Approval Package for:

APPLICATION NUMBER:

20-560/S016

Trade Name: Fosamax

Generic Name: (alendronate sodium)

Sponsor: Merck Research Laboratories

Approval Date: October 19, 1999

APPLICATION NUMBER: 20-560/S016

CONTENTS

Reviews / Information Included in this NDA Review.

Approval Letter	X
Approvable Letter	X
Labeling	X
Medical Review(s)	X
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: 20-560/S016

APPROVAL LETTER

OCT 19 1999

Merck Research Laboratories Attention: Michele Flicker, Ph.D. Director, Regulatory Affairs P.O. Box 4, BLA-20 West Point, PA 19486-0004

Dear Dr. Flicker:

Please refer to your supplemental new drug application dated October 30, 1998, received November 2, 1998 (Supplement 016) and your supplemental new drug application dated April 26, 1999, received April 27, 1999 (Supplement 020), submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for Fosamax (alendronate sodium) 10 and 40 mg Tablets.

We acknowledge receipt of your submission dated June 22, 1999 (Supplement 016). Your submission of April 22, 1999, constituted a complete response to our March 2, 1999, action letter for Supplement 016. We also acknowledge receipt of your submissions dated June 22, 1999 (Supplement-016), and May 26, June 8, and August 17, 1999 (Supplement-020). Further, we refer to the October 6, 1999, telephone conversation between you and Mr. Randy Hedin of our Division in which you agreed to the change listed below concerning bullet three on page two of the physicians' sample blister package.

Supplement 016 proposes the following changes: A new physicians' sample blister package for the 10 mg strength of Fosamax Tablets, associated labeling for the new blister package, and two new packaging sites for these physicians samples. The submission also requests a categorical exclusion from the requirement to prepare an environmental assessment for the tablets in these blister packages. Supplement 020 provides for a wax polish and a shape change.

We have completed the review of these supplemental applications, as amended, and have concluded that adequate information has been presented to demonstrate that the drug product is safe and effective for use as recommended in the agreed upon labeling text with the minor revision listed below. Accordingly, these supplemental applications are approved effective on the date of this letter.

The third bullet on page two of the carton in supplement 016 should be changed from,

"FOSAMAX increased the amount of spinal bone in more than 9 out of 10 patients with osteoporosis."

NDA 20-560/S-016 & S-020 Page 2

The new labeling for the physicians' sample blister package must be identical, and include the minor revision indicated, to the submitted draft blister package submitted on April 22, 1999. This revision is a term of the approval.

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, contact Randy Hedin, R.Ph., Senior Regulatory Management Officer, at (301) 827-6392.

Sincerely

Solomon Sobel, M.D.

Director

Division of Metabolic and Endocrine Drug Products

RH 10/19/99

Office of Drug Evaluation II

Center for Drug Evaluation and Research

Archival NDA 20569/

HFD-510/Div. Files

HFD-510/R.Hedin

cc:

HFD-510/Reviewers and Team Leaders

HFD-095/DDMS-IMT

HFD-820/DNDC Division Director

DISTRICT OFFICE

Drafted by: RH/October 7, 1999

Initialed by: EChikhale/10.14/SMarkofsky/DWu/10.15/RShore for HAhn/EGalliers/10.18.99

final: RH 10.19.99

filename: N20560AP.L16

APPROVAL (AP)

APPLICATION NUMBER: 20-560/S016

APPROVABLE LETTER

Merck and Company Inc. Attention: Dr. Michelle Kloss Director Regulatory Affairs Sumneytown Pike P.O. Box 4 BLA-20 West Point, PA 19486

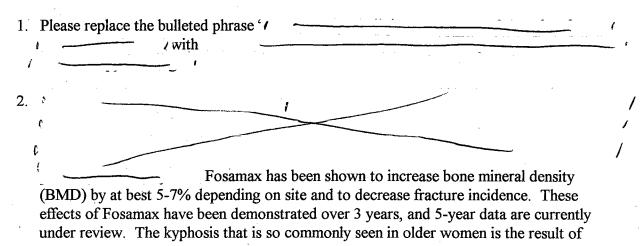
Dear Dr. Kloss:

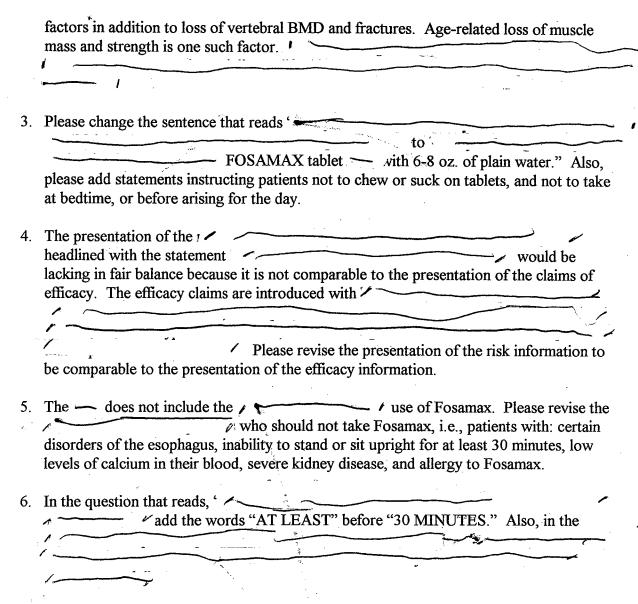
Please refer to your supplemental new drug application dated October 30, 1998, received November 2, 1998, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for Fosamax (alendronate sodium tablets).

We acknowledge receipt of your submissions dated December 28, 1998, and January 20 and February 1, 1999.

This supplement proposes the following changes: A new physicians' sample blister package for the 10 mg strength of Fosamax Tablets, associated labeling for the new blister package, and two new alternative packaging sites for these physicians samples. The submission also requests a categorical exclusion from the requirement to prepare an environmental assessment for the tablets in these blister packages.

We have completed the review of this application, as amended, and it is approvable. Before this application may be approved, however, it will be necessary for you to submit draft Patient Starter Kit labeling revised as follows:





Within 10 days after the date of this letter, you are required to amend the supplemental application, notify us of your intent to file an amendment, or follow one of your other options under 21 CFR 314.110. In the absence of any such action FDA may proceed to withdraw the application. Any amendment should respond to all the deficiencies listed. We will not process a partial reply as a major amendment nor will the review clock be reactivated until all deficiencies have been addressed.

This product may be considered to be misbranded under the Federal Food, Drug, and Cosmetic Act if it is marketed with these changes prior to approval of this supplemental application.

If you have any questions, contact Randy Hedin, R.Ph., Regulatory Management Officer, at (301) 827-6392.

Sincerely yours,

Solomon Sobel, M.D.

Director

Division of Metabolic and

Endocrine Drug Products (HFD-510)

Office of Drug Evaluation II

Center for Drug Evaluation and Research

RH 3/2/99

cc:

Archival NDA 20-560 HFD-510/Div. Files HFD-510/R.Hedin HFD-510/Reviewers and Team Leaders HFD-95/DDMS DISTRICT OFFICE

Drafted by: RH/March 1, 1999

Initialed by: GTroendle/SMarkofsky/DWu/EGalliers/BSchneider/3.2.99

final:RH

filename: N20560AE.LT2

APPROVABLE (AE)

APPLICATION NUMBER: 20-560/S016

MEDICAL REVIEW

October 5, 1999

MEDICAL OFFICER'S REVIEW

sNDA 20560-016

REVIEW OF SPONSOR'S RESPONSE TO OUR INITIAL COMMENTS REGARDING BLISTER PACKAGE FOR FOSAMAX

have reviewed the latest edition of Merck's Fosamax blister package. With one exception, I believe that they have responded adequately to our comments. In
ny initial review, I wrote
n response, the sponsor changed the second bullet (page 2) to:
This change is acceptable.
However, in the next bullet, "1/
,
This is not acceptable, for the reasons originally stated. The language should be identical to that in the second bullete.g. "FOSAMAX increased he amount of spinal bone.
in more than 9 out of 10 patients.
Again, Fosamax has been shown to increase spine BMD in more than 9 out of 10 patients in clinical trials.
he remainder of the blister package is acceptable.
Level Mer Ostrino 1/2000 1/200

