# **Clínicals Analysis**

- Germany
- Spain
- Australia
- U.K.
- Greece
- Czech Republic
- United Arab Emirates
- Saudí Arabia
- Holland
- Italy
- Malaysia
- Russia
- Perú
- U.S.A.
- F.D.A. (U.S.A.)

## Germany

Labor für Auftragsanalytik und Forschung

Buil Pharma Vertrieb Kurt Teubner Basler Straße 115

79115 Freiburg



Hauptstraße 28 76764 Rheinzabern Tel: 07272-9309-0 Fax: 07272-9309-28 email: hwlanalyt@aol.com

## Rheinzabern, 28.11.1997

## Analysenzertifikat

Préparat: Ch.-B.: Auftraggeber:

1.10

Skin-Cap Spray K-39 Herr Teubner

Laborcode:	2505
Eingang:	24.11.1997
Bestimmung:	25.11.1997

#### Gehalt Clobetasol-17-propionat:

Gefunden:

nicht nachweisbar

nicht nachweisbar = no detectable

Bestimmungsgrenze: 0,5 mg / kg

Methode:

HPLC-Bestimmung mit UV-Detektion nach der Methode des externen Standards.

Stefan Wissel

HWI ANALYTIK GmbH - Geschäftstührer: Dr. Stefan Wissel, Dr. Hanns Haberlein, Lothar Wissel Sitz der Gesellschaft: 76764 Rheinzabern, Hauptstraße 28- Registergericht: Amtsgericht Landeu HRB 1388 Kandel Bank: Sparkasse Germersheim-Kandel (BLZ 1: C01440) Kto.-Nr.23001233





We have performed analysis of clobetasol propionate in several samples of SKIN-CAP (Spray) (batch L-11, L-13, L-14 and L-16), determining molecular weight with a Bruker Biflex MALDI-TOF Mass Spectrometer (Bruker Analytical Systems Inc.) with a N<sub>2</sub> laser (337 nm wavelenght) and a pulse of 3 ns. Accelerations for the analyzed samples were 19.5 and 20.0 KV for linear and reflector TOF-MS, respectively.

Results showed the presence of a peak at 468 (M+H) and 325 in the sample which contained added clobetasol propionate as internal standard. On the other hand, only the 325 peak was detectable in the sample without the added standard.

Therefore, we could not detect the presence of clobetasol propionate in any of the samples (without added standard) analyzed by this method.

Madrid, 15 August, 1997

Dr. António Martin González Senior Investigator of CSIC

X Sind

Tilman Sänchez Elsner

## Australia



Department of Pharmacy A15 The University of Sydney Sydney 2006 Australia Facility Manager: Mr Bruce Tattam Telephone: (02) 9351 3451 Fax:+ 61 - 2 - 9351 4391 E-mail: brocet@pharm.usyd.edu.au

Sample ID: 65997

Sample ID: 107997

#### ANALYSIS REPORT FOR - BIOCEUTICALS PTY. LTD.

#### History:

Date 9/9/97 Sample L-26 arrived in laboratory. (delivered by Dr B.Massoud) 22/9/97 Reference Std of Clobetasol Propionate arrived as above. 23/9/97 Sample Reference Std analysed by Mass Spec Spike sample and extraction begun 24/9/97 Sample extraction and analysis of L-26 (ID 65997) Analyses and report generated.

> Skin Cap Spray L-26 Clobetasol Propionate Std

Samples for MS analysis:

#### Method:

The sample was run on a Finnigan/MAT TSQ 4600

The Mass Spectrometer was operated in the Chemical ionisation (CI) mode monitoring for positive ions. Peak detection was in centroid mode scanning Q1 from m/z 100 to m/z 550 in a .45 sec scan time.

The peaks created in the ion chromatograms from the mass spectrometer have been smoothed and all mass spectra generated are background subtracted.

#### Sample Preparation:

- 1. The contents of two cans of SKIN-CAP spray were discharged into a 250ml glass vessel.
- 2. An Aliquot of 20ml was spiked with Clobetasol Propionate at 0.05%.
- 3. A further 20ml aliquot was taken as the unspiked sample.
- 4. The samples were then filtered to remove most of the Zine Pyrithione.
- 5. Each sample was separately put onto the rotary evaporator to remove any ethanol, approx 15min.
- 6. To each sample a solution of methanol:water (95:5) in the
- proportion of mysterate;water 1:3 was added.
- 7. The samples were mixed thoroughly for 5min, then sonicated for 20min.
- 8. The sample were then put into clean centrifuge tubes and spun at 2500g for 20min. 9. The Methanol layers of both extracts were transferred into clean flasks and then put onto
- rotary evaporator for 15min each.
- 10. The remaining material was transferred to a centrifuge tube and spun at 250g for 20min.
- The aqueous layer was removed and put onto the rotary evaporator to remove all the water.
   To the material remaining 10ml of ethanol was added and mixed gently.
- 13. The ethanol was then transferred into a clean vial for analysis by MS

#### Results:

See attached MS Chromatograms and Spectra

File BM0124997 is Clobetasol Propionate reference std (#107997).

The trace on the ion chromatogram (page 5) shows a peak at scan #105, the Mass Spectrum of this is plotted on (page 6) and shows a protonated molecular ion at m/z 467. Page 7 is a different plot format of the same mass spectrum as (page 6).

The file BM0224997 (page 8) is a Blank run of ethanol and a limited mass chromatogram of 467 shows no significant level the ion trace produces an ion count of 17 ions ( this is electronic noise ). The mass spectrum (page 9) at scan 124 at amplification factor 20 shows only noise peaks.

The file BM0324997 is the Sample extract of (#065997) the ion trace (page 10) in this case producing 5240 ion counts at scan #150, the Mass Spectrum of this is plotted on (page 11), and the peak at #164 is plotted (page 12), it can be seen that neither spectrum matches with the Clobetasol Propionate spectrum plotted (page 6).

#### Conclusion:

From the mass spectral investigation of the Skin-Cap L26 ID 065997 sample supplied is negative for Ciobetasol Propionate in this sample.

Analysis Conducted by Bruce Tattam.

