

**CENTER FOR DRUG EVALUATION AND RESEARCH**

**Approval Package for:**

***APPLICATION NUMBER:***

**20-261/S029**

***Trade Name:*** Lescol Capsules

***Generic Name:*** fluvastatin sodium

***Sponsor:*** Novartis Pharmaceuticals Corporation

***Approval Date:*** May 23, 2001

# CENTER FOR DRUG EVALUATION AND RESEARCH

*APPLICATION NUMBER:*  
**20-261/S029**

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**CENTER FOR DRUG EVALUATION AND  
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*APPLICATION NUMBER:*

**20-261/S029**

**APPROVAL LETTER**



NDA 20-261/S-029

Novartis Pharmaceuticals Corporation  
Attention: Robert J. Clark  
Drug Regulatory Affairs, Chemistry, Manufacturing and Controls  
59 Route 10  
East Hanover, New Jersey 07936-1080

Dear Mr. Clark:

Please refer to your supplemental new drug application dated January 29, 2001, received January 31, 2001, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for Lescol (fluvastatin sodium) capsules.

We acknowledge receipt of your amendments dated March 9, and May 4, 2001.

This supplemental new drug application provides for the elimination of microbiological testing of the drug product.

We have completed the review of this supplemental application, and it is approved.

We remind you that you must comply with the requirements for an approved NDA set forth under 21 CFR 314.80 and 314.81.

If you have any questions, call Margaret Simoneau, R.Ph., Regulatory Project Manager, at (301) 827-6411.

Sincerely,

*{See appended electronic signature page}*

Stephen K. Moore, Ph.D.  
Chemistry Team Leader I, DNDC II for the  
Division of Metabolic and Endocrine Drug Products,  
(HFD-510)  
DNDC II, Office of New Drug Chemistry  
Center for Drug Evaluation and Research

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/s/

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Stephen Moore  
5/23/01 04:36:28 PM

**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

*APPLICATION NUMBER:*  
**20-261/S029**

**CHEMISTRY REVIEW(S)**

CHEMIST'S REVIEW		
<b>1. ORGANIZATION</b> CDER/HFD-510 Division of Metabolism and Endocrine Drug Products		<b>2. NDA # 20-261</b> Original NDA approved:
<b>3. NAME AND ADDRESS OF APPLICANT</b> Novartis Pharmaceuticals Corporation 59 Route 10 East Hanover, NJ 07936-1080		<b>4. SUPPLEMENT</b> SCM-029 (29-JAN-2001 Rec. 31-JAN-2001)
		<b>5. Name of the Drug</b> Lescol Capsules™
		<b>6. Nonproprietary Name</b> Fluvastatin sodium
<b>7. SUPPLEMENT PROVIDES</b> for the elimination of microbiological testing of the solid dosage form. Amendments contain data requested by the Agency.		<b>8. AMENDMENT</b> -- SCM-029 (09-MAR-2001 Rec. 12-MAR-2001) AND SCM-029 (04- MAY-2001 Rec. 07-MAY-2001)
<b>9. PHARMACOLOGICAL CATEGORY</b> Hypercholesterolemia	<b>10. HOW DISPENSED</b> Oral	<b>11. RELATED</b> -N. A. -
<b>12. DOSAGE FORM</b> Capsule	<b>13. POTENCY</b> 20 mg and 40 mg	
<b>14. CHEMICAL NAME AND STRUCTURE</b> 7-[3-(4-fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxy-6-heptenoic acid, monosodium salt, Mol wt = 433.46, C <sub>24</sub> H <sub>25</sub> FNO <sub>4</sub> .Na Salt/Base Ratio 1.053		
<b>15. COMMENTS</b> Amendment March 9 contains the approved release and stability specifications, including the microbial limits. Amendment May 4 contains data for each of the products from 1998 forward in support of the proposal to eliminate the microbiological testing. Data for Lescol Capsules, 20 mg and 40 mg, showed no significant microorganisms were recovered.		
<b>16. CONCLUSIONS AND RECOMMENDATIONS</b> Microbiological testing on the solid oral drug product can be eliminated. From the Chemistry point of view, this supplement can be approved. Issue Approval letter.		
<b>17. REVIEWER NAME (AND SIGNATURE)</b> COMPLETED 21-MAY-2001 Sharon Kelly, PhD R/D INITIATED BY		<b>DATE</b>
filename: 20261#29A NDA		
DISTRIBUTION: Original: NDA 20261 cc: HFD-510 Division File CSO Reviewer		

