

**CENTER FOR DRUG EVALUATION AND
RESEARCH**

APPLICATION NUMBER:

21-333

CHEMISTRY REVIEW(S)

DIVISION OF METABOLIC AND ENDOCRINE DRUG PRODUCTS

Review of Chemistry, Manufacturing and Controls

NDA #: 21-333

DATE REVIEWED: July 3, 2001

CHEMISTRY REVIEW #: 1

REVIEWER: Chien-Hua Niu, Ph.D.

<u>SUBMISSION TYPE</u>	<u>DOCUMENT DATE</u>	<u>CDER DATE</u>	<u>ASSIGNED DATE</u>
Original	10/27/00	11/03/00	11/21/00
Amendment	04/12/01	04/15/01	
Amendment	07/03/01		

NAME & ADDRESS OF APPLICATION:

Ferring Pharmaceuticals Inc.
120 White Plains Road, Suite 400
Tarrytown, NY 10591
Tel: (914)333-8932 (Ronald V. Nardi, Ph.D.)
Fax: (914)631-5120

DRUG PRODUCT NAME:

<u>Proprietary:</u>	None
<u>Established:</u>	Desmopressin acetate
<u>Code Name:</u>	None
<u>Chem. Type/Ther. Class:</u>	1S

PHARMACOLOGICAL CATEGORY/INDICATION: Antidiuretic hormone analog/Primary Nocturnal Enuresis

DOSAGE FORM: Intranasal solution

STRENGTHS: 5.0 mL of 0.1 mg/mL

ROUTE OF ADMINISTRATION: Nasal spray

CONCLUSION AND RECOMMENDATION:

The newly proposed tradename described in the revised vial and carton labels as well as package insert are acceptable from chemistry viewpoint. Moreover, the facilities used for manufacturing the drug substance and the drug product have been inspected and found to be acceptable by the Office of Compliance. The CMC information is satisfactory. The application can be approved from the chemistry viewpoint.

Chien-Hua Niu, Ph.D.
Review Chemist

cc: Org. NDA
HFD-510/Division File
HFD-510/CHNiu
HFD-510/SMcCort
R/D init. by: S. Moore

File Name: NDA21333N001

DISPENSED: x Rx OTC**SUPPORTING DOCUMENTS:**

Type/Number	Subject	Holder	Status	Review Date	Letter Date
NDA #17-922	DDAVP Nasal Spray	Aventis	Approved		Feb-2-1978
<u> </u>	Desmopressin acetate	<u> </u>	Acceptable	July-19-1999 Sept-20-1999	July-27-1999

CHEMICAL NAME, STRUCTURAL FORMULA, MOLECULAR FORMULA, MOLECULAR WT

Chemical Name: Desmopressin acetate

Molecular Formula: $\text{SCH}_2\text{CH}_2\text{C}(=\text{O})\text{-Tyr-Phe-Gln-Asn-Cys-Pro-D-Arg-Gly-NH}_2 \cdot \text{CH}_3\text{COOH} \cdot 3\text{H}_2\text{O}$

Molecular Weight: 1183.32

CONSULTS: Office of Post-Marketing and Drug Risk Assessment (OPDRA) for the tradename**REMARKS/COMMENTS:**

1. The 4/12/01 amendment provides a newly proposed tradename.
2. The 7/3/01 amendment provides the revised vial and carton labels as well as package insert.

SUMMARY:

On February 2, 1978, the original desmopressin acetate nasal solution (NDA #17-922) developed by Ferring Pharmaceuticals was approved for indication of Diabetes Insipidus. On November 28, 1989, a supplemental application providing for a second indication of Nocturnal Enuresis was approved. More recently, the desmopressin acetate nasal spray was reformulated from a refrigerated solution to a new formula that can be stored at room temperature. This supplement was approved on August 7, 1996. Since Aventis Pharmaceuticals currently only markets the room temperature stable desmopressin acetate nasal spray, which also is manufactured by Ferring Pharmaceuticals under NDA #17-922, Ferring Pharmaceuticals has filed this new NDA application to seek for approval for the refrigerated formulation of desmopressin acetate nasal spray for marketing. The maximum daily dose: 40 µg

Since the drug substance and the drug product has been previously reviewed and approved under NDA #17-922, there are no outstanding CMC issues remaining.

The facilities used for manufacturing the drug substance and the drug product have been inspected and found to be acceptable by the Office of Compliance.

The tradename "Minirin Nasal Spray" originally was proposed by the sponsor, but was withdrawn because of major obstacles encountered when trying to register the tradename "Minirin". On 4/12/01, the sponsor has proposed to use the name "Desmopressin Acetate Nasal Spray" for the labeling and packaging for the time being. This proposed name was forwarded to the OPDRA for consult review. On 6/20/01, the OPDRA completed their review, and recommended the tradename to be "Desmopressin acetate 0.01% nasal solution". However, the tradename recommended by the OPDRA is for the established name, but not appropriate for the tradename. Thus the name "Desmopressin Acetate Nasal Spray" proposed by the sponsor is acceptable for the time being. All other recommendations made by the OPDRA are acceptable by the sponsor. The vial and carton labels as well as package insert have been revised accordingly.

2 Page(s) Withheld

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

 § 552(b)(4) Draft Labeling

 § 552(b)(5) Deliberative Process

Withheld Track Number: Chemistry-

18-JUL-2001

FDA CDER EES
ESTABLISHMENT EVALUATION REQUEST
SUMMARY REPORT

Page 1 of 1

Application: NDA 21333/000	Priority: SS	Org Code: 510
Stamp: 03-NOV-2000 Regulatory Due: 03-SEP-2001	Action Goal:	District Goal: 05-JUL-2001
Applicant: FERRING PHARMS	Brand Name: DESMOPRESSIN ACETATE NASAL	
120 WHITE PLAINS RD STE 400	SPRAY	
TARRYTOWN, NY 10591	Established Name:	
	Generic Name: DESMOPRESSIN ACETATE	
	Dosage Form: SPR (SPRAY)	
	Strength: 0.1 MG/ML	
FDA Contacts: S. MCCORT (HFD-510)	301-827-6415	, Project Manager
C. NIU (HFD-510)	301-827-6420	, Review Chemist
S. MOORE (HFD-510)	301-827-6430	, Team Leader

Overall Recommendation:**ACCEPTABLE on 07-JUN-2001 by S. ADAMS (HFD-324) 301-594-0095**

Establishment: 9610568	DMF No:
FERRING AB	AADA No:
MALMO,, SW	

Profile: ADM	OAI Status: NONE	Responsibilities: FINISHED DOSAGE LABELER
Last Milestone: OC RECOMMENDATION		FINISHED DOSAGE RELEASE
Milestone Date: 07-JUN-2001		TESTER
Decision: ACCEPTABLE		FINISHED DOSAGE STABILITY
Reason: DISTRICT RECOMMENDATION		TESTER

Establishment: _____	DMF No: _____
	AADA No: _____
MALMO,, SW	

Profile: CSN	OAI Status: NONE	Responsibilities: DRUG SUBSTANCE
Last Milestone: OC RECOMMENDATION		MANUFACTURER
Milestone Date: 07-JUN-2001		
Decision: ACCEPTABLE		
Reason: DISTRICT RECOMMENDATION		

**This is a representation of an electronic record that was signed electronically and
this page is the manifestation of the electronic signature.**

/s/

Chien-Hua Niu
7/24/01 09:59:19 AM
CHEMIST

Stephen Moore
7/24/01 10:55:51 AM
CHEMIST