Brue Tette

Bruce Tattam Facility Manager Mass Spectrometry Analytical Facility Department of Pharmacy A15 University of Sydney 2006





West Yorkshire Analytical Services County Building, Cliff Lane, Wakefield WFI 2TN Tel: 01924 291015 Fax: 01924 376388 e-mailtab@wyanalysis.demon.co.uk.

Dr. Duncan Compbell B.Sc., D. Phil, M. Chem.A., C. Chem., M.R.S.C., Registered Analytical Chemist Public Analyst and Agricultural Analyst

16 March, 1998

Our reference: DC/NW

Skin Cap Ltd | The Moorings | Waterside Industrial Park Stourton | Leeds | LS10 IDG |

#### REPORT

Sample: Skin Cap 50 g Cream Lot No: L-13 Mfg. Date: 9/97 Expiry Date: 9/00 Lab Ref.: K08704 Submitted by: Mr Ken Holbrook On: y<sup>2</sup> March 1998

Analysis to test for the presence of Clobetasol Propionate.

Procedure:

I gram of the material was dissolved in 25 millilitres of a 75:25 mixture of methanol and water. The solution was filtered prior to HPLC analysis under the following conditions:

15cm Sperisorb 50DS2	
Methanol/water (75:25)	
1ml/minute	
Thermo Quest UV 3000 rapid scanning detector (200-350 nm)	
10 microlitres	
20°C	
	Methanol/water (75:25) Iml/minute Thermo Quest UV 3000 rapid scanning detector (200-350 nm) 10 microlitres

### Results

Under the conditions above a Clobetasol Propionate standard eluted at 5.63 minutes. No peak of this retention time was produced from an injection of the sample solution.

### Conclusion

No indication has been found of the presence of Clobetasol Propionate in the sample.

Page 1 of 1

Sunca Campbell

Dr D J Campbell Public Analyst

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West Yorkshire Joint Services





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Dr. Duncan Compbell B.Sc, D. Phil, M. Chem.A., C. Chem., M.R.S.C., Registered Analytical Chemist Public Analyst and Agricultural Analyst

16 March, 1998

Our reference: DC/NW

Skin Cap Ltd The Moorings Waterside Industrial Park Stourton Leeds LS10 1DG

### REPORT

Skin Cap 150 ml Shampoo
L-28
Sep 02
K08053
Mr Ken Holbrook
9th March 1998

## Analysis to test for the presence of Clobetasol Propionate.

Procedure:

gram of the material was dissolved in 25 millilitres of a 75:25 mixture of methanol and water. The solution was filtered prior to HPLC analysis under the following conditions:

Column:	15cm Sperisorb 5ODS2
Éluant:	Methanol/water (75:25)
How Rate:	1ml/miante
Detector:	Thermo Quest UV 3000 rapid scanning detector (200-350 nm)
Injection volume:	10 microlitres
Column temperature:	20°C

### Results

Under the conditions above a Clobetasol Propionate standard eluted at 5.63 minutes. No peak of this retention time was produced from an injection of the sample solution.

## Conclusion

No indication has been found of the presence of Clobetasol Propionate in the sample.

Duncan Campbell Dr D J Campbell

Dr DJ Campbel Public Analyst

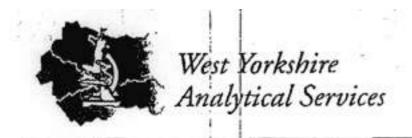
WWYTSA-IVSYSIREPORTSITOXI-KW08053.doc Page 1 of 1

West Yorkshire Joles Services are provided by a Joint Committee of the Metropolitan Districts of Bradford, Calderdale, Kirkless, Leeds and Wakefeld.



West Yorkshire Joint Services





West Yorkshire Analytical Services Councy Building, Cliff Lane, Wakafield WFI 2TN Tet 01924 291015 Pac 01924 376368 o-mailtab@wyanalysis.demon.co.vk

Dr. Duncan Complet B.Sc, D. HM, M. Chum A. C. Chum, M.R.S.C., Repintered Analysical Chamiat Public Acalyst and Agricultural Analyst

19 February, 1998

Our reference: DC/DS

Skin Cap Ltd	24
The Moorings	1
Waterside Industria	I Park
Stourton	1.0
Leeds	1
LS10 1DG	1

## REPORT

Sample:	Skin Cap 100ml spray
Lot No .:	L-28
Expiry Date:	Sep 02
Lab Ref.:	K07952
Submitted by:	Mr Ken Holbrook
Ou:	17th February 1998

Analysis to test for the presence of Clobetasol Propionate.

Procedure:

gram of the material was dissolved in 25 millilitres of a 75:25 mixture of methanol and water. The solution was filtered prior to HPLC analysis under the following conditions:

Column:	15cm Sperisorb 50DS1
Eluant:	Methanol/water (75:25)
Flow Rate:	lml/minute
Detector:	Thermo Quest UV 3000 rapid scanning detector
Injection volume:	10 microlitres
Column temperature:	20°C

## Results

Under the conditions above a Clobetasol standard eluted at 2.94 minutes. No peak of this retention time was produced from an injection of the sample solution.

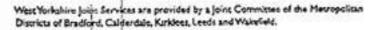
## Conclusion

No indication has been found of the presence of Clobetasol Propionate in the sample.

mcan Carpbell. Dr D J Campbell **Public Analyst** 

FURRPORTS TOXI-KUK07952 DOC

Page 1 of 1





West Yorkshire Joint Services

## Greece

ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ ΥΠΟΥΡΓΕΙΟ ΟΙΚΟΝΟΜΙΚΩΝ ΓΕΝΙΚΟ ΧΗΜΕΙΟ ΚΡΑΤΟΥΣ Γ' ΧΗΜΙΚΗ ΥΠΗΡΕΣΙΑ ΑΘΗΝΩΝ

Ταχ.Δ/νση: Αν. Τσόχα 16, 115 21 Τηλέφωνο: 6428211/Εσωτ.232,233 FAX: 6465123 TELEX: 0218311 A0nva, 20-11-1997..

Ар. Прот.: 4982

ΠΡΟΣ: Ανωτάτη Επιτροπή Τελων. Αμφισβητήσεων

ΘΕΜΑ : Σκεύασμα SKIN-CAP ΣΧΕΤ. : Εγγραφο 150/19-11-1997 ΑΕΤΑ.

