CENTER FOR DRUG EVALUATION AND RESEARCH

Application Number 21-150

CHEMISTRY REVIEW(S)

DIVISION OF PULMONARY AND ALLERGY DRUG PRODUCTS
Review of Chemistry, Manufacturing, and Controls

Addendum to NDA 21-150 Chemistry Review 4 (dated 7/19/01)

Review Notes:

- Pfizer in their response (dated Feb 12, 2001) to the Agency's approvable letter dated Jan 17, 2001 stated that they commit to the following. The commitments in the form of Agency's acknowledgements are stated below and are incorporated in Chemistry Review 3 dated March 16, 2001. They have been carried over to Chemistry Review 4 (dated July 19, 2001) since they were not communicated to the sponsor immediately after Chemistry Review 3 dated March 16, 2001.

1. The Agency acknowledges Pfizer's commitment to develop and submit to the Agency, a new HPLC method having a resolution of at least 1.5 between peaks ephedrine and pseudoephedrine hydrochloride, by August 12, 2001.

2. The Agency acknowledges Pfizer's Phase 4 commitment to identify degradation products observed at ≥ 0.2% (20 µg relative to cetirizine), in the drug product and take appropriate action (based on identity).

- Upon realizing that comment # 2 has not been provided to the applicant, until July 23, 2001 the applicant was contacted in a teleconference. During the teleconference, dated July 24, 2001 the applicant was informed of the Agency's desire of the following:

    1. Tighten the acceptance limits for total unspecified and individual impurities from <0.3 to NMT 0.2% to be consistent with the ICH guidance document Q3B.

    2. Identify to the extent possible and take appropriate action (based on identity) all impurities and degradants that appear at or greater than 0.2%.

- The applicant explained that modifying the specifications in such short notice and so close to the NDA action date (August 12, 2001) may not be possible. However they suggested that they would commit to the following:

    1. Pfizer commits to provide a new HPLC purity method to address the Agency's concerns with method P187.21. This new method will be submitted as a supplement to the approved NDA on or before Aug. 12, 2001.

    2. Pfizer commits to identify to the extent possible using appropriate structural characterization techniques (e.g., LC-MS), any new degradant products observed at levels equal to or greater that the threshold for the identification of impurities for this dose listed in the ICH guideline Q3b of 0.5% or 20µg TDI. This corresponds to a limit of 0.2% vs. cetirizine hydrochloride.

        Furthermore Pfizer commits to providing a summary to the Agency of their production and stability experience regarding individual and total unspecified degradants, including identification work as noted above, by Dec. 31, 2001. The

evaluation of the production and stability experience will be with the goal of meeting the Agency's desire for a tightened specification for individual unspecified and total unspecified impurities, should the data support it. While Pfizer accumulates the experience and provides the update to the Agency, noted above, the specifications will remain as stated in Pfizer's Feb. 12, 2001 response to the Agency's comment # 11.

Evaluation: Adequate

The commitments provided by Pfizer seem reasonable due to the present timelines and the fact that these comments were not communicated to the applicant earlier. However the following acknowledgements provided in the Draft CMC comments should be communicated to the applicant in the action package. Comment #3 has been taken from chemistry review 4.

This review does not change the approvable decision of the previous Chemistry Review 4, dated July 19, 2001.

Orig. NDA 21-150
HFD-570/Division File
HFD-570/PPeri/8/1/01
HFD-570/COstroff
HFD-570/GPoochikian
HFD-570/RMeyer
HFD-800/EDuffy
R/D Init. by: _____
filename: NDA 21150.CR4Amendment.doc

_____
S. Prasad Peri, Ph.D. Review Chemist

APPEARS THIS WAY
ON ORIGINAL

CHEMISTRY REVIEW # 4

July 2001

DIVISION OF PULMONARY AND ALLERGY DRUG PRODUCTS
Review of Chemistry, Manufacturing, and Controls

