50 SUBJECT HUMAN REPEAT INSULT PATCH TEST FOR SKIN IRRITATION AND SKIN SENSITIZATION EVALUATION

Study N°	CSCA570/17-01
Study Protocol code	REL/CA0685/2017/CLI
Sponsor	Cosmetic Solutions LLC 6101, Park of Commerce Blvd Boca Raton, FL 33487 - USA
Analyzed substance	**DermaSet Hollywood Skin care Anti-aging 3D Renewal Cream** **Batch: 435784A**
Date of final report	**August 7th, 2017**

The results reported here in do exclusively refer to the tested sample

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Contents

1) OBJECTIVE OF THE TEST

This human repeat insult patch test was conducted in order to assess the potential of the test substance to induce contact irritation/sensitization by repetitive applications to the skin of healthy volunteers.

2) TEST MATERIAL

Name:	**DermaSet Hollywood Skin care Anti-aging 3D Renewal Cream**
Batch	**435784A**
Abich sample code:	**CA0553/17-01**
Storage conditions:	Room temperature

3) STUDY DATE

Start: 12/06/2017
End: 14/07/2017

4) HANDLING

Upon arrival at Abich Inc the test sample was assigned a unique laboratory code number and entered in Abich Software identifying the lot number, description, sponsor, date received and tests requested.

5) INDEPENDENT ETHICS COMMITTEE (IEC)

An independent body of medical professionals and non-medical members was constituted to ensure the protection of the rights, safety and well-being of human subjects involved in a trial and to provide public assurance of that protection. Their most important duty is to reviewing, approving and providing favorable opinion on the trial protocol, to ensure the suitability of the investigator(s), the facilities, the methods and material to be used in obtaining and documenting informed consent of the trial subjects.

6) PANEL FEATURES

6.1 Inclusion Criteria of subject in a Study

- Individuals who are enlisted in the Abich Inc laboratory database.
- Individuals who are not under a doctor's care.
- Individuals who are healthy and do not suffer from chronic or dermatologic disorder that would affect the study in anyway.
- Individuals who have agreed to the study after reading, understanding and signing the informative form, informed consent from C.I.

6.2 Exclusion Criteria of subject in a Study

Prior to the beginning of the study, the following criteria were applied:

- Individuals under the legal age, 18 years old;
- Individuals under a doctor's care;
- Individuals who are not healthy and suffer from acute, chronic or dermatologic disorder that would affect the study in anyway;
- Female subjects who are pregnant or nursing;
- Individuals taking chronic or occasional medication which may affect the skin response to the product;
- Individuals with skin diseases which may interfere with the objective of the present study;
- Individuals who were diagnosed with chronic skin allergies;
- Individuals taking part in other studies simultaneously using the same test site or subject that did not have an appropriate rest period between studies.

After the beginning of the study, the following withdrawal criteria were applied:

- Individuals did not follow the conditions as described in the Study Information Sheet;
- Individuals who suffered any illness, an accident or developed any condition which could affect the outcome of the study;
- Individuals who did not longer wish to participate in the study.

For the duration of the study the volunteers were asked not to shower before the removal of the patch and to avoid exposure to UV rays on the test site.

The volunteers were also asked to report to the staff of the Abich Inc laboratory the use of any drug, particularly-anti-inflammatory drugs, steroids and antihistamines.

6.3 Recruitment

The study was performed on 52 healthy volunteers, males or females who have been identified from the volunteers' database of the Abich Inc laboratory. The selection was made by advertising on university bulletin board and website.

6.4 Informed Consent and Medical History Form

Before the beginning of the study, each volunteer has read and signed an informative form (informed consent form, C.I.). Each volunteer has had the opportunity to ask any kind of questions regarding the study. The aim of the test, the procedure and the possible risks related were explained. Only after signature of the informed consent the participation in the study was permitted. The originals of these informed consent forms were archived at the Abich Inc laboratory. All individuals signed also a consent allowing to treat personal data according to the Canadian law.

7) EQUIPMENT

The test product was applied by means of adhesive strips for patch tests model Finn Chambers on Scanpor® or similar in sufficient amount to fill one test disk (0.07-0.1 ml) before occluded application to the skin of the back of each volunteer.

Products are tested pure or diluted depending on product type and intended use. The hydrophilic products are diluted in demineralized water while lipophilic are diluted in mineral oil.

