#### **Approval Package for:**

### **APPLICATION NUMBER:** NDA 21-073/S007

Trade Name:

Actos

Generic Name:

pioglitazone HCl

Sponsor:

Takeda Pharmaceuticals Inc.

Approval Date: April 25, 2001

## APPLICATION NUMBER: NDA 21-073/S007

#### **CONTENTS**

### Reviews / Information Included in this NDA Review.

Approval Letter	X
Approvable Letter	
Labeling	
Medical Review(s)	
Chemistry Review(s)	X
Pharmacology Review(s)	
Statistical Review(s)	
Microbiology Review(s)	
Clinical Pharmacology/ Biopharmaceutics Review(s)	
Administrative/Correspondence Document(s)	X

# APPLICATION NUMBER: NDA 21-073/S007

### **APPROVAL LETTER**

Food and Drug Administration Rockville MD 20857



NDA 21-073/S-007

Takeda Pharmaceuticals North America Attention: Robert M. Pilson, RPh Manager, Regulatory Compliance 475 Half Day Road, Suite 500 Lincolnshire, IL 60069

Dear Mr. Pilson:

Please refer to your supplemental new drug application dated January 18, 2001, received January 19, 2001, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for Actos<sup>TM</sup> (pioglitazone hydrochloride) Tablets, 15 mg, 30 mg, and 45 mg.

This "Supplement - Changes Being Effected in 30 Days," provides for the addition of located in to act as a packager for the drug product.

We have completed the review of this supplemental application, and it is approved.

We remind you that you must comply with the requirements for an approved NDA set forth under 21 CFR 314.80 and 314.81.

If you have any questions, please call Ms. Jena Weber, Regulatory Project Manager, at (301) 827-6422.

Sincerely,

{See appended electronic signature page}

Stephen K. Moore, Ph.D.
Chemistry Team Leader I, for
Division of Metabolic and Endocrine Drug Products,
(HFD-510)
DNDC II, Office of New Drug Chemistry
Center for Drug Evaluation and Research

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

/s/

Stephen Moore 4/25/01 03:00:58 PM

### APPLICATION NUMBER: NDA 21-073/S007

### **CHEMISTRY REVIEW(S)**

CHEMIST'S RI	EVIEW			
Organization CDER/HFD-510		NDA # 21-073		
Division of Metabolism and Endocrine Drug Products		Approved: 21-JUL-1999		
Name and Address of Applicant:		Supplement		
Takeda Pharmaceuticals America Inc.	ļ	Doc. 18-JAN	N-2001 Rec. 19-JAN-2001	
101 Carnegie Center, Suite 207		Name Of The Drug		
Princeton, NJ 08540		Actos <sup>TM</sup> Tab		
Phone: (609) 452-1113 x-4409		Nonproprietary Name		
Fax: (609) 452-1218		Pioglitazone Hydrochloride Tablets		
Supplement provides for the addition of supplement provides for the drug product, Actos Tablets.		Amendment(s)		
Pharmacological Category:	How Dis		<b>Supporting Documents</b>	
Hypoglycemic Agent, treatment of NIDDM.	Oral B	spenseu	Supporting Documents	
Dosage Form Tablets	ļ	cies 15-, 30- and 45-mg		
	rotencie	:ncies 15-, 50- and 45-mg		
Chemical Name and Structure			0	
Pioglitazone .N			. <i> </i>	
1 logitazone	ī		NH · HCI	
C <sub>19</sub> H <sub>20</sub> N <sub>2</sub> O <sub>3</sub> S · HCl H <sub>3</sub> C	人人	\	s (iii	
MW = 356.43 + 36.57 = 392.90	~	.0. ~	<b>"</b>	
(±)-5[[4-[2-(5-ethyl-2-pyridinyl)ethoxy]phenyl]methyl]-2,4-thiazolidinedione monohydrochloride				
Comments: This Supplement - Changes Being Effected in 30 days- provides for the addition of as a packager for Actos® Tablets. This is considered a moderate change				
as a packager for Actos® 1 ablets. This is considered a moderate change (Guidance for the Industry, Changes to an approved NDA or ANDA, November 1999, pages 7 to 11), an a CBE in				
30 days supplemental submission is adequate. A request for inspection was submitted on 30-JAN-2001. The				
facility, was inspected on 06-APR-2001, and found acceptable by the Office District				
(copy of EER Detail Report dated 09-APR-2001 is attached). Adequate information has been provided, and all				
regulatory requirements have been fulfilled.				
Conclusions and Recommendations: has been found acceptable for the packaging				
of the drug product, Actos® (Pioglitazone) Tablets. From the chemistry point of view, this supplement can be				
approved. Issue approval letter.				
Reviewer Name (and signature)		Date C	Completed: 09-APR-2001	
and the state (when the state of		Dutt	ompicted: 05 /H R 2001	
Xavier Ysern, PhD				
R/D Init.				
		<b>C</b> 1		
Digital Division Cold Cold Cold Cold Cold Cold Cold Cold			lename: /nda/21073s07.doc	
DISTRIBUTION: Original: NDA 21-073 cc: HFD-510 Division File/ JWeber / SMoore/ XYsern				

