Clinical trial results:
A Phase II Randomized, Controlled Parallel-Group Pilot Study to Assess the Safety and Efficacy of Kék Lukács Ointment Compared to Standard Silver Sulphadiazine (Dermazin®, SSD) Therapy in the Wound-healing of Patients With Deep Partial Thickness (Second-Degree) Burns

Summary

EudraCT number	2011-005037-39
Trial protocol	HU
Global end of trial date	12 September 2014

Results information

Result version number	v1 (current)
This version publication date	20 October 2021
First version publication date	20 October 2021
Summary attachment (see zip file)	Report Synopsis (KEKLUKACS-CLIN-01_Study Report Synopsis__26092014.pdf)

Trial information

Trial identification

Sponsor protocol code	KEKLUKACS-CLIN-01

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	-
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Kék-Lukács Kft.
Sponsor organisation address	Mártírok street 53, Iharosberény, Hungary, 8725
Public contact	KÉKLUKÁCS Help Desk, AdWare Research Ltd., 36 87789073, info@adwareresearch.com
Scientific contact	KÉKLUKÁCS Help Desk, AdWare Research Ltd., 36 87789073, info@adwareresearch.com

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	12 May 2014
Is this the analysis of the primary completion data?	Yes
Primary completion date	12 May 2014
Global end of trial reached?	Yes
Global end of trial date	12 September 2014
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To compare the clinical efficacy of Kék Lukács ointment treatment with standard silver sulphadiazine (SSD) therapy in wound healing; degree of epithelisation of wound until Day 22 of treatment compared to Day 1.

Protection of trial subjects:

Wound pain management

Background therapy:

Only physical bound care management was applied.

Evidence for comparator:

Standard Silver Sulphadiazine (Dermazin®, SSD) therapeuthic product was applied as a same therapeutic indication for approved standard treatment.

Actual start date of recruitment	12 September 2012
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Hungary: 22
Worldwide total number of subjects	22
EEA total number of subjects	22

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	0

Adults (18-64 years)	21
From 65 to 84 years	1
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Patient recruitment took place in Hungary in 2012

Pre-assignment

Screening details:

The total number of 44 patient was expected to enrolled to the study, 20 evaluable subjects per group were needed. 20 g/200 cm2 ointment was applied in the case of the active group and the control group got 10-20 g/200 cm2 Dermazin cream. Inclusion and exclusion criteria were defined in the final study protocol.

Period 1

Period 1 title	Overall trial (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Not blinded

Arms

Are arms mutually exclusive?	Yes
Arm title	Active

Arm description:

Kék Lukács ointment group received 20 g/200 cm2 once daily for maximum 21 days.

Arm type	Experimental
Investigational medicinal product name	Kék Lukács ointment
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Cream
Routes of administration	Skin scarification

Dosage and administration details:

The ointment should be applied to a thickness between 1-2 mm onto the sterile gauze before covering the burned surface once daily for maximum 21 days, dose 20 g/200 cm2

Arm title	Placebo

Arm description:

Silver Sulphadiazine (SSD, Dermazin®)) cream group received 10-20 g/200 cm2 once daily for maximum 21 days.

Arm type	Active comparator
Investigational medicinal product name	Dermazin®
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Cream
Routes of administration	Skin scarification

Dosage and administration details:

The cream should be applied to a thickness between 2-4 mm onto the gauze before covering the burned surface once daily for maximum 21 days, dose 10-20 g/200 cm2

Number of subjects in period 1	Active	Placebo
Started	10	12
Completed	10	12

Baseline characteristics

Reporting groups

Reporting group title	Overall trial

Reporting group description: -

Reporting group values	Overall trial	Total	
Number of subjects	22	22	
Age categorical Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	21	21	
From 65-84 years	1	1	
85 years and over	0	0	
Gender categorical Units: Subjects			
Female	9	9	
Male	13	13	

Subject analysis sets

Subject analysis set title	Safety analysis set:
Subject analysis set type	Safety analysis

Subject analysis set description:

All subjects randomized and receiving at least one treatment are included in the safety analysis set.

Subject analysis set title	Intent-to-treat analysis set
Subject analysis set type	Intention-to-treat

Subject analysis set description:

All subjects randomized, receiving at least one treatment and having at least one post-baseline evaluation of the wound healing area included in the intent to-treat analysis set.

Subject analysis set title	Per protocol analysis set
Subject analysis set type	Per protocol

Subject analysis set description:

All subjects randomized, receiving at least one treatment and having at least one post-baseline evaluation of the wound healing area, and having no major protocol deviations are included in the per protocol analysis set.

Reporting group values	Safety analysis set:	Intent-to-treat analysis set	Per protocol analysis set
Number of subjects	22	21	21
Age categorical Units: Subjects			
In utero	0	0	0

Preterm newborn infants (gestational age < 37 wks)	0	0	0
Newborns (0-27 days)	0	0	0
Infants and toddlers (28 days-23 months)	0	0	0
Children (2-11 years)	0	0	0
Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	21	20	20
From 65-84 years	1	1	1
85 years and over	0	0	0
Gender categorical			
Units: Subjects			
Female	9	9	9
Male	13	12	12

End points

End points reporting groups

Reporting group title	Active
Reporting group description:	
Kék Lukács ointment group received 20 g/200 cm2 once daily for maximum 21 days.	
Reporting group title	Placebo
Reporting group description:	
Silver Sulphadiazine (SSD, Dermazin®)) cream group received 10-20 g/200 cm2 once daily for maximum 21 days.	
Subject analysis set title	Safety analysis set:
Subject analysis set type	Safety analysis
Subject analysis set description:	
All subjects randomized and receiving at least one treatment are included in the safety analysis set.	
Subject analysis set title	Intent-to-treat analysis set
Subject analysis set type	Intention-to-treat
Subject analysis set description:	
All subjects randomized, receiving at least one treatment and having at least one post-baseline evaluation of the wound healing area included in the intent to-treat analysis set.	
Subject analysis set title	Per protocol analysis set
Subject analysis set type	Per protocol
Subject analysis set description:	
All subjects randomized, receiving at least one treatment and having at least one post-baseline evaluation of the wound healing area, and having no major protocol deviations are included in the per protocol analysis set.	

