Evaluation of the antimicrobial properties of Neosalus cream when applied to human skin

Submission date
28/11/2018

Recruitment status
No longer recruiting

[_] Prospectively registered

[_] Protocol

[_] Statistical analysis plan

Registration date
28/12/2018

Overall study status
Completed

[X] Results

Last Edited
18/01/2023

Condition category
Skin and Connective Tissue Diseases

[_] Individual participant data

Plain English summary of protocol

Background and study aims
A defective skin barrier and bacterial colonization are two important factors in maintenance and progression of dry skin and eczema. The aim was to evaluate the antimicrobial efficacy of Neosalus cream.

Who can participate?
Healthy subjects at least 18 years of age of both genders who had normal skin that was free of disease and injury.

What does the study involve?
Upon completion of a 7-day product restriction period, a trained technician applied the test cream to the skin of one forearm. The other forearm received no test cream. Four sites were delineated on the skin of each forearm and, 10 minutes following the product application procedure, the sites were exposed to bacteria for contact times of 5 minutes, 10 minutes, 20 minutes, and 40 minutes. A collection liquid was then placed on the surface of the skin for one minute and then removed. The number of bacteria present in the collection liquid was then assessed in the laboratory. All participants received the same treatment.

What are the possible benefits and risks of participating?
There was nothing for the individual to gain from participating. No side effects were expected.

Where is the study run from?
The study was performed by Bioscience Laboratories, Bozeman Montana.

When is the study starting and how long is it expected to run for?
Study started 10/11/2009 – completed 29/03/2010

Who is funding the study?
Exceltis USA Dermatology

Who is the main contact?
Ruby Ghadially ruby.ghadially@ucsf.edu

Contact information

Type(s)
Scientific

Contact name
Prof Ruby Ghadially

Contact details
1700 Owens street, Dermatology, 3rd floor
San Francisco
United States of America
94158
415 -575-0529
ruby.ghadially@va.gov

Additional identifiers

Protocol serial number
2018-001

Study information

Scientific Title
Phase 1 of a Two-Phase Evaluation of the Antimicrobial Properties of Various Product Formulations

Study objectives
Neosalus Cream will have antimicrobial effects when applied to human skin.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Gallatin Institutional Review Board, 20/11/2009, ref. 090426-150.0

Study design
Single centre, blinded, within-subject, interventional

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Dry skin

Interventions

Twenty subjects, ten subjects per group, were evaluated on the forearms to determine the efficacy of Neosalus by comparing the recoveries of Escherichia coli (ATCC #11229) and Staphylococcus aureus MRSA (ATCC #33593) bacteria from the skin of treated forearms to recoveries from the skin of untreated forearms.

After a 7-day product restriction period, a trained technician applied 1ml neosalus cream to the skin of one randomly assigned forearm. The left or right forearm was randomized to treatment with the test formulation, and the remaining forearm served as the untreated control. Following demarcation (see below), the four test sites of the skin of each forearm were assigned randomly and bilaterally to post-treatment sample times.

Four sites were delineated on the skin of each forearm and, 10 minutes following the product application procedure, the sites were exposed to the randomly assigned challenges of bacterial suspensions (Staphylococcus aureus or Escherichia coli $1.0 \times 10E7$ CFU/ml) for contact times of 5 minutes, 10 minutes, 20 minutes, and 40 minutes, and then sampled.

On completion of testing, subjects were required to perform a I-minute rinse of their forearms with 70% ethanol and an air¬ dry, followed by a supervised 4-minute wash with a 4% chlorhexidine gluconate solution. A topical antibiotic ointment was applied to the forearms following the decontamination procedure.

Intervention Type
Other

Primary outcome(s)
Microbial counts recovered from subjects' forearms was measured using the Cylinder Sampling Technique at 5, 10, 20, and 40 minutes.

Key secondary outcome(s))
N/A

Completion date
29/03/2010

Eligibility

Key inclusion criteria
1. Healthy
2. Over 18 years old

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Adult

Lower age limit

18 years

Sex

All

Total final enrolment

20

Key exclusion criteria

1. Clinically evident dermatosis
2. Skin injury

Date of first enrolment

07/12/2009

Date of final enrolment

14/12/2009

Locations

Countries of recruitment

United States of America

Study participating centre
BioScience Laboratories, Inc. (testing facility)

300 N. Willson Avenue
Bozeman, Montana
United States of America
59715

Sponsor information

Organisation

(973) 324-0200

Funder(s)

Funder type

Industry

Funder Name

Quinnova Pharmaceuticals, Inc

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are/will be available upon request from: Ruby Ghadially, ruby.ghadially@ucsf.edu, raw data, available by written request.

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		22/01/2019	18/01/2023	Yes	No
Basic results		10/12/2018	10/12/2018	No	No