NDA #: 21-150 **CHEM. REVIEW #:** 4 **REVIEW DATE:** 07/19/01

RECOMMEND ACTION: APPROVAL

SUBMISSION TYPE	DOCUMENT DATE	CDER DATE	ASSIGNED DATE
ORIGINAL	01/18/00	01/21/00	2/10/00
Amendment	05/12/00	05/15/00	05/16/00
Amendment	07/28/00	07/31/00	07/31/00
Amendment(BC)	08/16/00	08/17/00	08/24/00
Amendment(AC)	10/11/00	10/12/00	10/19/00
Amendment(BL)	10/17/00	10/18/00	12/29/00
Amendment(BC)	11/21/00	11/22/00	11/22/00
Amendment(BC)	12/27/00	12/28/00	12/29/00
Amendment(BC)	01/17/01	01/18/01	01/19/01
Amendment (BC)	01/18/01	01/19/01	01/19/01
Amendment (BC)	02/12/01	02/12/01	02/12/01
Amendment(C)	02/14/01	02/15/01	02/15/01
Amendment(BC)	02/28/01	03/01/01	03/02/01
Amendment(BC)	03/16/01	03/16/01	03/16/01
Amendment(BL)*	03/27/01	03/28/01	03/28/01

*Subject of this Review

NAME & ADDRESS OF APPLICANT: Pfizer Pharmaceuticals Group,
Pfizer Inc.
235 East 42nd Street
New York, NY 10017-5755

DRUG PRODUCT NAME:

Proprietary: Zyrtec-D™-12 Hour Extended-release bilayer film coated tablets

Nonproprietary/USAN: Cetirizine hydrochloride 5 mg and Pseudoephedrine hydrochloride 120 mg Extended-release bi-layer film coated tablets

Code Name/#:

Chem. Type/Ther. Class:

PHARMACOL. CATEGORY/INDICATION: Cetirizine hydrochloride is an antihistamine and pseudoephedrine hydrochloride is a adrenergic vasoconstrictor

DOSAGE FORM: Extended-release Tablets (Film Coated)

STRENGTHS: Cetirizine hydrochloride 5 mg/pseudoephedrine hydrochloride 120 mg

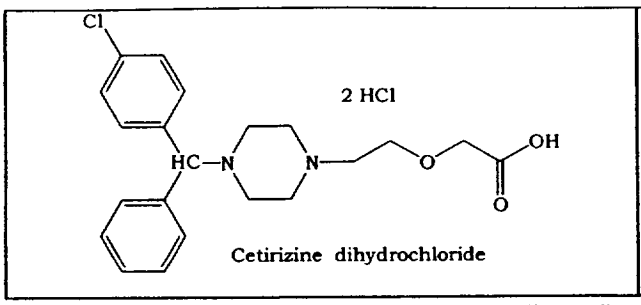
ROUTE OF ADMINISTRATION: Oral

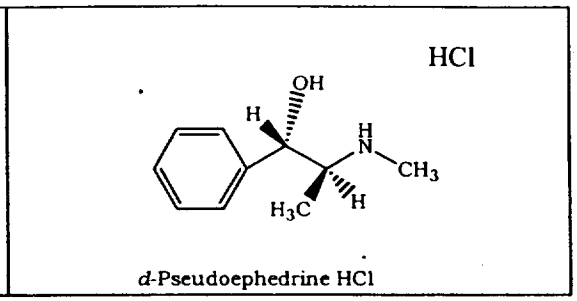
DISPENSED: X Rx _ OTC

SPECIAL PRODUCTS: _ YES X NO

(If yes, fill out the form for special products and deliver to the TIA through the team leader for data entry)

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





Cetirizine.2HCl-(±)-[2-[4-(*p*-chloro-α-phenylbenzyl)-1-piperazinyl]ethoxy] acetic acid dihydrochloride
Molecular Formula: $C_{21}H_{25}ClN_2O_3 \bullet 2HCl$
Molecular Weight: 461.82

Pseudoephedrine HCl-(1S.2S)-2-methylamino-1-phenyl-1-propanol hydrochloride
Molecular Formula: $C_{10}H_{15}NO \bullet HCl$
Molecular Weight: 201.70

SUPPORTING DOCUMENTS:

DMFs

DMF No.	Holder Name	Subject	LOA Date	Status/ Review Date	Reviewed By and for	Reference in Reviews
			09/13/99	Adequate 12/28/00	PeriP for NDA 21-150 (Solid Oral)	Pages 7, 9 CR. 1, Page 5 CR2
			01/27/99	Adequate 01/30/01	SwissK for NDA 21-150 (Solid Oral)	Pages 7, 8, 18 CR1, Page 5 CR2, Page 14 CR3
			05/26/99	Adequate 4/21/00	PeriP for NDA 21-150 (Solid Oral)	Page 26, CR1
			3/29/00	Withdrawn 10/11/00	PeriP for NDA 21-150 (Solid Oral)	Page 46, CR1, Page 5, CR2
			3/29/00	Withdrawn 10/11/00	PeriP for NDA 21-150 (Solid Oral)	Page 46, CR1, Page 5 CR2
			3/29/00	Withdrawn 10/11/00	PeriP for NDA 21-150 (Solid Oral)	Page 46, CR1, Page 5, CR2
			10/4/99	Adequate 03/07/01	PeriP for NDA 21-150 (Solid Oral)	Page 46, CR1, Page 29, CR2, Pages 27,28 CR3
			5/19/99	Withdrawn 10/11/00	PeriP for NDA 21-150 (Solid Oral)	Page 46, CR1