To the powders a drop of water or mineral oil is added to facilitate the homogeneous dispersion on the application surface and to ensure a good contact with the skin. Solid and viscous materials are applied once, while for liquid materials more applications may be made to maintain exposure of the application site.

8) EXPERIMENTAL PLAN

8.1 Structure of the study

- Phase 1 – Induction Phase:

Three (3) consecutive weeks, 3 days per week (Monday, Wednesday and Friday).

Stage 1:

On the first application, the patch remains in place for 48 hours and subjects were instructed to not remove the patch during the designated time frame. It is then removed by the subject before returning to the Testing Facility prior to the next patch application.

Stage 2:
After the stage 1, application of an occlusive patch containing the product is performed. The subjects were instructed to remove it after 24 hours and to return to the Testing Facility 48 hours after application, where a technician from Abich Inc laboratory will do a skin evaluation following by the reapplication of a new patch. This procedure was repeated for a series of nine (9) consecutive times in the same area. Whenever possible, the re-patching is done on the same site each time. In case of significant irritation (level 2 or greater), the application site is shifted

- Phase 2 – Rest Phase:

During 10-14 day rest period, no products are applied.

- Phase 3 – Challenge Phase:

Following a 10-14 day rest period a retest/challenge patch was applied once to a previously unpatched (virgin) test site. Test site was evaluated by trained laboratory personnel 48h after application. All subjects were instructed to contact the Testing Facility to report any delayed skin reactivity after the final patch reading. When warranted, the affected subjects are then asked to return to the Clinic for additional examination.

Notes:

- Volunteers are required to bathe or wash before their arrival at the laboratory;
- The patches were applied on the upper back of the volunteer on the right and left of the midline;
- For the duration of the study the volunteers were asked not to shower before the removal of the patch and to avoid exposure to UV rays on the test site;
- Security measures have been prepared in case of adverse reaction and the client will be notified;
- Clinical analysis is performed according to a scale proportional to the severity of irritation for each of the considered irritation phenomena (erythema, edema, vesicles).

8.2 Preparation of the sample

Products are tested pure or diluted depending on product type and intended use.

The use of the tested product **DermaSet Hollywood Skin care Anti-aging 3D Renewal Cream Batch: 435784A** is pure.

9) SCORING

Scoring scale and definition of symbols shown below are based on the scoring scheme according to the international Contact Dermatitis Research Group scoring scale.

Listed Below:

- No reaction (negative)
IR Irritant reaction of different types
? or ± Doubtful reaction
+ Light erythema (non-vesicular)
++ Edema, erythema, discrete vesicles
+++ Coalescing vesiculobullous papules

D Site discontinued
Dc Subject discontinued

All observations and comments provided by the volunteers participating in the study are taken into consideration and recorded accordingly.

Note: Clinical evaluations are performed by an investigator or designee trained in the clinical evaluation of the skin. Whenever feasible, the same individual will do the scoring of all the subjects throughout the study and will be blinded to the treatment assignments and any previous scores.

10) OBSERVATION

10.1 Adverse events/Severe adverse events

In this final report, an "adverse event" is defined as any unintended or harmful response that is observed in a volunteer who is testing a product, which may not necessarily be due to the product or treatment in question. Volunteers participating in this test may be subject to a variety of adverse events such as cracking, rash, dryness or pain if the test product is strongly irritant or if the volunteer is particularly sensitive to the product. Moreover, potential development of an allergic sensitization may occur due to the test product or its ingredients.

A "severe adverse event" is referred to any unmedical occurrence such as death or persistent disability that will require the affected subject to be hospitalized or cause significant or permanent incapacity, which may or may not be related to the test product.

No adverse events of any kind were reported during the course of this study.

11) DATA ANALYSIS

The individual scores, observed reactions and its severity, as well as their reproducibility from one volunteer to another are taken into consideration by the Dermatologist in order to evaluate the tolerance to the test product.

12) RESULTS

A total of 52 healthy volunteers were recruited for this study among which 2 subjects discontinued due to personal reasons unrelated to the study. The discontinued subjects' scores are shown in the table in Annex 2, but will not be taken into consideration in the conclusion of this final report.

