

CENTER FOR DRUG EVALUATION AND RESEARCH

Application Number 21-212

MICROBIOLOGY REVIEW(S)

1-10-2021

REVIEW FOR HFD-540
OFFICE OF NEW DRUG CHEMISTRY
MICROBIOLOGY STAFF
MICROBIOLOGIST'S REVIEW #1 OF NDA

SEP 24 1999

September 24, 1999

A. 1. NDA 21-112

SPONSOR Hill Dermaceuticals, Inc.
2650 So. Mellonville Avenue
Sanford, FL 32773

2. PRODUCT NAMES: — Cream

3. DOSAGE FORM AND ROUTE OF ADMINISTRATION: Topical Cream

4. METHOD(S) OF STERILIZATION: NA

5. PHARMACOLOGICAL CATEGORY: Cutaneous Melanosis

6. DRUG PRIORITY CLASSIFICATION:

B. 1. DATE OF INITIAL SUBMISSION: March 12, 1999

2. DATE OF AMENDMENT: na

3. RELATED DOCUMENTS: none

4. ASSIGNED FOR REVIEW: September 23, 1999

C. REMARKS: The drug product is a nonsterile, preserved topical cream which has a microbial limit specification.

D. CONCLUSIONS: This submission is recommended for approval on the basis of product quality microbiology.

[Handwritten signature] 9-24-99
Bryan Riley, Ph.D.
[Handwritten initials] 9/24/99

cc:

HFD 540/Consult File
HFD 540/V. Lutwak
HFD 540/E. Pappas
HFD 805/Consult File
HFD 805/B. Riley

Drafted by: B. Riley, 9/24/99
R/D initialed by: P. Cooney,

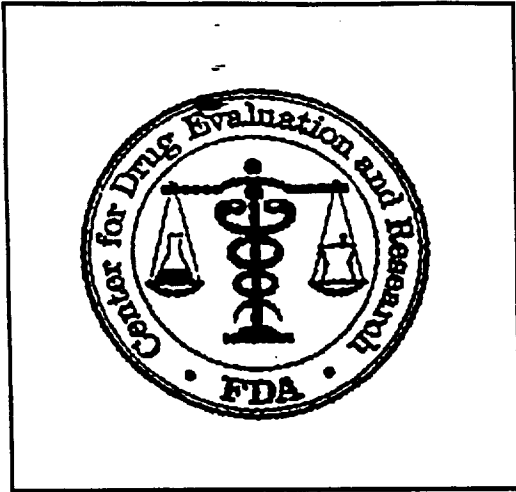
**APPEARS THIS WAY
ON ORIGINAL**

**THIS SECTION
WAS
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NOT
TO BE
RELEASABLE**

1 page

DEPARTMENT OF HEALTH AND HUMAN SERVICES PUBLIC HEALTH SERVICE FOOD AND DRUG ADMINISTRATION		REQUEST FOR CONSULTATION		
TO (Division/Office) <i>Mr. & Mrs. Conroy</i>		FROM: <i>Vince Lutwak HFD 540</i>		
<i>127199</i>	IND. NO.	NDA NO. <i>21112</i>	TYPE OF DOCUMENT	DATE OF DOCUMENT <i>May 12, 1999</i>
NAME OF DRUG <i>CREAM</i>		PRIORITY CONSIDERATION	CLASSIFICATION OF DRUG	DESIRED COMPLETION DATE <i>9/27/99</i>
NAME OF FIRM <i>Hill Dermaceuticals, Inc.</i>				
REASON FOR REQUEST				
I. GENERAL				
<input type="checkbox"/> NEW PROTOCOL <input type="checkbox"/> PRE-NDA MEETING <input type="checkbox"/> RESPONSE TO DEFICIENCY LETTER <input type="checkbox"/> PROGRESS REPORT <input type="checkbox"/> END OF PHASE II MEETING <input type="checkbox"/> FINAL PRINTED LABELING <input type="checkbox"/> NEW CORRESPONDENCE <input type="checkbox"/> RESUBMISSION <input type="checkbox"/> LABELING REVISION <input type="checkbox"/> DRUG ADVERTISING <input type="checkbox"/> SAFETY/EFFICACY <input type="checkbox"/> ORIGINAL NEW CORRESPONDENCE <input type="checkbox"/> ADVERSE REACTION REPORT <input type="checkbox"/> PAPER NDA <input type="checkbox"/> FORMULATIVE REVIEW <input type="checkbox"/> MANUFACTURING CHANGE/ADDITION <input type="checkbox"/> CONTROL SUPPLEMENT <input checked="" type="checkbox"/> OTHER (Specify below) <div style="text-align: right; margin-right: 50px;"><i>memo consult</i></div>				
II. BIOMETRICS				
STATISTICAL EVALUATION BRANCH		STATISTICAL APPLICATION BRANCH		
<input type="checkbox"/> TYPE A OR B NDA REVIEW <input type="checkbox"/> END OF PHASE II MEETING <input type="checkbox"/> CONTROLLED STUDIES <input type="checkbox"/> PROTOCOL REVIEW <input type="checkbox"/> OTHER		<input type="checkbox"/> CHEMISTRY <input type="checkbox"/> PHARMACOLOGY <input type="checkbox"/> BIOPHARMACEUTICS <input type="checkbox"/> OTHER		
III. BIOPHARMACEUTICS				
<input type="checkbox"/> DISSOLUTION <input type="checkbox"/> BIOAVAILABILITY STUDIES <input type="checkbox"/> IN-VIVO STUDIES		<input type="checkbox"/> DEFICIENCY LETTER RESPONSE <input type="checkbox"/> PROTOCOL - BIOPHARMACEUTICS <input type="checkbox"/> IN-VIVO WAIVER REQUEST		
IV. DRUG EXPERIENCE				
<input type="checkbox"/> PHASE IV SURVEILLANCE/EPIDEMIOLOGY PROTOCOL <input type="checkbox"/> DRUG USE e.g. POPULATION EXPOSURE, ASSOCIATED DIAGNOSES <input type="checkbox"/> CASE REPORTS OF SPECIFIC REACTIONS (List below) <input type="checkbox"/> COMPARATIVE RISK ASSESSEMENT ON GENERIC DRUG GROUP		<input type="checkbox"/> REVIEW OF MARKETING EXPERIENCE, DRUG USE AND SAFETY <input type="checkbox"/> SUMMARY OF ADVERSE EXPERIENCE <input type="checkbox"/> POISON RISK ANALYSIS		
V. SCIENTIFIC INVESTIGATIONS				
<input type="checkbox"/> CLINICAL		<input type="checkbox"/> PRECLINICAL		
COMMENTS/SPECIAL INSTRUCTIONS (Attach additional sheets if necessary)				
<div style="text-align: right; margin-right: 100px;"><i>Let's meet - 5/27</i></div> <div style="font-size: 2em; margin-left: 100px;"><i>memo consult</i></div> <div style="margin-left: 100px; margin-top: 20px;"><i>PKLN 18. B58</i></div> <div style="margin-left: 100px; margin-top: 20px;"><i>301-827-7340</i></div> <div style="text-align: right; margin-right: 50px; margin-top: 20px;"><i>please cc: HFD-540/E. Pappas HFD-540/V. Lutwak</i></div>				
NATURE OF REQUESTER		METHOD OF DELIVERY (Check one)		
<i>/S/</i>		<input checked="" type="checkbox"/> MAIL <input type="checkbox"/> HAND		
SIGNATURE OF RECEIVER		SIGNATURE OF DELIVERER		

FACSIMILE TRANSMISSION
RECORD



From: Vickey Lutwak, Project Manager

Division of Dermatologic and
Dental Drug Products, HFD-540
Center for Drug Evaluation & Research
Food & Drug Administration
9201 Corporate Blvd.
Rockville, MD 20850

Phone 301-827-2020 / 2073
Fax 301-827-2075

Date: Sept 24, 1999

To: Name BRYAN RILEY
Company _____
City _____ State _____
Phone # _____

FAX # 301-827-3084

Number of Pages (INCLUDING COVER PAGE) 23

Please telephone (301) 827-2020 IMMEDIATELY if re-transmission is necessary.

THIS DOCUMENT IS INTENDED FOR THE USE OF THE PARTY TO WHOM IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND PROTECTED FROM DISCLOSURE UNDER APPLICABLE LAW.

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NOTE: We are providing the attached information via telephone facsimile for your convenience. This material should be viewed as unofficial correspondence. Please feel free to contact me if you have any questions regarding the contents of this transmission.

Additional message:

NDA 21-112

Bryan - per your request -
Vickey
356h form

2. Labeling (check one) <input type="checkbox"/> Draft Labeling <input type="checkbox"/> Final Printed Labeling
3. Summary (21 CFR 314.50 (c))
4. Chemistry section
A. Chemistry, manufacturing, and controls information (e.g. 21 CFR 314.50 (d) (1), 21 CFR 601.2)
B. Samples (21 CFR 314.50 (e) (1), 21 CFR 601.2 (a)) (Submit only upon FDA's request)
C. Methods validation package (e.g. 21 CFR 314.50 (e) (2) (i), 21 CFR 601.2)
5. Nonclinical pharmacology and toxicology section (e.g. 21 CFR 314.50 (d) (2), 21 CFR 601.2)
6. Human pharmacokinetics and bioavailability section (e.g. 21 CFR 314.50 (d) (3), 21 CFR 601.2)
7. Clinical Microbiology (e.g. 21 CFR 314.50 (d) (4))
8. Clinical data section (e.g. 21 CFR 314.50 (d) (5), 21 CFR 601.2)
9. Safety update report (e.g. 21 CFR 314.50 (d) (5) (vi) (b), 21 CFR 601.2)
10. Statistical section (e.g. 21 CFR 314.50 (d) (6), 21 CFR 601.2)
11. Case report tabulations (e.g. 21 CFR 314.50 (f) (1), 21 CFR 601.2)
12. Case report forms (e.g. 21 CFR 314.50 (f) (2), 21 CFR 601.2)
13. Patent information on any patent which claims the drug (21 U.S.C. 355 (b) or (c))
14. A patent certification with respect to any patent which claims the drug (21 U.S.C. 355 (b) (2) or (i) (2) (A))
15. Establishment description (21 CFR Part 600, if applicable)
16. Debarment certification (FD&C Act 306 (k)(1))
17. Field copy certification (21 CFR 314.50 (k) (3))
18. User Fee Cover Sheet (Form FDA 3397)
X 19. OTHER (Specify) LETTER OF RESPONSE

CERTIFICATION

I agree to update this application with new safety information about the product that may reasonably affect the statement of contraindications, warnings, precautions, or adverse reactions in the draft labeling. I agree to submit safety update reports as provided for by regulation or as requested by FDA. If this application is approved, I agree to comply with all applicable laws and regulations that apply to approved applications, including, but not limited to the following:

1. Good manufacturing practice regulations in 21 CFR 210 and 211, 606, and/or 620.
2. Biological establishment standards in 21 CFR Part 600.
3. Labeling regulations in 21 CFR 201, 606, 610, 660 and/or 809.
4. In the case of a prescription drug or biological product, prescription drug advertising regulations in 21 CFR 202.
5. Regulations on making changes in application in 21 CFR 314.70, 314.71, 314.72, 314.97, 314.99, and 601.12.
6. Regulations on Reports in 21 CFR 314.80, 314.81, 600.80 and 600.81.
7. Local, state and Federal environmental impact laws.

If this application applies to a drug product that FDA has proposed for scheduling under the Controlled Substances Act I agree not to market the product until the Drug Enforcement Administration makes a final scheduling decision.

The data and information in this submission have been reviewed and, to the best of my knowledge are certified to be true and accurate.

Warning: a willfully false statement is a criminal offense, U.S. Code, title 18, section 1001.

SIGNATURE OF RESPONSIBLE OFFICIAL OR AGENT <i>Rosario G. Ramirez</i>	TYPED NAME AND TITLE Rosario G. Ramirez, Regulatory Affairs	DATE 21 SEPT. 1999
ADDRESS (Street, City, State, and ZIP Code) 2650 So. Mellonville Avenue Sanford, FL 32773		Telephone Number (407) 323-1887

Public reporting burden for this collection of information is estimated to average 40 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to:

DHHS, Reports Clearance Officer
Paperwork Reduction Project (0910-0338)
Hubert H. Humphrey Building, Room 531-H
200 Independence Avenue, S.W.
Washington, DC 20201

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MESSAGE CONFIRMATION

09/24/99 10:18

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DATE	TIME	DISTANT STATION ID	PAGES	RESULT	ERROR PAGES	S. CODE
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FACSIMILE TRANSMISSION RECORD



From: Vickey Lutwak, Project Manager

Division of Dermatologic and
Dental Drug Products, HFD-540
Center for Drug Evaluation & Research
Food & Drug Administration
9201 Corporate Blvd.
Rockville, MD 20850

Phone 301-827-2020 / 2073
Fax 301-827-2075

Date: Sept 24, 1999

To: Name BRYAN RILEY
Company _____
City _____ State _____
Phone # _____

FAX # 301-827-3084

Number of Pages (INCLUDING COVER PAGE) 23

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DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION

Form Approved OMB No 0910-0338
Expiration Date: March 31, 2003
See OMB Statement on page 2

APPLICATION TO MARKET A NEW DRUG, BIOLOGIC,
OR AN ANTIBIOTIC DRUG FOR HUMAN USE

(Title 21, Code of Federal Regulations, Parts 314 & 601)

FOR FDA USE ONLY

APPLICATION NUMBER

APPLICANT INFORMATION

NAME OF APPLICANT

Hill Dermaceuticals, Inc.