BRUCE S. SCHNEIDER, MD

MEDICAL OFFICER
DMEDP, HFD-510
CC Drs. Troendle, Sobel, Mr. Hedin, HFD-510 file

APPLICATION NUMBER: 20-560/S016

CHEMISTRY REVIEW(S)

File name: n20560s.016a

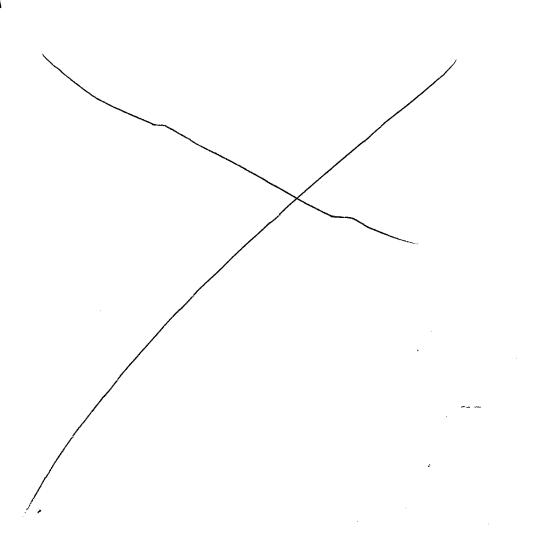
1. ORGANIZATION 2. NDA NUMBER . CHEMIST'S REVIEW DMEDP, HFD-510 20-560 3. NAME AND ADDRESS OF APPLICANT 4. SUPPLEMENT NUMBER, DATE Merck & Co., Inc. 30-Oct.-1998 SCP-016, Sumneytown Pike, BLA-20 P.O. Box 4 User Fee Date: 3-2-99 West Point, PA 19486 5. NAME OF DRUG 6. NONPROPRIETARY NAME Fosamax Alendronate Sodium Tablets 8. AMENDMENTS/REPORT, DATE 7. SUPPLEMENT PROVIDES FOR: Amendment: 12-28-98 Amendment: 2-1-99 Correspondence: 1-20-99 1) A new physicians' blister package for the 10 mg strength of Fosamax tablets 2) Associated labeling for the new blister package 3) Two new packaging sites for these physicians samples 4) A Categorical Exclusion from the requirement to prepare an Environmental Assessment for the tablets in these 9. PHARMACOLOGICAL CATEGORY 10. HOW DISPENSED 11. RELATED IND/NDA/DMF Treatment and prevention of Prescription steoporosis ∠. DOSAGE FORM 13. POTENCY Tablets (oral) 5, 10, & 40 mg tablets 14. CHEMICAL NAME AND STRUCTURE See Chem. Rev. # 1 15. COMMENTS: This Prior Approval Supplement provides for: 1) A new physicians' blister package for the 10 mg strength of Fosamax tablets 2) Associated labeling for the new blister package 3) Two new ______ packaging sites for these physicians samples 3) A Categorical Exclusion from the requirement to prepare an Environmental Assessment for the tablets in these blisters. The labeling for this new physicians' blister package is also being reviewed by the appropriate Medical Officer (Dr. Bruce Schneider) and by Division of Drug Marketing, Advertising and Communications (DDMAC). (Continued next page) 16. CONCLUSION AND RECOMMENDATIONS From a Chemistry point of view, the proposed supplement is acceptable. approval letter unless there are additional concerns raised by Dr. Schneider and (or) DDMAC. 17. NAME REVIEWER SIGNATURE DATE COMPLETED Sheldon Markofsky, Ph.D. 2-12-99 ORIGINAL JACKET/CSO/REVIEWER/DIVISION FILE DISTRIBUTION:

'/D initialed by:

Dengen 2/12/99

15. COMMENTS (continued from page 1):

The amendments of 12-28-98 and 2-1-99 provide stability commitments for the new package. The correspondence, dated 1-20-99, provided a completely assembled sample blister package (minus the tablets). The relevant packaging facilities were given an acceptable cGMP status (See attached EES printout.)



