

**CENTER FOR DRUG EVALUATION AND
RESEARCH**

APPLICATION NUMBER:

21-793

CHEMISTRY REVIEW(S)



NDA 21-793

**Reglan —™ (Metoclopramide Hydrochloride)
5mg and 10 mg Orally Disintegrating Tablet**

Schwarz Pharma, Inc.

**Zhengfang Ge, Ph.D.
DNDC II, Office of New Drug Chemistry
for
Division of Gastrointestinal and Coagulation Drug
Products, HFD-180**



Table of Contents

Table of Contents	2
Chemistry Review Data Sheet.....	3
The Executive Summary	8
I. Recommendations.....	8
A. Recommendation and Conclusion on Approvability	8
B. Recommendation on Phase 4 (Post-Marketing) Commitments, Agreements, and/or Risk Management Steps, if Approvable.....	8
II. Summary of Chemistry Assessments.....	8
A. Description of the Drug Product(s) and Drug Substance(s)	8
B. Description of How the Drug Product is Intended to be Used.....	8
C. Basis for Approvability or Not-Approval Recommendation.....	9



Chemistry Review Data Sheet

1. NDA #21-793
2. REVIEW #3
3. REVIEW DATE: May 26, 2005
4. REVIEWER: Zhengfang Ge
5. PREVIOUS DOCUMENTS:

Previous Documents

None

Document Date

6. SUBMISSION(S) BEING REVIEWED:

Submission(s) Reviewed

Original Submission
Amendment N000-BC
Amendment N000-BC
Amendment N000-BC
Amendment N000-BC

Document Date

July 30, 2004
Feb 17, 2005
March 8, 2005
May 9, 2005
May 25, 2005

7. NAME & ADDRESS OF APPLICANT:

Name: Schwarz Pharma Inc.
Address: 6140 W. Executive Drive, Mequon, WI 53092
Representative: Donna K. Multhauf, Director, Regulatory Affairs
Telephone: 262-238-5226

8. DRUG PRODUCT NAME/CODE/TYPE:



CHEMISTRY REVIEW



Chemistry Review Data Sheet

- a) Proprietary Name: Reglan
- b) Non-Proprietary Name (USAN): Metoclopramide hydrochloride (USP)
- c) Code Name/# (ONDC only): N/A
- d) Chem. Type/Submission Priority (ONDC only):
- Chem. Type: 3
 - Submission Priority: S

9. LEGAL BASIS FOR SUBMISSION: 505(b)(1) of the Federal Food, Drug & Cosmetic Act and 21CFR 314.101(a)

10. PHARMACOL. CATEGORY: GI motility modifiers

11. DOSAGE FORM: Orally disintegrating tablet

12. STRENGTH/POTENCY: 5 mg and 10 mg

13. ROUTE OF ADMINISTRATION: Oral

14. Rx/OTC DISPENSED: Rx OTC

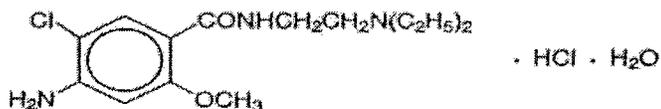
15. SPOTS (SPECIAL PRODUCTS ON-LINE TRACKING SYSTEM):

SPOTS product – Form Completed

Not a SPOTS product

Chemistry Review Data Sheet

1. CHEMICAL NAME, STRUCTURAL FORMULA, MOLECULAR FORMULA, MOLECULAR WEIGHT:



Name: 4-amino-5-chloro-N-[2-(diethylamino)ethyl]-2-methoxy benzamide monohydrochloride monohydrate

Molecular Formula: C₁₄H₂₂ClN₃O₂·HCl·H₂O

Molecular Weight: 354.3

17. RELATED/SUPPORTING DOCUMENTS:

A. DMFs:

DMF #	TYPE	HOLDER	ITEM REFERENCED	CODE ¹	STATUS ²	DATE REVIEW COMPLETED	COMMENTS
	2			1	Deficiency	24-Jan-2005	Annual update reviewed, deficiency letter sent to the sponsor
	2				Adequate	15-Sep-2003	Reviewed by Dr. Tele, Chhagan, HFD-120
	4			1	Adequate	26-July-2000	Reviewed by Dr. McLamore, Sherita, HFD-120
	3			1	Adequate	3-Nov-2004	Reviewed by Dr. Soldatova, Lyudmila N., HFD-120
	3			1	Adequate	11-April-2003	Reviewed by Dr.