Απαντώντας στο ανωτέρω σχετικό, με το οποίο μας υποβάλατε με το σκεύασμα SKIN-CAP καθώς και τις εργαστηριακές εξετάσεις των εργαστηρίων : a) Κρατικού Πανεπιστημίου του Michigan (Η.Π.Α.), β) Πανεπιστημίου του Σίδνευ (Αυστραλίας), γ) Ολλανδών Φαρμακοποιών (Ολλανδίας) και δ) Ε.Ο.Φ. (Ελλάδας), με το ερώτημα κατά πόσον το σκεύασμα περιέχει την κορτικοστεροειδή ουσία Clobetasol propionate, σας κάνουμε γνωστά τα κάτωθι :

#### Εκ της μελέτης των παραστατικών ουνάγεται ότι :

- Σε ένα πολύπλοκο σκεύασμα, όπως το ανωτέρω, δεν είναι εύκολο να αποφανθεί κανείς για την ύπαρξη ή μη της Clobetasol propionate με μόνο χρωματογραφικές μεθόδους, διότι, και άλλες ουσίες είναι δυνατόν να έχουν τους αυτούς χρόνους κατακράτησης με την εν λόγώ ουσία κάτω από συγκεκριμένες χρωματογραφικές παραμέτρους. Η ανίχνευση καθίσταται δυνατή εάν κανείς εργασθεί επισταμένως παραλλάσσοντας τις χρωματογραφικές παραμέτρους, όπως π.χ. τα υγρά ανάπτυξης και έκλουσης και με διαφορετικές στήλες και υποστρώματα. Αυτήν την τεχνική πραγματοποίησε το Ολλανδικό εργαστήριο.
- Βασικά η επιβεβαίωση της παρουσίας ή μη της Clobetasol propionate στα σκευάσματα αυτού του είδους αποτελεί αντικείμενο έρευνας με εξειδικευμένες τεχνικές και εξειδικευμένες συσκευές Φασματογράφου Μάζας, που δεν διαθέτουν τα εργαστήρια του Γ.Χ.Κ.
- Και τα τρία πιο πάνω αναφερόμενα εργαστήρια του εξωτερικού, το ένα με εξειδικευμένες τεχνικές χρωματογραφίας (Ολλανδικό) και τα άλλα δύο με τεχνικές Μάζας (Αμερικής και Αυστραλίας) καταδεικνύουν αναλυτικά ότι η εν λόγω ουσία Clobetasol propionate δεν περιέχεται στο σκεύασμα SKIN-CAP της εταιρείας CANTASSIUM HELLAS S.A.

VOG TIC ATVOTIC poxique Mig

## Greece (traslation)

GREEK DEMOCRACY MINISTRY OF FINANCE GENERAL STATE OF CHEMISTRY THIRD CHEMICAL DEPARTMENT OF ATHENS

Post - Address: Anastasios Tsoha 16 Postal Code: 115 21 Telephone: 01 642821 Internal: 232 - 233 Facsimile: 01 6465123 Telex: 02 18311 Athens 20th of November, 1997

Protocol No.: 4992

To: The Highest Committee of Custom Disputes

2

SUBJECT : The Product Skiny - CAP RE : Document No. 150/19/11/1997 HCCD (AETA)

In response to the above mentioned documents with which you deposited along with the product SKIN - CAP, as well as the laboratory examinations from the following laboratories:

A. The State Laboratory of Michigan (USA),

B. The Laboratory of the University of Sidney (Australia),

C. The Chemical Laboratory of Holland (Holland) and

D. The Hellenic Pharmaceutical Administration (EOF, Greece).

In relation to the question of whether or not the above product contains traces of Corticosteroid Clobetasol Proprionate, we acknowledge the following:

> According to the studies which were completed by the above Laboratorius, the examinations showed that

- In a complicated product such as the above, it is not easy to have proper results, due to the fact that this
  product is complex and nobody can make a clear decision on whether or not there are traces of
  Clobetasol Proprionate within by using only Chromatographic Methods. This is so, due to the fact that
  there are other substancer, in addition to the Colbetasol Proprionate, with the same properties and the
  same time retention as the above substance.
- It is possible to examine the product in depth for traces of this substance. If someone were to undergo such an examination, they must do so carefully under very controlled circumstances, by changing the chromatographic parameters, like, for example, to increase the liquid and the pull which must be in varying columns and layers. This is technical data which was used by Holland's Laboratories.
- Basically, the certification of whether or not there is any Clobetasol Proprionate present in this type of product is subject to further study with specialized techniques and apparatus for the Phasmatometrical mass, equipment in which the laboratories of the General State Chemistry do not have.
- In all three of the above mentioned foreign laboratories, the first has specialized technical data of Chromatography (in Holland) and the remaining two have technical data for mass (in the USA and Australia), demonstrating analytically that In reference to the above substance, Clot ctasol Proprionate, is not present in the product SKIN - CAP which is from the Company Cantassium Hellas SA.

Divisior Director

Signature (and Stamp) Panagiotis Mavrikos

 NOTICE : The product SKIN - CAP is produced by the Company CHEMINOVA INTERNACIONAL SA. The Company CANTASSIUM HELLAS SA is only the importer and distributor of this product.

## Czech Republic



VYSOKÁ ŠKOLA CHEMICKO-TECHNOLOGICKÁ Ústav chemie a analýzy potravin Technická 5, 166 28 Praha 6 tel./ fax.: 02/24353185, tel.:02/24314096, e-mail: jana.hajslova@vscht.cz

#### Vyšetření vzorku SKIN-CAS spray na přítomnost clobetasol 17-propionátu

zadavatel: KOMVET spol. s r.o. Sadová 576 675 21 Okříšky

specifikace dodaného vzorku:

SKIN-CAP spray 100 ml, šarže M-10, exp. sep-03 (do laboratoře dodáno 9.března 1999)

#### ANALYTICKÝ POSTUP

#### a) preanalytická úprava

Vzorek byl skladován při laboratorní teplotě. Před úpravou byl důkladně protřepán. Poté byl za pomoci aplikátoru (součást praye) nastříkán objem asi 10 ml do kádinky, odplyněn na ultrazvuku a přefiltrován přes mikrofiltr (filter units 25 mm - teflon, 5 mm PTFE - fa Shandon).

#### b) HPLC metodika

přístroj: kapalinový chtomatograf HP 1100 s DAD detektorem (Hewlett-Packard) kolona: LiChroSpher C18 (250×4, 5 μm, Merck) s předkolonkou (4×4, 5 μm) mobilní fáze: methanol:voda (0-15 min 65 % MeOH, 15-35 min 65-100 % MeOH) průtok mobilní fáze: 1 ml/min

detekce: 242 nm teplota kolony: 20 °C teplota nátřiku: 20 °C

objem nástřiku: 20 µl

#### c) analytický standard

clobetasol propionát CAS: 25122-46-7 (čistota 99 %, Sigma) koncentrace zásobního roztoku - 1 mg/ml v methanolu desítkovým ředěním byla připravena pětibodová škála standardních roztoků (v koncentračním rozpětí 0.0001 - 1 mg/ml)

#### DOKUMENTACE VYĚTŘENÍ

Pro účely vyšetření vzorku byla vyvinuta a validována analytická metoda. Realizovány byly následující kroky dokumentované v příloze:

- Bylo změřeno absorpční spektrum standardu viz. obr. 1. Pro vlastní měření byla určena vlnová délka 242 nm odpovídající absorpčnímu maximu.
- 2. Byla optimalizována HPLC separace, viz. obr.2.
- Byl stanoven lineární rozsah odezvy detektoru (0.0001 1 mg/ml), viz. kalibrační graf - obr. 3.
- 4. Hodnota detekčního limitu odpovídá 0.1 µg/ml, viz. obr.4.
- Vyšetření reálného vzorku SKIN-CAP spray (100 ml, šarže M-10, exp. sep-03) ilustruje obr. 5.

#### VÝSLEDEK

V přípravku SKIN-CAS spray nebyla za výše uvedených podmínek vyšetření prokázána přítomnost elobetasol 17-propionátu.

Analýzy provedl : Ing. J.Guziur Konzultace: Dr. Ing. V. Schulzová

Prof. Ing. J. Hajšlová, CSc. vedoucí laboratoře

VYSOKÁ ŠKOLA CHEMICKO-TECHNOLOGICKÁ Ústav chentie a drutiev notrovin 165 20 Hrana 6, i uchatická 5 4

Praha, 20.3. 1999

## Czech Republic (traslation)

Protocol and Analysis of a SKIN-CAP Spray Sample to Test for the Presence of Clobetasol Propionate

Applicant: KOMVET spol.s r.o. Sadová 576 675 21 Ok\_í\_ky

Sample: SKIN-CAP Spray 100 ml, batch M-10, expiry SEP-03 The sample was handed over to the laboratory on March 9, 1999.

#### ANALYTICAL TECHNIQUE

a) preanalytical condition (preparation of the sample before analysis) The sample was stored at room temperature in the laboratory. Before handling, it was shaken well. Afterwards, through the applicator which is an integral part of the spray, some 10 ml were let out into a small container. Then there followed the degasification of the sample in ultrasound and the filtration through microfilter (filter units 25 mm - teflon, 5 mm PTFE - fa Shandon).

b) analytical method HPLC Equipment used:liquid chromatograph HP 1100 with detector DAD (Hewlett-Packard) Column:LiChroSpher C 18 (250x4,5 mm, Merck) with precolumn (4x4,5 mm) Eluant:methanol/water (0 - 15 min. 65 % MeOH, 15 - 35 min. 65 - 100 % MeOH) Flow rate:1 ml/min. Detection:242 nm Column temperature:20 °C Flow temperature:20 °C Injection volume:20 ml

c) analytical standard Clobetasol propionate CAS: 25122-46-7 (purity 99 %, Sigma) Concentration of reserve liquid: 1 mg/ml in methanol Using decimal dilution, there was prepared a five-point scale of standard solutions (with concentrations between 0.0001 - 1 mg/ml).

#### GRAPHIC EVIDENCE OF THE TESTS

In order to analyse the sample, an analytical method was developed and validated. The following steps were taken (see graphic evidence enclosed):

- 1. The standard absorption spectrum has been measured (graph 1). For the proper measurement, there has been determined the correspondingwavelength 242 nm with the maximum absorption.
- 2. HLPC separation has been optimized (graph 2).
- 3. There has been determined the extension of the repercussion of the detector (0.0001 1 mg/ml) (graph 3 calibration).
- 4. The value of the detection limit is 0.1 mg/ml (graph 4).
- 5. examination of the real SKIN-CAP Spray sample (100 ml, batch M-10, expiry SEP-03) (graph 5).

#### RESULTS

No indication has been found of the presence of CLOBETASOL PROPIONATE in the preparation SKIN-CAP Spray analysed under the above-mentioned conditions.

Analysis made by:Ing. J. Guziur Consultant:Dr. Ing. V. Schulzova

> Prof. Ing. J. Haj\_lova, CSc Head of the Laboratory

## United Arab Emirates

UNITED ARAB EMIRATES MINISTRY OF HEALTH

ورك لد كدر المراب المربغ المحمد cilielose s إدارة الصيدلة والرقابة الدوانيه الرقم : إمن رد/د/ ٦ -التاريخ :١٩٩٨/٨/٢٩

المحترمين

السادة / المزروعي للتجهيزات الطبيه والكيماتيه ديم فاكس :- ٤/٦٩٠٦١٢ . ... تحبه طبيه وبع..... م/مستحضير سكن كاب skin cap

من شركة Cheminova

اشارة الى الخطاب الوارد من الادارة العامه لشرطة ابوظيس - قسم الادله الجنائيه- تحت رقم ٢٢٩٥/ سم/ ٩٨ والمتضمن عدم وجود مادة Clobertol في مستحضر سكن كاب SKINCAP (كريم، بخاخ وشامبو)، عليه تفيدكم بأنه لاماتع لدينا من بيع المستحضر المذكور اعلاه.

وتفضل وابتيدي تحياتها ..... مديرة ادارة الصيدلة و

-تسفه لقسم التسجيل الدوالى. - تسغه لمغتبر الرقابه الدواليه. - تمنخه للملف العام.

## United Arab Emirates (traslation)

United Arab Emirates Ministry of Health Direction of Pharmacy and Medicien Vigilance

SKIN-CAP PRODUCTS (CHEMINOVA INTERNACIONAL)

According to the Police General Direction of Abu Dhabi laboratory under number 2295/ SM / 98 which certify the ABSENCE of CLOBETASOL DIPROPIONATE and CLOBETASOL BUTYRATE from the SKIN-CAP PRODUCTS (SPRAY, SHAMPOO and CREAM).

General Director of Pharmacy and Medicien Vigilance

Dr. Mariam

## Saudi Arabia

التاريسيع : 4 0.0.00 من من من من التقوعات : مسيور من وزارة المس المكرم مدير مؤسسة زمو التجارية السلام عليقم ورحمة الله وبركاته الشارة لي خطاب مدير المختمير المركسزي للادويسة والاغذيسة رقسم ٢٧/١/٤٢٨ فسي Skin Cap Sprey في مستحضد والمتضمين عدم وجود مادة Clobetasol في مستحضد Skin Cap Sprey من التاج شركة Cheminova الاسبالية : عليه نفيدكم بانه لا مانع من التعمرف بالمستعضي المذكور اعلام . مع لطيب تحياتي .... في الرفض الطبية والصيدلة د/ عنياح محمد الريس and a second and a second and در خلال علی اعبر المبنی المعنی بالشیم 1 7 JUN 1998 ZIMINO TO ADING EST. JEDEAH and the second 02. JUL '98 (JUE) 12:34 COMUNICACION Nº . 32 PAG. . 2

## Saudi Arabia (traslation)

Kingdom of Saudi Arabia Ministry of Health

According to the letter of the Director of the Central Laboratory of Medicine and Foods with number 428/1/27 dated 27/1/1419 Hijry which cerfitying that NO PRESENCE OF CLOBETASOL in the product SKIN-CAP SPRAY produced by Cheminova Internacional.

General Dierector of Medicine and Pharmacy Licence.

Dr. Sabah Mohammad al rayes

## Holland



Laboratorium der Nederlandse Apothekers Pusitius 30460 - 2500 GI 3-Gravennage - Tel (070) 362 41 II

## ANALYSERAPPORT

SKIN-CAP, diverse produkten
1)Crême (50 g) : charge L-12, LNA-registratienummer 21230
2)Shampoo (150 ml) : charge L-24, LNA-registratienummer 21229
3)Spray (100 ml) : charge L-25, LNA-registratienummer 21228

Doel analyse: Onderzoek op aanwezigheid van corticosteroiden. Conform declaratie (bedrukt op de verpakking van de monsters) mogen deze niet aantoonbaar zijn.

Conclusie onderzoek: Uit chromatografisch onderzoek (DLC en HPLC-DAD) zijn geen aanwijzingen verkregen die wijzen op de aanwezigheid van corticosteroïden.

Datum: 11 september 1997

NAMENS HET LABORATORIUM DER NEDERLANDSE APOTHEKERS,

O.S.N.M. Smeets, apotheker

## Holland (traslation)



Laboratorium der Nederlandse Apothekers Positious 30480 + 2500 CL 'n Gravenhager Tel (070) 362 4111

## CERTIFICATE OF ANALYSIS

SKIN-CAP, several products: ESHUIS BODYCARE - HILVARENBEEK - HOLLAND

- : batchnumber L-12, LNA-registrationnumber 21230 1) Cream (50 g)
- 2) Shampoo (150 ml) : batchnumber L-24, LNA-registrationnumber Z1229
- 3) Spray (100 ml) : batchnumber L-25, LNA-registrationnumber 21228

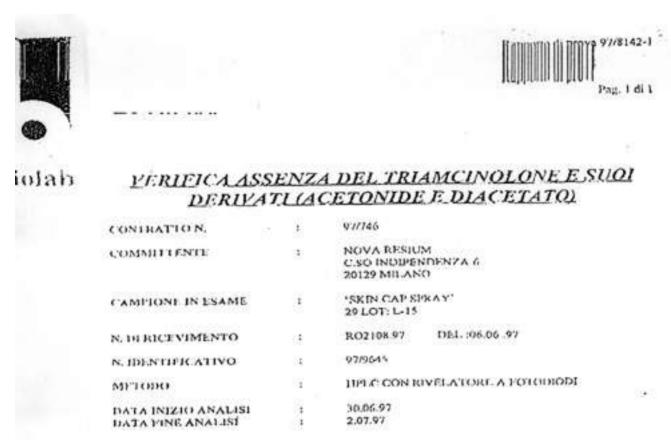
Aim of analysis: Research for the presence of corticosteroids. Conform the declared content (as stated on the container of the samples) corticosteroids should not be present.

Conclusion: From the results of chromatographic analysis (TLC and HPLC-DAD), no indications have become for the presence of corticosteroids in the products mentioned above.

Date: 11 September 1997

ON BEHALF OF THE LABORATORY OF DUTCH PHARMACISTS, 1/2 O.S.N.M Smeets, pharmacist





### RISULTATI ANALITICI

DETERMINAZIONE	UNITA' DI MISURA	RISULTATO
TRIAMCINOLONE	mt/100ml	non rivelato (1)
TRIAMCINOLONE DIACETATO	mg/100m1	non rivetato (1)
	mg/100m1	non rivelato (1)

(1) Sensibilità del nietodo 0.02mg/100ml.

DATA EMISSIONL:3.07.97

DIRETIONE DELLO STUDIO:

6 AL MARCHARCH (1999) 6 N. BLA OZI (1997) 1 - 1001 (1999) - 1 - 1 - 2 A 8 - 1993 (1996) - 1 - 1 - 2 A

Graf County of Home Boys Cysteme of a market 1975 Contraction and All 1975 Contraction 1975 Contraction 1975

Dr.G.Costantint ٦ 30 500

I risultati contanuti ti rilerizzano esclutivamente al compione provata. El presente capporto puo: essece elproduto autonto per intern

rick (Con Statistics, and Stat

# 1524. 10 mab

## Italy (traslation)

#### BIOLAB

Verify the presence of TRIAMCINOLONE and their derivates (ACETONOIDE and DIACETATE).

Product: SKIN-CAP SPRAY batch L-15

ANALITICAL RESULTS

TRIAMCINOLONE TRIAMCINOLONE DIACETATE TRIAMCINOLONE ACETONOIDE

Date 03 - 07 - 97

NON REVEALED NON REVEALED NON REVEALED

Dr. G. Costantint

## Malaysia



## PUSAT INOVASI DAN PERUNDINGAN UNIVERSITI SAINS MALAYSIA

Innovation and Consultancy Centre 11800 USM Penang, Malaysia Tel.: 04-6577888 Ext. 3684, 2132 Direct Line: 04-6572407 Fax: 04-6572210

Bil. Kami (Our Ref.)

Bil. Tuan (Your Ref.)

Tarikh (Date) 24th June 1999

## SIJIL ANALISIS / CERTIFICATE OF ANALYSIS

Tajuk (Title)

Chemical Analysis of "Skin-Cap Spray"

Pelanggan (Client)

IMEKS Farmaseutis Sdn. Bhd. No 2 Jalan 6/33B Batu 6½ Jalan Kepong MWE Commercial Park 52000 Kuala Lumpur Pencerapan/Komen (Observation/Comment)

Spray Lot : N-4 Exp. : March 2004

Kaedah yang digunakan (Method used)

Thin Layer Chromatography

Keputusan (Results) (Gunakan muka surat baru sekiranya perlu / Use separate sheet if necessary)

The following steroids were not detectable ; (detection limit : Imcg)

- 1. Betamethasone
- 2. Betamethasone-17-valerate
- 3. Dexamethasone
- 4. Cortisone
- 5. Cortisone acetate

- 6. Hydrocortisone 7. Hydrocortisone acetate 8. Prednisone 9. Prednisone
- 10. Clobetasol Propionate

Nama Penganalisis (Name of Analyst): Assoc. Prof. Dr. Yuen Kah Hay

Tandatángan

Pengajian/Pusat (School /Centre): Pusat Pengajian Sains Farmasi

Dr. YUEN KAH HAY B. Phorm (Host). M Sc. Ph D Associate Professor Cop (Stamp) University of Science Malaysia 11800 Penang, Malaysia.

TIDAK UNTUK DIIKLANKAN NOT FOR PURPOSES OF ADVERTISEMENT

## Russia



### МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ (МИНЗДРАВ РОССИИ)

ДЕПАРТАМЕНТ Государственного контроля качества, эффективности, безопасности лекарственных средств и медицинскоя техники Генеральному директору Фирмы "Хеминова Интернешил С.А." (Испания) г-ну Али Санта Марта

101431. Москва, Рахмановский пер., д. 3 тел. 973-13-94, 973-18-67 16.02.2000 290-20/140

Департамент государственного контроля лекарственных средств и медицинской техники рассмотрел представленные фирмой документы на препарат СКИН-КАП, зарегистрированный в установленном порядке Минздравом России в качестве лекарственного средства для наружного применения в виде аэрозоля, крема и шампуня, подтверждающие отсутствие в составе препарата кортикостероида клобетазола.

Представленные фирмой при регистрации в Минздраве России в 1995 и 1998гг. официальные документы на препарат СКИН-КАП, результаты клинических испытаний ведущих в лечебных учреждениях России, заключения по составу из 8 стран с описанием методов исследований, также заключение Института государственного Научного центра экспертизы контроля н государственного контроля лекарственных средств Минздрава России свидетельствуют об отсутствии в препарате клобетазола. Департамент считает, что эффективность и безопасность препарата СКИН-КАП позволяет использовать его при лечении псориаза, дерматитов и др.заболеваний кожи в соответствии с инструкцией по медицинскому применению.

Руководитель Департамента

Р.У.Хабриев

Исп.Колесникова Г.Н. 973-1635

## Russia (traslation)

Ministry of Health of the Federation of Russia

The State department for the control of quality, efficiency, safety of medicines and medical equipment.

The State department for the control of medical products examined the documents of the product Skin-Cap, which is registered according to the norms of the Ministry of Health of Russia. The examination included the preparation of the product for external use in Spray form, cream and shampoo. This examination confirmed the absence in the product of corticosteroide clobetazol

Official documents presented by the company to the Ministry of Health of Russia between 1995-98 combined with clinical studies by major medical centers in Russia, along with the conclusions presented by 8 countries with descriptions of their methodology and analyses including the conclusion of the State Institute of Scientific Peritaje of the Central State Ministry of Health of Russia, confirm the absence of the composition Clobetazol.

The department confirmed the effectiveness and the complete safety of the product Skin-Cap allows its use to treat psoriasis, dermatitis and other maladies of the skin used according to medical instruction.

Chief of the department

Dr. Mr. Khabriev



MINISTERIO DE SALUD Birecciós Geseral de Bedicasestes, Issues y Bregar

Lima, 12.4 MAS 1946

DIGEMID/DEPI-OFICIO NO 483 98

Señor Representante Legal DROGUERIA CHEMINOVA PERU S.A. Prolongación Iquitos Nº 2261 LINCE Presente.-

## Att. Q.F. Regente

Me dirijo a Ud., en relación al producto SKIN-CAP SPRAY USO TOPICO × 100 mL lote Nº 4-21, pesquisado según Acta Nº 334-97.

Al respecto, se le comunica que el Centro Nacional de Control de Calidad del Instituto Nacional de Salud, ha emitido el Protocolo de Análisis NO 775D-P/98-CNCC-INS, de fecha 14 de Enero de 1998.

Sobre el particular, se ha verificado en la Dirección de Registros de Productos Farmacéuticos, que el mencionado lote del producto: SKIN-CAP SPRAY USO TOPICO cumple con las específicaciones técnicas autorizadas en su Registro Sanitario.

Sin otro particular,

Quedo de Ud.

Atentamente.

MINISTERIO DE SALUD DIRECCION GENERAL DE MEDICALENCION ENSUMOS Y GROGAS

O.F. Dro. ELVIRA TINCOPA ORTIZ Directora Ejettiva de Pesquisa e Inspecciones

Kova Thatea International S. A. RECEPCIÓN Feela 24/03/13 Line 10 100 Firms

ETO/RRH/ICHW/LRE/gdp. c.c.: Dirección de Registros.