	10/4/99	Adequate 3/24/00	KleinD for NDA10-392,NDA11-459, NDA16-584, NDA16-798 (solid Oral)	Page 47, CR1, Page 30, CR2
	5/19/99	Withdrawn 10/11/00	PeriP for NDA 21-150 (Solid Oral)	Page 47, CR1
	10/4/99	Adequate 6/16/00	PeriP for NDA 21-150 (Solid Oral)	Page 47, CR1
	6/7/99	Withdrawn 10/11/00	PeriP for NDA 21-150 (Solid Oral)	Page 48, CR1
	10/20/99	Adequate 9/9/99	Sloan, MJ for NDA 20-064 SCP010 (Solid Oral)	Page 48, CR1, Page 31, CR2
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	10/14/99	Withdrawn 02/12/01	PeriP for NDA 21-150 (Solid Oral)	Page 47, CR1, Page 34, CR2, Pages 29, 30 CR3
	10/14/99	Adequate 3/20/97	GuzewskaM for NDA 20-699 (Solid Oral)	Page 47, CR1, Page 34, CR2
	6/7/99	Withdrawn 10/11/00	KleinD for NDA 20-974 (Solid Oral)	Page 48, CR1
	6/7/99	Withdrawn 10/11/00	KleinD for NDA 20-974 (Solid Oral)	Page 48, CR1
	6/7/99	Withdrawn 10/11/00	KleinD for NDA 20-974 (Solid Oral)	Page 48, CR1
	6/7/99	Withdrawn 10/11/00	KleinD for NDA 20-974 (Solid Oral)	Page 48, CR1
	10/14/99	Adequate 3/20/97	GuzewskaM for NDA 20-699 (Solid Oral)	Page 47, CR1
	07/28/00	Adequate 03/07/01	PeriP for NDA 21-150 (solid oral)	Page 30, CR2
	01/12/98	Adequate 12/29/00	PeriP for NDA 21-150 (solid oral)	Page 30, CR2, Page 30 CR3

* Supporting DMFs for DMF , ** Supporting DMF for DMF
† DMF withdrawn in a fax dated 7/28/2000

APPEARS THIS WAY
ON ORIGINAL

RELATED DOCUMENTS (if applicable)

Type	Number	Owner	Subject
IND	[redacted]		
NDA	19-835	Pfizer, Inc.	Zyrtec (cetirizine dihydrochloride) Tablets

CONSULTS:

CONSULT	DATE FORWARDED	STATUS	COMMENTS
EER	3/9/2000	Complete	Acceptable based on profile
Microbiology, HFD-160	Not applicable	Not applicable	Not applicable
Biometrics, HFD-710	03/02/01	Complete	Expiry dating, set at 24 months based on data and input from Biometrics
Environmental Assessment	N/A	Adequate	Applicant has applied for a categorical exclusion/Certificate Provided
Labeling & Nomenclature Committee	Not applicable	Adequate	All portions of the trade name have been previously approved.

[redacted]

The applicant was requested for the updated Methods Validation package via telephone (March 15, 2001) and will be pursued once the package is received by Agency.

CONCLUSIONS AND RECOMMENDATIONS:

The application may be approved from the standpoint of chemistry, manufacturing and controls. Comments at the end of the review should be forwarded to the applicant.

cc:
Orig. NDA 21-150
HFD-570/Division File
HFD-570/PPeri
HFD-570/ASchroeder
HFD-570/COstroff
HFD-570/GPoochikian
HFD-570/RMeyer
HFD-800/EDuffy
R/D Init. by: [redacted]
filename: NDA 21150.CR4.doc

S. Prasad Peri, Ph.D. Review Chemist

APPEARS THIS WAY
ON ORIGINAL

CHEMISTRY REVIEW # 3

March 2001

DIVISION OF PULMONARY AND ALLERGY DRUG PRODUCTS
Review of Chemistry, Manufacturing, and Controls

