Evaluation of atopic dermatitis using a topical moisturiser containing tocotrienol

Submission date	Recruitment status No longer recruiting	Prospectively registered		
29/08/2022		[X] Protocol		
Registration date 05/09/2022	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited 09/05/2023	Condition category Skin and Connective Tissue Diseases	Individual participant data		

Plain English summary of protocol

Background and study aims

Atopic dermatitis causes the skin to become itchy, dry and cracked. Little is known about the antioxidant effects of topical vitamin E on atopic dermatitis due to a lack of controlled clinical studies. Therefore this study aims to assess the effectiveness and safety of a moisturiser containing a tocotrienol-rich composition (REMDII Sensitive, Malaysia) on children with mild-to-moderate atopic dermatitis.

Who can participate?

Patients aged 1 month to 12 years with a diagnosis of atopic dermatitis

What does the study involve?

Each participant will be examined for signs and symptoms of atopic dermatitis before and after using REMDII Sensitive. Participants are instructed to exclusively use the moisturiser (REMDII® Sensitive Intensive Moisturising Cream) and body wash (REMDII® Sensitive Calming Body Wash) given and abstain from using other soap-based products and commercial moisturiser during the whole study period. In accordance with this, participants are advised to apply the study product (Remdii Sensitive) thrice daily on the affected atopic dermatitis lesion sites for 12 consecutive weeks. To ensure their compliance, each participant is requested to return the bottles at every visit to assess the amount of applied moisturiser. Mild potency corticosteroids such as hydrocortisone 1% cream are used for the first 2 weeks concurrently with the study product. Thereafter, the use is only limited to flare up. The utilization of corticosteroids is recorded in the provided diary.

What are the possible benefits and risks of participating?

There are no adverse effects known to be caused by REMDII Sensitive. REMDII Sensitive has been registered to the National Pharmaceutical Regulatory Agency (NPRA), Kementerian Kesihatan Malaysia with the notification number NOT181000506K and certified halal. All topicals can cause irritation, burning, stinging sensation and folliculitis. There is a low risk of sensitization to the topical ingredients. The study procedures are all routine procedures for the disease /condition studied. There is thus a minimal risk for subjects. All parties will be insured by trial insurance paid for by the sponsor. Where is the study run from? Lipidware Sdn Bhd (Malaysia)

When is the study starting and how long is it expected to run for? February 2019 to February 2020

Who is funding the study? Lipidware Sdn Bhd (Malaysia)

Who is the main contact? 1. Dr How Kang Nien, hkangnien@upm.edu.my 2. Prof. Lai Oi Ming, omlai@upm.edu.my

Contact information

Type(s) Principal Investigator

Contact name Dr Kang Nien How

ORCID ID http://orcid.org/0000-0002-8032-9804

Contact details

Dermatology Unit Faculty of Medicine and Health Sciences Universiti Putra Malaysia Serdang Malaysia 43400 +60 (0)17-6723051 hkangnien@upm.edu.my

Type(s) Scientific

Contact name Prof Oi Ming Lai

ORCID ID http://orcid.org/0000-0003-1205-149X

Contact details

Department of Bioprocess Technology Faculty of Biotechnology and Biomolecular Sciences Universiti Putra Malaysia Serdang Malaysia 43400 +60 (0)3-9769 7520 omlai@upm.edu.my

Additional identifiers

EudraCT/CTIS number Nil known

IRAS number

ClinicalTrials.gov number Nil known

Secondary identifying numbers JKEUPM-2019-274 (NMMR-19-1588-49234)

Study information

Scientific Title

A Phase II open-label, single arm, single centre clinical study on the effect of a moisturiser containing tocotrienol-rich composition on mild to moderate atopic dermatitis in children

Acronym

Atopic Dermatitis

Study objectives

REMDII Sensitive significantly improves the severity of atopic dermatitis in children with mild to moderate atopic dermatitis.

Ethics approval required Old ethics approval format

Ethics approval(s)

Approved 27/08/2019, Universiti Putra Malaysia Ethic Committee for Research Involving Human Subjects (JKEUPM; Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia; +60 (0)3 97691605; jkeupm@upm.edu.my), ref: JKEUPM/1.4.18.2 (JKEUPM)

Study design Phase II open-label single-arm single-centre clinical study

Primary study design Interventional

Secondary study design Non randomised study

Study setting(s) Hospital

Study type(s)

Treatment

Participant information sheet

Not available in web format

Health condition(s) or problem(s) studied

Atopic dermatitis

Interventions

Each participant will be examined for signs and symptoms of atopic dermatitis before and after using REMDII Sensitive. Participants are instructed to exclusively use the moisturiser (REMDII® Sensitive Intensive Moisturising Cream) and body wash (REMDII® Sensitive Calming Body Wash) given and abstain from using other soap-based products and commercial moisturiser during the whole study period. In accordance with this, participants are advised to apply the study product (Remdii Sensitive) thrice daily on the affected atopic dermatitis lesion sites for 12 consecutive weeks. To ensure their compliance, each participant is requested to return the bottles at every visit to assess the amount of applied moisturiser. Mild potency corticosteroids such as hydrocortisone 1% cream are used for the first 2 weeks concurrently with the study product. Thereafter, the use is only limited to flare up. The utilization of corticosteroids is recorded in the provided diary.