CHEMISTRY REVIEW



Chemistry Review Data Sheet

					Zimmerman, Stuart, HFD- 110
3			Adequate	15-Sep-2000	Reviewed by Dr Donald N. Kleir
3		1	Adequate	2-Aug-2002	Reviewed by Dr. Art Shaw
7 3		1	Adequate	06-May-2003	Reviewed by Dr. Sarah C. Pope

¹ Action codes for DMF Table:

1 – DMF Reviewed.

Other codes indicate why the DMF was not reviewed, as follows:

2 – Type 1 DMF

3 – Reviewed previously and no revision since last review

4 – Sufficient information in application

5 – Authority to reference not granted

6 – DMF not available

7 – Other (explain under "Comments")

² Adequate, Inadequate, or N/A (There is enough data in the application, therefore the DMF did not need to be reviewed)

B. Other Documents:

DOCUMENT	APPLICATION NUMBER	DESCRIPTION
	NDA 17-854	Reglan, 5 mg and 10 mg tablets

18. STATUS:

ONDC:

CONSULTS/ CMC RELATED REVIEWS	RECOMMENDATION	DATE	REVIEWER
Biometrics	Not Applicable		
EES	Acceptable	22-Dec-2004	
Pharm/Tox	Not Applicable		



CHEMISTRY REVIEW



Chemistry Review Data Sheet

Biopharm	Pending		
LNC	See review note, page 13		
Methods Validation	Pending		
DMETS	Done	3-May-2005	
EA	See review		
Microbiology	Not Applicable		

OGD:

CONSULTS/ CMC RELATED REVIEWS	RECOMMENDATION	DATE	REVIEWER
Microbiology			
EES			
Methods Validation			
Labeling			
Bioequivalence			
EA			
Radiopharmaceutical			

19. ORDER OF REVIEW (OGD Only)

The application submission(s) covered by this review was taken in the date order of receipt. ___ Yes ___ No If no, explain reason(s) below:

**Appears This Way
On Original**



The Chemistry Review for NDA 21-793

The Executive Summary

I. Recommendations

A. Recommendation and Conclusion on Approvability

In the amendment dated 25-May-2005, the applicant accepted all the recommendations by the Agency in the IR letter dated 20-May-2005 (see review note). As a conclusion, this NDA can be approved from CMC prospective.

B. Recommendation on Phase 4 (Post-Marketing) Commitments, Agreements, and/or Risk Management Steps, if Approvable

Not applicable.

II. Summary of Chemistry Assessments

A. Description of the Drug Product(s) and Drug Substance(s)

Metoclopramide hydrochloride is an USP monograph item. NDA 17-854, originally submitted by Wyeth-Ayerst for Reglan 10 mg tablets was approved on 12/30/1980. The NDA was later transferred to SPInc on 12/27/2001. Several dosage forms of metoclopramide, as well as several generic applications for metoclopramide tablets have since been approved.

This NDA proposed an orally disintegrating dosage form of metoclopramide HCl (Reglan ) , in strengths of 5 mg and 10 mg. Most of the inactive ingredients, except natural & artificial orange flavor, reviewed in later sections are listed in the FDA Inactive Ingredient list and are commonly used in oral tablet formulations. Each of these inactive ingredients has a long and safe history of use in pharmaceutical preparations that is well recognized in the industry. All the DMFs referenced for the inactive ingredients were reviewed previously and are adequate for the drug use.

The drug product will be marketed in bottles (100 count). Sample drug products in blister packages are also available.