NDA #: 21-150 **CHEM. REVIEW #**: 3 **REVIEW DATE**: 03/16/01

RECOMMEND ACTION: APPROVAL

SUBMISSION TYPE	DOCUMENT DATE	CDER DATE	ASSIGNED DATE
ORIGINAL	01/18/00	01/21/00	2/10/00
Amendment	05/12/00	05/15/00	05/16/00
Amendment	07/28/00	07/31/00	07/31/00
Amendment(BC)	08/16/00	08/17/00	08/24/00
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Amendment(BC)	12/27/00	12/28/00	12/29/00
Amendment(BC)*	01/17/01	01/18/01	01/19/01
Amendment (BC)*	01/18/01	01/19/01	01/19/01
Amendment (BC)*	02/12/01	02/12/01	02/12/01
Amendment(C)*	02/14/01	02/15/01	02/15/01
Amendment(BC)*	02/28/01	03/01/01	03/02/01
Amendment(BC)*	03/16/01	03/16/01	03/16/01

*Subject of this Review

NAME & ADDRESS OF APPLICANT:

Pfizer Pharmaceuticals Group,
Pfizer Inc.
235 East 42nd Street
New York, NY 10017-5755

DRUG PRODUCT NAME:

Proprietary: Zyrtec-D™-12 Hour Extended-release bilayer film coated tablets

Nonproprietary/USAN: Cetirizine hydrochloride 5 mg and Pseudoephedrine hydrochloride 120 mg Extended-release bi-layer film coated tablets

Code Name/#:

Chem. Type/Ther. Class:

PHARMACOL. CATEGORY/INDICATION: Cetirizine hydrochloride is an antihistamine and pseudoephedrine hydrochloride is a adrenergic vasoconstrictor

DOSAGE FORM: Extended-release Tablets (Film Coated)

STRENGTHS: Cetirizine hydrochloride 5 mg/pseudoephedrine hydrochloride 120 mg

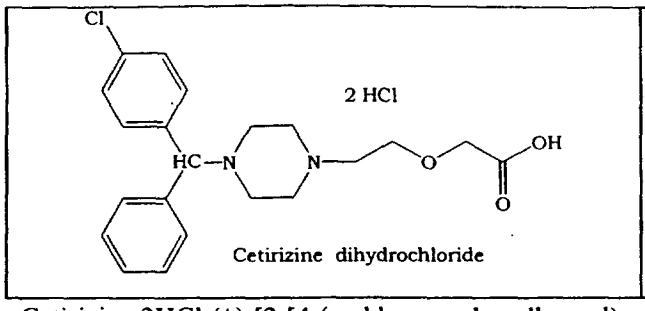
ROUTE OF ADMINISTRATION: Oral

DISPENSED: X Rx _ OTC

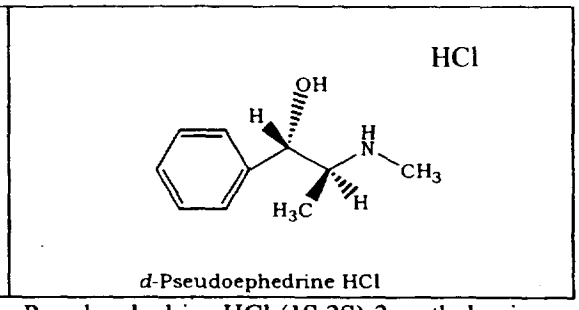
SPECIAL PRODUCTS: _ YES X NO

(If yes, fill out the form for special products and deliver to the TIA through the team leader for data entry)

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



Cetirizine dihydrochloride



d-Pseudoephedrine HCl

Cetirizine.2HCl-(±)-[2-[4-(*p*-chloro-α-phenylbenzyl)-1-piperazinyl]ethoxy]acetic acid dihydrochloride
Molecular Formula: $C_{21}H_{25}ClN_2O_3 \bullet 2HCl$
Molecular Weight: 461.82

Pseudoephedrine HCl-(1S.2S)-2-methylamino-1-phenyl-1-propanol hydrochloride
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[redacted]			09/13/99	Adequate 12/28/00	PeriP for NDA 21-150 (Solid Oral)	Pages 7, 9 CR. 1, Page 5 CR2
[redacted]			01/27/99	Adequate 01/30/01	SwissK for NDA 21-150 (Solid Oral)	Pages 7, 8, 18 CR1, Page 5 CR2, Page 14 CR3
[redacted]			05/26/99	Adequate 4/21/00	PeriP for NDA 21-150 (Solid Oral)	Page 26, CR1
[redacted]			3/29/00	Withdrawn 10/11/00	PeriP for NDA 21-150 (Solid Oral)	Page 46, CR1, Page 5, CR2
[redacted]			3/29/00	Withdrawn 10/11/00	PeriP for NDA 21-150 (Solid Oral)	Page 46, CR1, Page 5 CR2
[redacted]			3/29/00	Withdrawn 10/11/00	PeriP for NDA 21-150 (Solid Oral)	Page 46, CR1, Page 5, CR2
[redacted]			10/4/99	Adequate 03/07/01	PeriP for NDA 21-150 (Solid Oral)	Page 46, CR1, Page 29, CR2, Pages 27,28 CR3
[redacted]			5/19/99	Withdrawn 10/11/00	PeriP for NDA 21-150 (Solid Oral)	Page 46, CR1

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5/19/99	Withdrawn 10/11/00	PeriP for NDA 21-150 (Solid Oral)	Page 47, CR1
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6/7/99	Withdrawn 10/11/00	PeriP for NDA 21-150 (Solid Oral)	Page 48, CR1
10/20/99	Adequate 9/9/99	Sloan, MJ for NDA 20-064 SCP010 (Solid Oral)	Page 48, CR1, Page 31, CR2
10/14/99	Withdrawn 02/12/01	PeriP for NDA 21-150 (Solid Oral)	Page 47, CR1, Page 34, CR2, Pages 29,30 CR3
10/14/99	Withdrawn 02/12/01	PeriP for NDA 21-150 (Solid Oral)	Page 47, CR1, Page 34, CR2, Pages 29, 30 CR3
10/14/99	Adequate 3/20/97	GuzewskaM for NDA 20-699 (Solid Oral)	Page 47, CR1, Page 34, CR2
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6/7/99	Withdrawn 10/11/00	KleinD for NDA 20-974 (Solid Oral)	Page 48, CR1
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07/28/00	Adequate 03/07/01	PeriP for NDA 21-150 (solid oral)	Page 30, CR2
01/12/98	Adequate 12/29/00	PeriP for NDA 21-150 (solid oral)	Page 30, CR2, Page 30 CR3

* Supporting DMFs for ** Supporting DMF for DMF

† DMF withdrawn in a fax dated 7/28/2000

RELATED DOCUMENTS (if applicable)

Type	Number	Owner	Subject
NDA	19-835	Pfizer, Inc.	Zyrtec (cetirizine dihydrochloride) Tablets

CONSULTS:

CONSULT	DATE FORWARDED	STATUS	COMMENTS
EER	3/9/2000	Complete	Acceptable based on profile
Microbiology, HFD-160	Not applicable	Not applicable	Not applicable
Biometrics, HFD-710	03/02/01	Complete	Expiry dating, set at 24 months based on data and input from Biometrics
Environmental Assessment	N/A	Adequate	Applicant has applied for a categorical exclusion/Certificate Provided
Labeling & Nomenclature Committee	Not applicable	Adequate	All portions of the trade name have been previously approved.

The applicant was requested for the updated Methods Validation package via telephone (March 15, 2001) and will be pursued once the package is received by Agency.

CONCLUSIONS AND RECOMMENDATIONS:

The application may be approved (pending the labeling comments) from the standpoint of chemistry, manufacturing and controls. Comments are detailed in the accompanying review notes and will be summarized in attached draft letter to the applicant, chemistry portion. These comments should be promptly forwarded to the applicant.

Input from the Biopharmaceutics division is needed for response to Question # 27. The project manager needs to follow up on this issue.

cc:
Orig. NDA 21-150
HFD-570/Division File
HFD-570/PPeri
HFD-570/ASchroeder
HFD-570/COstroff
HFD-570/GPoochikian
HFD-570/RMeyer
HFD-800/CHoiberg
R/D Init. by: _____
filename: NDA 21150.CR3.doc

S. Prasad Peri, Ph.D. Review Chemist

CHEMISTRY REVIEW# 2

January 2001

DIVISION OF PULMONARY AND ALLERGY DRUG PRODUCTS
Review of Chemistry, Manufacturing, and Controls