CBE-30 days AP 09-APR-2001

### FDA CDER EES ESTABLISHMENT EVALUATION REQUEST DETAIL REPORT

Page 1 of 1

DISTRICT RECOMMENDATION

NDA 21073/007 Action Goal: Application: Stamp: 19-JAN-2001 District Goal: 14-JUN-2001 Brand Name: ACTOS (PIOGLITAZONE Regulatory Due: 19-JUL-2001 HCL) 15/30/45MG TABS Applicant: TAKEDA PHARMS Estab. Name: 475 HALF DAY RD STE 500 Generic Name: PIOGLITAZONE HCL LINCOLNSHIRE, IL 60069 Priority: 1P Dosage Form: (TABLET) Org Code: 510 Strength: 15-, 30- AND 45-MG Application Comment: THE NAME OF THE FACILITY # THIS FACILITY WOULD BE USED AS ADDITIONAL PACKAGING FACILITY FOR ACTOS TABLETS (on 15-FEB-2001 by X. YSERN (HFD-510) 301-827-6420) (HFD-510) 301-827-6420 , Review Chemist FDA Contacts: X. YSERN 301-827-6430 , Team Leader S. MOORE (HFD-510) Overall Recommendation: ACCEPTABLE on 09-APR-2001 by J. D AMBROGIO (HFD-324) 301-827-0062 Establishment: DME No: AADA: Responsibilities: OAI Status: NONE Profile: TCM -(on 08-FEB-2001 by M. GARCIA (HFD-322) 301-594-Estab. Comment: 0095) Req. TypeInsp. Date Decision & Reason Creator Milestone Name Date SUBMITTED TO OC 01-FEB-2001 YSERNX 01-FEB-2001 GMP FERGUSONS SUBMITTED TO DO LJARRELL ASSIGNED INSPECTION '21-FEB-2001 PS INSPECTION PERFORMED 06-APR-2001 05-APR-2001 LJARRELL THIS INSPECTION WAS LIMITED TO NO FDA-483 WAS ISSUED. 06-APR-2001 LJARRELL DO RECOMMENDATION ACCEPTABLE INSPECTION EI DONE FOR ON 4/5/01. OC RECOMMENDATION 06-APR-2001 ACCEPTABLE **FERGUSONS** 

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

/s/

Xavier Ysern 4/19/01 10:29:47 AM CHEMIST

ΑP

Stephen Moore 4/23/01 03:11:37 PM CHEMIST

APPLICATION NUMBER: NDA 21-073/S007

# ADMINISTRATIVE and CORRESPONDENCE DOCUMENTS



Food and Drug Administration Rockville MD 20857

NDA 21-073/S-007

**CBE-30 SUPPLEMENT** 

Takeda Pharmaceuticals
Attention: Robert M. Pilson
RPh Manager, Regulatory Compliance
475 Half Day Road Suite 500
Lincolnshine, IL 60069

Dear Dr. Pilson:

We have received your supplemental drug application submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for the following:

Name of Drug Product:

ACTOS (pioglitazone) Tablets, 15, 30, 45mg

NDA Number:

21-073

Supplement Number:

S-007

Date of Supplement:

January 18, 2001

Date of Receipt:

January 19, 2001

This supplemental application, submitted as a "Supplement - Changes Being Effected in 30 days" supplement, proposes the following change: to add

Unless we notify you within 60 days of our receipt date that the application is not sufficiently complete to permit a substantive review, this application will be filed under section 505(b) of the Act on March 20, 2001 in accordance with 21 CFR 314.101(a). If the application is filed, the user fee goal date will be July 19, 2001.

Please cite the application number listed above at the top of the first page of any communications concerning this application. All communications concerning this supplemental application should be addressed as follows:

#### U.S. Postal Service/Courier/Overnight Mail:

Food and Drug Administration Center for Drug Evaluation and Research Division of Metabolic and Endocrine Drug Products, HFD-510 Attention: Division Document Room 14B-19 5600 Fishers Lane Rockville, Maryland 20857

If you have any questions, call me at (301) 827-6422.

Sincerely,

{See appended electronic signature page}

Jena Weber Regulatory Project Manager Division of Metabolic and Endocrine Drug Products Office of Drug Evaluation II Center for Drug Evaluation and Research /s/ -----

Jena Weber 2/1/01 09:47:10 AM