B. Description of How the Drug Product is Intended to be Used

Reglan ^M is indicated as short-term (4 to 12 weeks) therapy for adults with symptomatic, documented gastroesophageal reflux who failed to respond to conventional therapy. The proposed labeling indicated that the use of Reglan 

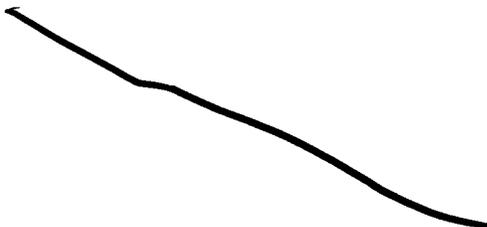


CHEMISTRY REVIEW TEMPLATE



Chemistry Assessment Section

tablets is for adults only and the therapy should not exceed 12 weeks in duration. The following uses are provided in the proposed labeling:



C. Basis for Approvability or Not-Approval Recommendation

None



Appears This Way
On Original

1 Page(s) Withheld

Trade Secret / Confidential

Draft Labeling

Deliberative Process

Withheld Track Number: Chemistry- 1

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

/s/

Zhengfang Ge
5/26/05 03:08:10 PM
CHEMIST

Liang Zhou
5/26/05 03:31:47 PM
CHEMIST



NDA 21-793

**Reglan —^M (Metoclopramide Hydrochloride)
5mg and 10 mg Orally Disintegrating Tablet**

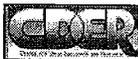
Schwarz Pharma, Inc.

**Zhengfang Ge, Ph.D.
DNDC II, Office of New Drug Chemistry
for
Division of Gastrointestinal and Coagulation Drug
Products, HFD-180**



Table of Contents

Table of Contents	2
Chemistry Review Data Sheet.....	3
The Executive Summary	8
I. Recommendations.....	8
A. Recommendation and Conclusion on Approvability	8
B. Recommendation on Phase 4 (Post-Marketing) Commitments, Agreements, and/or Risk Management Steps, if Approvable.....	8
II. Summary of Chemistry Assessments.....	8
A. Description of the Drug Product(s) and Drug Substance(s)	8
B. Description of How the Drug Product is Intended to be Used.....	9
C. Basis for Approvability or Not-Approval Recommendation.....	9
Review Note: Review of sponsor's responses to the deficiencies.....	10



Chemistry Review Data Sheet

1. NDA #21-793
2. REVIEW #2
3. REVIEW DATE: May 18, 2005
4. REVIEWER: Zhengfang Ge
5. PREVIOUS DOCUMENTS:

Previous Documents

None

Document Date

6. SUBMISSION(S) BEING REVIEWED:

Submission(s) Reviewed

Original Submission
Amendment N000-BC
Amendment N000-BC
Amendment N000-BC

Document Date

July 30, 2004
Feb 17, 2005
March 8, 2005
May 9, 2005

7. NAME & ADDRESS OF APPLICANT:

Name: Schwarz Pharma Inc.
Address: 6140 W. Executive Drive, Mequon, WI 53092
Representative: Donna K. Multhauf, Director, Regulatory Affairs
Telephone: 262-238-5226

8. DRUG PRODUCT NAME/CODE/TYPE:

a) Proprietary Name: Reglan ~~XXXXXXXXXX~~



CHEMISTRY REVIEW



Chemistry Review Data Sheet

- b) Non-Proprietary Name (USAN): Metoclopramide hydrochloride (USP)
c) Code Name/# (ONDC only): N/A
d) Chem. Type/Submission Priority (ONDC only):
- Chem. Type: 3
 - Submission Priority: S

9. LEGAL BASIS FOR SUBMISSION: 505(b)(1) of the Federal Food, Drug & Cosmetic Act and 21CFR 314.101(a)

10. PHARMACOL. CATEGORY: GI motility modifiers

11. DOSAGE FORM: Orally disintegrating tablet

12. STRENGTH/POTENCY: 5 mg and 10 mg

13. ROUTE OF ADMINISTRATION: Oral

14. Rx/OTC DISPENSED: Rx OTC

15. SPOTS (SPECIAL PRODUCTS ON-LINE TRACKING SYSTEM):
 SPOTS product – Form Completed
 Not a SPOTS product

**Appears This Way
On Original**

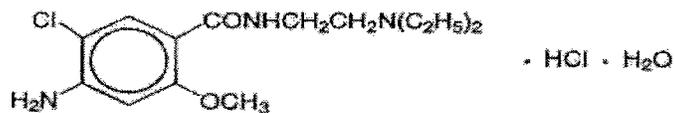


CHEMISTRY REVIEW



Chemistry Review Data Sheet

1. CHEMICAL NAME, STRUCTURAL FORMULA, MOLECULAR FORMULA, MOLECULAR WEIGHT:



Name: 4-amino-5-chloro-N-[2-(diethylamino)ethyl]-2-methoxy benzamide monohydrochloride monohydrate

