

# The impact of treatments using cosmetic acids on the skin of people suffering from acne vulgaris

<b>Submission date</b> 08/01/2020	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 17/01/2020	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 14/07/2022	<b>Condition category</b> Skin and Connective Tissue Diseases	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

Cosmetic acids are a procedure that can be used for people suffering from acne vulgaris. Both pyruvic acid and azelaic acid can be used for treatments that are aimed at reducing skin greasiness, as well as reducing skin porosity.

The aim of the test is to check how both acids will affect skin parameters, quality of life and if one of these cosmetic acids will be better for acne vulgaris skin.

### Who can participate?

Polish female volunteers with mild to moderate acne vulgaris or with healthy skin, aged 18-25

### What does the study involve?

Cosmetic acids will be performed on the cleansed face skin, using a cotton stick, then neutralizer will be put on the skin, and rinsed by cold water.

After all the sessions, the follow-up measurements will be made after 14 days.

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

Benefits: Improved skin health.

Risks: There is no possible risks of participating, only after treatment skin is a little bit red, but after 1-2 hours it stops.

### Where is the study run from?

Opole Medical School - Faculty of Health Science (Poland)

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

January 2020 to April 2020

### Who is funding the study?

Opole Medical School (Poland)

Who is the main contact?  
Dr Karolina Chilicka  
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## Contact information

### Type(s)

Public

### Contact name

Dr Karolina Chilicka

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## Additional identifiers

### Protocol serial number

KB/16/2018

## Study information

### Scientific Title

The impact of treatments using pyruvic and azelaic acids on selected skin parameters and quality of life from people suffering from acne vulgaris

### Study objectives

1. Treatment with cosmetic acids decreases the oiling of skin
2. Treatment with cosmetic acids increases the quality of life
3. Treatment with cosmetic acids acts anti-inflammatory on skin efflorescence

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Approved 13/03/2018, Research Ethics Committee from Opole Medical School (68 Katowicka Street; 45-065; Poland; +48 774410882; biurorektora@wsm.opole.pl), ref: KB/16/2018

### Study design

Prospective clinical study with follow-up analysis

## **Primary study design**

Interventional

## **Study type(s)**

Treatment

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

Acne vulgaris

## **Interventions**

Participants are recruited into 2 groups:

1st group - treatment with pyruvic acid

2nd group - treatment with azelaic acid

Parameters of the skin will be checked like: oiling, moisturising, porosity, peeling by device Nati Skin Analyzer.

Six sessions of cosmetic acids are performed every two weeks. After this time skin parameters will be measured (14 days after last session). Skin parameters will be compared between these two groups. Cosmetic acids will be performed on the cleansed face skin, using a cotton stick that, then neutralizer will be used and rinsed by a cold water. After all sessions, the follow-up measurements will be made after 14 days.

Also quality of life will be checked into this two groups, before and after finishing all sessions. DLQI and Skindex-29 will be used.

## **Intervention Type**

Drug

## **Drug/device/biological/vaccine name(s)**

Pyruvic and Azelaic Acids

## **Primary outcome(s)**

Skin sebum content measured using the Nati Skin Analyzer at baseline, and two-weeks after finishing the treatments.

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

1. Skin moisture measured using NAti Skin Analyzer at baseline, two-weeks after finishing the treatments
2. Porosity and peeling of skin will be measured by Nati Skin Analyzer at baseline two-weeks after finishing the treatments
3. General quality of life of patients with acne vulgaris measured using the Hellgren and Vincent Scale and also Skindex-29 and DLQI questionnaires at baseline and two weeks after finishing the treatments

## **Completion date**

20/04/2020

## **Eligibility**

### **Key inclusion criteria**

1. Female aged 18-25 years
2. Acne vulgaris

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Upper age limit**

25 years

**Sex**

Female

**Total final enrolment**

120

**Key exclusion criteria**

1. Severe acne
2. Pregnancy, lactation
3. Active inflammation of the skin
4. Bacterial, viral, allergic and fungal relapsing skin diseases
5. Disturbed skin continuity
6. Fresh surgical procedures in the treatment area
7. Active Herpes
8. Treatment with isotretinoin
9. Reduced immunity
10. Cancer/tumour
11. Skin allergy

**Date of first enrolment**

27/01/2020

**Date of final enrolment**

31/01/2020

**Locations****Countries of recruitment**

Poland

**Study participating centre**

**Opole Medical School**  
Katowicka 68  
Opole  
Poland  
45-060

## Sponsor information

### Organisation

Public Higher Medical Professional School in Opole

### ROR

<https://ror.org/000bjk220>

## Funder(s)

### Funder type

University/education

### Funder Name

Opole Medical School

## 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.

### IPD sharing plan summary

Available on request

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	28/07/2020	31/07/2020	Yes	No
<a href="#">Results article</a>		27/07/2020	14/07/2022	Yes	No
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes
<a href="#">Study website</a>	Study website	11/11/2025	11/11/2025	No	Yes