Archivo : CONFD.REG



## MICHIGAN STATE UNIVERSITY

DEPARTMENT OF BIOCHEMISTRY BIOCHEMISTRY BUTLDING EAST LANSING + MICHIGAN + 48824-1313 + USA FAX: 1 (317) 333-0311 PHONE: 1 (317) 333-1660

September 5, 1997

Roger Howard Great Lakes Pharmaceuticals Marshall Michigan

Dear Mr. Howard

As per your extraction conditions, Lot I-17 was extracted and tested by Fast Atom Bombardment Mass Spectroscopy (FAB-MS). The sample(SKIN-CAP) exhibited no clobetasol propionate in the spectra. The spectra showed the absence of the 467 M+H peak that is the molecular ion for clobetasol propionate. The 541 2M+H peak is the dimer of isopropyl myristate as demonstrated by the B/E link scan. This dimer peak may not exist in solution but may well be an artifact generated by the FAB-MS. The 271 M+H peak is the base molecular weight for isopropyl myristate. The 481M+H peak and the 407 M+H peak are unknowns. A sample of clobetasol propionate was run as a standard. The sensitivity of this mass spectrum is 1 nmole applied to the probe tip or about .5µg.

Joseph Leykam

£

Director Macrohiolecular Structure Facility

MSU is an Affirmative Action/Equal Opportunity Institution

## • U.S.A. 2

### MICHIGAN STATE UNIVERSITY

DEPARTMENT OF BIOCHEMISTRY BIOCHEMISTRY MULDING EAST LANSING + MICHIGAN + 41924-1110 + USA FAX: 1 (317) 333-9334 PHONE 1 (317) 333-9334

September 5, 1997

Roger Howard Great Lakes Pharmaceuticals Marshall Michigan

Dear Mr. Howard

As per your extraction conditions, Lot I-20 was extracted and tested by Fast Atom Bombardment Mass Spectroscopy (FAB-MS). The extracted sample(SKIN-CAP) exhibited no signal for clobetasol propionate in the spectra. That is the spectra showed the absence of the 467 M+H peak that is the molecular ion for clobetasol propionate. The 541 2M+H peak is the dimer of isopropyl myristate as demonstrated by the B/E link scan. This dimer peak may not exist in solution but may well be an artifact generated by the FAB-MS. The 271 M+H peak is the base molecular weight for isopropyl myristate. The 481M+H peak, the 407 M+H and the 422 M+H peak are unknowns. A sample of clobetasol propionate was run as a standard. The sensitivity of this mass spectrum is 1 nmole applied to the probe tip or about .5µg.

Joseph Leykam

Director Macromolecular Structure Facility

MSU is an Affirmative Action/Equal Opportunity Institution



ANALYST	WORKSHEET	I. PRODU	JCT N SKIN CAP SPRAY	2. SAMPLEN	
SEALS	DINTACT	4. DATE REC'D	5. RECEIVED FROM	6. DISTRICT	I216827 OR LABORATORY
NONE	BROKEN	19-JUL-99	JAMES BROWER		DA-STL (HFD-920)
One brown p Skin-Cap S AB: Samp	Spray 100 ml, Che ple #: 1216827 D.	eminova Internacio	nal, Lot N-4, Exp. MAR MB". The box containe	04" and identif	contained a box labeled in pa ied as "F11-1711712-9 1-1 beled in part "Skin-Cap Spray
	NOT APPLICABL NOT DETERMINI UNITS EXAMI		IND ING	0 ORIGINAL( 0 COPIES SUI	S) SUBMITTED BMITTED
				27	
		9			
		a M			
		8			, Tu
I. RESERVE	SAMPLE				
ne box whi	ich contained an o		dentifed "I-216827 7-20 0 John C. Reepmeyer".		original brown paper bag
One box whi fficially sea 2. a. ANALYS	ich contained an o aled and identified ST SIGNATURE (Be	d "1216827 6-12-0 roke Seal 🗆) (#: c	0 John C. Reepmeyer".		original brown paper bag
ne box whi fficially sea 2. a. ANALYS	ich contained an o aled and identified ST SIGNATURE (Be	1 "1216827 6-12-0	0 John C. Reepmeyer".	-99 JCR" in the 13. WORK- SHEET CHECK	a. BY J.F. Geower b. DATE 6-15-00
One box whi fficially sea 2. a. ANALYS	ich contained an o aled and identified ST SIGNATURE (Be	d "1216827 6-12-0 roke Seal 🗆) (#: c	0 John C. Reepmeyer".	-99 JCR" in the 13. WORK- SHEET CHECK 14. DATE REPO	a. BY J.F. Leower b. DATE 6-15-00

## • F.D.A. 2

ANALYST DATA SHEET	BOROZIN SKI	N CAP SPRAY	SAMPLE NUMBER I216827
7-20-99 Screen for corticos	teroids by HPLC with ra	pid-scanning UV de	tection
Buffer (0.1M citrate. pH 4, citric acid and adjust to pH		100 ml saturated NaC	Cl, add 1.92 g anhydrous
Red Dye Solution – Prepare concentration of 1 mg / ml.	a solution of Ponceau 3	R (FD&C Red No. 1)	) in water at a
Steroid Standard Solution: I ml EtOAc:	Dissolve 10 mg of each o	of the following selec	ted corticosteroids in 100
Triamcinolone (TRI, DDA Hydrocortisone (HC, DDA Triamcinolone Acetonide Fluocinonide (FCAA, DD Clobetasol Propionate (CH Betamethasone Dipropion Triamcinolone Hexaceton Deoxycorticosterone Piva	A# S-277B) (TRA, DDA# S-633C) A# S-799) P, DDA# 74167B) ate (BMD, DDA# S-56) ide (TRH, DDA# S-634)	)	
Steroid Standard Solution for the residue in 300 µl methar	[2017] 2018] 2017\\ 2017[ 2017] 2017] 2017] 2017[ 2017] 2017] 2017] 2017[ 2017] 2017] 2017] 2017[ 2017] 2017	0 μl of Steroid Standa	ard Solution and dissolve
Extraction method — Spray g of the spray into a chilled 10 ml EtOAc. For a spiked Solution. Shake vigorously tube on its side and mix on and mix. The dye imparts a the 2-layer interface. Centri sulfate, then evaporate to dry and 5 ml MeCN-water (9:1), MeCN-water (9:1), and com dryness. Add 300 µl MeOH 66 micro-spin centrifuge filt	test tube (16 x 125 mm) sample, add 5 ml buffer, by hand to ensure that n an oscillating shaker for red color in the lower ac fuge. Separate and dry t yness. Dissolve the resid Separate the lower Me bine this with the first pe to the residue, wash tho	with a Teflon-lined c 9.5 ml EtOAc, and 0 o large clumps adhere 20 minutes. Add 2 di pueous layer and enab- the EtOAc solution of lue in a biphasic mixe CN-water layer, extra ortion. Evaporate the roughly, and filter th	ap, add 5 ml buffer and 0.5 ml Steroid Standard e to the tube. Lay the rops of Red Dye Solution oles easy visualization of ver anhydrous sodium ture of 10 ml heptane act the heptane with 2 ml e MeCN-water to
NOT STIKED	1.0050 %		
	0.9990 3		JPB 6-15-07