DATE OF SUBMISSION

JULY 24, 2001

TELEPHONE NO. (Include Area Code)

407-323-1887

FACSIMILE (FAX) Number (Include Area Code)

407-649-9213

APPLICANT ADDRESS (Number, Street, City, State, Country, ZIP Code or Mail Code, and U.S. License number if previously issued):

2650 South Mellonville Avenue
Sanford, Florida 32773

AUTHORIZED U.S. AGENT NAME & ADDRESS (Number, Street, City, State, ZIP Code, telephone & FAX number) IF APPLICABLE

PRODUCT DESCRIPTION

NEW DRUG OR ANTIBIOTIC APPLICATION NUMBER, OR BIOLOGICS LICENSE APPLICATION NUMBER (If previously issued)

NDA 21-112

ESTABLISHED NAME (e.g., Proper name, USPIUSAN name)

Please See Attachment

PROPRIETARY NAME (trade name) IF ANY

TRI-LUMA Cream

CHEMICAL/BIOCHEMICAL/BLOOD PRODUCT NAME (If any)

Please See Attachment

CODE NAME (If any)

N/A

DOSAGE FORM:

Cream

STRENGTHS:

Please See Attachment

ROUTE OF ADMINISTRATION:

Topical

(PROPOSED) INDICATION(S) FOR USE:

Melasma

APPLICATION INFORMATION

APPLICATION TYPE

(check one)



NEW DRUG APPLICATION (21 CFR 314.50)



ABBREVIATED NEW DRUG APPLICATION (ANDA, 21 CFR 314.94)

BIOLOGICS LICENSE APPLICATION (21 CFR Part 601)

IF AN NDA, IDENTIFY THE APPROPRIATE TYPE



505 (b)(1)



505 (b)(2)

IF AN ANDA, OR 505(b)(2), IDENTIFY THE REFERENCE LISTED DRUG PRODUCT THAT IS THE BASIS FOR THE SUBMISSION

Name of Drug

Holder of Approved Application

TYPE OF SUBMISSION (check one)



ORIGINAL APPLICATION



AMENDMENT TO A PENDING APPLICATION



RESUBMISSION



PRESUBMISSION



ANNUAL REPORT



ESTABLISHMENT DESCRIPTION SUPPLEMENT



EFFICACY SUPPLEMENT



LABELING SUPPLEMENT



CHEMISTRY MANUFACTURING AND CONTROLS SUPPLEMENT



OTHER

IF A SUBMISSION OF PARTIAL APPLICATION, PROVIDE LETTER DATE OF AGREEMENT TO PARTIAL SUBMISSION: _____

IF A SUPPLEMENT, IDENTIFY THE APPROPRIATE CATEGORY



CBE



CBE-30



Prior Approval (PA)

REASON FOR SUBMISSION

Full response to Non-Approvable Letter (to NDA)

PROPOSED MARKETING STATUS (check one)



PRESCRIPTION PRODUCT (Rx)



OVER THE COUNTER PRODUCT (OTC)

NUMBER OF VOLUMES SUBMITTED

THIS APPLICATION IS



PAPER



PAPER AND ELECTRONIC



ELECTRONIC

ESTABLISHMENT INFORMATION (Full establishment information should be provided in the body of the Application.)

Provide locations of all manufacturing, packaging and control sites for drug substance and drug product (continuation sheets may be used if necessary). Include name, address, contact, telephone number, registration number (CFN), DMF number, and manufacturing steps and/or type of testing (e.g. Final dosage form, Stability testing) conducted at the site. Please indicate whether the site is ready for inspection or, if not, when it will be ready.

Please See Attachment

Cross References (list related License Applications, INDs, NDAs, PMAs, 510(k)s, IDEs, BMFs, and DMFs referenced in the current application)

This application contains the following items: (Check all that apply)

<input checked="" type="checkbox"/>	1. Index
<input checked="" type="checkbox"/>	2. Labeling (check one) <input checked="" type="checkbox"/> Draft Labeling <input type="checkbox"/> Final Printed Labeling
<input checked="" type="checkbox"/>	3. Summary (21 CFR 314.50 (c))
<input checked="" type="checkbox"/>	4. Chemistry section
<input checked="" type="checkbox"/>	A. Chemistry, manufacturing, and controls information (e.g., 21 CFR 314.50(d)(1); 21 CFR 601.2)
	B. Samples (21 CFR 314.50 (e)(1); 21 CFR 601.2 (a)) (Submit only upon FDA's request)
	C. Methods validation package (e.g., 21 CFR 314.50(e)(2)(i); 21 CFR 601.2)
<input checked="" type="checkbox"/>	5. Nonclinical pharmacology and toxicology section (e.g., 21 CFR 314.50(d)(2); 21 CFR 601.2)
<input checked="" type="checkbox"/>	6. Human pharmacokinetics and bioavailability section (e.g., 21 CFR 314.50(d)(3); 21 CFR 601.2)
	7. Clinical Microbiology (e.g., 21 CFR 314.50(d)(4))
<input checked="" type="checkbox"/>	8. Clinical data section (e.g., 21 CFR 314.50(d)(5); 21 CFR 601.2)
<input checked="" type="checkbox"/>	9. Safety update report (e.g., 21 CFR 314.50(d)(5)(vi)(b); 21 CFR 601.2)
<input checked="" type="checkbox"/>	10. Statistical section (e.g., 21 CFR 314.50(d)(6); 21 CFR 601.2)
<input checked="" type="checkbox"/>	11. Case report tabulations (e.g., 21 CFR 314.50(f)(1); 21 CFR 601.2)
<input checked="" type="checkbox"/>	12. Case report forms (e.g., 21 CFR 314.50 (f)(2); 21 CFR 601.2)
<input checked="" type="checkbox"/>	13. Patent information on any patent which claims the drug (21 U.S.C. 355(b) or (c))
	14. A patent certification with respect to any patent which claims the drug (21 U.S.C. 355 (b)(2) or (j)(2)(A))
	15. Establishment description (21 CFR Part 600, if applicable)
	16. Debarment certification (FD&C Act 306 (k)(1))
<input checked="" type="checkbox"/>	17. Field copy certification (21 CFR 314.50 (f)(3))
	18. User Fee Cover Sheet (Form FDA 3397)
<input checked="" type="checkbox"/>	19. Financial Information (21 CFR Part 54)
	20. OTHER (Specify)

CERTIFICATION

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1. Good manufacturing practice regulations in 21 CFR Parts 210, 211 or applicable regulations, Parts 606, and/or 820.
2. Biological establishment standards in 21 CFR Part 600.
3. Labeling regulations in 21 CFR Parts 201, 606, 610, 660, and/or 809.
4. In the case of a prescription drug or biological product, prescription drug advertising regulations in 21 CFR Part 202.
5. Regulations on making changes in application in FD&C Act Section 506A, 21 CFR 314.71, 314.72, 314.97, 314.99, and 601.12.
6. Regulations on Reports in 21 CFR 314.80, 314.81, 600.80, and 600.81.
7. Local, state and Federal environmental impact laws.

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The data and information in this submission have been reviewed and, to the best of my knowledge are certified to be true and accurate.

Warning: A willfully false statement is a criminal offense, U.S. Code, title 18, section 1001.

SIGNATURE OF RESPONSIBLE OFFICIAL OR AGENT <i>Rosario G. Ramirez</i>	TYPED NAME AND TITLE Rosario G. Ramirez Director, Medical/Regulatory Affairs	DATE JULY 24, 2001
ADDRESS (Street, City, State, and ZIP Code) 2650 So. Mellonville Ave., Sanford, FL 32773		Telephone Number (407) 323-1887

Public reporting burden for this collection of information is estimated to average 24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to:

Department of Health and Human Services
Food and Drug Administration
CBER, HFM-99
1401 Rockville Pike
Rockville, MD 20852-1448

Food and Drug Administration
CDER, HFD-94
12420 Parklawn Dr., Room 3048
Rockville, MD 20852

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

ATTACHMENT to 356h

CHEMICAL NAME

Fluocinolone acetonide: pregna-1,-4-diene-3,20-dione, 6,9-difluoro-11,21 dihydroxy- 16,17-[(1-methylethylidene)bis(oxy)]-, (6 α ,11 β ,16 α)-.

Hydroquinone: 1,4-benzenediol

Tretinoin: (all-E)-3,7-dimethyl-9-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2,4,6,8-nonatetraenoic acid

ESTABLISHMENT INFORMATION

Locations of manufacturing, packaging and control sites for drug substances and drug product:

Drug Product: Cream

Location: HILL DERMACEUTICALS, INC.
(Establishment Registration Number: 1036365/ORL)
2650 South Mellonville Avenue
Sanford, Florida 32773

Contact: Jerry Roth
Telephone: (407) 323-1887

Drug Substance: Fluocinolone acetonide USP Drug Master File Number:

Location: _____

Contact: _____

Telephone: _____

Drug Substance: Hydroquinone USP Drug Establishment Registration #

Location: _____

Contact: _____
Telephone: _____

Drug Substance: Tretinoin USP Drug Master File Number:

Location: _____

Contact: _____

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ORIGINAL



"The Scalp Company"

ORIG AMENDMENT

— Cream
— NDA 21-112

BS

September 9, 1999

Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd.
Rockville, MD 20850
Attn: Ms. Vickey Lutwak
Project Manager

RE: Additional Information
Diskettes as requested

Enclosed are 2 diskettes, a copy for the statisticians and a desk copy.

I have also enclosed a diskette on the In vivo study on percutaneous absorption of
on human volunteers, as desk copy. This is the corrected version, as
per changes from the Institutional Review Board. The amended study protocol will
be submitted under the IND.

Thank you.

Respectfully,


Rosario G. Ramirez
Medical/Regulatory Affairs

2000 South McIlhenny Avenue • Sanford, Florida 32773 • 407 323 1887 • FAX 407 649 9213



NEW CORRESP

AC

"The Scalp Company"

— Cream
— (NDA 21-112)

September 9, 1999

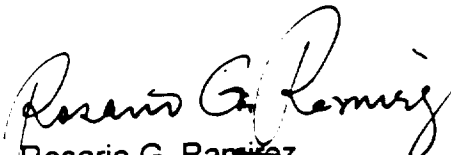
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd.
Rockville, MD 20850
Attn: Ms. Vickey Lutwak
Project Manager




RE: 120 Days Safety Report

In reference to NDA 21-112 for the drug product containing 0.01% Fluocinolone acetonide, 4.0% Hydroquinone, 0.05% Tretinoin, there are no on-going follow-up or new studies currently in progress. The clinical studies performed for this product have been completed and concluded prior to the submission of the NDA.

This letter is to notify the FDA that the safety analysis on all studies have been reported under the NDA submission, and that the 120-day safety report does not apply.


Rosario G. Ramirez
Medical/Regulatory Affairs

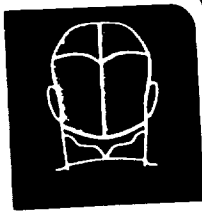

Jerry S. Roth
F

120 day
see 9/9/99

2050 South Mellonville Avenue • Sanford, Florida 32773 • 407-323-1887 • FAX: 407-649-9213

ORIGINAL

Hill Derma



ceuticals, Inc.

NEW CORRESP

NC

"The Scalp Company"

— Cream
— NDA 21-112

September 13, 1999

Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd.
Rockville, MD 20850
Attn: Ms. Vickey Lutwak
Project Manager

- RE: 1. Additional Information: Case report forms
Baseline photos
2. Requested Study Drugs

This submission contains the following items:

1. 3 copies of the requested additional case report forms (74 MAH/Torok, 78 CCD/Torok, 02 BJ/Wieder, 53 JNK/Wieder);
2. Baseline photographs included in the Reviewer Copy
3. Samples of the test drugs used in the clinical trials, with active contents identified for each tube.

Photographs were not taken for Dr. Willis' patients. Patients 14 IB, 43 DBF, 49MHJ, 50 CLJ, 59 LEW, 78 MB do not have photos as these patients were from Dr. Willis' study center.

A desk copy of volume 1.3 of the original NDA submission is also submitted for the Microbiology reviewers.

Respectfully,

Rosario G. Ramirez
Rosario G. Ramirez
Medical/Regulatory Affairs



• 407-323-1887 • Fax: 407-649-9213

1000 West Orange Avenue • Sanford, Florida 32761

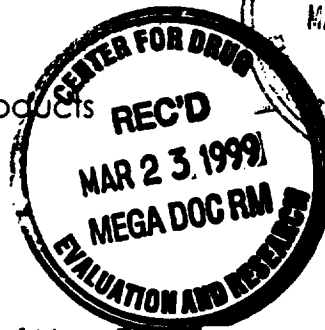
2650 South Mellonville Avenue • Sanford, Florida 32773 • 407-323-1887 • Fax: 407-649-9213



"The Scalp Company"

March 19, 1999

Jonathan K. Wilkin, MD
Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd. HFD-540
Rockville, MD 20850



RE: NDA 21,112, application for approval of New Drug _____ Cream for the treatment of individuals (Skin phototypes II and III) with Cutaneous Melanosis

Dear Dr. Wilkin:

Hill Dermaceuticals, Inc., is submitting a full new drug application for _____ NDA 21,112, for the indication, cutaneous melanosis. This application contains all the required sections of a full application, CFR section 314.50

The clinical study conducted for _____ consists of well-controlled clinical trials (Study 1--EAST and Study 2--WEST) carried out by independent investigators. The East study was conducted by Isaac Willis, MD of Atlanta, Georgia, Helen Torok, MD of Medina, Ohio and Neil Brody, MD of Manhasset, New York. The West study was conducted by A. Paul Kelly, MD and Joshua Wieder, MD of Los Angeles, California. The clinical trials and statistical analysis reports were written in such a way that the East (Study 1) study is considered one well-controlled trial and the West (Study 2) study as another well controlled trial. The investigators belonging to their respective regions were combined to make up one report. A statistical analysis was also made for all centers combined as one (Studies 1 & 2).