AP

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/s/

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Sharon Kelly  
5/22/01 02:41:44 PM  
CHEMIST

Paper copy signed May 22, 2001

Stephen Moore  
5/22/01 02:47:44 PM  
CHEMIST

**CENTER FOR DRUG EVALUATION AND  
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*APPLICATION NUMBER:*  
**20-261/S029**

**MICROBIOLOGY REVIEW(S)**

REVIEW FOR  
OFFICE OF NEW DRUG CHEMISTRY  
MICROBIOLOGY STAFF  
MICROBIOLOGIST'S REVIEW OF BUNDLED SUPPLEMENT  
16 May 2001

A. 1. APPLICATIONS

**HFD-580**

NDA 06-035/SCS-065  
NDA 17-962/SCS-060

**HFD-510**

NDA 20-261/SCS-029

**HFD-550**

NDA 17-534/SCS-054  
NDA 19-429/SCS-017  
NDA 20-232/SCS-013

**HFD-120**

NDA 18-706/SCS-025  
NDA 19-758/SCS-043  
NDA 20-234/SCS-019

**HFD-110**

NDA 19-546/SCS-024

**HFD-600**

ANDA 88-616/S

APPLICANT: Novartis Pharmaceuticals Corporation  
Drug Regulatory Affairs  
59 Route 10  
East Hanover, NJ 07936-1080

2. PRODUCT NAMES:

NDA 06-035: Methergine® Tablets, USP  
NDA 17-534: Fiorinal® Capsules, USP  
Fiorital® Capsules, USP  
NDA 17-962: Parodel® Tablets/Capsules, USP  
Bromocriptine Mesylate Tablets/Capsules, USP  
NDA 18-706: Hydergine® Liquid Capsules  
NDA 19-429: Fiorinal/Codeine® Capsules, USP  
Fiorital/ Codeine® Capsules, USP  
NDA 19-546: Dynacirc® Capsules  
NDA 19-758: Clozaril® Tablets  
NDA 20-232: Fioricet/Codeine® Capsules  
NDA 20-234: Tegretol®-XR Extended Release Tablets  
NDA 20-261: Lescol® Capsules  
ANDA 88-616: Fioricet® Capsules

3. DOSAGE FORM AND ROUTE OF ADMINISTRATION:

The products are a variety of capsules or tablets for oral administration.

4. METHODS OF STERILIZATION:

Page(s) Withheld

   ✓ § 552(b)(4) Trade Secret / Confidential

   § 552(b)(4) Draft Labeling

   § 552(b)(5) Deliberative Process

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Paul Stinavage, Ph.D.

cc: HFD-120/D. Klein/T. Oliver/M. Guzewska  
HFD-550/S.-C. Lin  
HFD-580/J. Mercier  
HFD-640/A. High  
HFD-800/S. Lange  
HFD-805/Consult File/Stinavage

Drafted by: P. Stinavage, 16 May 2001  
R/D initialed by P. Cooney

E. REVIEW NOTES

These supplements provide for the elimination of microbiological testing of the specified drug products. These products are solid oral dosage forms. The applicant states that microbiological testing of the products had been instituted several years ago as a result of an internal company policy. The company states that they have not experienced any failures in 5 years of testing. Data generated during the last three years were provided and reviewed for several of the tablets/capsules. These data and the fact that the products are solid oral dosage forms that are unlikely to sustain microbial replication support the applicant's desire to eliminate testing. The applicant also correctly points out that it is not "industry practice" to routinely perform microbiological testing on solid oral drug products.

*Satisfactory*

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/s/  
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Paul Stinavage

5/16/01 02:08:46 PM

MICROBIOLOGIST

Bundled supplements to eliminate microbiological testing of solid oral  
dosage forms.