ANALYST DATA SHEET	BOROZIN SKIN CAP SPRAY	SAMPLE NUMBER 1216827
7-21-99 Screen for Cortico	osteroids, continued	
HPLC Method		
Instrumentation: Spectra Pl autosampler, SpectraFOCU computer, PC1000 ver 3.0.	hysics Liquid Chromatograph SP8800 pun IS forward optical scanning detector, Compa- 1	ip, SP8880 q Deskpro XL 5100
Guard Column: BrownLee Mobile Phase System #1: li	C18, 75 x 4.6 mm, 3.5 μm (DDA# 772) NewGuard RP-18, 15 x 3 mm, 3.5 μm inear gradient 18-82% acetonitrile over 12 min inear gradient 38-88% methanol over 12 min	inutes utes
volume is 4.5 ml. Thus, the	5 ml. The Spectra Physics chromatographic initial mobile phase conditions (18% MeCN be maintained for the first 2 minutes, and the	for system #1 or 38%
Flow Rate: 1 ml/min Wavelength: Scan 200-350 Injection volume: 5 µL	nm, monitor at 240 nm ,	
Results		
There were no peaks in the had UV spectra typical of c	chromatograms of the MeCN-water and MeC orticosteroids.	OH-water gradients that
See Attachments A1-A12 for	or chromatograms and B1-B3 for UV spectra	<b>t</b> a
Conclusion	·*	
No corticosteroid was detec	ted.	14
		5785 6-15-00
ALYST(5) John C. Reepmeyer	film C Reepinger 571	PAGE 3 OF 6 PAGES

## • F.D.A. 4

	BOROZIN SKIN CAP SPRA	Y I216827
7-26-99 Screen for Cortico	osteroids, continued	
Additional Extraction		
extracted with 2 portions of was evaporated and the resi	ion used for HPLC was evaporated to f 2-ml ether and filtered through a plu idue dried under high vacuum at 40°0 nol and filtered. The sample was ana	ig of filter paper. The ether C for 1 hour. The residue was
Steroid Standard Solution corticosteroids in 1.5 ml me	a: Dissolve < 1 mg (not weighed) of ethanol.	each of the following
Beclomethasone Diprop Hydrocortisone Cypion	vionate (BMD, DDA# S-56) pionate (BCD, DDA# S-45) nate (HCC, DDA# U-551A) onide (TRH, DDA# S-634)	
Results		
were less intense suggesting	e results of the previous HPLC exper g that these are somewhat volatile cor conents that were poorly soluble in et	nponents which were removed
See Attachments C1-C10 fo	or chromatograms.	
See Attachments C1-C10 fo	or chromatograms.	
See Attachments C1-C10 fo	or chromatograms.	33
See Attachments C1-C10 fo	or chromatograms.	33
See Attachments C1-C10 fo	or chromatograms.	33
See Attachments C1-C10 fo	or chromatograms.	
See Attachments C1-C10 fo	or chromatograms.	
See Attachments C1-C10 fo	or chromatograms.	JB 6-15-0

## • F.D.A. 5

NALYST DATA SHEET	BOROZIN SKIN CAP SPRAY	SAMPLE NUMBER I216827
6-6-00 Silica Gel Thin-L	ayer Chromatography (TLC)	
Silica Gel HLF (Analtech, 1 Used 2.5 x 10 cm plates.	Inc., 75 Blue Hen Drive, Newark, DE; catal	og no. 47521)
Standard: Spot an ethyl ac plate.	etate solution of betamethasone 17-propion	ate 21-stearate on the
	ution of the sample used for HPLC, which h to dryness, dissolved in a small amount of	
Mobile solvent: diethyl eth Detection: UV hand lamp,		
	rigin and one fast eluting spot did not corres	pond to the standard.
	A = betameThesme - 17-pro stearate standard B = Sample I 216	827 extract
0.	)	21
0		
A B A E		
1 some ple second solvent	te developed a time in the same	JFB 6-15-00
John C. Reepmeyer	han c Reepony ANALYST NO. 571	PAGE 5 OF 6 PAGE

0.



ANALYST DATA SHEET	BOROZIN SKIN CAP SPRAY	SAMPLE NUMBER I216827
6-9-00 HPLC of sample ex	xtract and BMPS	51
Sample: The EtOAc soluti dissolved in 200 mcl MeO	on of the sample (6-6-00) was evaporated H.	i and the residue was
Standard: Betamethasone	17-propionate 21-stearate (BMPS) in Me	OH.
Degasser (G1322A), HP 11	C with HP 1100 Quaternary Pump (G13 100 Thermostatted Column Compartment HP 1100 Diode Array Detector (G1315A	(G1316A), Automatic
LC Conditions:		
A MODULE WITH ADD TO POST AND A DOWN	C18, 75 x 4.6 mm, 3.5 µm (BBA# 772)	
Guard Column: BrownLee	NewGuard RP-18, 15 x 3.2 mm, 7 µm	
Column Temp: 25°C Mobile Phase: 100% MeO	Hisocratic	
Stop Time 10 min, Post Ti		
Flow Rate: 0.6 ml/min; M		
Wavelength: monitor at 24		
Injection volume: 3 µL		
Results: There was no pea	ak corresponding to BMPS. See attachme	ent D.
Maradination - Provident Contractions		
-		
		1
5		

JB 6-15-10.

ANALYST(S) John C. Reepmeyer	John C Reeprugue	ANALYST NO. 571	PAGE & OF & PAGES
TODU CDA 424a (Escelmile Rev 7	(99) Single sided worksheet		