_____ contains 3 active components, Fluocinolone acetonide 0.01%, Hydroquinone 4.0%, and Tretinoin 0.05%, in a hydrophilic base. The clinical studies performed compared this triple combination product to formulations of any 2 combinations of its active ingredients, i.e. fluocinolone + hydroquinone; fluocinolone + tretinoin; hydroquinone + tretinoin. Statistical analysis showed a significantly better results for _____ than any of the other treatment groups, for both primary efficacy evaluation and secondary efficacy evaluation.

TRI-HY-RET/ NDA 21,112

Dr. Wilkin

Page 2

Safety data collected showed that erythema was the most frequently experienced adverse event, followed by peeling. The frequency of these reactions had very little difference between treatment groups, as these adverse events are expected reactions from the product due to the inherent irritancy property of tretinoin and hydroquinone. It is well to mention that the group experienced mostly mild cases of erythema.

The chemistry, manufacturing and controls section of this submission complied with all the requirements of a full new drug applications, section 314.50 of the Code of Federal Regulations.


Statistical data sets and the proposed package labeling have been placed in disks and will be made available upon your request.

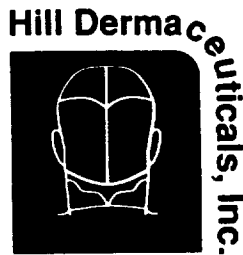
We respectfully request priority review of this submission. We have attached a copy of the application letter to the Health and Human Services pertaining to the application fee. An application fee has been submitted for this NDA.

Should you have any questions concerning this NDA, please call Rosario Ramirez, MD, clinical study coordinator, at 407-323-1887.

Thank you for your continued cooperation.

Sincerely,


Jerry S. Roth
President
Hill Dermaceuticals, Inc.



CENTRAL
NC

2000 SOUTH MEMORIAL AVENUE • SANFORD, FLORIDA 32773 • 407-323-1887 • Fax: 407-649-9213

VIA FEDERAL EXPRESS

"The Scalp Company"

April 21, 1999

Food and Drug Administration
Center for Drug Evaluation and Research
Division of Dermatologic and Dental Drug
Products, HFD-540
Attention: Document Room
9201 Corporate Blvd.
Rockville, MD 20850-3202



Re: _____ (fluocinolone acetonide 0.01%/hydroquinone4%/tretinoin 0.05%) Cream
Your Reference Number: 21-112

To Whom It May Concern:

We have received your letter of April 16, 1999 informing us that you received our new drug application (NDA) for _____ and that it will either be filed on May 21, 1999, or you will notify us to the contrary by May 21, 1999.

For the sake of clarity, we are writing to reiterate that, prior to receiving your April 16 correspondence, we submitted payment in full for the User Fees. Two checks written on Hill Dermaceuticals Licensing Account (Check Nos. 0276 and 0277), payable to The Food and Drug Administration in the amount of \$136,141.00 each, were sent via Federal Express to the Mellon Bank in Pittsburg, Pennsylvania. Please refer to the copies which are enclosed.

We would like to further reiterate that we sent a request for a waiver of the pediatric study requirement in the Archival copy Volume 1.1, NDA 21-112, dated March 19, 1999, including supporting information and documentation which appear on the 17th page from the User Fee Cover Sheet (top page), copies of which are enclosed for your reference.

Should you require additional information, or wish to discuss this matter further, please contact me at (800) 344-5707.

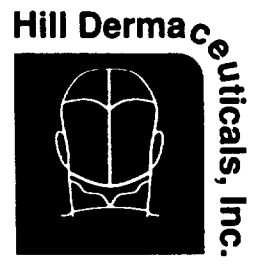
Very truly yours,

Jerry S. Roth
President

JSR:med

cc: Mary Jean Kozma-Fornaro - Supervisor, Project Management Staff

ORIGINAL

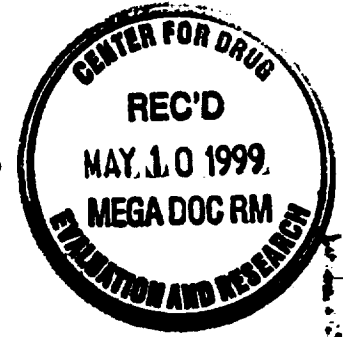


"The Scalp Company"

Cream
NDA 21-112

April 29, 1999

Jonathan K. Wilkin, MD
Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research **NEW CORRESP**
Food and Drug Administration
9201 Corporate Blvd. , HFD-540
Rockville, MD 20850
Attn: Mr. Ernie Pappas
Chemistry Division



RE: _____ NDA 21-112
Amendment to a Pending Application.

Dear-Mr. Pappas:

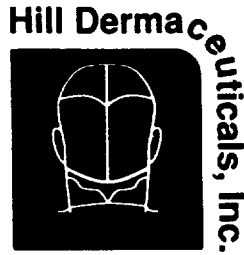
In response to your request for the location and address of the actual manufacturing plant for Tretinoin USP, we have taken every effort to follow-up and expedite acquisition of this information from _____ representative _____ has kindly provided the address for the manufacturing plant for Tretinoin _____

The attachment to FDA Form 356h has been revised to show the above address for the drug substance Tretinoin. This revision is submitted as supplement to NDA 21-112, _____ Cream. Please advise if there is any other requirement.

Sincerely,
R.G. Ramirez
Rosario G. Ramirez
Medical/Regulatory Affairs

cc: Ms Mary Jean Kozma-Fornaro

2650 South Mellonville Avenue • Sanford, Florida 32773 • 407-323-1887 • Fax: 407-649-9213



ORIGINAL

— Cream
— NDA 21-112

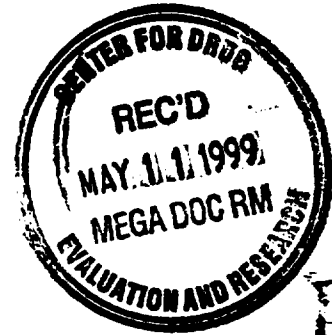
"The Scalp Company"

NEW CORRESP

April 29, 1999

NC

Jonathan K. Wilkin, MD
Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd. , HFD-540
Rockville, MD 20850
Attn: Ms. Mary Jean Kozma-Fornaro



RE: — Cream, NDA 21-112
General Correspondence

Dear Ms. Fornaro:

We would like to verify the pages for the *in-vitro* study (*In vitro* Percutaneous Absorption and Cutaneous Disposition of — Cream Across Intact Human Skin) submitted under the Human Pharmacokinetic and Bioavailability Section (biopharm) which is Item 6 in the original NDA submission. The pages for the summary of the *in-vitro* study are 6 0003 - 0004; the full report for this study is located in pages 6 0021 to 6 0046.

Item 6 is included in volume 5 of 7 of the archival copy.

Please advise as to acceptability of the submitted information on the biopharmaceutic section for filing purposes. We are also requesting further guidance on the matter of the *in vivo* study, as discussed earlier in the teleconference. We are presently looking into laboratory facilities for this study.

Thank you for your patience and guidance.

Sincerely,


Rosario G. Ramirez
Med/Regulatory

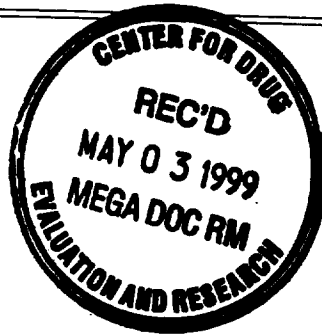
Jerry Roth

2050 South Westchase Avenue • Sanford, Florida 32773 • 407-323-1887 • FAX: 407-649-9213



BC ✓
ORIGINAL

V. Herdick
E. Pappas



ORIG. SUBMISSIONS

April 29, 1999

Mary Jean Kozma-Fornaro
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd. HFD-540
Rockville, MD 20850

*Added to
Jochem's
app. materials
4/29/99*

RE: NDA 21,112

Dear Ms. Kozma-Fornaro:

Enclosed is the copy of volume 1.6 of the _____ Cream NDA Submission and another copy of the abbreviated table of contents, to assist Mr. Pappas in finding the room temperature stability information of the clinical investigation formulations of _____ Cream found in volume 1.6, as promised.

If you have any further questions, please feel free to call. (407) 323-1887

Thank you,

Marianna Arsts



DRUG NEW CORRES
NC

April 29, 1999

Mary Jean Kozma-Fornaro
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd. HFD-540
Rockville, MD 20850

RE: — Cream NDA 21,112

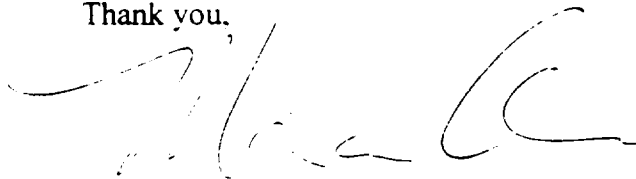
Dear Ms. Kozma-Fornaro:

The following is an abbreviated table of contents, which will assist Mr. Pappas in finding the room temperature stability information of the clinical investigation formulations of — Cream found in volume 1.6.

We are sending a copy of volume 1.6, as well another copy of this abbreviated table of contents to you by Federal Express.

If you have any further questions, please feel free to call. (407) 323-1887

Thank you,



Marianna Arsts

ORIGINAL

Stability Information for Formulations

Cream Clinical Investigation

Page Number

Drug Formulation Summary Table 7 0249

Cream Investigational Formulation

97K065 / K970082

Initial Test Results

Assay for Active Ingredients 7 0269

Assay for Preservatives..... 7 0270

Microbial Testing / Preservative Effectiveness Testing 7 0271

Room Temperature Stability Test Results..... 7 0279

Tretinoin – Hydroquinone Investigational Formulation

(Red) 12/9/97 \ 12/10/97

Initial Test Results

Assay for Active Ingredients 7 0337

Assay for Preservatives..... 7 0338

Microbial Testing / Preservative Effectiveness Testing 7 0339

Room Temperature Stability Test Results..... 7 0343

Tretinoin – Fluocinolone Acetonide Investigational Formulation

(Blue) 12/10/97 \ 12/11/97

Initial Test Results

Assay for Active Ingredients 7 0367

Assay for Preservatives..... 7 0368

Microbial Testing / Preservative Effectiveness Testing 7 0369

Room Temperature Stability Test Results..... 7 0373

Hydroquinone – Fluocinolone Acetonide Investigational Formulation

(Black) 12/11/97 \ 12/12/97

Initial Test Results

Assay for Active Ingredients 7 0397

Assay for Preservatives..... 7 0398

Microbial Testing / Preservative Effectiveness Testing 7 0399

Room Temperature Stability Test Results..... 7 0403

ATTACHMENT to 356h

CHEMICAL NAME

Fluocinolone acetonide: **pregna-1,-4-diene-3,20-dione, 6,9-difluoro-11,21 dihydroxy- 16,17-[[1-methylethylidene)bis(oxy)]-, (6 α ,11 β ,16 α)-.**

Hydroquinone: **1,4-benzenediol**

Tretinoin: **(all-E)-3,7-dimethyl-9-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2,4,6,8-nonatetraenoic acid**

ESTABLISHMENT INFORMATION

Locations of manufacturing, packaging and control sites for drug substances and drug product:

Drug Product: Cream

Location: HILL DERMACEUTICALS, INC.
(Establishment Registration Number: 1036365/ORL)
2650 South Mellonville Avenue
Sanford, Florida 32773

Contact: Jerry Roth
Telephone: (407) 323-1887

Drug Substance: Fluocinolone acetonide USP Drug Master File Number:

Location:

Contact:

Telephone:

Drug Substance: Hydroquinone USP Drug Establishment Registration

Location:

Contact:

Telephone:

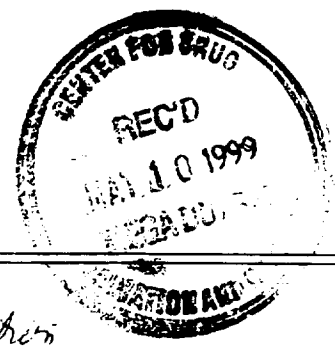
Drug Substance: Tretinoin USP Drug Master File Number

Location:

Contact:

5/10/99 Han Sun & My

① requested East & West efficacy data presented separately
② Need Safety



③ data separate *Hydroflon*
④ will find out tomorrow on previous location
"The Scalp Company"

— Cream
— NDA 21-112

May 7, 1999

Jonathan K. Wilkin, MD
Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd. , HFD-540
Rockville, MD 20850

RE: — Cream, NDA 21-112
General Correspondence: Response to deficiencies with NDA application.

Dear Dr. Wilkin:

The enclosed archival copy, review copy and desk copy are submitted in response to the deficiencies noted in several sections of the new drug application. The following itemizes the list of deficiency issues addressed in this submission.

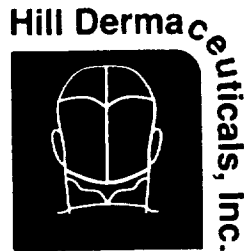
In reference to the original submission, the following volume number follow the sequence of the originally submitted 7- volume Archival Copy.

Volume 8 contains:

1. Integrated Summary of Safety Results, as requested.
2. The hard copy of the correspondence faxed to the Agency indicating the volume and page number of the assay test results on the formulations used in the clinical studies. The results contain initial assays and room temperature stability assays.
3. Stability summary forms on the Clinical Study Batch No. 97K065 / K970082.
4. Stability summary forms for the 3 test batches packaged in the 1 ounce tubes and those packaged in the 5 ounce tubes.

Volume 9 contains the full report of the Dermal Safety Studies:

- A. Protocol # 0056, Repeat Insult Patch Test comparing — to its vehicle
- B. Protocol # 0057, Photocontact Allergenicity Study on —
- C. Protocol # 0058, Phototoxicity Study on —
- D. Protocol # 0059, Repeat Insult Patch Test comparing each active ingredient in to its vehicle



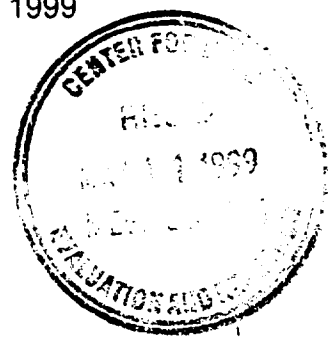
2000 South Westwind Avenue • Santa Rosa, Florida 32173 • 407-323-1887 • Fax: 407-649-9213

— Cream
— NDA 21-112

"The Scalp Company"

May 10, 1999

Jonathan K. Wilkin, MD
Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd. , HFD-540
Rockville, MD 20850
Attn: Ms. Mary Jean Kozma-Fornaro



RE: — NDA 21-112
General Correspondence: Disk for Statistical Database.