NDA #:21-150 **CHEM. REVIEW #:** 2 **REVIEW DATE:** 01/09/01

RECOMMEND ACTION: NOT APPROVABLE

SUBMISSION TYPE	DOCUMENT DATE	CDER DATE	ASSIGNED DATE
ORIGINAL	01/18/00	01/21/00	2/10/00
Amendment	05/12/00	05/15/00	05/16/00
Amendment	07/28/00	07/31/00	07/31/00
Amendment(BC)*	08/16/00	08/17/00	08/24/00
Amendment(AC)*	10/11/00	10/12/00	10/19/00
Amendment(BL)*	10/17/00	10/18/00	12/29/00
Amendment(BC)*	11/21/00	11/22/00	11/22/00
Amendment(BC)*	12/27/00	12/28/00	12/29/00

*Subject of this Review

NAME & ADDRESS OF APPLICANT: Pfizer Pharmaceuticals Group,
Pfizer Inc.
235 East 42nd Street
New York, NY 10017-5755

DRUG PRODUCT NAME:

Proprietary: Zyrtec-D™-12 Hour Extended-release bilayer film coated tablets

Nonproprietary/USAN: Cetirizine hydrochloride 5 mg and Pseudoephedrine hydrochloride 120 mg Extended-release bi-layer film coated tablets

Code Name/#:

Chem. Type/Ther. Class:

PHARMACOL. CATEGORY/INDICATION: Cetirizine. hydrochloride is an antihistamine and pseudoephedrine hydrochloride is a adrenergic vasoconstrictor

DOSAGE FORM: Extended-release Tablets (Film Coated)

STRENGTHS: Cetirizine. hydrochloride 5 mg/pseudoephedrine hydrochloride 120 mg

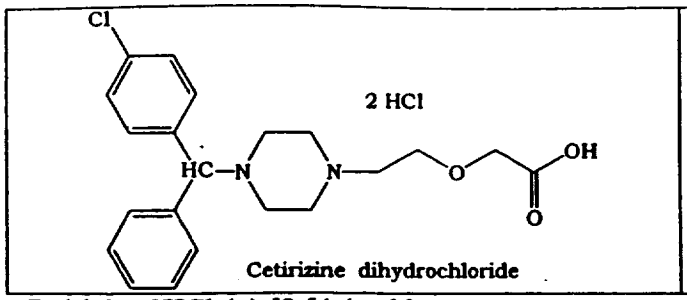
ROUTE OF ADMINISTRATION: Oral

DISPENSED: X Rx _ OTC

SPECIAL PRODUCTS: _ YES X NO

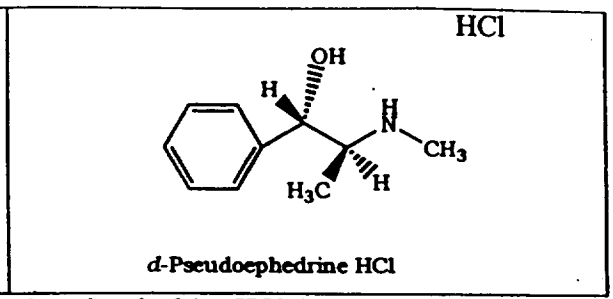
(If yes, fill out the form for special products and deliver to the TIA through the team leader for data entry)

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



Cetirizine dihydrochloride

Cetirizine.2HCl-(±)-[2-[4-(*p*-chloro-α-phenylbenzyl)-1-piperazinyl]ethoxy] acetic acid dihydrochloride
Molecular Formula: $C_{21}H_{25}ClN_2O_3 \bullet 2HCl$
Molecular Weight: 461.82



d-Pseudoephedrine HCl

Pseudoephedrine HCl-(1S.2S)-2-methylamino-1-phenyl-1-propanol hydrochloride
Molecular Formula: $C_{10}H_{15}NO \bullet HCl$
Molecular Weight: 201.70

SUPPORTING DOCUMENTS:

DMFs

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10/14/99	Adequate 3/20/97	GuzewskaM for NDA 20-699 (Solid Oral)	Page 47, CR1, Page 34, CR2
6/7/99	Withdrawn 10/11/00	KleinD for NDA 20-974 (Solid Oral)	Page 48, CR1
6/7/99	Withdrawn 10/11/00	KleinD for NDA 20-974 (Solid Oral)	Page 48, CR1
6/7/99	Withdrawn 10/11/00	KleinD for NDA 20-974 (Solid Oral)	Page 48, CR1
6/7/99	Withdrawn 10/11/00	KleinD for NDA 20-974 (Solid Oral)	Page 48, CR1
10/14/99	Adequate 3/20/97	GuzewskaM for NDA 20-699 (Solid Oral)	Page 47, CR1
07/28/00	Inadequate 12/22/00	PeriP for NDA 21-150 (solid oral)	Page 30, CR2
01/12/98	Adequate 12/29/00	PeriP for NDA 21-150 (solid oral)	Page 30, CR2