Primary: Reduction in wound surface area

End point title	Reduction in wound surface area
End point description:	
The study was stopped earlier because of the slow patient recruitment. However, planned analysis was performed with the available (smaller) sample size. The aims of this analysis were: to appropriately perform analyses described by the study protocol, obtain relevant pharmacokinetic information and confirm the sample size calculation of the following clinical study of Kek Lukacs ointment	
End point type	Primary
End point timeframe:	
Day 1 to Day 22 (3 weeks after treatment start)	

End point values	Active	Placebo	Per protocol analysis set	
Subject group type	Reporting group	Reporting group	Subject analysis set	
Number of subjects analysed	10	11	21	
Units: percent	10	11	21	

Statistical analyses

Statistical analysis title	random coefficient model
Comparison groups	Active v Placebo v Per protocol analysis set

Number of subjects included in analysis	42
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.5645 [1]
Method	random coefficient model

Notes:

[1] - For treatment is 0.6346, for Day p-value is less than 0.0001. Descriptive Statistics are also provided in the report.

Secondary: Incidence of complete wound healing full epithelisation within 22 days

End point title	Incidence of complete wound healing full epithelisation within 22 days

End point description:

The scores assigned by the Investigator to the signs of wound infection and inflammation were compared across the two treatment groups by a Wilcoxon–Mann–Whitney test, for each timepoint separately

End point type	Secondary

End point timeframe:

within 22 days for each timepoint

End point values	Active	Placebo	Intent-to-treat analysis set	
Subject group type	Reporting group	Reporting group	Subject analysis set	
Number of subjects analysed	10	11	21	
Units: frequency	10	11	21	

Statistical analyses

No statistical analyses for this end point

Secondary: Percent reduction of wound surface area, on Day 8, 15 and 22 from Day 1

End point title	Percent reduction of wound surface area, on Day 8, 15 and 22 from Day 1

End point description:

End point type	Secondary

End point timeframe:

Day 8, 15 and 22 from Day 1

End point values	Active	Placebo	Intent-to-treat analysis set	
Subject group type	Reporting group	Reporting group	Subject analysis set	
Number of subjects analysed	10	11		
Units: Percent	10	11	21	

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Incidence of treatment- related adverse events during the whole study period.

End point title	Incidence of treatment- related adverse events during the whole study period.

End point description:

End point type	Other pre-specified

End point timeframe:

from the sign of the informed consent to the end of the study

End point values	Active	Placebo	Intent-to-treat analysis set	
Subject group type	Reporting group	Reporting group	Subject analysis set	
Number of subjects analysed	10	11	21	
Units: frequency	10	11	21	

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

From 2012.09.12. to 2013.09.19.

Adverse event reporting additional description:

25 adverse events were reported during the study. Relationship between the treatment and the adverse event was examined. Adverse events were presented in summary tables by severity, outcome and relation to the study and tabulated by the action taken in relation to the study treatment.

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	16.0

Reporting groups

Reporting group title	Severity

Reporting group description:

Adverse events were presented by severity: mild, moderate and severe events were determined.

Serious adverse events	Severity		
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 22 (4.55%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Skin and subcutaneous tissue disorders			
Hospitalization due to necrectomia and skin-grafting			
subjects affected / exposed	1 / 22 (4.55%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 0 %

Non-serious adverse events	Severity		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	10 / 22 (45.45%)		
Injury, poisoning and procedural complications			
all burned wounds have pain			
subjects affected / exposed	1 / 22 (4.55%)		
occurrences (all)	1		
General disorders and administration			

site conditions			
shivering-fit			
subjects affected / exposed	1 / 22 (4.55%)		
occurrences (all)	1		
Nausea			
subjects affected / exposed	2 / 22 (9.09%)		
occurrences (all)	2		
leg pain			
subjects affected / exposed	1 / 22 (4.55%)		
occurrences (all)	1		
Blood and lymphatic system disorders			
Elevated ASO			
subjects affected / exposed	1 / 22 (4.55%)		
occurrences (all)	1		
leg oedema			
subjects affected / exposed	1 / 22 (4.55%)		
occurrences (all)	1		
Immune system disorders			
allergy to dog fur			
subjects affected / exposed	1 / 22 (4.55%)		
occurrences (all)	1		
Skin and subcutaneous tissue disorders			
targeted wound pain			
subjects affected / exposed	5 / 22 (22.73%)		
occurrences (all)	7		
Infections and infestations			
fever			
subjects affected / exposed	3 / 22 (13.64%)		
occurrences (all)	4		
Pharyngitis			
subjects affected / exposed	1 / 22 (4.55%)		
occurrences (all)	1		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
28 October 2012	The number of the sites, the post-burn status, the leaflet (number of sites, post-burn status were changed and reimbursement fee were included) were changed. Urine pregnancy test for female patients with childbearing potential was needed.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

Planned analysis was performed with the available (smaller) sample size, because of the slow patient enrollment.

Notes: