

**CENTER FOR DRUG EVALUATION AND RESEARCH**

**Application Number** 21-014

**CHEMISTRY REVIEW(S)**

Malandrucco  
DEC 14 1999

DIVISION OF NEUROPHARMACOLOGICAL DRUG PRODUCTS  
Review of Chemistry, Manufacturing, and Controls

NDA#: 21-014

CHEMISTRY REVIEW: # 3

DATE REVIEWED: 13-DEC-99

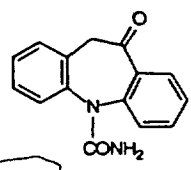
Submission Type	Document Date	CDER Date	Assigned Date
ORIGINAL	25-SEP-98	28-SEP-98	
AMENDMENTS (BF)	24-AUG-99	25-AUG-99	27-AUG-99
(BC)	2-SEP-99	8-SEP-99	8-SEP-99
(BC)	20-SEP-99	21-SEP-99	21-SEP-99
(AZ)	15-NOV-99	16-NOV-99	16-NOV-99

NAME AND ADDRESS OF APPLICANT: Novartis Pharmaceuticals Corporation  
59 Route 10  
East Hanover,  
NJ 07936-1080

DRUG PRODUCT NAME:  
Proprietary: Trileptal™  
Nonproprietary/Established/USAN: oxcarbazepine [USAN applied 12-JUL-99]  
Code Name/#: GP 47680  
Chem. Type/Therapeutic Class: 1 S

DES/PATENT STATUS: No patent application relating to the product as of filing date.  
PHARMACOLOGICAL CATEGORY / INDICATION: Anticonvulsant  
DOSAGE FORM: Tablets  
STRENGTH(S): 150, 300, 600 mg  
ROUTE OF ADMINISTRATION: Oral  
DISPENSED: XX Rx      \_\_\_ OTC  
SPECIAL PRODUCTS: No

CHEMICAL NAME, STRUCTURAL FORMULA AND MOLECULAR FORMULA: 10, 11-Dihydro-10-oxo-5H-dibenz[b,f]azepine-5-carboxamide  
C<sub>15</sub>H<sub>13</sub>N<sub>2</sub>O<sub>2</sub>      Mol. Weight: 252.27      CAS: 28721-07-5



SUPPORTING DOCUMENTS: [Redacted] DMF [Redacted]  
RELATED DOCUMENTS: IND [Redacted]

CONSULTS: The proposed trademark "Trileptal" is accepted by the CDER Labeling and Nomenclature Committee. [Redacted] Site inspections completed (OC recommendation acceptable, June 7, 1999) [Redacted] Methods Validation to be submitted.

REMARKS / COMMENTS: This review consists of two parts: Part I: Review and evaluation of the responses provided by Novartis to the AE letter of 24-SEP-99, and Part II: Review of other amendments. Novartis' responses to both CMC comments are adequate. The proposed 24-month expiration date is supported by the stability data of Trileptal Tablets [Redacted]

CONCLUSIONS AND RECOMMENDATIONS: Recommend Approval. [Redacted]

cc: Orig. NDA 21-014  
HFD-120/Division File  
HFD-120/DChristodoulou  
HFD-120/MMalandrucco  
HFD-120/MGuzewska/R/D Init by: MG  
HFD-810/JSimmons

/S/ 12.14.99

[Redacted] /S/ Danae D. Christodoulou, Ph.D., Review Chemist

Filename: N21014n4.doc

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AUG 5 1999

DIVISION OF NEUROPHARMACOLOGICAL DRUG PRODUCTS  
Review of Chemistry, Manufacturing, and Controls

NDA#: 21-014

CHEMISTRY REVIEW: # 2

DATE REVIEWED: 30-JUL-99

Submission Type	Document Date	CDER Date	Assigned Date
ORIGINAL	25-SEPT-98	28-SEPT-98	
AMENDMENTS	14-JUN-99	15-JUN-99	18-JUN-99
	16-JUN-99	17-JUN-99	18-JUN-99
	24-JUN-99	25-JUN-99	28-JUN-99
	16-JUL-99	19-JUL-99	22-JUL-99

NAME AND ADDRESS OF APPLICANT: Novartis Pharmaceuticals Corporation  
59 Route 10  
East Hanover,  
NJ 07936-1080

DRUG PRODUCT NAME:

Proprietary: **Trileptal™**  
Nonproprietary/Established/USAN: oxcarbazepine [USAN applied 12-JUL-99]  
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STRENGTH(S): 150, 300, 600 mg

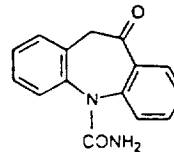
ROUTE OF ADMINISTRATION: Oral

DISPENSED: XX Rx      \_\_\_ OTC

SPECIAL PRODUCTS: No

CHEMICAL NAME, STRUCTURAL FORMULA AND MOLECULAR FORMULA: 10, 11-Dihydro-10-oxo-5H-dibenz[b,f]azepine-5-carboxamide

C<sub>15</sub>N<sub>2</sub>O<sub>2</sub>      Mol. Weight: 252.27      CAS: 28721-07-5



SUPPORTING DOCUMENTS: DMF [redacted]

RELATED DOCUMENTS: IND [redacted]

CONSULTS: The proposed trademark "Trileptal" is accepted by the CDER Labeling and Nomenclature Committee [redacted]. Site inspections completed (OC recommendation acceptable, June 7, 1999 [redacted] Methods Validation to be submitted.

REMARKS / COMMENTS: Novartis provided responses to the CMC deficiencies. A 36-month retest date for the drug substance is supported by real time stability data from [redacted]. Revised specifications and post-approval stability commitments for the drug product have been provided (AM, July 16, 1999). The 24-month expiration date is supported by real time stability data [redacted].

CONCLUSIONS AND RECOMMENDATIONS: Recommend NDA 21-014 is Approvable.

The following recommendations should be communicated to the sponsor:

1. Rounding the purity factor (reference standard) to the first decimal (rounding to 100% not acceptable).
2. Including one batch (300 mg strength) tablets packaged in blisters in the post-approval stability commitment to cover all prevalent marketed packaging configurations.

cc: Orig. NDA 21-014  
HFD-120/Division File  
HFD-120/DChristodoulou  
HFD-120/MMalandruccho  
HFD-120/MGuzewska/R/D Init by: MG  
HFD-810/CHoiberg

[Signature] /S/ Danae D. Christodoulou, Ph.D., Review Chemist

[Signature] 8.5.99

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JUL 19 1999

DIVISION OF NEUROPHARMACOLOGICAL DRUG PRODUCTS  
Review of Chemistry, Manufacturing, and Controls

NDA#: 21-014

CHEMISTRY REVIEW: # 1

DATE REVIEWED: 16-Jul-99

Submission Type	Document Date	CDER Date	Assigned Date
ORIGINAL	25-SEPT-98	28-SEPT-98	7-OCT-98
AMENDMENTS	04-APR-99	06-APR-99	
	23-APR-99	26-APR-99	

NAME AND ADDRESS OF APPLICANT: Novartis Pharmaceuticals Corporation  
59 Route 10  
East Hanover,  
NJ 07936-1080

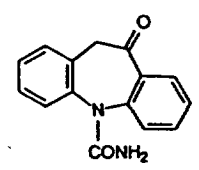
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Nonproprietary/Established/USAN: oxcarbazepine [USAN accepted 1999]  
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C<sub>15</sub>N<sub>2</sub>O<sub>2</sub>      Mol. Weight: 252.27      CAS: 28721-07-5



SUPPORTING DOCUMENTS: OME  
RELATED DOCUMENTS: IND  
CONSULTS: The proposed trademark "Trileptal" is accepted by the CDER Labeling and Nomenclature Committee. The EER report is attached.  
all facilities comply. MV to be submitted after methods deficiencies have been addressed.

REMARKS / COMMENTS: The deficiencies were communicated.  
Updated 18-month stability data for the drug substance, and 24-month data for the drug product have been provided in the April 5, 1999 amendment. The 24-month expiration date is supported by real time stability data.

CONCLUSIONS AND RECOMMENDATIONS: Recommend NDA 21-014 Not Approvable.

cc: Orig. NDA 21-014  
HFD-120/Division File  
HFD-120/DChristodoulou  
HFD-120/MMalandrucchio  
HFD-120/MGuzewska/R/D Init.by: MG  
HFD-810/CHoiberg

/S/  
Danae D. Christodoulou, Ph.D., Review Chemist

Filename: N21014n.doc

/S/ 7.19.99