INDUCTION PHASE SUMMARY

PRODUCT	CONCENTRATION	INDUCTION SCORE	NUMBER OF RESPONSE
DermaSet Hollywood Skin care Anti-aging 3D Renewal Cream Batch: 435784A	PURE	+	0
		++	0
		+++	0

CHALLENGE PHASE SUMMARY

PRODUCT	CONCENTRATION	INDUCTION SCORE	NUMBER OF RESPONSE
DermaSet Hollywood Skin care Anti-aging 3D Renewal Cream Batch: 435784A	PURE	+	0
		++	0
		+++	0

13) CONCLUSION

Under the exposure conditions of this test and on the basis of the obtained results, the test substance **DermaSet Hollywood Skin care Anti-aging 3D Renewal Cream Batch: 435784A** may be considered a **NON PRIMARY IRRITANT** and **NON PRIMARY SENSITIZER** to the skin according to reference.

Laboratory Director
Michela Pollastri

Date:
31/07/2017

Supervision Dermatologist
Ari Demirjian MD,
FRCPC Professeur adjoint CUSM

Date:
3/8/17

Laboratory Manager
Debora Pischedda

Date:
28/07/2017

Other professional figures involved in the study:

Laboratory Technician
Caroline Wong

Date:
01/08/2017

14) ARCHIVING

The study protocol, the raw data and the final report will be kept at Abich Inc laboratory: 5160, Décarie Boulevard, suite 330, Montréal (Québec) H3X 2H9 – Canada, for a minimum period of 5 years from the issue of the final report.

The control sample of the test substance and eventual specific reference material will be kept for 3 month, unless the customer provides a specific request.

The Customer, upon drafting a suitable contract, may request either the extension of the conservation of all or part of the materials for a further period or their restitution.

QA STATEMENT

The volunteers' recruitment is done according to specific internal procedures, according to GCP directive and according to Helsinki Declaration, 2013 requests. The volunteers signed the personal informal consent, they were informed about the complete study plan under development.
The collected data derived from this study is managed according to internal procedures following the GLP directive and is verified by the QA manager who checks the different parts of this study (comparison between raw data and recorded data, laboratory books and files, protocol and report) according to the quality plan of ABICH Inc laboratory (internal audits, periodical calibration status of the instruments if they are involved in the test).

Quality Assurance Chemist

Nina Duru _____

Date 07/08/2017

ANNEXES

ANNEX 1 – Panel of volunteers

#	CODE VOL	Gender	Age
1	AMLE 314	F	19
2	ANMO 090	M	64
3	ANSH 395	M	22
4	ANSI 285	F	45
5	BECI 327	F	19
6	CLLA 171	F	19
7	DAOR 412	F	37
8	DICO 434	F	43
9	EDMA 071	F	37
10	EFPA 426	M	34
11	ELMO 315	F	30
12	FAVA 345	F	38
13	FEPA 330	F	26
14	FLSI 287	F	21
15	GECA 274	F	35
16	HOUO 416	M	26
17	HUSC 372	M	31
18	ISWA 236	F	28
19	JAFE 277	F	35
20	JELO 259	F	37
21	JEMO 110	F	28
22	JHPU 141	M	32
23	JHSA 430	M	36
24	JULE 424	M	39
25	JUPA 425	M	32
26	JUPR 361	F	51
27	KAGO 417	F	27
28	LAHO 429	F	26
29	LEAN 431	M	39
30	LIAO 135	F	54
31	LIGA 421	F	43
32	LIMA 089	F	51
33	LOLA365	M	62
34	LOMA 290	M	63
35	LUPU 428	M	43
36	MAMA 346	F	38

37	MAMO 423	F	35
38	MAPE 433	F	44
39	MEHO 272	F	44
40	NAGA 427	F	37
41	NIHE 432	M	20
42	OLGH 334	F	41
43	PARI 263	M	36
44	PASZ 118	F	46
45	PIDO364	F	63
46	QISH 134	M	54
47	RITO 420	M	37
48	SYGO 317	F	42
49	SYRH 009	F	61
50	URUR 370	M	33
51	VIDI 418	F	32
52	ZAPA 411	F	38
AVERAGE			**37.94**

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ANNEX 2 – Individual Scores

Induction Phase / Challenge Phase:
DermaSet Hollywood Skin care Anti-aging 3D Renewal Cream Batch: 435784A

