

CENTER FOR DRUG EVALUATION AND RESEARCH

Application Number 74-655

CHEMISTRY REVIEW(S)

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SCIENTIFIC ASSOCIATES--Contract lab

13. DOSAGE FORM 14. POTENCY
Capsules 150 mg & 300 mg

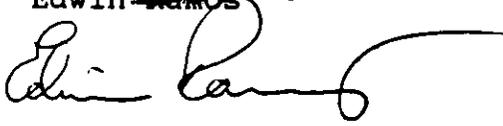
15. CHEMICAL NAME AND STRUCTURE
N[2-[[[5-[(dimethylamino)methyl]-2-furanyl]methyl]thio]ethyl]-N'-methyl-2-nitro-1,1-ethenediamine, hydrochloride.

16. RECORDS AND REPORTS
N/A

17. COMMENTS
The firm has revised their QVI's method to control the five USP listed OVIs and the process solvents used by the drug substance supplier. Also, batch size decreases are proposed for the 150 mg and 300 mg dosage forms. Detailed information can be found written in bold under each pertinent section of this review. No other changes are requested.

18. CONCLUSIONS AND RECOMMENDATIONS
Recommend approval letter to issue. Patent litigation issues have been resolved due to a settlement agreement reached between the applicant and Glaxo.

19. REVIEWER: DATE COMPLETED:
Edwin Ramos October 6, 1997

 10/10/97

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Information and are not
releasable.

Chemistry Review #4a.

10/10/97

1. CHEMIST'S REVIEW NO. 4
2. ANDA # 74-655
3. NAME AND ADDRESS OF APPLICANT
Geneva Pharmaceuticals, Inc.
2555 W. Midway Blvd.
P.O. Box 446
Broomfield, Colorado 80038-0446
4. LEGAL BASIS for ANDA SUBMISSION
Ranitidine HCl Capsules, USP 150 mg and 300 mg are the generic version of the listed drug, Zantac®/Gel Dose 150 mg and 300 mg manufactured by Glaxo. Patent Nos. 4,128,658 and 4,521,431 which cover Polymorphic Form I and Form II respectively, will expire on 12/5/95 and on 2002. Also, patent No. 5,028,432 is referred for the subject drug product which will expire on July 2, 2008. Paragraph III certifies that upon approval, the applicant will be able to make, use and sell the subject finished drug product as of December 5, 1995 (7/97 after GATT extension is applied).
5. SUPPLEMENT
N/A
6. PROPRIETARY NAME
7. NONPROPRIETARY NAME
Ranitidine Hydrochloride
8. SUPPLEMENT(s) PROVIDE(s) FOR:
N/A
9. AMENDMENTS AND OTHER DATES:

March 31, 1995--	Original Submission
May 2, 1995--	Acknowledgment receipt
September 21, 1995-	Deficiency letter
January 22, 1996--	Bio. deficiency letter
February 5, 1996--	Amendment
April 16, 1996--	Bio Amendment
May 10, 1996--	Bio letter
July 11, 1996--	Bio amendment
August 14, 1996--	Deficiency letter
January 16, 1997--	Amendment
January 23, 1997--	Bio review, acceptable.
March 14, 1997--	Deficiency letter (labeling)
March 25, 1997--	Amendment (labeling only)
June 25, 1997--	Telecom
June 27, 1997--	Amendment
10. PHARMACOLOGICAL CATEGORY
H2 Receptor Antagonist
11. Rx or OTC
Rx

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Chemistry Review # 4
6/30/97

Division Review Summary

ANDA: 74-655

DRUG PRODUCT: Ranitidine Hydrochloride I

FIRM: Geneva Pharmaceutical

DOSAGE FORM: Capsules

STRENGTHS: 150 mg & 300 mg

CGMP STATEMENT/EIR UPDATE STATUS:
Acceptable dated 1/23/97.

BIO INFORMATION:
Acceptable dated 1/23/97.

VALIDATION:
N/A

STABILITY:
Accelerated stability data (40°C and 75% RH) on the smallest (30's/150 mg & 60's/300 mg) and largest (500's for both) of the container sizes are included. These data were found to conform to specified limits.

The stability protocol is in conformance with FDA Stability Guidelines. Containers used in the stability studies are the same as those in the container/closure section of the application.

LABELING:
Acceptable, dated 3/25/97.

SIZE OF BIO BATCH:
A batch record for lot No. 6494023/300 mg is appended. A total of tablets were manufactured.

A batch record for lot No. 6494022/150 mg is appended. A total of tablets were manufactured.

DMF, drug substance manufacturer for Ranitidine Hydrochloride (Form I), was reviewed on 8/8/95 and found to be satisfactory. No relevant revisions since last review, as of 4/15/97.

SIZE OF STABILITY BATCHES:
Same as the Bio batch.

PROPOSED PRODUCTION BATCH:

RECOMMENDATION:
Recommend approval of generic drug Ranitidine Hydrochloride

Capsules, 150 mg & 300 mg.

CHEMISTRY REVIEWER:
Edwin Ramos

DATE: April 17, 1997

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4/30/97

(BJ)

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Geneva Pharmaceuticals, Inc.
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5. SUPPLEMENT
N/A
6. PROPRIETARY NAME
7. NONPROPRIETARY NAME
Ranitidine Hydrochloride
8. SUPPLEMENT(s) PROVIDE(s) FOR:
N/A
9. AMENDMENTS AND OTHER DATES:
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February 5, 1996-- Amendment
April 16, 1996-- Bio Amendment
May 10, 1996-- Bio letter
July 11, 1996-- Bio amendment
August 14, 1996-- Deficiency letter
January 16, 1997-- Amendment
January 23, 1997-- Bio review, acceptable.
March 14, 1997-- Deficiency letter (labeling)
March 25, 1997-- Amendment (labeling only)
10. PHARMACOLOGICAL CATEGORY
H2 Receptor Antagonist
11. Rx or OTC
Rx
12. RELATED DMFs #

13. DOSAGE FORM 14. POTENCY
Capsules 150 mg/300 mg

15. CHEMICAL NAME AND STRUCTURE
N[2-[[[5-[(dimethylamino)methyl]-2-furanyl]methyl]thio]ethyl]-N'-methyl-2-nitro-1,1-ethenediamine, hydrochloride.