* Supporting DMFs for DMF
† DMF withdrawn in a fax dated 7/28/2000

* Supporting DMF for DMF

APPEARS THIS WAY
ON ORIGINAL

RELATED DOCUMENTS (if applicable)

Type	Number	Owner	Subject
NDA	19-835	Pfizer, Inc.	Zyrtec (cetirizine dihydrochloride) Tablets

CONSULTS:

CONSULT	DATE FORWARDED	STATUS	COMMENTS
EER	3/9/2000	Complete	Acceptable based on profile
Microbiology, HFD-160	Not applicable	Not applicable	Not applicable
			specifications
Environmental Assessment	N/A	Adequate	Applicant has applied for a categorical exclusion/Certificate Provided
Labeling & Nomenclature Committee	Not applicable	Adequate	All portions of the trade name have been previously approved.

CONCLUSIONS AND RECOMMENDATIONS:

The application as submitted is not approvable from the standpoint of chemistry, manufacturing and controls. Deficiencies are detailed in the accompanying review notes and will be summarized in a attached draft letter to the applicant, chemistry portion. These deficiencies should be promptly forwarded to the applicant.

cc:
Orig. NDA 21-150
HFD-570/Division File
HFD-570/PPeri
HFD-570/ASchroeder
HFD-570/COstroff
HFD-570/GPoochikian
HFD-570/RMeyer
HFD-800/JGibbs
R/D Init. by: acs for GP 1-9-01
filename: NDA 21150.CR2.doc

/S/ 1-09-01
S. Prasad Peri, Ph.D. Review Chemist

Prasad Peri
C:\WINDOWS\DESKTOP\NDA 21150.CR2.doc

CHEMISTRY REVIEW# 1

July 28, 2000

DIVISION OF PULMONARY AND ALLERGY DRUG PRODUCTS
Review of Chemistry, Manufacturing, and Controls

NDA #:21-150 **CHEM. REVIEW #:** 1 **REVIEW DATE:** 7/28/00

RECOMMEND ACTION: NOT APPROVABLE

SUBMISSION TYPE	DOCUMENT DATE	CDER DATE	ASSIGNED DATE
ORIGINAL	01/18/00	01/21/00	2/10/00
Amendment	05/12/00	05/15/00	05/16/00
Amendment	07/27/00	07/27/00	07/27/00

NAME & ADDRESS OF APPLICANT: Pfizer Pharmaceuticals Group,
Pfizer Inc.
235 East 42nd Street
New York, NY 10017-5755

DRUG PRODUCT NAME:

Proprietary: Zyrtec-D™-12 Hour Extended Release Tablets

Nonproprietary/USAN: Cetirizine.2HCl 5 mg and Pseudoephedrine HCl 120 mg Extended-release Tablets

Code Name/#:

Chem. Type/Ther. Class:

PHARMACOL. CATEGORY/INDICATION: Cetirizine.2HCl is an antihistamine and pseudoephedrine HCl is a adrenergic vasoconstrictor

DOSAGE FORM: Extended-release Tablets (Film Coated)