Peter Cooney

5/16/01 02:28:53 PM

MICROBIOLOGIST

**CENTER FOR DRUG EVALUATION AND  
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*APPLICATION NUMBER:*

**20-261/S029**

**ADMINISTRATIVE and CORRESPONDENCE  
DOCUMENTS**

 **NOVARTIS**

**ORIGINAL**

**Novartis Pharmaceuticals Corporation**  
Drug Regulatory Affairs  
59 Route 10  
East Hanover, NJ 07936-1080

Tel 973 781 7500  
Fax 973 781 6325

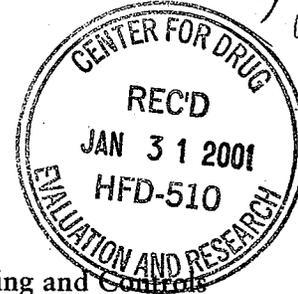
January 29, 2001

NDA NO. 20261 REF NO. 24  
NDA SUPPL FOR SEM

NDA 20-261  
Lescol® Capsules  
(fluvastatin sodium)

Supplemental New Drug Application - Chemistry, Manufacturing and Controls  
Bundled Submission

David Orloff, MD, Director  
Division of Metabolic and  
Endocrine Drug Products/HFD-510  
Office of Drug Evaluation II  
Attn: Document Control Room 14B-19  
Center for Drug Evaluation and Research  
5600 Fishers Lane  
Rockville, Maryland 20857



*1/31/01*  
*See e-mail dated 1/31/01 from Steve Moore to Susan Fong to bundle to Genevieve Kelly + lead reviewer*  
*Mao*

REVIEWS COMPLETED	
<i>APLth 5/23/01</i>	
CSO ACTION:	
<input checked="" type="checkbox"/> LETTER	<input type="checkbox"/> N.A.I. <input type="checkbox"/> MEMO
<i>Mao</i>	
CSO INITIALS	DATE

Dear Dr. Orloff:

Novartis Pharmaceuticals Corporation is submitting a supplemental New Drug Application for the above cited drug product. This supplement provides for the elimination of microbiological testing of the dosage form.

Novartis is proposing this change following the review of data generated over the past 5 years. That review indicated that there were no failures for the above cited dosage form (as well as the others cited on the list below). Please therefore note that Novartis is proposing to eliminate the reporting of microbiological test results at release and on stability due to these findings.

Please note that the microbiological testing for this drug product had been instituted several years ago as a result of an internal company policy. Since this material (a solid oral dosage form) has not experienced any failures, Novartis feels that it would be prudent at this time to eliminate that testing. In addition it is not "industry practice" to routinely perform microbiological testing on solid oral drug products.

This submission is being made to several NDAs simultaneously since many Novartis products are affected. Please see the table below for a complete list of all the products/NDAs to which this change is being submitted.

If you have questions and/or comments regarding this submission, please do not hesitate to contact me at (973) 781-7005.

Sincerely,



Robert J. Clark  
Chemistry, Manufacturing and Controls  
Drug Regulatory Affairs

Attachments  
Submitted in Duplicate

cc: Ms. Regina Brown  
New Jersey District Office, North Brunswick Resident Post - Certified Field Copy

<b>NDA/ ANDA</b>	<b>Product Name</b>	<b>FDA Division</b>
		<b>Anti-Inflammatory, Analgesic &amp; Ophthalmologic (HFD-550)</b>
20-232	Fioricet/Codeine® Capsules	
19-429	Fiorinal/Codeine® Capsules, USP Fiorital/Codeine® Capsules, USP	
17-534	Fiorinal® Capsules, USP Fiorital® Capsules, USP	
		<b>Cardio-Renal (HFD-110)</b>
19-546	Dynacirc® Capsules	
		<b>Reproductive and Urologic (HFD-580)</b>
06-035	Methergine® Tablets, USP	
		<b>Special Pathogen and Immunologic (HFD-590)</b>
		<b>Neuropharmacological (HFD-120)</b>
19-758	Clozaril® Tablets	
17-962	Parlodel® Tablets/Capsules, USP Bromocriptine Mesylate Tablets/Capsules, USP	
18-706	Hydergine® Liquid Capsules	
20-234	Tegretol®-XR Extended-Release Tablets	
		<b>Metabolic and Endocrine (HFD-510)</b>
20-261	Lescol® Capsules	
		<b>Generic Division (HFD-600)</b>
88-616	Fioricet® Tablets	

Dr. Susan Lange at the Office of New Drug Chemistry has been forwarded a copy of an example submission to a typical drug product. She will be coordinating a bundled review of these supplements.

