# Procedures of effectiveness of aesthetic and cosmetic methods

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>
16/12/2024	No longer recruiting	Protocol
Registration date 18/12/2024	Overall study status Completed	Statistical analysis plan
		Results
Last Edited	Condition category	Individual participant data
18/12/2024	Skin and Connective Tissue Diseases	[X] Record updated in last year

#### Plain English summary of protocol

Background and study aims

This study aims to evaluate the effects of certain cosmetic creams on the skin of healthy volunteers. Researchers will use biophysical methods and skin biopsies to assess the impact of these creams, both alone and in combination with laser treatments.

#### Who can participate?

Healthy male and female volunteers aged 18 to 65 years can participate in this study.

#### What does the study involve?

Participants will apply either an active cream or a placebo cream to the inner surface of both arms twice daily (morning and evening) for two weeks. The study will measure transdermal water loss, erythema, pigmentation, and keratin hydration using the MPA 5 device at Day 1 and Day 14. Elasticity will be measured using the Cutometer 575 device at the same time points. Additionally, small skin biopsies will be taken before starting the cream application and after 14 days to assess collagen improvement.

# What are the possible benefits and risks of participating?

The study aims to demonstrate the effectiveness of the active ingredients in the cosmetic formulations. The results will help understand how these ingredients and treatments affect the skin. While the non-invasive tests are safe, the skin biopsies are minimally invasive and carry a small risk of discomfort or minor complications.

#### Where is the study run from?

Established Laboratory of Chemistry - Biochemistry - Cosmetology, Department of Biomedical Sciences, University of West Athens, Aegaleo Alsace Campus (Greece)

When is study starting and how long is it expected to run for? November 2021 to July 2023

Who is funding the study? Investigator initiated and funded

Who is the main contact? Prof. Varvaresou Athanasia avarvares@uniwa.gr

# Contact information

#### Type(s)

Public, Principal Investigator

#### Contact name

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Scientific

#### Contact name

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# Additional identifiers

# EudraCT/CTIS number

Nil known

#### **IRAS** number

# ClinicalTrials.gov number

Nil known

#### Secondary identifying numbers

CPMS37942

# Study information

#### Scientific Title

Procedures of effectiveness of aesthetic and cosmetic methods

#### Acronym

**PEACM** 

#### Study objectives

Study with biophysical methods and skin biopsies to evaluate the effect on the skin of healthy volunteers of

- a) cosmetic creams of Unisooth EG-28® mixture before and after Nd:YAG or Diode laser or microcrystal dermabrasion or dermaroller and
- b) the Unisooth EG-28® ingredient with iontophoresis device and external application of cosmetic cream with active ingredient Olea vitae PLF®.

#### Ethics approval required

Ethics approval required

#### Ethics approval(s)

Approved 05/11/2021, UNIWA RESEARCH ETHICS COMMITTEE (Agiou Spyridonos 28, Aigaleo, 12243, Greece; +30 2105387294; ethics@uniwa.gr), ref: 37942/05-11-2021

#### Study design

Randomized double blind placebo controlled study

#### Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

#### Study setting(s)

Laboratory

#### Study type(s)

Efficacy

#### Participant information sheet

Not available in web format, please use contact details below to request a patient information sheet

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

Skin condition in healthy volunteers

#### **Interventions**

Group 1: Used OLEA VITAE™ 02 cream.

Group 2: Used placebo cream.

Intervention: Each participant received a coded vessel containing 70 g of either the active cream or placebo cream, without indication of its contents.

Application: Participants applied the cream to the inner surface of both arms twice daily (morning and evening) for two weeks.

Instructions: Participants were instructed not to apply their test cream in the twelve hours prior to the baseline visit.

Total Duration of Intervention: 2 weeks.

Follow-Up: Skin biopsies were performed at baseline (Day 0) and after 14 days of treatment (Day 14).

#### Intervention Type

Supplement

#### Primary outcome measure

- 1. Transdermal water loss is measured using Tewameter MPA-5 at Day 0 and Day 14
- 2. Erythema is measured using Mexameter MPA-5 at Day 0 and Day 14
- 3. Pigmentation is measured using Mexameter MPA-5 at Day 0 and Day 14
- 4. Keratin hydration is measured using Corneometer CM 825 at Day 0 and Day 14
- 5. Elasticity is measured using Cutometer MPA 580 at Day 0 and Day 14
- 6. Collagen improvement is measured using skin biopsy at Day 0 and Day 14

#### Secondary outcome measures

Satisfaction and product tolerability measured using a questionnaire at the end of the treatment

#### Overall study start date

05/11/2021

#### Completion date

31/07/2023

# **Eligibility**

#### Key inclusion criteria

- 1. Volunteer individuals aged 18 to 65 years, either sex
- 2. Written and informed consent
- 3. Healthy volunteers without skin disease or any other diseases (acute or chronic)

#### Participant type(s)

Healthy volunteer

#### Age group

Adult

#### Lower age limit

18 Years

#### Upper age limit

65 Years

#### Sex

Both

#### Target number of participants

45

#### Total final enrolment

45

#### Key exclusion criteria

- 1. Pregnancy, lactating, or planned pregnancy
- 2. People who use external application containing steroids for the treatment of skin disease more than one month
- 3. Participated in the same trial within six months from the interview
- 4. People with hypersensitive skin
- 5. Skin abnormalities such as severe acne, erythema, telangiectasia on the test site
- 6. Used the same or similar cosmetic (or pharmaceutical) on the test site within three months from the interview
- 7. Have peeling of skin or wrinkles removed within six months from the interview
- 8. Other unsuitable reasons for clinical trial based on the discretion of the investigator

#### Date of first enrolment

01/09/2022

#### Date of final enrolment

30/12/2022

# Locations

#### Countries of recruitment

Greece

# Study participating centre

ESTABLISHED LABORATORY OF CHEMISTRY - BIOCHEMISTRY - COSMETOLOGY, DEPARTMENT OF BIOMEDICAL SCIENCES, UNIVERSITY OF WEST ATHENS, AEGALEO ALSACE CAMPUS

Agiou Spyridonos 28 Aigaleo

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# Sponsor information

#### Organisation

**UNIWA** 

#### Sponsor details

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#### Sponsor type

University/education

#### Website

https://www.uniwa.gr

# Funder(s)

### Funder type

Other

#### Funder Name

Investigator initiated and funded

# **Results and Publications**

## Publication and dissemination plan

Planned publication in a peer-reviewed journal

# Intention to publish date

30/12/2024

# Individual participant data (IPD) sharing plan

The datasets generated during and/or analyzed during the current study are not expected to be made available due to university policy

# IPD sharing plan summary

Not expected to be made available