Dear Ms. Fornaro:

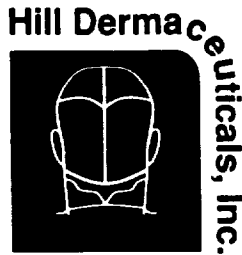
Enclosed, please find the disk for the — , cream clinical efficacy and safety studies statistical database. A printout of this database is included in the submission of May 8, 1999. Nevertheless, I have included another copy of the printout for this disk.

Thank you.

Sincerely,

Rosario G. Ramirez
Medical/Regulatory Affairs

**APPEARS THIS WAY
ON ORIGINAL**



ORIGINAL

"The Scalp Company"

— Cream
— NDA 21-112

May 11, 1999

Jonathan K. Wilkin, MD
Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd. , HFD-540
Rockville, MD 20850
Attn: Biostatistics Department



RE: _____ .n, NDA 21-112
General Correspondence: Safety analysis, Statistical Section

Dear Sir:

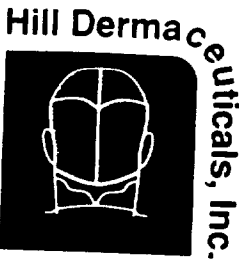
Enclosed, please find 3 copies (Archival, Review and Desk copies) of the safety report for East (Study 1) and West (Study 2) studies for the statistical section of NDA 21-112. The summary of the adverse events were presented for each study.

Thank you.

Sincerely,

Rosario G. Ramirez
Rosario G. Ramirez
Medical/Regulatory Affairs

cc: Ms. Mary Jean Kozma-Fornaro
Project Manager Supervisor



ORIGINAL

BM

"The Scalp Company"

Cream
NDA 21-112

OFFICE AMENDMENT

May 19, 1999



Jonathan K. Wilkin, MD
Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd. , HFD-540
Rockville, MD 20850
Attn: Biostatistics Department

RE: _____, NDA 21-112
General Correspondence

Dear Dr. Wilkin:

In response to the enclosed letter from the Agency regarding adverse events information and case report forms on the clinical studies, please find tabulated data for:

1. Adverse events information pursuant to Clin guidelines III.B.10.b.5. The adverse events were tabulated according to Investigator. ✓
2. Tabulated absolute number of patients per adverse event.
3. Tabulated safety and efficacy data on the long term follow-up period after 8 weeks double-blind. ✓
4. Resubmission of case report forms with page numbers. ✓

Item number 1 references the page numbers on the case report forms.

Enclosed are 3 copies of the submission. Thank you.

Sincerely,

Rosario G. Ramirez
Medical/Regulatory Affairs

cc: Ms. Mary Jean Kozma-Fornaro

2630 South Melbourne Avenue • Sanford, Florida 32773 • 407-323-1887 • Fax: 407-649-9213

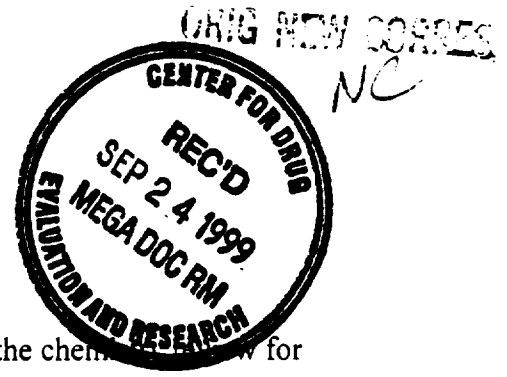
Information



"The Scalp Company"

June 4, 1999

Mary Jean Kozma-Fornaro
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd. HFD-540
Rockville, MD 20850



Dear Ms. Kozma-Fornaro:

The information requested by Dr. De Camp to continue the chemical review for _____ (NDA 21-112) is as follows:

1. The difference between the tables was the Identification Test for Hydroquinone. It was an editing mistake and a revised table for Vol. 1.3 Page Number: 4 0764 has been included with this letter.
2. To show the compatibility between Hydroquinone, Tretinoin and Fluocinolone Acetonide three different formulations were used. All formulations have the same active ingredient concentrations as in
 - A) Tretinoin and Hydroquinone Cream (Red)
 - B) Tretinoin and Fluocinolone Acetonide Cream (Blue)
 - C) Fluocinolone Acetonide and Hydroquinone Cream (Black)

These formulations were placed on room temperature stability. There is 12 months stability on each formula and also can be found in the Clinical Data Section. The page numbers are as follows:

- a) Tretinoin and Hydroquinone Cream (Red) 7 0343 to 7 0344
- b) Tretinoin and Fluocinolone Acetonide Cream (Blue).....7 0373 to 7 0374
- c) Fluocinolone Acetonide and Hydroquinone (Black)7 0403 to 7 0404

Additional room temperature stability will be available in June for these formulations and will be submitted.

ORIGINAL

South Melbourne Avenue • Sanford, Florida 32773 • 407-323-1887 • FAX 407-643-9233

3. Room Temperature long-term stability on _____ is on going.
Additional stability data will be available in August and will be submitted.

If you have any further questions, please feel free to call. (407) 323-1887

Thank you,

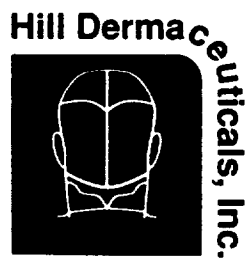


Nancy Puglia

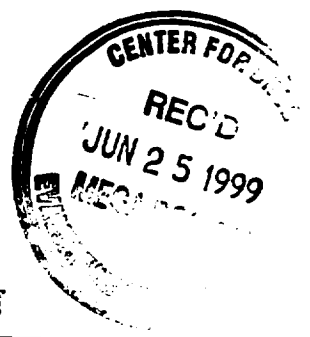
Quality Assurance / Chemical Engineer

**APPEARS THIS WAY
ON ORIGINAL**

ORIGINAL



BC



ORIG AMENDMENT

"The Scalp Company"

— Cream
— NDA 21-112


June 23, 1999

Jonathan K. Wilkin, MD
Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd. , HFD-540
Rockville, MD 20850
Attn: Chemistry Department

RE: — NDA 21-112
General Correspondence

This submission refers to the information request from the chemistry department, FDA correspondence dated May 26, 1999 (copy enclosed). The response letter from Nancy Puglia (lab manager), and corrected specifications and tests table faxed to the agency on June 4, 1999, are included. Also included is a copy of the original submitted table (vol 1.1, pg 3 0021) for in-process, finished product, and stability specifications and tests.

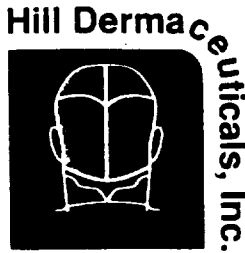
Enclosed are 3 copies of the submission. Thank you.

Sincerely,

Rosario G. Ramirez
Medical/Regulatory Affairs

cc: Ms. Mary Jean Kozma-Fornaro
Project Manager Supervisor

Ms. Victoria Lutwak
Project Manager

2650 South Mellonville Avenue • Sanford, Florida 32733 • 407-323-1887 • Fax: 407-649-9213



"The Scalp Company"

— / NDA 21-112
—

ORIG NEW CORRES

August 19, 1999

NC

Jonathan K. Wilkin, MD
Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd., HFD-540
Rockville, MD 20850
ATTN: Ms. Vickey Lutwak
Project Manager



RE: Response to Chemistry request.

We are requesting comments and advise with the enclosed itemized list. The list includes planned actions as well as actions taken regarding specific issues in the CMC section.

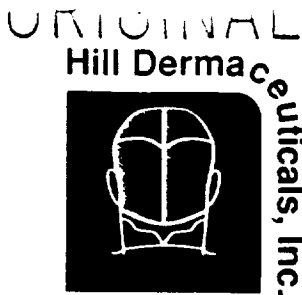
We request further guidance if the information provided is not adequate. We would like a teleconference before August 27. Thank you for your patience and understanding.

Sincerely,
Rosario Ramirez
Rosario G. Ramirez
Medical/Regulatory Affairs

Nancy Puglia
Nancy Puglia
Plant Manager / Lab Supervisor

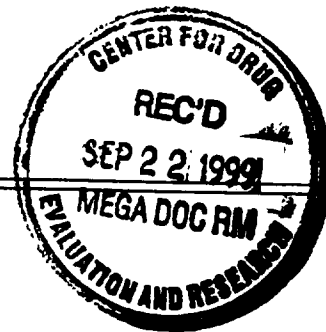
Enc.

ORIGINAL



NEW CORRESP

NC



"The Scalp Company"

Cream
NDA 21-112

August 27, 1999

Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd.
Rockville, MD 20850
Attn: Ms. Vickey Lutwak
Project Manager

RE: Response to faxed request

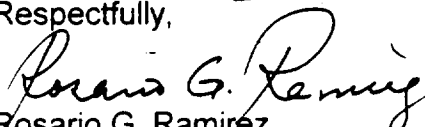
The requested information, photographs and samples shall be provided no later September 9, 1999. To be included in this submission are the following:

1. Baseline photographs of the patients specified in the list provided by the Agency.
2. Test drug samples, the triad and the 3 dyads.
3. Additional Case Report Forms
4. Electronic format of the statistical report (pages 8 0006 - 8 0027), integrated summary of safety, and the integrated summary of efficacy.
5. Letter on the '120-days safety report'.

At this time, there is no plan to include a patient package insert for this drug product.

Regarding the licensing of the drug product, this information will be forwarded to FDA when it becomes available. Thank you.

Respectfully,


Rosario G. Ramirez
Medical/Regulatory Affairs

DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION

Form Approved: OMB No. 0910-0338
Expiration Date: April 30, 2000
See OMB Statement on page 2.

APPLICATION TO MARKET A NEW DRUG, BIOLOGIC,
OR AN ANTIBIOTIC DRUG FOR HUMAN USE

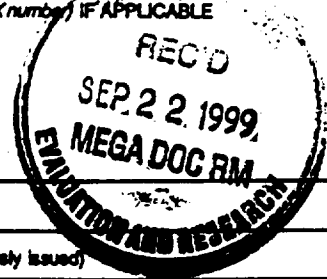
(Title 21, Code of Federal Regulations, 314 & 601)

FOR FDA USE ONLY

APPLICATION NUMBER

APPLICANT INFORMATION

NAME OF APPLICANT HILL DERMACEUTICALS, INC	DATE OF SUBMISSION 21 SEPTEMBER 1999
TELEPHONE NO. (Include Area Code) (407) 323 - 1887	FACSIMILE (FAX) Number (Include Area Code) (407) 649 - 9213
APPLICANT ADDRESS (Number, Street, City, State, Country, ZIP Code or Mail Code, and U.S. License number if previously issued): 2650 South Mellonville Avenue Sanford, FL 32773 USA	AUTHORIZED U.S. AGENT NAME & ADDRESS (Number, Street, City, State, ZIP Code, telephone & FAX number) IF APPLICABLE



PRODUCT DESCRIPTION

NEW DRUG OR ANTIBIOTIC APPLICATION NUMBER, OR BIOLOGICS LICENSE APPLICATION NUMBER (if previously issued)

ESTABLISHED NAME (e.g., Proper name, USP/USAN name) Fluocinolone acetonide, Hydroquinone, Tretinoin	PROPRIETARY NAME (trade name) IF ANY	
CHEMICAL/BIOCHEMICAL/BLOOD, PRODUCT NAME (if any) Please see attachment	CODE NAME (if any) N/A	
DOSAGE FORM: 1 oz. (28 grams)	STRENGTHS: 0.01%, 4.0%, 0.05%	ROUTE OF ADMINISTRATION: Topical

(PROPOSED) INDICATION(S) FOR USE:
Cutaneous melanosis

APPLICATION INFORMATION

APPLICATION TYPE (check one) NEW DRUG APPLICATION (21 CFR 314.50) ABBREVIATED APPLICATION (ANDA, AADA, 21 CFR 314.94)
 BIOLOGICS LICENSE APPLICATION (21 CFR part 601)

IF AN NDA, IDENTIFY THE APPROPRIATE TYPE 505 (b) (1) 505 (b) (2) 507

IF AN ANDA, OR AADA, IDENTIFY THE REFERENCE LISTED DRUG PRODUCT THAT IS THE BASIS FOR THE SUBMISSION:
Name of Drug _____ Holder of Approved Application _____

TYPE OF SUBMISSION (check one)
 ORIGINAL APPLICATION AMENDMENT TO A PENDING APPLICATION RESUBMISSION
 PRESUBMISSION ANNUAL REPORT ESTABLISHMENT DESCRIPTION SUPPLEMENT SUPAC SUPPLEMENT
 EFFICACY SUPPLEMENT LABELING SUPPLEMENT CHEMISTRY MANUFACTURING AND CONTROLS SUPPLEMENT OTHER

REASON FOR SUBMISSION RESPONSE TO FAXED REQUEST

PROPOSED MARKETING STATUS (check one) PRESCRIPTION PRODUCT (Pd) OVER THE COUNTER PRODUCT (OTC)

NUMBER OF VOLUMES SUBMITTED _____ THIS APPLICATION IS PAPER PAPER AND ELECTRONIC ELECTRONIC

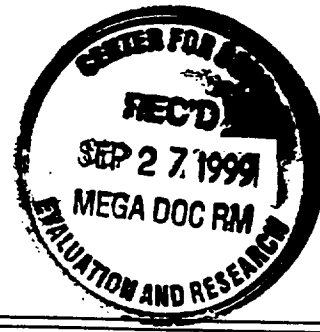
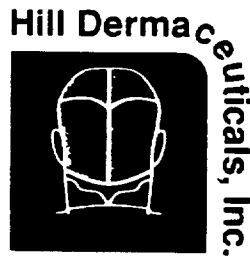
ESTABLISHMENT INFORMATION

Provide locations of all manufacturing, packaging and control sites for drug substance and drug product (continuation sheets may be used if necessary). Include name, address, contact, telephone number, registration number (CFR), DMF number, and manufacturing steps and/or type of testing (e.g. Final dosage form, Stability testing) conducted at the site. Please indicate whether the site is ready for inspection or, if not, when it will be ready.