STRENGTHS: Cetirizine.2HCl 5 mg/pseudoephedrine HCl 120 mg

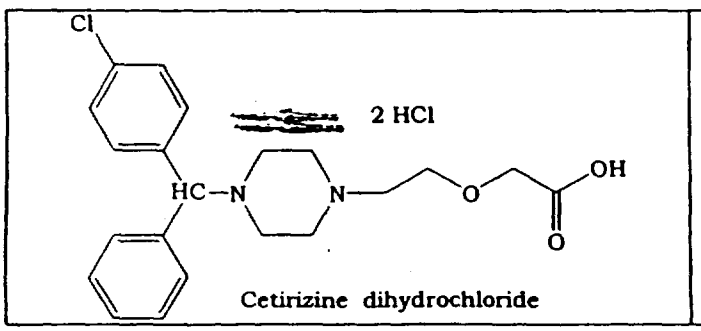
ROUTE OF ADMINISTRATION: Oral

DISPENSED: X Rx _ OTC

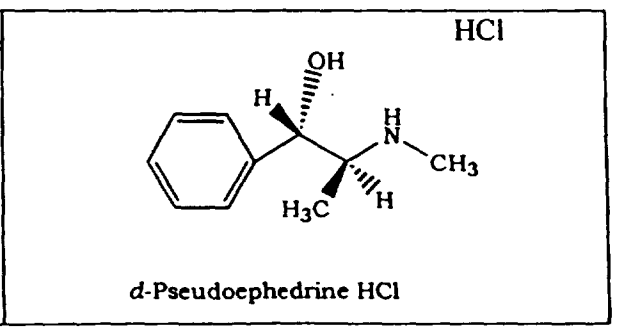
SPECIAL PRODUCTS: _ YES X NO

(If yes, fill out the form for special products and deliver to the TIA through the team leader for data entry)

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



Cetirizine dihydrochloride



d-Pseudoephedrine HCl

Cetirizine.2HCl-(±)-[2-[4-(*p*-chloro-α-phenylbenzyl)-1-piperazinyl]ethoxy] acetic acid dihydrochloride

Pseudoephedrine HCl-(1S.2S)-2-methylamino-1-phenyl-1-propanol hydrochloride

Molecular Formula: $C_{21}H_{25}ClN_2O_3 \bullet 2HCl$
Molecular Weight: 461.82

Molecular Formula: $C_{10}H_{15}NO \bullet HCl$
Molecular Weight: 201.70

SUPPORTING DOCUMENTS:

DMFs

DMF No.	Holder Name	Subject	LOA Date	Status/ Review Date	Reviewed By and for	Reference in Reviews
			09/13/99	Inadequate 4/3/00	PeriP for NDA 21-150 (Solid Oral)	Pages 7, 9
			01/27/99	Inadequate 4/10/00	SwissK for NDA 21-150 (Solid Oral)	Pages 7, 8, 18
			05/26/99	Adequate 4/21/00	PeriP for NDA 21-150 (Solid Oral)	Page 26
			3/29/00	Inadequate 6/6/00	PeriP for NDA 21-150 (Solid Oral)	Page 46
			3/29/00	Inadequate 6/6/00	PeriP for NDA 21-150 (Solid Oral)	Page 46
			3/29/00	Inadequate 6/6/00	PeriP for NDA 21-150 (Solid Oral)	Page 46
			10/4/99	Inadequate 6/6/00	PeriP for NDA 21-150 (Solid Oral)	Page 46
			5/19/99	Inadequate 6/6/00	PeriP for NDA 21-150 (Solid Oral)	Page 46
			10/4/99	Adequate 3/24/00	KleinD for NDA10-392,NDA11-459, NDA16-584, NDA16-798 (solid Oral)	Page 47
			5/19/99	Inadequate 7/18/00	PeriP for NDA 21-150 (Solid Oral)	Page 47
			10/4/99	Adequate 6/16/00	PeriP for NDA 21-150 (Solid Oral)	Page 47
			6/7/99	Adequate 6/16/00	PeriP for NDA 21-150 (Solid Oral)	Page 48
			10/20/99	Adequate 9/9/99	Sloan, MJ for NDA 20-064 SCP010 (Solid Oral)	Page 48
			10/14/99	Adequate 7/28/00	PeriP for NDA 21-150 (Solid Oral)	Page 47
			10/14/99	Adequate 7/28/00	PeriP for NDA 21-150 (Solid Oral)	Page 47
			10/14/99	Adequate 3/20/97	GuzewskaM for NDA 20-699 (Solid Oral)	Page 47

6/7/99	Adequate 02/23/99	KleinD for NDA 20-974 (Solid Oral)	Page 48
6/7/99	Adequate 02/23/99	KleinD for NDA 20-974 (Solid Oral)	Page 48
6/7/99	Adequate 02/23/99	KleinD for NDA 20-974 (Solid Oral)	Page 48
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10/14/99	Adequate 3/20/97	GuzewskaM for NDA 20-699 (Solid Oral)	Page 47

* Supporting DMFs for DMF
** Supporting DMF for DMF
† DMF withdrawn in a fax dated 7/27/2000

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cc:
Orig. NDA 21-150
HFD-570/Division File
HFD-570/PPeri/7/26/00
HFD-570/GTrout
HFD-570/GPoochikian
HFD-570/RMeyer
HFD-800/JGibbs
R/D Init. by: 7/28/00
filename: NDA21150.CR1

/S/ 7/28/00
S. Prasad Peri, Ph.D. Review Chemist

APPEARS THIS WAY
ON ORIGINAL