Molecular Formula: C₁₄H₂₂ClN₃O₂·HCl·H₂O

Molecular Weight: 354.3

17. RELATED/SUPPORTING DOCUMENTS:

A. DMFs:

DMF #	TYPE	HOLDER	ITEM REFERENCED	CODE ¹	STATUS ²	DATE REVIEW COMPLETED	COMMENTS
	2			1	Deficiency	24-Jan-2005	Annual update reviewed, deficiency letter sent to the sponsor
	2		1	Adequate	15-Sep-2003	Reviewed by Dr. Tele, Chhagan, HFD-120	
	4		1	Adequate	26-July-2000	Reviewed by Dr. McLamore, Sherita, HFD-120	
	3		1	Adequate	3-Nov-2004	Reviewed by Dr. Soldatova, Lyudmila N., HFD-120	
	3		1	Adequate	11-April-2003	Reviewed by Dr.	



CHEMISTRY REVIEW



Chemistry Review Data Sheet

					Zimmerman, Stuart, HFD-110
3		1	Adequate	15-Sep-2000	Reviewed by Dr. Donald N. Kleir
3		1	Adequate	2-Aug-2002	Reviewed by Dr. Art Shaw
7	3	1	Adequate	06-May-2003	Reviewed by Dr. Sarah C. Pope

¹ Action codes for DMF Table:

1 – DMF Reviewed.

Other codes indicate why the DMF was not reviewed, as follows:

2 – Type 1 DMF

3 – Reviewed previously and no revision since last review

4 – Sufficient information in application

5 – Authority to reference not granted

6 – DMF not available

7 – Other (explain under "Comments")

² Adequate, Inadequate, or N/A (There is enough data in the application, therefore the DMF did not need to be reviewed)

B. Other Documents:

DOCUMENT	APPLICATION NUMBER	DESCRIPTION
	NDA 17-854	Reglan, 5 mg and 10 mg tablets

18. STATUS:

ONDC:

CONSULTS/ CMC RELATED REVIEWS	RECOMMENDATION	DATE	REVIEWER
Biometrics	Not Applicable		
EES	Acceptable	22-Dec-2004	
Pharm/Tox	Not Applicable		



CHEMISTRY REVIEW



Chemistry Review Data Sheet

Biopharm	Pending		
LNC	See review note, page 13		
Methods Validation	Pending		
DMETS	Done	3-May-2005	
EA	See review		
Microbiology	Not Applicable		

OGD:

CONSULTS/ CMC RELATED REVIEWS	RECOMMENDATION	DATE	REVIEWER
Microbiology			
EES			
Methods Validation			
Labeling			
Bioequivalence			
EA			
Radiopharmaceutical			

19. ORDER OF REVIEW (OGD Only)

The application submission(s) covered by this review was taken in the date order of receipt. ___ Yes ___ No If no, explain reason(s) below:

*Appears This Way
On Original*



The Chemistry Review for NDA 21-793

The Executive Summary

I. Recommendations

A. Recommendation and Conclusion on Approvability

This is a review of the response sent by the sponsor, dated May 9, 2005, based on the deficiencies letter, dated April 25, 2004, communicated with the sponsor regarding the original submission of NDA 21-793.

Based on the review of the sponsor's responses, this application is **Approvable** from CMC prospective pending the sponsor to resolve the following issues:

- a. The justification for the scoring on the 10 mg drug product is unacceptable. The sponsor should not use the scoring on the 10 mg drug products because of the potential off-label use and quality issues.
- b. The proposed dissolution limit of NLT in 15 minutes is unacceptable. The dissolution limit should be NLT in 15 minutes based on the test results.
- c. The proposed acceptance criteria for the disintegration specification is unacceptable. The acceptance criteria for the disintegration specification should be less than based on the test results.
- d. It is recommended to remove in the trade name for the drug product because of the potential usage of promotion and confusion with immediate release tablets. This recommendation is pending decision from clinical division.

B. Recommendation on Phase 4 (Post-Marketing) Commitments, Agreements, and/or Risk Management Steps, if Approvable

Not applicable.

