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A new face cream helps skin heal faster after light-based cosmetic treatments

Submission date
14/09/2025

Recruitment status
No longer recruiting

Registration date
16/09/2025

Overall study status
Completed

Last Edited
15/09/2025

Condition category
Skin and Connective Tissue Diseases

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[_] Results
[_] Individual participant data
[_] Record updated in last year

Plain English summary of protocol

Background and study aims
Intense Pulsed Light (IPL) is a popular light-based treatment for skin rejuvenation. However, it can temporarily damage the skin's protective barrier, leading to dryness, redness, and discomfort. Moisturizers are recommended after such treatments to help the skin recover. This study aims to test whether a new moisturizer containing an ingredient called Saccharide Isomerate is better than a standard moisturizer at helping skin heal and feel more comfortable after an IPL treatment.

Who can participate?
We are looking for Chinese women and men aged between 25 and 65 years, who have signs of skin aging (like wrinkles or spots) and have skin types III or IV (skin that tans easily and rarely burns).

What does the study involve?
Each participant will receive one IPL treatment on their entire face. Immediately after, they will apply two different moisturizers: the new test moisturizer on one side of their face and a control moisturizer (without the active ingredient) on the other side. They will do this twice a day for 7 days. Which side gets which moisturizer is decided randomly, and neither the participant nor the researchers will know which is which during the study. We will measure skin hydration, water loss, and redness on both sides of the face several times over the 7 days. Participants will also fill out a questionnaire about their satisfaction with the products at the end of the study.

What are the possible benefits and risks of participating?
Participants will receive a free IPL treatment and professional skincare products. The potential benefit is that their skin may recover faster and feel more comfortable after the IPL. The risks are minimal and are mainly related to the IPL treatment itself, which can commonly cause temporary redness, slight swelling, or a feeling of tightness. The moisturizers are expected to be very safe and are not known to cause irritation.

Where is the study run from?
The study is run from the Department of Plastic Surgery at Beijing Tsinghua Changgung Hospital in Beijing, China.

When is the study starting and how long is it expected to run for?
July 2024 to August 2024

Who is funding the study?
This study did not receive any funding from external companies. It is an investigator-initiated study.

Who is the main contact?
The main contact for this study is Dr Hui Shao at sh.2020@tsinghua.org.cn

Contact information

Type(s)
Public, Scientific, Principal investigator

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Additional identifiers

Study information

Scientific Title
A novel facial moisturizer containing saccharide isomerate accelerates skin barrier restoration following intense pulsed light treatment: a randomized split-face study

Study objectives
Saccharide isomerate moisturizer can facilitate skin barrier recovery, and reduce procedure-related adverse effects

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 26/07/2024, Beijing Tsinghua Changgung Ethics Committee (No.168 Litang Road, Changping District, Beijing, 102218, China; +86 10-56118567 ; 870398654@qq.com), ref: 24452-6-01

Primary study design
Interventional

Study design
Single-center randomized split-face clinical trial

Study type(s)
Safety, Efficacy

Health condition(s) or problem(s) studied
Skin barrier repair in post-IPL patients

Interventions
Prior to the treatment session, all subjects underwent facial cleansing to remove cosmetics. No topical anesthesia was administered. Subjects received a single IPL treatment session using the BroadBand Light™ system (Sciton® Palo Alto, CA, USA) equipped with a 420-1200 nm cutoff filter. Treatment parameters were individualized based on clinical assessment according to specific photodamage characteristics and immediate skin response. Immediately post-treatment, participants initiated a twice-daily split-face application regimen for seven consecutive days. According to a computer-generated randomization table, the novel facial moisturizer containing saccharide isomerate (test item; commercially available formulation from Galderma®, Inc.) was assigned to one randomly assigned check, while the contralateral side received the reference moisturizer (control; identical base formulation without saccharide isomerate). Follow up for 7 days.

Intervention Type
Other

Primary outcome(s)
1. Transepidermal water loss (TEWL) measured using Tewameter® TM HEX probe (Cutometer® dual MPA580 system, Courage + Khazaka) at Baseline (T0), Immediately after first IPL treatment (T1), 1 day (T4), 3 days (T5), 5 days (T6), and 7 days (T7) post-treatment.
2. Skin hydration (SCH - Stratum Corneum Hydration) measured using Corneometer® CM825 probe (Cutometer® dual MPA580 system, Courage + Khazaka) at Baseline (T0), Immediately after first IPL treatment (T1), 1 day (T4), 3 days (T5), 5 days (T6), and 7 days (T7) post-treatment.
Erythema Index (EI) measured using Mexameter® MX18 probe (Cutometer® dual MPA580 system, Courage + Khazaka) at Baseline (T0), Immediately after first IPL treatment (T1), 1 day (T4), 3 days (T5), 5 days (T6), and 7 days (T7) post-treatment.
3. Subject satisfaction measured using a subjective questionnaire (assessing moisturizer's performance and purchase intent on a Likert scale) at 7 days post-treatment (T7).
4. Incidence of Treatment-Emergent Adverse Events (TEAEs) assessed by clinical evaluation (including assessment for erythema, edema, blisters, and hyperpigmentation) at All evaluation time points (Baseline (T0), Immediately after first IPL treatment (T1), 1 day (T4), 3 days (T5), 5 days (T6), and 7 days (T7) post-treatment).
5. Visual documentation of skin condition obtained using VISIA®-CR imaging system (Canfield Scientific) under standard and cross-polarized lighting at Baseline (T0), Immediately after first IPL treatment (T1), 1 day (T4), 3 days (T5), 5 days (T6), and 7 days (T7) post-treatment.

Key secondary outcome(s)
There are no secondary outcome measures

Completion date
30/08/2024

Eligibility

Key inclusion criteria
1. Aged between 25 and 65 years with Fitzpatrick skin types III-IV
2. Presentation of clinical signs of skin aging
3. Willingness to apply the test moisturizer on the assigned facial side twice daily for 7 consecutive days

Participant type(s)
Healthy volunteer, Patient

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
25 Years

Upper age limit
65 Years

Sex
All

Total final enrolment
30

Key exclusion criteria
1. Known history of intolerance or hypersensitivity to any component of the test moisturizer
2. Pregnancy, lactation or planning to become pregnant
3. History of systemic phototoxic drug use or any facial laser/energy-based device treatment within the past 6 months
4. Presence of active facial rash, scaling, or edema at the time of screening

Date of first enrolment
28/07/2024

Date of final enrolment
25/08/2024

Locations

Countries of recruitment
China

Study participating centre
Beijing Tsinghua Changgung Hospital
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Sponsor information

Organisation
Beijing Tsinghua Chang Gung Hospital

ROR
https://ror.org/050nfgr37

Funder(s)

Funder type
Hospital/treatment centre

Funder Name
Beijing Tsinghua Changgung Hospital

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study will be stored in a non-publicly available repository: https://edc.clinflash.com. The type of data stored is individual participant data (IPD) including demographic details, treatment received, and outcomes

IPD sharing plan summary
Stored in non-publicly available repository