

**CENTER FOR DRUG EVALUATION AND
RESEARCH**

APPLICATION NUMBER: 20-986/SE3-~~603~~

CHEMISTRY REVIEW(S)

CHEMISTS REVIEW	1. ORGANIZATION	2. NDA NUMBER
	DMEDP II, HFD-510	20-986
3. NAME AND ADDRESS OF APPLICANT		4. COMMUNICATION, DATE
Novo Nordisk Pharmaceuticals, Inc. Suite 200, 100 Overlook Center Princeton NJ 08450		SE1-003, 20-Dec-00
5. PROPRIETARY NAME	6. NAME OF THE DRUG	7. AMENDMENTS, REPORT, DATE
Novolog®	Insulin aspart (rDNA origin) injection	
8. COMMUNICATION PROVIDES FOR:		
The use of NovoLog in continuous subcutaneous insulin infusion.		
9. PHARMACOLOGICAL CATEGORY	10. HOW DISPENSED	11. RELATED IND, NDA, DMF
Antihyperglycemic	RX	
12. DOSAGE FORM	13. POTENCY	
Solution for injection	100 U/mL	
14. CHEMICAL NAME AND STRUCTURE		
See Chemistry Review #1		
15. COMMENTS		
<p>This was submitted and filed as an efficacy supplement. Novolog® (NDA 20-986) was approved for subcutaneous injection in adult patients for the diabetes mellitus on June 7, 2000. Information on the manufacturing, testing, stability and sterility assurance of Novolog are included in NDA 20-986. No changes in the formulation or testing of the product have been made to accommodate its use in the external pump. The submission included in-use stability studies using the MiniMed pump 506 system and Disetronic pump H-TRON plus V100 along with the proposed labeling.</p> <p>MiniMed Pump 506: The pump system consists of an electronic pump that can be programmed to deliver the insulin continuously or in a bolus. Novolog is filled in the plastic syringe and connected to the catheter by a leur-lock (see Figure 1). The syringe is placed in the device, which administers the flow. Two types of infusion sets were used in the simulated in-use study, either a Polyfin or a Sof-set catheter. The Polyfin and Sof-set catheters are composed of a laminate with a polyolefin inner surface. The was not tested because the quick-release coupling would require additional testing for antimicrobial properties.</p> <p><u>Continued</u></p>		
16. CONCLUSION AND RECOMMENDATION		
The sponsor has satisfactorily demonstrated the stability of Novolog in the MiniMed 506 pump using either the Polyfin or Sofset catheters and Disetronic H-TRON pump using either the Tender or Classic catheters. Labeling comments should be communicated to the sponsor.		
17. NAME	18. REVIEWERS SIGNATURE	19. DATE COMPLETED
JANICE BROWN		05-Sept-01
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secret and/or

confidential

commercial

information

Addendum

CHEMISTS REVIEW	1. ORGANIZATION	2. NDA NUMBER
	DMEDP II, HFD-510	20-986
3. NAME AND ADDRESS OF APPLICANT		4. COMMUNICATION, DATE
Novo Nordisk Pharmaceuticals, Inc. Suite 200, 100 Overlook Center Princeton NJ 08450		SE1-003, 20-Dec-00
5. PROPRIETARY NAME	6. NAME OF THE DRUG	7. AMENDMENTS, REPORT, DATE
Novolog®	Insulin aspart (rDNA origin) injection	SE1-003, 25-Oct-01
8. COMMUNICATION PROVIDES FOR:		
The use of NovoLog in continuous subcutaneous insulin infusion.		
9. PHARMACOLOGICAL CATEGORY	10. HOW DISPENSED	11. RELATED IND, NDA, DMF
Antihyperglycemic	RX	
12. DOSAGE FORM	13. POTENCY	
Solution for injection	100 U/mL	
14. CHEMICAL NAME AND STRUCTURE		
See Chemistry Review #1		
15. COMMENTS		
<p>This amendment provides for a categorical exclusion from submitting an environmental assessment. The applicant is requesting a categorical exclusion from an environmental assessment (EA) under section 25.31b. Section 25.31b allows for a (EA) exclusion if the amount of drug into the environment is below 1 ppb. The expected introduction concentration of the drug at the point of entry into the environment is: This value combined with amount of Novolog in the other presentations (vial and cartridges) is which qualifies the sponsor to a categorical exclusion. Labeling issues identified in chemistry review #1 will be resolved with DMEDP and Novo Nordisk prior to final approval.</p>		
16. CONCLUSION AND RECOMMENDATION		
The sponsor qualifies for a categorical exclusion under Section 25.31b		
17. NAME	18. REVIEWERS SIGNATURE	19. DATE COMPLETED
JANICE BROWN		11-Dec-01
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AP

