked to complete a satisfaction questionnaire regarding the product you used.

4. What risks am I exposed to if I participate in the trial?

Although we believe that toothpaste is a valid aid in maintaining good oral health, we cannot exclude certain risks in your case, including:

- **Ineffectiveness**: The toothpaste might not be effective in controlling plaque, providing remineralization, or reducing tooth sensitivity in your case.
- **Taste Alteration**: There may be a change in your taste sensation after using the toothpaste.
- **Discoloration of Teeth**: The use of certain beverages (e.g., coffee, green or black tea, red wine) might influence the long-term color stability of your teeth.

5. Should I inform my general practitioner or family doctor?

Yes, it is advisable to inform your general practitioner about your participation in the study. We have prepared a letter for you to give to your doctor, which explains the nature and procedures of the trial.

6. What are my responsibilities if I decide to participate?

If you choose to participate, you are expected to:

- Carefully follow the instructions and requests provided by the trial staff and attend all appointments.
- Inform the trial staff if:
    - You are taking any medication during the trial period.
    - There are any changes in your medical or dental history since the first visit.
    - You have had any hospital visits or admissions during the treatment period.
    - You experience any symptoms or changes since starting the treatment.

7. Will I incur any costs for participating in the trial? Will I be reimbursed? Will I receive compensation?

There are no costs associated with your participation in the trial, as these are fully covered by the clinic where the treatment is being conducted.

There is no financial compensation for participating in the study.

8. What happens if I suffer harm as a result of participating in the trial?

Participating in a clinical trial may involve unforeseen inconveniences and risks. For this reason, the trial is covered by insurance that protects participants.

In accordance with the current laws, there is an insurance policy that covers any damage caused as a result of participating in the trial for the entire duration of the trial. This policy also covers the civil liability of both the lead investigator and the sponsor.

The insurance provider is Lloyd’s Insurance Company S.A., with a coverage limit of

1,000,000 euros per patient. Details of the policy are attached to this document.
It is important to note that under Italian law (DM of July 14, 2009), the insurance policy does not cover claims for compensation beyond the policy's coverage limit, and it only covers damages if the claim is made within three months of the event. This limitation does not affect your right to seek compensation from those responsible for any damage.
In the event of damage caused by the trial, you should contact the study coordinator, **Prof. Lorenzo Breschi**.

9. How will my health data, including identifying information, be handled during the trial?

Your data, particularly personal and health-related data, will be processed in accordance with EU Regulation 2016/679, known as the General Data Protection Regulation (GDPR), and Italian Legislative Decree no. 101 of August 10, 2018.
In practice, the documents related to your participation will be stored securely, and your name will not be directly associated with your data. Instead, a code known only to the researchers will be used.
Your data, in pseudonymized form (i.e., associated with a code rather than your name), may be subject to review by regulatory authorities and may be used for scientific publications (journals, conferences).
Your clinical data collected for the purposes of the trial, as well as the results of any tests, will be stored for the period required by law and then destroyed, unless they are anonymized during the trial or if you provide specific consent for their use in future studies.
If your personal data are transferred to a third country or an international organization, all safeguards provided by Article 46 of the GDPR will be adopted.
Additional information is included in the attached data processing consent form.

10. How will my biological samples collected for the trial be handled?

Similar to your health data, your biological samples (saliva) will also be pseudonymized and used for the purposes of the trial.
Once the trial is over, your samples will be destroyed. They will not be destroyed only if:

- It is no longer possible to link them to your identity (because they have been anonymized), or
- You provide specific consent for their storage in a biobank for future research.

Additional information is included in the attached data processing consent form.

11. How can I access the results of the trial?

Once the trial is completed, and all data has been collected, the results will be analyzed and shared with the scientific community.
Participants have the right to access the results of the trial. You may ask the lead investigator to share the general results of the trial with you.

12. Has the trial been approved by an ethics committee?

The protocol of the trial has been reviewed and approved by the Ethics Committee.
The committee has verified that the trial complies with Good Clinical Practice guidelines and the ethical principles outlined in the Declaration of Helsinki, ensuring that your safety, rights, and well-being are protected.