Intervention Type

Other

Primary outcome measure

Atopic dermatitis severity measured using Investigator's Global Assessment (IGA) score at baseline, Week 0, Week 2, Week, 4, Week 8 and Week 12

Secondary outcome measures

1. Atopic dermatitis severity measured using Scoring Atopic Dermatitis Index (SCORAD) at baseline, Week 0, Week 2, Week, 4, Week 8 and Week 12

2. Atopic dermatitis severity measured using Infant Dermatology Life Quality Index (IDQOL) and Children's Dermatology Life Quality Index (CDLQI) at baseline, Week 0, Week 2, Week, 4, Week 8 and Week 12

3. Atopic dermatitis severity measured using Pruritis Score using Visual Analogue Score (VAS) or ordinal at baseline, Week 0, Week 2, Week, 4, Week 8 and Week 12

4. Frequency of rescue treatment needed, measured using the number of times hydrocortisone is required at baseline, weeks 0, 2, 4, 8 and 12

5. Atopic dermatitis severity measured using high-resolution ultrasound skin imaging (HR-USI), skin colour and transepidermal water loss (TEWL) at baseline, Week 0, Week 2, Week, 4, Week 8 and Week 12

6. Correlation between atopic dermatitis severity measured using SCORAD index and Patient-Oriented SCORing Atopic Dermatitis (PO-SCORAD) or IDLQI at each baseline and follow-up visit at weeks 0, 2, 4, 8 and 12 and absolute changes from baseline

Overall study start date

11/02/2019

Completion date 04/02/2020

Eligibility

Key inclusion criteria

1. Male and female ages 1 month to 12 years with a diagnosis of atopic dermatitis based on UK Working Party Criteria of Atopic Dermatitis (Williams, Jburney, Pembroke, Hay, & Party, 1994) 2. Individuals with an IGA score of at least mild (IGA= 2) or moderate (IGA= 3) and have at least 5% of body surface area affected during the inclusion time

3. Individuals with a carer reported pruritus score based on VAS of at least 40 mm and above

Participant type(s)

Patient

Age group Child

Lower age limit 1 Months

Upper age limit

12 Years

Sex

Both

Target number of participants 33

Total final enrolment

30

Key exclusion criteria

1. Patients with exacerbation which is not controlled by per protocol rescue medicine in 2 weeks. 2. Infection failed to be treated with per protocol oral antibiotic. Or those who develop

cutaneous sepsis, as defined by skin infection + >/= 2 meets the SIRS definition, as defined below: 3. Temp >38.5°C or >36°C

4. Tachycardia or bradycardia (if <1 year)

5. Tachypnea or requiring mechanical ventilation

6. Abnormal leukocyte count or >10% bands

7. Infections which are not deemed related to atopic eczema i.e. pneumonia, UTI, AGE, will not be withdrawn even if fulfilled sepsis criteria.

8. The development of any severe adverse event, as defined by the Malaysian GCP

9. Use of any forbidden medication or treatment, and/or other use moisturisers or emollients during the trial that could affect the study result

10. Subjects who did not comply with the protocol of at least two times-per-day application of cream

11. Subject's withdrawal of consent

12. Detection of eligibility violations, occurrence of other significant protocol violations during the trial

13. Investigator's decision to terminate the process for the sake of the subject's health 14. Dropouts are defined as patients who did not attend a follow-up visit within the designated visit window (+/- 3 days) and whose outcomes are unknown by the end of the trial

Date of first enrolment 01/07/2019

Date of final enrolment 30/08/2019

Locations

Countries of recruitment Malaysia

Study participating centre Hospital Pengajar Universiti Putra Malaysia Persiaran Mardi - Upm Serdang Malaysia 43400

Sponsor information

Organisation Lipidware Sdn Bhd

Sponsor details MTDC-UPM, G-05 Jalan Maklumat Universiti Putra Malaysia

Serdang Malaysia 43400 +60 (0)17 331 9765 m2leow@lipidware.com

Sponsor type

Industry

Website https://remdii.com

Funder(s)

Funder type Industry

Funder Name Lipidware Sdn Bhd

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal

Intention to publish date

30/11/2022

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available due to anonymity arrangements made with the patients that data of personal nature will be made anonymous as much as possible.

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet			01/09/2022	No	Yes
<u>Protocol file</u>			01/09/2022	No	No
<u>Results article</u>		04/05/2023	09/05/2023	Yes	No