II. Summary of Chemistry Assessments

A. Description of the Drug Product(s) and Drug Substance(s)

Metoclopramide hydrochloride is an USP monograph item. NDA 17-854, originally submitted by Wyeth-Ayerst for Reglan 10 mg tablets was approved on 12/30/1980. The NDA was later transferred to SPInC on 12/27/2001. Several dosage forms of metoclopramide, as well as several generic applications for metoclopramide tablets have since been approved.

This NDA proposed an orally disintegrating dosage form of metoclopramide HCl (Reglan ⁴), in strengths of 5 mg and 10 mg. Most of the inactive ingredients,

Chemistry Assessment Section

except natural & artificial orange flavor, reviewed in later sections are listed in the FDA Inactive Ingredient list and are commonly used in oral tablet formulations. Each of these inactive ingredients has a long and safe history of use in pharmaceutical preparations that is well recognized in the industry. All the DMFs referenced for the inactive ingredients were reviewed previously and are adequate for the drug use.

The drug product will be marketed in bottles (100 count). Sample drug products in blister packages are also available.

B. Description of How the Drug Product is Intended to be Used

Reglan TM is indicated as short-term (4 to 12 weeks) therapy for adults with symptomatic, documented gastroesophageal reflux who failed to respond to conventional therapy. The proposed labeling indicated that the use of Reglan TM tablets is for adults only and the therapy should not exceed 12 weeks in duration. The following uses are provided in the proposed labeling:

For the relief of symptomatic gastroesophageal reflux: Administer from 10 mg to 15 mg of Reglan ^M orally up to q.i.d. 30 min before each meal and at bedtime, depending upon symptoms being treated and clinical response.

For the relief of symptoms associated with diabetic gastroparesis (Diabetic Gastric Stasis): Administer 10 mg of Reglan ^M 30 min before each meal and at bedtime for two and eight weeks, depending upon response and the likelihood of continued well-being upon drug discontinuation.

C. Basis for Approvability or Not-Approval Recommendation

Based on the review of the sponsor's responses, this application is **Approvable** from CMC prospective pending the sponsor to resolve the following issues:

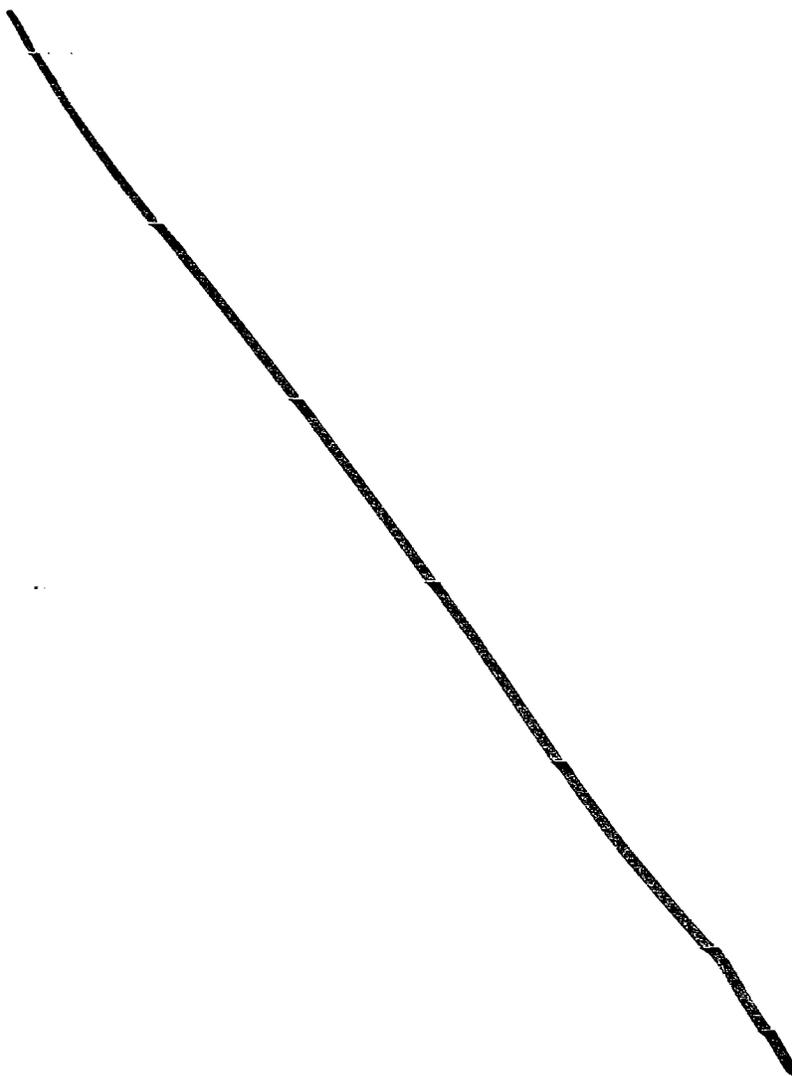
- a. The justification for the scoring on the 10 mg drug product is unacceptable. The sponsor should not use the scoring on the 10 mg drug products because of the potential off-label use and quality issues. From this reviewer's point of view, removing the score on the tablet will not result in any potential manufacturing difficulty. Additionally, if the sponsor intends to market the current 10 mg drug products with the score, tests of the friability and hardness should be included in the regulatory specification for these batches. However, the score should not be used for the future commercial batches.
- b. The proposed dissolution limit of NLT [■] in 15 minutes is unacceptable. The dissolution limit should be NLT [■] in 15 minutes based on the test results provided by the sponsor and also concurred by Biopharm review team.
- c. The proposed acceptance criteria for the disintegration specification is unacceptable. The acceptance criteria for the disintegration specification should be less than [■] based on the test results provided by the sponsor and