Please see attachment

Cross References (list related License Applications, INDs, NDAs, PMAs, 510(k)s, IDEs, BMFs, and DMFs referenced in the current application)

ORIGINAL



"The Scalp Company"
NEW CORRESP
NC

NDA 21-112
Cream

September 24, 1999

Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd., HFD-540
Rockville, MD 20850
ATTN: Ms. Vickey Lutwak
Project Manager

RE: Proposed Trade Names for the combination drug product:
Fluocinolone acetonide 0.01%, Hydroquinone 4.0%, Tretinoin 0.05%
NDA 21-112

The following names are hereby submitted for the above combination drug product: Fluocinolone acetonide 0.01%, Hydroquinone 4.0%, Tretinoin 0.05%, NDA 21-112

1. _____

2. _____

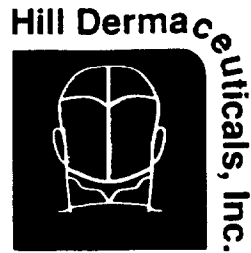
Sincerely,

Rosario G. Ramirez
Medical/Regulatory Affairs

1111 NICHOLS AVENUE • SANFORD, FLORIDA 32773 • 407 323-1887 • FAX: 407-649-9213

ORIGINAL

BM



"The Scalp Company"

NDA 21-112
— Cream

NDA ORIG AMENDMENT

September 27, 1999

Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd., HFD-540
Rockville, MD 20850
ATTN: Ms. Vickey Lutwak
Project Manager

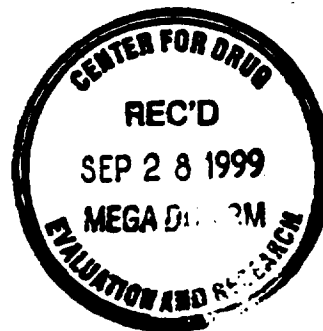
RE: Response to the medical reviewer's request for photographs, and additional case report forms.

The following is a resubmission of the Sept. 13, 1999 sponsor response letter and additional information requested, the archival and 2 copies. This submission includes photographs of specified patients from the clinical studies, and copies of additional requested case report forms.

A copy of the Sept. 13, 1999 sponsor letter and faxed request from the FDA is enclosed. Thank you.

Sincerely,

Rosario G. Ramirez
Medical/Regulatory Affairs

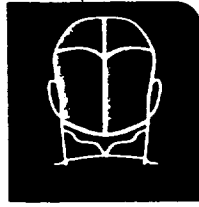


Enc.

ORIGINAL

Hill Derma

ceuticals, Inc.



NEW CORRESP

NC

2000 South Mellonville Avenue • Sanford, Florida 32773 • 407-323-1887 • Fax: 407-649-9213

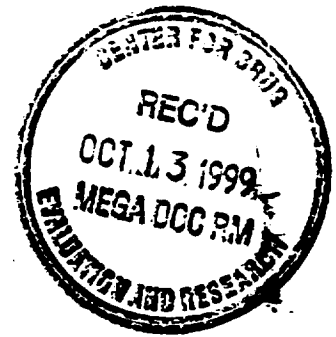
"The Scalp Company"

NDA 21-112

CREAM

October 12, 1999

Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd., HFD-540
Rockville, MD 20850
ATTN: Ms. Vickey Lutwak
Project Manager



RE: Requested photographs of all male patients from clinical studies.

As requested in your earlier telephone conversation, photographs of all male patients from the East and West clinical studies are enclosed, the archival and two copies. The following is a list of patient identification numbers, patient initials and appropriate investigator group for the above-mentioned photographs. There were no male patients in Dr. Helen Torok's clinical study group.

<u>Investigator Group</u>	<u>Patient ID #/Patient Initials</u>
Neil Brody, MD	#)
Joshua Wieder, MD	
Paul Kelly, MD	

The above selected photographs are from the initial visit. Please do not hesitate to

↑
APPEARS THIS WAY
ON ORIGINAL



ORIGINAL

BM

"The Scalp Company"

0396 AMENDMENT

NDA 21-112
Cream

October 25, 1999

Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd., HFD-540
Rockville, MD 20850
ATTN: Ms. Vickey Lutwak
Project Manager

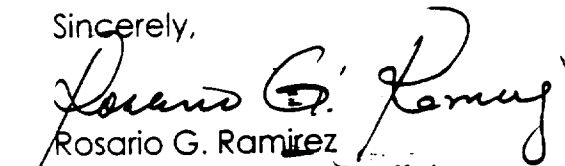


RE: Case Reports, Protocol 24

Enclosed, please find copies of the requested case report documentation, pages 1 and 2, from the East and West studies.

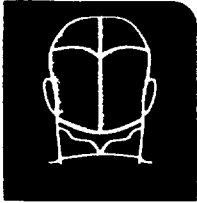
The content of this submission includes all patients enrolled in all 5 study sites, divided according to investigator. The enclosed first 2 pages of each case report are sequentially arranged according to patient number.

Sincerely,


Rosario G. Ramirez
Medical/Regulatory Affairs

ORIG AMENDMENT

BC



"The Scalp Company"

NDA 21-112
— Cream

October 25, 1999

Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd. , HFD-540
Rockville, MD 20850
ATTN: Ms. Vickey Lutwak
Project Manager

RE: Requested Chemistry Information

The executed manufacturing batches placed on primary stability are not the same as the manufactured batch used in the clinical studies.

The batch used in the clinical studies can be found in Archival volume 1.6, Item 7, Appendix 6, starting at page 7 0248. This section includes manufacturing batch records, stability summary forms, certificates of analysis, and initial test results for batch number 97K065 / K970082. We will gladly forward a copy of Appendix 6 section for Mr. Pappas if he so wishes.

The executed manufactured batch size was — The intended commercial batch size is —

Sincerely,

Rosario G. Ramirez
Rosario G. Ramirez
Medical/Regulatory Affairs

ORIGINAL

NC



"The Scalp Company"

NDA 21-112
Cream

NEW CORRESP

October 28, 1999

Division of Dermatologic and Dental Drug Products
 Center for Drug Evaluation and Research
 Food and Drug Administration
 9201 Corporate Blvd., HFD-540
 Rockville, MD 20850
 ATTN: Ms. Vickey Lutwak
 Project Manager



RE: General Correspondence: Requested Information

The tabulated data enclosed is provided in referencé to the information request from the Medical officer regarding the clinical studies performed for _____

The requested information include date of starting, date of completion, and date of data unblinding for Study 24 East, Study 24 West, Contact irritation and sensitization potential - 0056, Photoallergenicity test - 0057, Phototoxicity test - 0058, and Repeat insult patch test - 0059.

Sincerely,

Rosario G. Ramirez
 Rosario G. Ramirez
 Medical/Regulatory Affairs

2650 South Mellonville Avenue • Sanford, Florida 32773 • 407-323-1887 • Fax: 407-649-9213

ORIGINAL



NEW CORRESP

NC

"The Scalp Company"

NDA 21-112

— Cream

November 4, 1999

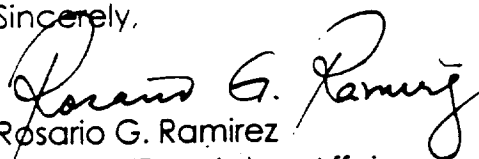
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd., HFD-540
Rockville, MD 20850
ATTN: Ms. Vickey Lutwak
Project Manager



RE: Protocol # 24, West Study patient # 100

Enclosed, please find 3 copies (archival plus 2 copies) of the missing case report for patient # 100 of the West study under Dr. A. Paul Kelly. As requested previously, only the first 2 pages of the case report is submitted.

Sincerely,


Rosario G. Ramirez
Medical/Regulatory Affairs

2690 South Mellonville Avenue • Sanford, Florida 32773 • 407-323-1887 • Fax: 407-649-9213



ORIGINAL

NC

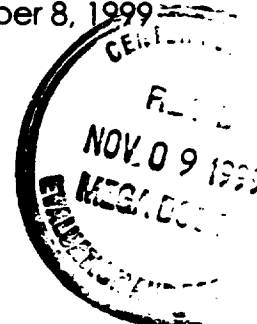
NEW CORRESP

"The Scalp Company"

NDA 21-112
— Cream

November 8, 1999

Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd., HFD-540
Rockville, MD 20850
ATTN: Ms. Vickey Lutwak
Project Manager



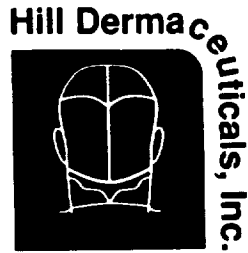
RE: Proposed Trade Names for the combination drug product
Fluocinolone acetonide 0.01%, Hydroquinone 4.0%, Tretinoin 0.05%
NDA 21-112

The following names are hereby submitted for the above combination drug product: Fluocinolone acetonide 0.01%, Hydroquinone 4.0%, Tretinoin 0.05%,
NDA 21-112 (IND —)

1. **TRILUMA**
2. —

Sincerely,


Rosario G. Ramirez
Medical/Regulatory Affairs



"The Scalp Company"

NDA 21-112
_____ Cream

December 16, 1999

Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd., HFD-540
Rockville, MD 20850
ATTN: Ms. Vickey Lutwak
Project Manager

NDA ORIG AMENDMENT

BC

RE: Additional Information for Chemistry, Manufacturing and Controls
Section of NDA 21-112

Reference is made to the CMC section of NDA 21-112. _____ Cream
(0.01% Fluocinolone acetonide, 4.0% Hydroquinone, 0.05% Tretinoin),
regarding the request for information to demonstrate chemical
compatibility of the active ingredients, and to show that the analytical
assay methods are stability indicating.

1. Validation of the analytical test methods to assay Tretinoin,
Hydroquinone and Fluocinolone acetonide in the presence of
potential degradation products, 1,4 benzoquinone, 13-cis-tretinoin,
11-cis-tretinoin, fluocinolone, and 21-methoxy-fluocinolone
acetonide.

Although each of the active ingredients in _____ Cream has its own
analytical assay method, the validation of each test method verified
that the active ingredient being assayed was quantitatively determined
with no interference from the degradation products of the tested active
ingredient, other active ingredients, degradation products of the other
active ingredients, or excipients found in the cream.

ORIGINAL

NDA 21-112

— Cream

Page 2

Dec. 16, 1999

2. Validation of the analytical assay method for each active component to demonstrate that the method is stability indicating.

The assay method for the individual active ingredient is specific for the wavelength of the active component, i.e. Fluocinolone acetonide = 254nm, Hydroquinone = 280 nm, and Tretinoin = 365 nm. To establish that each assay method is 'stability indicating', each method was run at 3 different wavelengths, 254 nm / 280 nm / 365 nm, and tested for each active component and their degradation products.

The results of the experimentation demonstrated that each method specific for an active component, e.g. fluocinolone acetonide = 254 nm, verified presence of the active component at a specific retention time, different from retention times of its degradation products, other active ingredients, and degradation products of other active ingredients. (Pages 3 - 7).

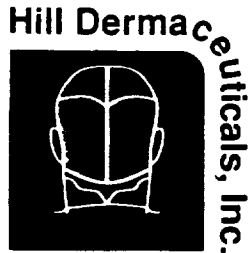
Each section of this submission is labeled accordingly for easy access. The chromatographic data are labeled according to the test performed.

We are confident that the information presented satisfies the chemistry questions. Thank you for your continued assistance and cooperation.

Sincerely,


Rosario G. Ramirez
Medical/Regulatory Affairs

**APPEARS THIS WAY
ON ORIGINAL**



NEW CORRESP

"The Scalp Company"

NDA 21-112
— Cream

January 5, 2000

Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd., HFD-540
Rockville, MD 20850
ATTN: Ms. Vickey Lutwak
Project Manager



*Oct 21
never submitted
to NDA -
asked sponsor
to submit
in Jan*

RE: Hard copy submission for request

Enclosed please find the letter providing information to the Agency, regarding the letter that was sent via facsimile but was inadvertently submitted as hard copies to the NDA. Herewith submitted are 3 copies to NDA 21-112, — Cream.

by the
ry. The
d as hard
id 2 copies,

Thank you for your kind understanding.

Sincerely,

Rosario G. Ramirez
Rosario G. Ramirez
Medical/Regulatory Affairs

BEST POSSIBLE COPY

Enc.



"The Scalp Company"

NDA 21-112
_____ Cream

October 21, 1999

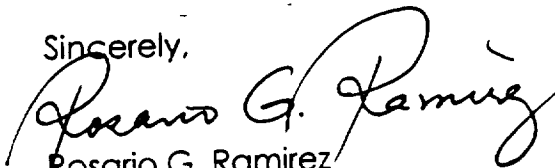
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd., HFD-540
Rockville, MD 20850
ATTN: Ms. Vickey Lutwak
Project Manager

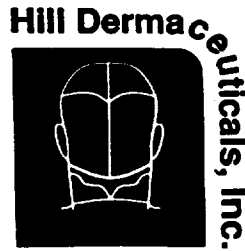
RE: _____

_____ provides the x-ray diffraction (XRD) analysis according to USP/NF methodology for magnesium aluminum silicate identification. Magnesium aluminum silicate, also known as Veegum k, is one of the components found in the triple combination drug product. _____

A copy of the methodology and results performed by the _____ can be found in NDA 21-112 Archival volume 1.2, Item 4 CMC, pages 4 0242 to 4 0245.