VOLUNTEERS		INDUCTION									CHALLENGE	
Ref	Vol	1	2	3	4	5	6	7	8	9	1	2
1	AMLE 314	-	-	-	-	-	-	-	-	-	-	-
2	ANMO 090	-	-	-	-	-	-	-	-	-	-	-
3	ANSH 395	-	-	Dc								
4	ANSI 285	-	-	-	-	-	-	-	-	-	-	-
5	BECI 327	-	-	-	-	-	-	-	-	-	-	-
6	CLLA 171	-	-	-	-	-	-	-	-	-	-	-
7	DAOR 412	-	-	-	-	-	-	-	-	-	-	-
8	DICO 434	-	-	-	-	-	-	-	-	-	-	-
9	EDMA 071	-	-	-	-	-	-	-	-	-	-	-
10	EFPA 426	-	-	-	-	-	-	-	-	-	-	-
11	ELMO 315	-	-	-	-	-	-	-	-	-	-	-
12	FAVA 345	-	-	-	-	-	-	-	-	-	-	-
13	FEPA 330	-	-	-	-	-	-	-	-	-	-	-
14	FLSI 287	-	-	-	-	-	-	-	-	-	-	-
15	GECA 274	-	-	-	-	-	-	-	-	-	-	-
16	HOUO 416	-	-	-	-	-	-	-	-	-	-	-
17	HUSC 372	-	?	-	-	-	-	Dc				
18	ISWA 236	-	-	-	-	-	-	-	-	-	-	-
19	JAFE 277	-	-	-	-	-	-	-	-	-	-	-
20	JELO 259	-	-	-	-	-	-	-	-	-	-	-
21	JEMO 110	-	-	-	-	-	-	-	-	-	-	-
22	JHPU 141	-	-	-	-	-	-	-	-	-	-	-
23	JHSA 430	-	-	-	-	-	-	-	-	-	-	-
24	JULE 424	-	-	-	-	-	-	-	-	-	-	-
25	JUPA 425	-	-	-	-	-	-	-	-	-	-	-

26	JUPR 361	-	-	-	-	-	-	-	-	-	-	-
27	KAGO 417	-	-	-	-	-	-	-	-	-	-	-
28	LAHO 429	-	-	-	-	-	-	-	-	-	-	-
29	LEAN 431	-	-	-	-	-	-	-	-	-	-	-
30	LIAO 135	-	-	-	-	-	-	-	-	-	-	-
31	LIGA 421	-	-	-	-	-	-	-	-	-	-	-
32	LIMA 089	-	-	-	-	-	-	-	-	-	-	-
33	LOLA365	-	-	-	-	-	-	-	-	-	-	-
34	LOMA 290	-	-	-	-	-	-	-	-	-	-	-
35	LUPU 428	-	-	-	-	-	-	-	-	-	-	-
36	MAMA 346	-	-	-	-	-	-	-	-	-	-	-
37	MAMO 423	-	-	-	-	-	-	-	-	-	-	-
38	MAPE 433	-	-	-	-	-	-	-	-	-	-	-
39	MEHO 272	-	-	-	-	-	-	-	-	-	-	-
40	NAGA 427	-	-	-	-	-	-	-	-	-	-	-
41	NIHE 432	-	-	-	-	-	-	-	-	-	-	-
42	OLGH 334	-	-	-	-	-	-	-	-	-	-	-
43	PARI 263	-	-	-	-	-	-	-	-	-	-	-
44	PASZ 118	-	-	-	-	-	-	-	-	-	-	-
45	PIDO364	-	-	-	-	-	-	-	-	-	-	-
46	QISH 134	-	-	-	-	-	-	-	-	-	-	-
47	RITO 420	-	-	-	-	-	-	-	-	-	-	-
48	SYGO 317	-	-	-	-	-	-	-	-	-	-	-
49	SYRH 009	-	-	-	-	-	-	-	-	-	-	-
50	URUR 370	-	-	-	-	-	-	-	-	-	-	-
51	VIDI 418	-	-	-	-	-	-	-	-	-	-	-
52	ZAPA 411	-	-	-	-	-	-	-	-	-	-	-

15) REFERENCES

Declaration WORLD MEDICAL ASSOCIATION DECLARATION OF HELSINKI
Ethical Principles for Medical Research Involving Human Subjects
Adopted by the 18th WMA General Assembly, Helsinki, Finland, June 1964, and amended by the:
29th WMA General Assembly, Tokyo, Japan, October 1975
35th WMA General Assembly, Venice, Italy, October 1983
41st WMA General Assembly, Hong Kong, September 1989
48th WMA General Assembly, Somerset West, Republic of South Africa, October 1996
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"The role and responsibility of the Study Director in the GLP studies" 15 Sept. 1999.