Chemistry Assessment Section

Agency's draft Guidance for Industry: Defining Orally Disintegrating Tablets issued in January 2005.

d.



4 Page(s) Withheld

Trade Secret / Confidential

Draft Labeling

Deliberative Process

Withheld Track Number: Chemistry-2

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

/s/

Zhengfang Ge
5/19/05 05:01:19 PM
CHEMIST

Liang Zhou
5/19/05 05:08:23 PM
CHEMIST



NDA 21-793

Reglan —TM (Metoclopramide Hydrochloride)
5mg and 10 mg Orally Disintegrating Tablet

Schwarz Pharma, Inc.

Zhengfang Ge, Ph.D.
DNDC II, Office of New Drug Chemistry
for
Division of Gastrointestinal and Coagulation Drug
Products, HFD-180



Table of Contents

Table of Contents	2
Chemistry Review Data Sheet.....	3
The Executive Summary	8
I. Recommendations.....	8
A. Recommendation and Conclusion on Approvability.....	8
B. Recommendation on Phase 4 (Post-Marketing) Commitments, Agreements, and/or Risk Management Steps, if Approvable.....	8
II. Summary of Chemistry Assessments.....	8
A. Description of the Drug Product(s) and Drug Substance(s).....	8
B. Description of How the Drug Product is Intended to be Used.....	8
C. Basis for Approvability or Not-Approval Recommendation.....	9
III. Administrative.....	9
A. Reviewer's Signature.....	9
B. Endorsement Block.....	9
C. CC Block	9
Chemistry Assessment.....	10
I. Review Of Common Technical Document-Quality (Ctd-Q) Module 3.2: Body Of Data.....	10
S DRUG SUBSTANCE [Name, Manufacturer].....	10
P DRUG PRODUCT [Name, Dosage form].....	14
A APPENDICES	45
R REGIONAL INFORMATION	45
II. Review Of Common Technical Document-Quality (Ctd-Q) Module 1	45
A. Labeling & Package Insert	45
B. Environmental Assessment Or Claim Of Categorical Exclusion	47
III. List Of Deficiencies To Be Communicated.....	47



Chemistry Review Data Sheet

1. NDA #21-793
2. REVIEW #1
3. REVIEW DATE: March 31, 2005
4. REVIEWER: Zhengfang Ge
5. PREVIOUS DOCUMENTS:

Previous Documents

None

Document Date

6. SUBMISSION(S) BEING REVIEWED:

Submission(s) Reviewed

Original Submission
Amendment N000-BC
Amendment N000-BC

Document Date

July 30, 2004
Feb 17, 2005
March 8, 2005

7. NAME & ADDRESS OF APPLICANT:

Name: Schwarz Pharma Inc.
Address: 6140 W. Executive Drive, Mequon, WI 53092
Representative: Donna K. Multhauf, Director, Regulatory Affairs
Telephone: 262-238-5226