Sincerely,


Rosario G. Ramirez
Medical/Regulatory Affairs



DOSK
COPY

2650 South Mellonville Avenue • Sanford, Florida 32773 • 407-323-1887 • Fax: 407-649-9213

"The Scalp Company"

NDA 21-112
Cream

October 28, 1999

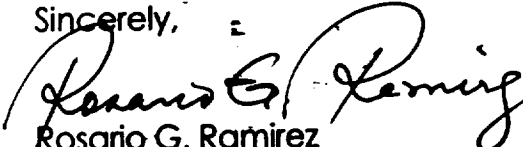
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd., HFD-540
Rockville, MD 20850
ATTN: Ms. Vickey Lutwak
Project Manager

RE: General Correspondence: Requested Information

The tabulated data enclosed is provided in reference to the information request from the Medical officer regarding the clinical studies performed for

The requested information include date of starting, date of completion, and date of data unblinding for Study 24 East, Study 24 West, Contact irritation and sensitization potential - 0056, Photoallergenicity test - 0057, Phototoxicity test - 0058, and Repeat insult patch test - 0059.

Sincerely,


Rosario G. Ramirez
Medical/Regulatory Affairs

Attachment to NDA 21-112

**General Correspondence Letter
October 28, 1999**

Protocol No.	Date Started	Date Completed	Date of Data Unblinding
Study 24, EAST	1 - 31 - 98	2 - 25 - 99	Unblinding of all patients occurred at the 8 th week of treatment. Start: 5 - 14 - 98 Last: 9 - 4 - 98
Study 24, WEST	3 - 17 - 98	2 - 23 - 99	Unblinding of all patients occurred at the 8 th week of treatment. Start: 5 - 12 - 98 Last: 10 - 1 - 98
Protocol 0056 Contact irritation and sensitization	8 - 25 - 97	10 - 24 - 97	11 - 4 - 97, double-blinded
Protocol 0057 Photoallergenicity test	10 - 3 - 97	12 - 8 - 97	NOT BLINDED
Protocol 0058 Phototoxicity test	9 - 22 - 97	9 - 26 - 97	9 - 26 - 97, single-blinded
Protocol 0059 Repeat insult Patch test	3 - 30 - 98	5 - 15 - 98	5 - 18 - 98, double-blinded

**APPEARS THIS WAY
ON ORIGINAL**



~~TYPE AMENDMENT~~
A2

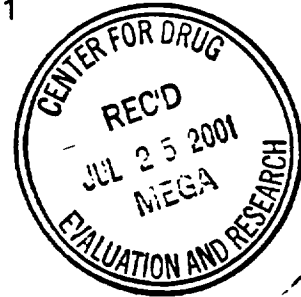
Dermaceuticals, Inc.

Specialty Dermatologicals for Children & Adults

NDA 21-112
TRI-LUMA Cream

July 20, 2001

Jonathan Wilkin, MD
Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd. , HFD-540
Rockville, MD 20850
Attn: Ms. Vickey Lutwak
Project Manager



RE: Amendment to a Pending Application
NDA 21-112 TRI-LUMA Cream

Dear Dr. Wilkin :

Hill Dermaceuticals, Inc. is submitting this amendment to a pending application for TRI-LUMA Cream, NDA 21-112, for the indication, melasma of the face. This amendment is in response to the non-approvable (NA) letter (January 21, 2000) to the original NDA submission. The contents of this amendment include the complete response to the deficiencies stated in the NA letter.

Two new adequate and well-controlled clinical trials for a Phase III efficacy and safety study have been conducted. These pivotal clinical studies support clinical and statistical claims of the drug for the treatment of melasma. The 6 months safety data report on more than 300 patients, in accordance with ICH E1A Guideline for Industry, The Extent of Population Exposure to Assess Clinical Safety, is included in this submission. The long-term (12 months) safety studies are presently ongoing. Upon completion, 12 months safety data will be submitted during the review period, prior to approval.

Clinical and statistical assessment of the pivotal efficacy studies show that TRI-LUMA Cream is significantly effective for the treatment of melasma. Superiority (statistical significance) of TRI-LUMA Cream over each dyad was demonstrated based on analysis of success rate as "clearing" of melasma, or score of zero. Safety evaluation, including the 6 months safety data, show that TRI-LUMA has a significantly favorable safety profile in 1029 patients in a total of 8 clinical studies.

ORIGINAL

Studies were conducted to assess irritation and sensitization potential of TRI-LUMA cream on more than 200 subjects. A preliminary 21-Day cumulative irritancy study was performed on 25 subjects to assess the irritancy potential of TRI-LUMA compared to the Hydroquinone-Tretinoin (HQ-RA) dyad, and the cream vehicle, under occlusive patch. Data from this preliminary study demonstrated significant irritation from the HQ-RA dyad as compared to TRI-LUMA and the vehicle.

The second study, Modified Draize Sensitization Study, was performed on 225 subjects. The patch used for this study is an occlusive plastic chamber held in place with paper tape. Results from the Modified Draize study showed the HQ-RA dyad to be more irritating than TRI-LUMA or the vehicle.

Separate clinical pharmacology studies were conducted to assess maximum systemic exposure after percutaneous absorption, and to evaluate HPA axis (adrenal) suppression after 8 weeks of daily use. The results of the *in vivo* maximum systemic exposure study demonstrated minimal absorption of the active components of TRI-LUMA as shown by the plasma assay analysis for each active component. The methods used to analyze each active component in the human plasma were developed and validated by _____ The assay methods used were high performance liquid chromatography (HPLC) and _____ to ensure that the lowest limit of quantitation for the active components were below endogenous levels. Validation reports for the human plasma assay is still under Quality Assurance review by ____ The report will be submitted to the Agency upon receipt and review by Hill Dermaceuticals, Inc..

The adrenal suppression study on 29 patients with melasma, treated for 8 weeks, showed that there was no clinically or statistically significant alteration of HPA axis function after 56 days of daily use. The Cortrosyn Stimulation Test kit was used as diagnostic tool, to assess Cortisol levels (pre- and post-stimulation levels) prior to the start of application, after 4 weeks, and at the 8-week completion time of the study.

Animal toxicology studies were conducted on rodents and non-rodent species, to address the reproductive and developmental effects of TRI-LUMA on rats and rabbits when administered dermally, and to assess dermal toxicity with chronic dermal application of TRI-LUMA on mini pigs. Pharmacokinetic studies were also performed on plasma samples from these animals. Assay methods for animal plasma analysis were developed and validated by _____

Since the original submission, the new Hydroquinone, USP Drug Master File (DMF) submitted to the Agency on December 16, 1999 has been under review. A DMF number has been made available to Hill Dermaceuticals for reference purposes.

Changes in chemistry, manufacturing and controls (CMC) were effected in response to the deficiencies listed in the NA letter. Microscopic examination (Particle Size Test) of the finished product to assure that no phase separation has occurred and that the product is free of particles, has been incorporated in the Finished Product Specification form. This test will also be performed as part of stability testing.

To test for homogeneity in the packaged unit, samples for assay will be taken from the top, middle and bottom portions of the tube. Homogeneity test will also be performed for the entire manufactured batch where samples for assay testing will be taken from the beginning, middle and end of the packaging run. This test has been incorporated in the In Process and Finished Product Specification forms.

Assay methods and validation reports have been submitted to the Agency on December 16, 1999. Data from assay tests have verified that the known degradants from each active component did not have any effect on the assay results. No new degradant were found.

Twenty-four months room temperature stability data has been collected. Stability results are included in the CMC section.

The internal coating () and end sealant () components of the aluminum tube used for packaging TRI-LUMA Cream has been found to be suitable for this purpose based on the results of the tests performed.

Other requirements for the CMC section, description, drawings and specifications for the closure system (cap), and DMF reference for the tube sealant () is included in this submission.

**APPEARS THIS WAY
ON ORIGINAL**

A new trade name, TRI-LUMA, is proposed for the combination drug product containing 0.01% fluocinolone acetonide, 4.0% hydroquinone and 0.05% tretinoin, in a cream base. The provisional names TRADENAME and/o: _____ although still referred to in some reports, shall be superseded by the new proposed trade name.

A claim for exclusivity has been previously submitted in the original NDA, file date March 19, 1999.

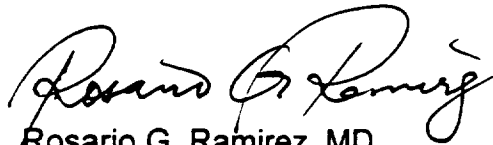
To the best of our abilities, all issues concerning the deficiencies outlined in the NA letter have been addressed and presented in this submission.

Thank you for your continued assistance and support. We are looking forward to a quick and favorable review.

Sincerely,



Jerry S. Roth
President



Rosario G. Ramirez, MD
Director, Medical/Regulatory Affairs

**APPEARS THIS WAY
ON ORIGINAL**

DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION

Form Approved: OMB No. 0910-0338
Expiration Date: March 31, 2003
See OMB Statement on page 2.

APPLICATION TO MARKET A NEW DRUG, BIOLOGIC,
OR AN ANTIBIOTIC DRUG FOR HUMAN USE

(Title 21, Code of Federal Regulations, Parts 314 & 601)

FOR FDA USE ONLY

APPLICATION NUMBER

APPLICANT INFORMATION

NAME OF APPLICANT

Hill Dermaceuticals, Inc.

DATE OF SUBMISSION

JULY 24, 2001

TELEPHONE NO. (Include Area Code)

407-323-1887

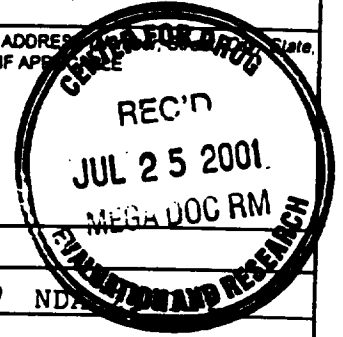
FACSIMILE (FAX) Number (Include Area Code)

407-649-9213

APPLICANT ADDRESS (Number, Street, City, State, Country, ZIP Code or Mail Code, and U.S. License number if previously issued):

2650 South Mellonville Avenue
Sanford, Florida 32773

AUTHORIZED U.S. AGENT NAME & ADDRESS (Number, Street, City, State, ZIP Code, telephone & FAX number) IF APPLICABLE



PRODUCT DESCRIPTION

NEW DRUG OR ANTIBIOTIC APPLICATION NUMBER, OR BIOLOGICS LICENSE APPLICATION NUMBER (If previously issued)

NDA

ESTABLISHED NAME (e.g., Proper name, USP/USAN name)

Please See Attachment

PROPRIETARY NAME (trade name) IF ANY

TRI-LUMA Cream

CHEMICAL/BIOCHEMICAL/BLOOD PRODUCT NAME (If any)

Please See Attachment

CODE NAME (If any)

N/A

DOSAGE FORM:

Cream

STRENGTHS:

Please See Attachment

ROUTE OF ADMINISTRATION:

Topical

(PROPOSED) INDICATION(S) FOR USE:

Melasma

APPLICATION INFORMATION

APPLICATION TYPE

(check one)

NEW DRUG APPLICATION (21 CFR 314.50)

ABBREVIATED NEW DRUG APPLICATION (ANDA, 21 CFR 314.94)

BIOLOGICS LICENSE APPLICATION (21 CFR Part 601)

IF AN NDA, IDENTIFY THE APPROPRIATE TYPE

505 (b)(1)

505 (b)(2)

IF AN ANDA, OR 505(b)(2), IDENTIFY THE REFERENCE LISTED DRUG PRODUCT THAT IS THE BASIS FOR THE SUBMISSION
Name of Drug: _____
Holder of Approved Application: _____

TYPE OF SUBMISSION (check one)

ORIGINAL APPLICATION

AMENDMENT TO A PENDING APPLICATION

RESUBMISSION

PRESUBMISSION

ANNUAL REPORT

ESTABLISHMENT DESCRIPTION SUPPLEMENT

EFFICACY SUPPLEMENT

LABELING SUPPLEMENT

CHEMISTRY MANUFACTURING AND CONTROLS SUPPLEMENT

OTHER

IF A SUBMISSION OF PARTIAL APPLICATION, PROVIDE LETTER DATE OF AGREEMENT TO PARTIAL SUBMISSION: _____

IF A SUPPLEMENT, IDENTIFY THE APPROPRIATE CATEGORY

CBE

CBE-30

Prior Approval (PA)

REASON FOR SUBMISSION

Full response to Non-Approvable Letter (to NDA)

PROPOSED MARKETING STATUS (check one)

PRESCRIPTION PRODUCT (Rx)

OVER THE COUNTER PRODUCT (OTC)

NUMBER OF VOLUMES SUBMITTED: _____

THIS APPLICATION IS

PAPER

PAPER AND ELECTRONIC

ELECTRONIC

ESTABLISHMENT INFORMATION (Full establishment information should be provided in the body of the Application.)

Provide locations of all manufacturing, packaging and control sites for drug substance and drug product (continuation sheets may be used if necessary). Include name, address, contact, telephone number, registration number (CFN), DMF number, and manufacturing steps and/or type of testing (e.g. Final dosage form, Stability testing) conducted at the site. Please indicate whether the site is ready for inspection or, if not, when it will be ready.