13. Who can I contact for more information about the trial?

For more information, you can contact:
Prof. Lorenzo Breschi
Dental Clinic, via S. Vitale 59, 40125, Bologna (BO).
Email: **lorenzo.breschi@unibo.it**

14. Who should I contact in case of an emergency or for unforeseen events during the trial?

For any concerns, side effects, or decisions to withdraw from the trial, you may contact:

- **Prof. Lorenzo Breschi**, tel: **051 2088139**, email: **lorenzo.breschi@unibo.it**

If you wish to report events or concerns related to the trial to someone not directly involved, you can contact the Ethics Committee that approved the trial (details to be provided).

Section: Consent Expression
(**Note**: 1 copy for the participant, 1 copy for the trial coordinator)
Title of the trial:
Antibacterial efficacy of a toothpaste: randomized double-blind clinical trial
Protocol Code, Version, and Date:
Version 2.2022
Sponsor/Funder:
University of Bologna / Unilever
Lead Investigator:
Prof. Lorenzo Breschi, DIBINEM, University of Bologna – Dental Clinic, via S. Vitale 59, 40125 – Bologna (BO).
Email: **lorenzo.breschi@unibo.it**

I, the undersigned, _____
Born in _____ on //_____
DECLARE:
☐ I have received a full explanation from Dr. _____ about the request to participate in the research project, as outlined in the information section that is part of this consent form. I was given a copy of this section on _____.
☐ The nature, objectives, procedures, expected benefits, possible risks, and alternatives to this clinical trial have been clearly explained to me, and I understand them.
☐ I had the opportunity to ask questions to the lead investigator and received satisfactory answers.
☐ I was given sufficient time to reflect on the information provided.
☐ I had enough time to discuss the trial with others, if necessary.
☐ I was informed that the trial protocol and all the forms used have received favorable approval from the relevant Ethics Committee.
☐ I am aware that the research may be interrupted at any time by the lead investigator.
☐ I was informed that I will be informed of any new data that might compromise the safety of the research and that, for any issues or questions, I can contact the lead investigators.
☐ I understand that for the protection of my health, it is my responsibility to inform my general practitioner about my participation in the trial. I am also aware of the importance of providing the lead investigator with all necessary information (medications, side effects, etc.).
☐ I was informed that the results of the research will be made available to the scientific community while protecting my identity in accordance with current privacy laws.
☐ I am aware that I can withdraw my consent to participate in the trial at any time without justification.
☐ I have received a copy of this consent form.

I therefore declare my decision to:
☐ Participate in the trial.

☐ I wish to / ☐ I do not wish to be informed of any unexpected information related to my current or future health that may incidentally arise during the trial, including genetic information, if it could lead to possible benefits.
☐ I wish to / ☐ I do not wish to be informed of unexpected information related to my current or future health only if it may be useful for my medical care or allow me to make informed reproductive choices.
☐ I wish to / ☐ I do not wish to be re-contacted after the end of the trial to provide information about my health status (this only applies to contacts not scheduled as part of the follow-up in the study protocol).

_____ //___
(Full name of the patient) (Date) (Signature)

Declaration of the Doctor Collecting the Consent
(Patient's Name, Place, and Date of Birth)

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Version 2.2022
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University of Bologna / Unilever
Lead Investigator:
Prof. Lorenzo Breschi, DIBINEM, University of Bologna – Dental Clinic, via S. Vitale 59, 40125 – Bologna (BO).
Email: **lorenzo.breschi@unibo.it**

I, the undersigned, Prof./Dr. _____, in my capacity as the lead investigator (or delegate of the lead investigator),
DECLARE:

- The patient has voluntarily consented to participate in the trial.

I also declare that I have:
☐ Provided a full explanation of the purpose of the trial, the procedures, the possible risks and benefits, and the available alternatives.
☐ Verified that the participant fully understood the information provided.
☐ Allowed sufficient time for the participant to ask questions about the trial.
☐ Clearly explained the participant's right to withdraw from the trial at any time or modify their choices.
☐ Not exerted any coercion or undue influence in seeking this consent.
☐ Provided information on how the trial results will be shared with the participant.

(Location and Date) (Time)

(Full name in block letters of the doctor who provided the information and collected the consent)
(Signature and stamp)

The present form is an integral part and must be stored together with the information sheet for informed consent.