8. DRUG PRODUCT NAME/CODE/TYPE:

- a) Proprietary Name: Reglan
- b) Non-Proprietary Name (USAN): Metoclopramide hydrochloride (USP)



CHEMISTRY REVIEW



Chemistry Review Data Sheet

- c) Code Name/# (ONDC only): N/A
d) Chem. Type/Submission Priority (ONDC only):

- Chem. Type: 3
- Submission Priority: S

9. LEGAL BASIS FOR SUBMISSION: 505(b)(1) of the Federal Food, Drug & Cosmetic Act and 21CFR 314.101(a)

10. PHARMACOL. CATEGORY: GI motility modifiers

11. DOSAGE FORM: Orally disintegrating tablet

12. STRENGTH/POTENCY: 5 mg and 10 mg

13. ROUTE OF ADMINISTRATION: Oral

14. Rx/OTC DISPENSED: X Rx ___ OTC

15. SPOTS (SPECIAL PRODUCTS ON-LINE TRACKING SYSTEM):

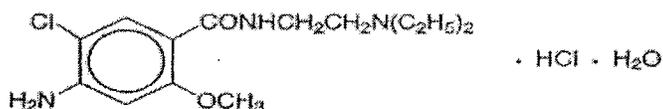
___ SPOTS product – Form Completed

X Not a SPOTS product

**Appears This Way
On Original**

Chemistry Review Data Sheet

1. CHEMICAL NAME, STRUCTURAL FORMULA, MOLECULAR FORMULA, MOLECULAR WEIGHT:



Name: 4-amino-5-chloro-N-[2-(diethylamino)ethyl]-2-methoxy benzamide monohydrochloride monohydrate

Molecular Formula: C₁₄H₂₂ClN₃O₂·HCl·H₂O

Molecular Weight: 354.3

17. RELATED/SUPPORTING DOCUMENTS:

A. DMFs:

DMF #	TYPE	HOLDER	ITEM REFERENCED	CODE ¹	STATUS ²	DATE REVIEW COMPLETED	COMMENTS
	2			1	Deficiency	24-Jan-2005	Annual update reviewed, deficiency letter sent to the sponsor
	2			1	Adequate	15-Sep-2003	Reviewed by Dr. Tele, Chhagan, HFD-120
	4			1	Adequate	26-July-2000	Reviewed by Dr. McLamore, Sherita, HFD-120
	3			1	Adequate	3-Nov-2004	Reviewed by Dr. Soldatova, Lyudmila N., HFD-120
	3			1	Adequate	11-April-2003	Reviewed by Dr.



CHEMISTRY REVIEW



Chemistry Review Data Sheet

	3	e			Zimmerman, Stuart, HFD-110
	3	1	Adequate	15-Sep-2000	Reviewed by Dr. Donald N. Kleir
	3	1	Adequate	2-Aug-2002	Reviewed by Dr. Art Shaw
	3	1	Adequate	06-May-2003	Reviewed by Dr. Sarah C. Pope

¹ Action codes for DMF Table:

1 – DMF Reviewed.

Other codes indicate why the DMF was not reviewed, as follows:

2 – Type 1 DMF

3 – Reviewed previously and no revision since last review

4 – Sufficient information in application

5 – Authority to reference not granted

6 – DMF not available

7 – Other (explain under "Comments")

² Adequate, Inadequate, or N/A (There is enough data in the application, therefore the DMF did not need to be reviewed)

B. Other Documents:

DOCUMENT	APPLICATION NUMBER	DESCRIPTION
Amendment dated 2/17/05	NDA21-793 N000 BC	Updated stability data
Amendment date 3/8/05	NDA21-793 N000 BC	Minor change

18. STATUS:

ONDC:

CONSULTS/ CMC RELATED REVIEWS	RECOMMENDATION	DATE	REVIEWER
Biometrics	Not Applicable		
EES	Acceptable	22-Dec-2004	