Please See Attachment

Cross References (list related License Applications, INDs, NDAs, PMAs, 510(k)s, IDEs, BMFs, and DMFs referenced in the current application)

This application contains the following items: (Check all that apply)

<input checked="" type="checkbox"/>	1. Index
<input checked="" type="checkbox"/>	2. Labeling (check one) <input checked="" type="checkbox"/> Draft Labeling <input type="checkbox"/> Final Printed Labeling
<input checked="" type="checkbox"/>	3. Summary (21 CFR 314.50 (c))
<input checked="" type="checkbox"/>	4. Chemistry section
<input checked="" type="checkbox"/>	A. Chemistry, manufacturing, and controls information (e.g., 21 CFR 314.50(d)(1); 21 CFR 601.2)
	B. Samples (21 CFR 314.50 (e)(1); 21 CFR 601.2 (a)) (Submit only upon FDA's request)
	C. Methods validation package (e.g., 21 CFR 314.50(e)(2)(i); 21 CFR 601.2)
<input checked="" type="checkbox"/>	5. Nonclinical pharmacology and toxicology section (e.g., 21 CFR 314.50(d)(2); 21 CFR 601.2)
<input checked="" type="checkbox"/>	6. Human pharmacokinetics and bioavailability section (e.g., 21 CFR 314.50(d)(3); 21 CFR 601.2)
	7. Clinical Microbiology (e.g., 21 CFR 314.50(d)(4))
<input checked="" type="checkbox"/>	8. Clinical data section (e.g., 21 CFR 314.50(d)(5); 21 CFR 601.2)
<input checked="" type="checkbox"/>	9. Safety update report (e.g., 21 CFR 314.50(d)(5)(vi)(b); 21 CFR 601.2)
<input checked="" type="checkbox"/>	10. Statistical section (e.g., 21 CFR 314.50(d)(6); 21 CFR 601.2)
<input checked="" type="checkbox"/>	11. Case report tabulations (e.g., 21 CFR 314.50(f)(1); 21 CFR 601.2)
<input checked="" type="checkbox"/>	12. Case report forms (e.g., 21 CFR 314.50 (f)(2); 21 CFR 601.2)
<input checked="" type="checkbox"/>	13. Patent information on any patent which claims the drug (21 U.S.C. 355(b) or (c))
	14. A patent certification with respect to any patent which claims the drug (21 U.S.C. 355 (b)(2) or (j)(2)(A))
	15. Establishment description (21 CFR Part 600, if applicable)
	16. Debarment certification (FD&C Act 306 (k)(1))
<input checked="" type="checkbox"/>	17. Field copy certification (21 CFR 314.50 (l)(3))
	18. User Fee Cover Sheet (Form FDA 3397)
<input checked="" type="checkbox"/>	19. Financial Information (21 CFR Part 54)
	20. OTHER (Specify)

CERTIFICATION

I agree to update this application with new safety information about the product that may reasonably affect the statement of contraindications, warnings, precautions, or adverse reactions in the draft labeling. I agree to submit safety update reports as provided for by regulation or as requested by FDA. If this application is approved, I agree to comply with all applicable laws and regulations that apply to approved applications, including, but not limited to the following:

1. Good manufacturing practice regulations in 21 CFR Parts 210, 211 or applicable regulations, Parts 606, and/or 820.
2. Biological establishment standards in 21 CFR Part 600.
3. Labeling regulations in 21 CFR Parts 201, 606, 610, 660, and/or 809.
4. In the case of a prescription drug or biological product, prescription drug advertising regulations in 21 CFR Part 202.
5. Regulations on making changes in application in FD&C Act Section 506A, 21 CFR 314.71, 314.72, 314.97, 314.99, and 601.12.
6. Regulations on Reports in 21 CFR 314.80, 314.81, 600.80, and 600.81.
7. Local, state and Federal environmental impact laws.

If this application applies to a drug product that FDA has proposed for scheduling under the Controlled Substances Act, I agree not to market the product until the Drug Enforcement Administration makes a final scheduling decision.

The data and information in this submission have been reviewed and, to the best of my knowledge are certified to be true and accurate.

Warning: A willfully false statement is a criminal offense, U.S. Code, title 18, section 1001.

SIGNATURE OF RESPONSIBLE OFFICIAL OR AGENT <i>Rosario G. Ramirez</i>	TYPED NAME AND TITLE Rosario G. Ramirez Director, Medical/Regulatory Affairs	DATE JULY 24, 2001
ADDRESS (Street, City, State, and ZIP Code) 2650 So. Mellonville Ave., Sanford, FL 32773		Telephone Number (407) 323-1887

Public reporting burden for this collection of information is estimated to average 24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to:

Department of Health and Human Services Food and Drug Administration CBER, HFM-99 1401 Rockville Pike Rockville, MD 20852-1448	Food and Drug Administration CDER, HFD-94 12420 Parklawn Dr., Room 3046 Rockville, MD 20852	An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.
--	--	--

ATTACHMENT to 356h

CHEMICAL NAME

Fluocinolone acetonide: *pregna-1,4-diene-3,20-dione, 6,9-difluoro-11,21 dihydroxy- 16,17-[(1-methylethylidene)bis(oxy)]-, (6 α ,11 β ,16 α)-.*

Hydroquinone: 1,4-benzenediol

Tretinoin: (*all-E*)-3,7-dimethyl-9-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2,4,6,8-nonatetraenoic acid

STRENGTHS

Fluocinolone acetonide 0.01%0.01% FA
Hydroquinone 4.00%.....4.00% HQ
Tretinoin 0.05%.....0.05% RA

ESTABLISHMENT INFORMATION

Locations of manufacturing, packaging and control sites for drug substances and drug product:

Drug Product: TRI-LUMA Cream
Location: HILL DERMACEUTICALS, INC.
(Establishment Registration Number: 1036365/ORL)
2650 South Mellonville Avenue
Sanford, Florida 32773
Contact: Jerry Roth
Telephone: (407) 323-1887

Drug Substance: Fluocinolone acetonide USP **Drug Master File Number:** _____
Location: _____

Contact: _____

Telephone: _____

Drug Substance: Hydroquinone USP **Drug Master File Number:** _____
Location: _____

Contact: _____
Telephone: _____

Drug Substance: Tretinoin USP **Drug Master File Number:** _____
Location: _____

Contact: _____

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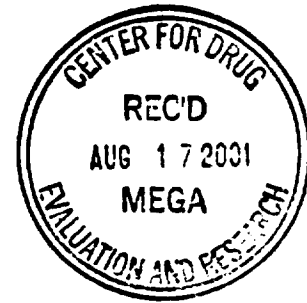
Dermaceuticals, Inc.

Specialty Dermatologicals for Children & Adults

NDA 21-112
TRI-LUMA Cream

August 16, 2001

Jonathan K. Wilkin, M.D. / Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd.
Rockville, MD 20850
ATTN: Vickey Lutwak / Project Manager



NDA 21-112
NDA 21-112 AMENDMENT

RE: Amendment to a Pending Application / Request for Mock-up Color Label

Dear Dr. Wilkin:

In reference to NDA 21-112, TRI-LUMA (Fluocinolone acetonide 0.01% + Hydroquinone 4.0% + Tretinoin 0.05%) Cream, enclosed please find mock-up, color copies of label for TRI-LUMA carton and container as requested. We now have a color diskette in Mac format and will forward a WORD diskette to you once the conversion is final.

Please do not hesitate to contact us should additional information be required. Thank you again for your continued support and consideration.

Sincerely,

Criss Molasso

Criss Molasso
Assistant Regulatory Affairs

cc: Rosario G. Ramirez, MD
Director, Medical/Regulatory Affairs

encls.

ORIGINAL



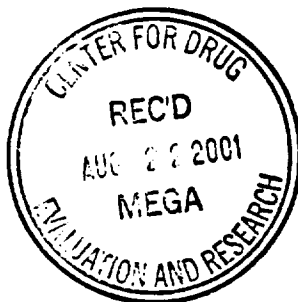
Dermaceuticals, Inc.

Specialty Dermatologicals for Children & Adults

NC

NEW CORRESP

NDA 21-112
TRI-LUMA Cream



August 21, 2001

Jonathan Wilkin, MD
Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd., HFD-540
Rockville, MD 20850
Attn: Ms. Vickey Lutwak
Project Manager

RE: NDA 21-112 TRI-LUMA Cream
Review Copy of volume 46

Dear Ms. Lutwak,

Hill Dermaceuticals, Inc. is formally submitting the review copy of volume 46 of the amendment to the pending application to NDA 21-112.

Volume 46 of the Amendment to NDA 21-112 pending application is the last part of the full amendment submission consisting of a total of 46 volumes. Volume 46 of the NDA submission contains copies of Case Report Forms of patients that died or were dropped / terminated due to adverse events.

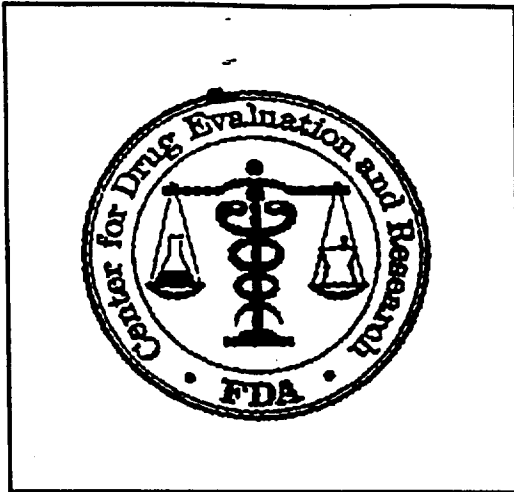
Thank you for your continued assistance and support.

Sincerely,

Rosario G. Ramirez
Director
Medical / Regulatory Affairs

ORIGINAL

FACSIMILE TRANSMISSION
RECORD



From: Vickey Lutwak, Project Manager

Division of Dermatologic and
Dental Drug Products, HFD-540
Center for Drug Evaluation & Research
Food & Drug Administration
9201 Corporate Blvd.
Rockville, MD 20850

Phone 301-827-2020

1827-2058

Fax 301-827-2075

Date: _____

To:

Name Nivi Ramirez

Company _____

City _____ State _____

Phone # 407 323-1787

FAX # (407) 649-9213

Number of Pages (INCLUDING COVER PAGE) (2)

Please telephone (301) 827-2020 IMMEDIATELY if re-transmission is necessary.

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NOTE: We are providing the attached information via telephone facsimile for your convenience. This material should be viewed as unofficial correspondence. Please feel free to contact me if you have any questions regarding the contents of this transmission.

Additional message:

NDA 21 112

Nivi

Please provide the following for the medical & statistical review for NDA 21,112 - Give me an idea when this will be provided. Thanks.

/s/

Let me know if you have any questions -

NDA 21-112

Please provide the following for the medical review:

The medical officer would like to see the following photographs. Only baseline photos are needed. The following shows which patients with CRF submitted in this NDA had baseline photos shown in the CRFs (we only have CRFs of those dropouts due to AEs):

Study East

|

Study West

|

+

Additional CRFs (all in Study West)

|

- 2) Please provide samples of the test drugs used in the clinical trial 024 (the triad and three dyads - total of 4 drugs).

AND
For the statistical review

Additional information requested from the sponsor:

1. Protocol 24 and statistical report (pages 80006-80027 in volume 1.7), ISS (integrated summary of safety), and ISE (integrated summary of efficacy) in electronic format (Microsoft Word).
-



TEL No. 1-407-323-1270

FAX No. 1-407-323-1871

PAGES SENT 4 (INCLUDING THIS COVER SHEET)

TO: Ms. Vickey Lutwak

FAX #: 301-827-2091

FROM: Nini Ramirez

DATE: 8/18/99

SUBJECT: NDA 21-112

MESSAGE:

IF YOU HAVE ANY TROUBLE WITH THIS TRANSMISSION PLEASE CALL _____
407-323-1270



Division of Dermatologic and Dental Drug Products

Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Boulevard, HFD-540
Rockville, MD 20850

FACSIMILE TRANSMISSION

DATE: October 26, 1999.

Number of Pages (including cover sheet) 1

TO: Rosario Ramirez, M.D., Regulatory Affairs

COMPANY: Hill Laboratories

NUMBER: 407-323-1871

MESSAGE: RE: NDA 21-112 _____ Cream

Medical officer's request for information follow:

Please provide the date of starting, date of completion, and date of data unblinding for each of the following studies:

24 East

24 West

0056

0059

Phototoxicity test

Photoallergenicity test

Please fax followed by a formal submission to the NDA.

NOTE: We are providing the attached information via telefacsimile for your convenience. Please feel free to contact me if you have any questions regarding the contents of this transmission.

FROM: Olga Cintron, R.Ph. *for*

TITLE: Project Manager

TELEPHONE: 301-827-2020

IS
FAX NUMBER: 301-827-2075

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CC: NDA 21-112
HFD-540 DIV FILES
HFD-540/KO

PROTOCOL No 24
Double-blind Comparative Study of
for the Treatment of Cutaneous Melanosis

a New Formulation.

HILL DERMACEUTICALS, INC.
Case Report Form
Page 1

Date: 7/20/98

ADMISSION Visit

Study Site:

Investigator Name:

Patient Initials:

Patient No. 100

DEMOGRAPHICS and BACKGROUND INFORMATION

Informed Written Consent Yes No Date: 7/20/98

Date of Birth: _____
Mo Day Year

Patient's must be 18 years of age or older

Gender: Male Female

Race: (Skin type II or III)

- Caucasian
- Black
- Hispanic
- Oriental
- Other, specify _____

Allergies: None

- Ingestants
- Contactants
- Inhalants
- Drugs

If drugs, specify _____

Drugs used in the past 2 weeks, OTC and prescription: None Yes, describe below.

Drug Name or Class	Reason for Use	Start Date	Stop Date

Use of bleaching agents in the past. Yes No

If YES, give name of bleaching agent _____

duration of application _____

frequency of application _____

Did pigmented lesions get lighter _____, stayed the same _____, got worse _____.