### USER FEE COVER SHEET

*See Instructions on Reverse Side Before Competing This Form*

1. APPLICANT'S NAME AND ADDRESS  Novartis Pharmaceuticals Corporation 59 Route 10 East Hanover, New Jersey 07936-1080	3. PRODUCT NAME  Lescol® Capsules
2. TELEPHONE NUMBER (Include Area Code) (973) 781-7005	4. DOES THIS APPLICATION REQUIRE CLINICAL DATA FOR APPROVAL? IF YOUR RESPONSE IS "NO" AND THIS IS FOR A SUPPLEMENT, STOP HERE AND SIGN THIS FORM. No  IF RESPONSE IS 'YES', CHECK THE APPROPRIATE RESPONSE BELOW: <input type="checkbox"/> THE REQUIRED CLINICAL DATA ARE CONTAINED IN THE APPLICATION. <input type="checkbox"/> THE REQUIRED CLINICAL DATA ARE SUBMITTED BY REFERENCE TO (APPLICATION NO. CONTAINING THE DATA)
5. USER FEE I.D. NUMBER.	6. LICENSE NUMBER / NDA NUMBER 20-261

7. IS THIS APPLICATION COVERED BY ANY OF THE FOLLOWING USER FEE EXCLUSIONS? IF SO, CHECK THE APPLICABLE EXCLUSION.

<input type="checkbox"/> A LARGE VOLUME PARENTERAL DRUG PRODUCT APPROVED UNDER SECTION 505 OF THE FEDERAL FOOD, DRUG, AND COSMETIC ACT BEFORE 9/1/92 (Self Explanatory)	<input type="checkbox"/> A 505(b)(2) APPLICATION THAT DOES NOT REQUIRE A FEE (See item 7, reverse side before checking box.)
<input type="checkbox"/> THE APPLICATION QUALIFIES FOR THE ORPHAN EXCEPTION UNDER SECTION 736(a)(1)(E) of the Federal Food, Drug, and Cosmetic Act (See item 7, reverse side before checking box.)	<input type="checkbox"/> THE APPLICATION IS A PEDIATRIC SUPPLEMENT THAT QUALIFIES FOR THE EXCEPTION UNDER SECTION 736(a)(1)(F) of the Federal Food, Drug, and Cosmetic Act (See item 7, reverse side before checking box.)
<input type="checkbox"/> THE APPLICATION IS SUBMITTED BY A STATE OR FEDERAL GOVERNMENT ENTITY FOR A DRUG THAT IS NOT DISTRIBUTED COMMERCIALY (Self Explanatory)	

**FOR BIOLOGICAL PRODUCTS ONLY**

<input type="checkbox"/> WHOLE BLOOD OR BLOOD COMPONENT FOR TRANSFUSION	<input type="checkbox"/> A CRUDE ALLERGENIC EXTRACT PRODUCT
<input type="checkbox"/> AN APPLICATION FOR A BIOLOGICAL PRODUCT FOR FURTHER MANUFACTURING USE ONLY	<input type="checkbox"/> AN "IN VITRO" DIAGNOSTIC BIOLOGICAL PRODUCT LICENSED UNDER SECTION 351 OF THE PHS ACT
<input type="checkbox"/> BOVINE BLOOD PRODUCT FOR TOPICAL APPLICATION LICENSED BEFORE 9/1/92	

8. HAS A WAIVER OF AN APPLICATION FEE BEEN GRANTED FOR THIS APPLICATION?  YES  NO  
*(See reverse side if answered YES)*

***A completed form must be signed and accompany each new drug or biologic product application and each new supplement. If payment is sent by U.S. mail or courier, please include a copy of this completed form with payment.***

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Paperwork Reduction Project (0910-0297)  
Hubert H. Humphrey Building, Room 531-H  
200 Independence Avenue, S.W.  
Washington, DC 20201

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SIGNATURE OF AUTHORIZED COMPANY REPRESENTATIVE 	TITLE Robert J. Clark Director Drug Regulatory Affairs	DATE 29-Jan-01
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