CHEMISTRY REVIEW



Chemistry Review Data Sheet

Pharm/Tox	Not Applicable		
Biopharm	Pending		
LNC	N/A		
Methods Validation	Pending		
DMETS	Pending		
EA	See review		
Microbiology	Not Applicable		

OGD:

CONSULTS/ CMC RELATED REVIEWS	RECOMMENDATION	DATE	REVIEWER
Microbiology			
EES			
Methods Validation			
Labeling			
Bioequivalence			
EA			
Radiopharmaceutical			

19. ORDER OF REVIEW (OGD Only)

The application submission(s) covered by this review was taken in the date order of receipt. ___ Yes ___ No If no, explain reason(s) below:

**Appears This Way
On Original ..**



The Chemistry Review for NDA 21-793

The Executive Summary

I. Recommendations

A. Recommendation and Conclusion on Approvability

From CMC point of view, this NDA is approvable pending adequate resolution for the deficiencies listed in section III of this review. These deficiencies should be able to address by the sponsor during the current review cycle. The sponsor proposed to score the 10 mg drug product. Because of a variety of technical issues for the 1st precedent of ODT product with scoring, it is discouraged for the sponsor to make the scoring on the commercial product, see review in section P.5.1.

B. Recommendation on Phase 4 (Post-Marketing) Commitments, Agreements, and/or Risk Management Steps, if Approvable

Not applicable.

II. Summary of Chemistry Assessments

A. Description of the Drug Product(s) and Drug Substance(s)

Metoclopramide hydrochloride is an USP monograph item. NDA 17-854, originally submitted by Wyeth-Ayerst for Reglan 10 mg tablets was approved on 12/30/1980. The NDA was later transferred to SPInc on 12/27/2001. Several dosage forms of metoclopramide, as well as several generic applications for metoclopramide tablets have since been approved.

This NDA proposed an orally disintegrating dosage form of metoclopramide HCl (Reglan TM), in strengths of 5 mg and 10 mg. Most of the inactive ingredients, except natural & artificial orange flavor, reviewed in later sections are listed in the FDA Inactive Ingredient list and are commonly used in oral tablet formulations. Each of these inactive ingredients has a long and safe history of use in pharmaceutical preparations that is well recognized in the industry. All the DMFs referenced for the inactive ingredients were reviewed previously and are adequate for the drug use.

The drug product will be marketed in bottles (100 count). Sample drug products in blister packages are also available.

B. Description of How the Drug Product is Intended to be Used



Chemistry Assessment Section

Reglan TM is indicated as short-term (4 to 12 weeks) therapy for adults with symptomatic, documented gastroesophageal reflux who failed to respond to conventional therapy. The proposed labeling indicated that the use of Reglan ^M tablets is for adults only and the therapy should not exceed 12 weeks in duration. The following uses are provided in the proposed labeling:

For the relief of symptomatic gastroesophageal reflux: Administer from 10 mg to 15 mg of Reglan TM orally up to q.i.d. 30 min before each meal and at bedtime, depending upon symptoms being treated and clinical response.

For the relief of symptoms associated with diabetic gastroparesis (Diabetic Gastric Stasis): Administer 10 mg of Reglan ^M 30 min before each meal and at bedtime for two and eight weeks, depending upon response and the likelihood of continued well-being upon drug discontinuation.

C. Basis for Approvability or Not-Approval Recommendation

The drug substance, Metoclopramide hydrochloride, is a USP monograph item. Metoclopramide hydrochloride has marketed drugs (tablets). This NDA provides a different dosage form, orally disintegrated tablets. Several minor deficiencies were found during the CMC review. From CMC point of view, this NDA is approvable pending adequate resolution for the deficiencies.

III. Administrative**A. Reviewer's Signature****B. Endorsement Block**

ChemistName/Date: Same date as draft review
ChemistryTeamLeaderName/Date
ProjectManagerName/Date

C. CC Block

38 Page(s) Withheld

Trade Secret / Confidential

Draft Labeling

Deliberative Process

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

/s/

Zhengfang Ge
4/18/05 03:39:55 PM
CHEMIST

Liang Zhou
4/19/05 10:57:17 AM
CHEMIST

The sponsor claims categorical exclusion for environmental assessment (see page 47 of the CMC review).

67
5/17/05