If complete clearing occurred, did the hyperpigmentation return when the bleaching agent was discontinued? Yes No

If YES, how long before darkening recurred? _____

Pregnancy Test			Date	Method of Contraception
Neg. <input checked="" type="checkbox"/>	Pos. <input type="checkbox"/>	N/A <input type="checkbox"/>	7/20/98	(Specify) CONDOM
			Mo Day Year	

PROTOCOL No 24

HILL DERMA-CHEMICALS, INC.
Case Report Form
Page 2

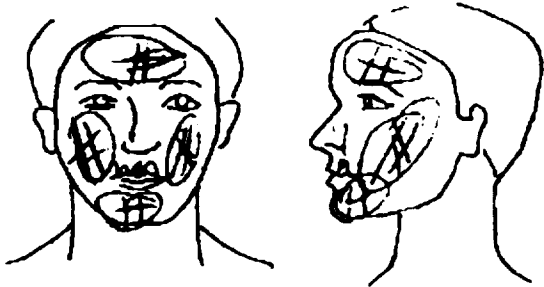
Investigator's Initials <i>APL</i>	Patient # <i>100</i>	Patient's Initials <i>—</i>
---------------------------------------	-------------------------	--------------------------------

Dispense Medication Packet. Yes No

Duration of hyperpigmentation: 11 yrs. Stable: Yes No
(Persistent, unchanged, for more than 3 months)

Photograph: Yes No

Location of pigmented lesions:



Initial Evaluation of Hyperpigmentation:
minimum score of 2

0 None	1 Mild	2 Moderate	3 Severe
		<i>2</i>	

Concomitant Medication:			
Drug Name or Class	Reason for Use	Start Date	Stop Date

Signature of Investigator/sub-investigator: *[Signature]*

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Dermaceuticals, Inc.

Specialty Dermatologicals for Children & Adults

FACSIMILE TRANSMISSION RECORD

DATE: 17 September 2001 **Pages (including cover):** 1

TO: Ms. Vickey Lutwak, Project Manager

COMPANY: FDA CDER / DDDDP

FAX PHONE #: 301-827-2075 **Hill Fax #** (407) 323-1871

Tel. no. # (407) 323-1887

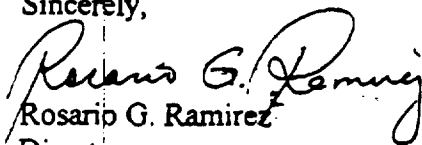
RE: Final Report on Animal Study: 26 Week Chronic Dermal Application Toxicity Study in Mini Pigs

Dear Ms Lutwak,

The final report for the mini pig study has been signed off as of this morning and will be sent FED EX overnight to HILL. Due to last week's catastrophic events, the responsible person to sign off on the final report has been held out of town until today, 17 September.

The report will be forwarded to you forthright. You should receive the full report no later than Wednesday, September 19. We apologize for this delay.

Sincerely,


Rosario G. Ramirez
Director
Medical / Regulatory Affairs



Dermaceuticals, Inc.

Specialty Dermatologicals for Children & Adults

FACSIMILE TRANSMISSION RECORD

DATE: 20 September 2001 **Pages (including cover):** 1

TO: Ms. Vickey Lutwak, Project Manager

COMPANY: FDA CDER / DDDDP

FAX PHONE #: 301-827-2075 **Hill Fax #** (407) 323-1871


RE: NDA 21-112
Validation Reports for Human Plasma Assay

Dear Ms Lutwak,

Previously, we have committed to submitting the validation reports for the human plasma assays on or before September 27, 2001. Due to the repercussions of last week's disaster, the CRO _____) informed Hill yesterday, Sept 19, that there will be some delay in finishing these reports. The new date given to Hill is For October 19, 2001. In light of this unforeseen circumstance, Hill Dermaceuticals is respectfully requesting a change of timeline for the submission of human plasma validations reports to October 26, 2001, from the previously commitment date of September 27.

Your kind consideration and understanding would be greatly appreciated. Thank you.

Sincerely,



Rosario G. Ramirez
Director
Medical / Regulatory Affairs

*NOTE - Checked & Reviewed. This is agreeable
Change the Review deadline to 12/1/01*



Dermaceuticals, Inc.

Specialty Dermatologicals for Children & Adults

FACSIMILE TRANSMISSION RECORD

DATE: 16 November 2001 **Pages (including cover):** 2
TO: Ms. Vickey Lutwak, Project Manager
COMPANY: FDA / CDER / DDDDP
FAX PHONE #: 301-827-2075 **Hill Fax #** (407) 323-1871
RE: NDA 21-112, Tri-Luma Cream

Dear Vickey,

Enclosed is the letter of request for the extension of the submission date for the 12-month report on Study 29, long-term clinical safety study. I have also included an estimated response date for the other information requests.

Sincerely,

Nini

DERMA-SMOOTHIE/FS[®]
SCALP OILDERMA-SMOOTHIE/FS[®]
ATOPIC PAK**Dermaceuticals, Inc.***Specialty Dermatologicals for Children & Adults*NDA 21-112
TRI-LUMA Cream

November 16, 2001

Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd., HFD-540
Rockville, MD 20850
Attn: Ms. Vickey Lutwak
Project Manager

RE: Clinical Study 12-month Report for Study 29 (Long-term Safety Study)

Dear Ms. Lutwak,

There has been some delay in the data entry and transfer of data to the statistician, for the long-term safety study on Tri-Luma Cream (Study 29). Hill Dermaceuticals respectfully request change of timeline for the Clinical Study 29 Report submission, from November 23 to December 6, 2001. We will, however, submit prior to December 6 upon earlier completion of the 12-month report.

Response to the information request from the statistician, FDA facsimile correspondence dated Nov 16, 2001, should be available by December 7, 2001. Response to the information request on the mini pig study (PharmTox) should be available by November 21, 2001.

Thank you for your kind consideration and understanding.

Sincerely,

Rosario G. Ramirez
Director
Medical / Regulatory Affairs

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Dermaceuticals, Inc.

Specialty Dermatologicals for Children & Adults

November 21, 2001

VIA FACSIMILE AND FEDERAL EXPRESS

Jonathan Wilkins, M.D.
Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Blvd., HFD-540
Rockville, MD 20850

Re: NDA 21-112 TRI-LUMA Cream

Dear Dr. Wilkin:

I am very concerned about our telephone conversation on Tuesday, November 20, 2001. We have communicated for many months regarding the submission timeframe of November 23, 2001, for the long term safety study. Not once did Division staff agency raise issues with respect to completing the review of the NDA by the user fee deadline of January 25, 2002, until your call yesterday. As you know, we have met the timelines for additional information set forth in the Agency's September 10, 2001, letter. As I emphasized during our conversation, if the Division is unable to meet its commitment for completing its NDA review by January 25, 2002, especially in view of Hill's meeting all of its commitments for submission of information as set forth in the September 10, 2001, letter, would result in severe financial hardship to the company.

We committed to submit by November 23, 2001, all outstanding data, including the 12-month safety study report, which has an adequate number of patients (314) with cumulative exposure time of greater than 6 months. This study will satisfy Dr. Ko's requirements as stated in his November 8, 2001 correspondence.

Regarding the mini-pigs, all statistical data will be included in the November 23, 2001, submission, as well as the statistician's request of November 16, 2001, for additional tables. This final submission will be hand delivered by me to the Document Room on November 23, 2001. With the November 23, 2001 submission, Hill will have met its commitment for submitting the remaining information to satisfy all of the Division's requirements. We trust that the Division will live up to its commitment to complete the review of this additional information and will meet the January 25, 2002, action date.

We look forward to the completion of the Division's review.

Sincerely yours,

Jerry Roth

cc: Mary Jean Kozma-Fornaro



Food and Drug Administration
 Center for Drug Evaluation and Research
 Office of Drug Evaluation ODE 5

FACSIMILE TRANSMITTAL SHEET

DATE: 12/17/01

To: Nini Rameriz	From: Victoria Lutwak <i>VL</i>
Company: Hill Dermaceuticals	Division of Dermatological and Dental Drug Products
Fax number: 407-323-1871	Fax number: 301-827-2075/ 827-2091
Phone number: 1-800 344-5705	Phone number: 301-827-2073

Subject: Requests for the review of NDA 21-112

Total no. of pages including cover : 3

Comments: Please see following page(s). **This information is critical for continuing the review; would you please provide it to us by the end of Thursday (12-20-01). If this cannot be accomplished, please let me know immediately.**
 Thank you.

VL

Document to be mailed: YES NO

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NDA 21-112
December 17, 2001

Please provide the following
For the Medical Officer:

Deficiencies of November 22 and December 10, 2001 submissions:

1. The submission of 12/10/01 should have an **index** (Table of Contents) to comply with 21 CFR 314.50(b).
2. The submission of 12/10/01 should have Case Report Tabulations (line listings) to comply with 21 CFR 314.50(f)(1). As the NDA is a **paper copy** NDA, listings should also be submitted in paper. Since the material in the CD is stated to be "**12 month draft 1**", Hill should provide documentation that the paper submission is no longer draft and has been audited for accuracy.
1. Hill's letter dated 8/21/01 promised to submit a "**Final** Report for Study 29 **and ISS report**" by November 23, 2001. Hill has **NOT** presented an ISS to integrate the safety data from earlier studies (24 and 28), Study 29, and ongoing Study 30. For data on Study 30, all adverse events and discontinuations including pregnancies must be presented.
4. It is unclear from the material presented whether the safety data of **patients previously treated with TRI-LUMA** in Study 28 have been included as part of the report for Study 29. Since Study 29 is continuation of Study 28, excluding **the safety data for the first 56 days** of treatment with TRI-LUMA in this group of patients could bias the ultimate safety profile, and impact on labeling. On the other hand, safety data from **patients who did not use TRI-LUMA** in Study 28 should begin upon entry into Study 29. This would be consistent with the definition of study duration and completion provided by Amendment 6 of Protocol 29.
5. To be informative, the listing on adverse events (Listing 9) should incorporate data on exposure to TRI-LUMA (Listing 5.2) so that development of the **adverse events can be correlated with usage time and dose**.
6. The report for Study 29 should contain the **1572s** and **IRB approval letters** for all Investigators. Such information for Study 30 should also be provided, as only one Investigator's information has been on record in _____ ALL of their information should ALSO be submitted to the IND.
7. Questions on safety data in Study 29.
 - a. Previous drug use in Study 28. What is the effect, if any, of prior treatment with a dyad on the (a) incidence of adverse events or lab abnormalities seen in Study 29, and (b) the type of adverse events in Study 29?
 - b. Duration of use. What is the effect, if any, of the duration of treatment on the (a) incidence of adverse events or lab abnormalities seen in Study 29, and (b) the type of adverse events in Study 29? We can divide events by their occurrence time in relation to treatment duration [note: real treatment duration, i.e., on drug, NOT just days in the study] (0-91 days, 92-182 days, 183-273 days, 274-365 days).
8. Questions on efficacy data in Study 29.
 - a. How many patients received how many courses of treatment (e.g., 1, 2, 3, 4 courses)?

Tables with the following information should be provided:

Treatment duration per course	Courses of Treatment						
	1	2	3	4	5	6	etc
<4 wks	N (%)						
4 - <8 wks							
8 - <12 wks							
12 - <16 wks							
16 - <20 wks							
20 - <24 wks							
24 - <28 wks							
etc							
Total							

N = number of patients; (%) = percent of total

A Table should be provided for patients in Study 29 who came **from each of the four arms of Study 28** (4 Tables in all). An additional Table should also be provided for **ALL** patients in Study 29. The dataset on which these Tables are constructed should be provided to the Biometrics Reviewer with proper dictionary.

- b. Are there differences between 1st, 2nd, 3rd, 4th courses in patient responses?
- c. Between treatment courses, what is the time to relapse/duration of remission, and are there differences after the 1st, 2nd, 3rd, 4th course for these parameters?
- d. Does efficacy relate to adverse effect, i.e., is there difference between success and failure groups in relation to adverse events or specific adverse events? The unit of analysis here should be treatment courses rather than patients. The TRI-LUMA data, but not the dyad data, from Study 28 should be part of this analysis.

9. Additional informational needs may become evident upon review of the submitted material.

Please provide the following
For the statistician for Study 28:

Randomization: The issue of any selection bias in the efficacy results due to the way of assigning study sites to studies 28A and 28B as well as deviation from pre-planned randomization during the course of the trials is not addressed based on the Sponsor's submission. The Sponsor's assignment of site numbers in each study was not sequential (i.e. odd number sites as one study and even number sites as another study). It is not clear whether such assignment was a post-hoc and if so, the implication on the efficacy results. The Sponsor should provide clarification/justification to address this issue.

If you have questions, please call.
VL



Food and Drug Administration
 Center for Drug Evaluation and Research
 Office of Drug Evaluation ODE 5

FACSIMILE TRANSMITTAL SHEET

DATE: 12/26/01

To: Nini Rameriz	From: Victoria Lutwak
Company: Hill Dermaceuticals	Division of Dermatological and Dental Drug Products
Fax number: 407-323-1871	Fax number: 301-827-2075/ 827-2091
Phone number: 1-800 344-5705	Phone number: 301-827-2073

Subject: Requests for the review of NDA 21-112

Total no. of pages including cover: 2

Comments: Please see following page(s).

Document to be mailed: YES NO

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DA 21-112
December 26, 2001

Please provide the following
For the Medical Officer:

1. In the ISS submitted last week, Section 25 is for Tables, and the ISS Table of Contents gives pp 100-455 for these Tables. Instead, the report ends on page 115, with the statement: "Please see Section IX for all Tables". This refers to Section IX of the submission of 12/20/01, which is not part of the ISS document. The ISS should be a stand-alone document, and if cross-reference is made to Section IX of another document, the pertinent Table numbers should be specified for the cross-reference, e.g., Table 1 of ISS refers to which Table of Section IX of that submission, etc. All Tables of the ISS should be accounted for.
2. Please specify the cleanser and the sunscreen provided to patients in Study 28 for mandatory use, or where this can be found in the protocol or study report. Please specify the instructions on the daily use of the sunscreen.

**APPEARS THIS WAY
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