16. RECORDS AND REPORTS
N/A

17. COMMENTS
This application is acceptable from a chemistry standpoint.

18. CONCLUSIONS AND RECOMMENDATIONS
Recommend approval letter to issue. Chemistry review only, no letter will be issued. Awaiting decision from General Counsel.

19. REVIEWER: DATE COMPLETED:
Edwin Ramos *ER* February 14, 1997

4/30/97

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Chemistry Review 4

4/30/97

1. CHEMIST'S REVIEW NO. 3
2. ANDA # 74-655
3. NAME AND ADDRESS OF APPLICANT
Geneva Pharmaceuticals, Inc.
2555 W. Midway Blvd.
P.O. Box 446
Broomfield, Colorado 80038-0446
4. LEGAL BASIS for ANDA SUBMISSION
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5. SUPPLEMENT
N/A
6. PROPRIETARY NAME
7. NONPROPRIETARY NAME
Ranitidine Hydrochloride
8. SUPPLEMENT(s) PROVIDE(s) FOR:
N/A
9. AMENDMENTS AND OTHER DATES:
March 31, 1995-- Original Submission
May 2, 1995-- Acknowledgment receipt
September 21, 1995- Deficiency letter
January 22, 1996-- Bio. deficiency letter
February 5, 1996-- Amendment
May 10, 1996-- Bio letter
July 11, 1996-- Bio amendment
August 14, 1996-- Deficiency letter
January 16, 1997-- Amendment
January 23, 1997-- Bio review, acceptable.
10. PHARMACOLOGICAL CATEGORY
H2 Receptor Antagonist
11. Rx or OTC
Rx
12. RELATED DMFs #

13. DOSAGE FORM
Capsules

14. POTENCY
150 mg/300 mg

15. CHEMICAL NAME AND STRUCTURE

N[2-[[[5-[(dimethylamino)methyl]-2-furanyl]methyl]thio]ethyl]-N'-methyl-2-nitro-1,1-ethenediamine, hydrochloride.

16. RECORDS AND REPORTS
N/A

17. COMMENTS

This application is acceptable from a chemistry standpoint.

18. CONCLUSIONS AND RECOMMENDATIONS

Recommend facsimile to issue to convey labeling deficiencies and a bio comment.

19. REVIEWER:
Edwin Ramos

DATE COMPLETED:
February 14, 1997

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3/2/97

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Chemistry Review #3

3/7/97

1. CHEMIST'S REVIEW NO. 2
2. ANDA # 74-655
3. NAME AND ADDRESS OF APPLICANT
Geneva Pharmaceuticals, Inc.
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P.O. Box 446
Broomfield, Colorado 80038-0446
4. LEGAL BASIS for ANDA SUBMISSION
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5. SUPPLEMENT
N/A
6. PROPRIETARY NAME
7. NONPROPRIETARY NAME
Ranitidine Hydrochloride
8. SUPPLEMENT(S) PROVIDE(S) FOR:
N/A
9. AMENDMENTS AND OTHER DATES:
March 31, 1995-- Original Submission
May 2, 1995-- Acknowledgement receipt
September 21, 1995- Chem. deficiency letter
January 22, 1996-- Bio. deficiency letter
February 5, 1996-- Amendment
April 16, 1996 - Amendment (bio)
10. PHARMACOLOGICAL CATEGORY
H2 Receptor Antagonist
11. Rx or OTC
Rx
12. RELATED DMFs #

2359-- Scientific Associates--Contract lab

13. DOSAGE FORM
Capsules

14. POTENCY
150 mg/300 mg

15. CHEMICAL NAME AND STRUCTURE
N[2-[[[5-[(dimethylamino)methyl]-2-furanyl]methyl]thio]ethyl]-N'-methyl-2-nitro-1,1-ethenediamine, hydrochloride.

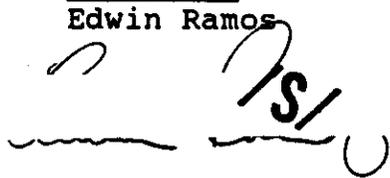
16. RECORDS AND REPORTS
N/A

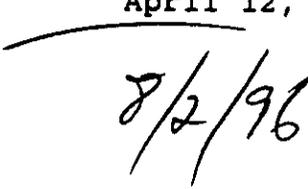
17. COMMENTS
A PAI request will be issued with this review.

18. CONCLUSIONS AND RECOMMENDATIONS
Recommend not approval letter to issue (Minor).

19. REVIEWER:
Edwin Ramos

DATE COMPLETED:
April 12, 1996





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releasable.

Chemistry Review #2
8/2/96

15. CHEMICAL NAME AND STRUCTURE
N[2-[[[5-[(dimethylamino)methyl]-2-furanyl]methyl]thio]ethyl]-N'-methyl-2-nitro-1,1-ethenedfamine, hydrochloride.

16. RECORDS AND REPORTS
N/A

17. COMMENTS

18. CONCLUSIONS AND RECOMMENDATIONS
Recommend not approval letter to issue.

19. REVIEWER: DATE COMPLETED:
Edwin Ramos July 21, 1995

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Commercial/Confidential
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*Security Review #1
9/20/95*