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this page is the manifestation of the electronic signature.**

/s/

Janice Brown
12/11/01 02:40:25 PM
CHEMIST

Stephen Moore
12/11/01 05:10:38 PM
CHEMIST

APPEARS THIS WAY
ON ORIGINAL

APPEARS THIS WAY
ON ORIGINAL

**ESTABLISHMENT EVALUATION REQUEST
SUMMARY REPORT**

Application: NDA 20986/000 Stamp: 16-SEP-1998 Regulatory Due: 07-JUN-2000 Applicant: NOVO NORDISK PHARM 100 OVERLOOK CENTER STE 200 PRINCETON, NJ 085407810	Priority: 1S Action Goal: Brand Name: NOVOLOG Established Name: Generic Name: INSULIN ASPART RECOMBINANT Dosage Form: INJ (INJECTION) Strength: 100 U/ML	Org Code: 510 District Goal: 18-JUL-199
FDA Contacts: H. RHEE (HFD-510) 301-827-6424 , Project Manager ID = 121714 , Review Chemist S. MOORE (HFD-510) 301-827-6430 , Team Leader		

Overall Recommendation:

ACCEPTABLE on 15-DEC-1999 by S. FERGUSON (HFD-324) 301-827-0062
WITHHOLD on 14-SEP-1999 by EGASM

Establishment: 9610095
 NOVO NORDISK A/S
 BAGSVAERD, , DA

DMF No:
AADA No:

Profile: CFN **OAI Status:** NONE
Last Milestone: OC RECOMMENDATION
Milestone Date: 15-DEC-1999
Decision: ACCEPTABLE
Reason: DISTRICT RECOMMENDATION
Profile: SVS **OAI Status:** NONE
Last Milestone: OC RECOMMENDATION
Milestone Date: 15-DEC-1999
Decision: ACCEPTABLE
Reason: DISTRICT RECOMMENDATION

Responsibilities:

Establishment: 9610699
 NOVO NORDISK A/S
 HALLAS ALLE
 KALUNDBORG 4400, , DA

DMF No:
AADA No:

Profile: CFN **OAI Status:** NONE
Last Milestone: OC RECOMMENDATION
Milestone Date: 15-DEC-1999
Decision: ACCEPTABLE
Reason: DISTRICT RECOMMENDATION
Profile: SVS **OAI Status:** NONE
Last Milestone: OC RECOMMENDATION
Milestone Date: 15-DEC-1999

Responsibilities:

FDA CDER EES
ESTABLISHMENT EVALUATION REQUEST
SUMMARY REPORT

Decision: ACCEPTABLE
Reason: DISTRICT RECOMMENDATION

Establishment: 9613244
NOVO NORDISK A/S
BERNNUM PARK, DK-3400
HILLEROED, , DA

DMF No:
AADA No:

Profile: SVS OAI Status: NONE
Last Milestone: OC RECOMMENDATION
Milestone Date: 15-DEC-1999

Responsibilities: _____

Decision: ACCEPTABLE
Reason: DISTRICT RECOMMENDATION

APPEARS THIS WAY
ON ORIGINAL