____ Page(s) Withheld

____X__ § 552(b)(4) Trade Secret / Confidential

§ 552(b)(4) Draft Labeling

_ § 552(b)(5) Deliberative Process

APPLICATION NUMBER: 20-560/S016

ADMINISTRATIVE and CORRESPONDENCE DOCUMENTS

NDA 20-560/S-016 & 020 Fosamax Tablets Dr. Michele Flicker.

Date: 10/6/99

CONTACT: Dr. Michele Flicker 610-397-3193

MEMORANDUM OF TELECON

I spoke with Dr. Flicker, concerning NDA 20-560/S-016 & 020. We discussed the third bullet on page two of the carton in supplemen 016, and she agreed that the bullet should be changed increased the amount of spinal bone to be consisten with the change in bullet number two. I stated that we would put this change in the approval letter as a condition of approval, and she agreed with this procedure.

Randy Hedin, CSO

Alendronate, Merck, NDA 20560 / S-016 Suggestions for Letter to Sponsor Re Advertising Jayne Peterson (DDMAC) and Bruce Schneider Reviews

The expression		-	
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Fosamax has been shown to increase BMD by at best 5-7% depending on site and to decrease fracture incidence. These effects of Fosamax have been demonstrated over 3 years, and 5-year data are currently under review. The kyphosis that is so commonly seen in older women is the result of factors in addition to loss of vertebral BMD and fractures. Age-related loss of muscle mass and strength is one such factor.

Maria Trouble

CC: Orig NDA 20-560/5-076 HFD-510

February	24,	1999
-----------------	-----	------

To: Jayne Peterson, DDMAC

Re: Fosamax blister package for patients
In general, I agree with the proposed changes. However, I would go a bit further.
withholding food for at least 30 minutes is an absorption/efficacy issue.
Fosamax treatment has been shown to increase BMD by at best 5-7%, depending on site, and to decrease fracture incidence as well. These effects of Fosamax have been demonstrated in 3-year studies, and 5-year data are currently under review. We have no data extending past 5 years. The kyphosis that is so commonly seen in older women is the result of many factors in addition to loss of vertebral BMD and presence of vertebral fractures. Age-related loss of muscle mass and strength is one such factor.
Bullete
Bruge S. Schneider, MD
Medical Officer, DMEDP, HFD-510

Cc; Orig NDA 20-560/5-016 HFD-510/div. File

To: Jayne Peterson, DDMAC	
Re: Fosamax blister package for patients	
Jayne,	
In general, I agree with the proposed changes.	
withholding food for at least 30 minutes is an absorption	I also agree that n/efficacy issue.
withholding food for at least 30 minutes is an absorption	I also agree that n/efficacy issue.
withholding food for at least 30 minutes is an absorption	I also agree that

CC: OrigNDA 20-560/5-016 HFD-510/div. Fle

February 18, 1999

MEMORANDUM

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service Food and Drug Administration

Center for Drug Evaluation and Research Division of Drug Marketing, Advertising, and Communications

DATE:

February 3, 1999

TO:

Randy Hedin

Division of Metabolic and Endocrine Drug Products

FROM:

Jayne E. Peterson, Regulatory Review Officer

Division of Drug Marketing, Advertising, and Communications

THROUGH: Tracy Acker, Acting Branch Chief

Division of Drug Marketing, Advertising, and Communications

SUBJECT:

NDA 20-560 3-016

NAME OF DRUG: Fosamax 10 mg (alendronate sodium tablets)

SPONSOR:

Merck & Co., Inc.

MACMIS#:

7392

BACKGROUND/RECOMMENDATIONS:

Merck submitted a proposed physicians' sample blister package for the 10 mg strength of Fosamax to the Division of Metabolic and Endocrine Drug Products (DMEDP) on October 30, 1999. Merck currently markets an individualized blister card with 31 tablets of the 10 mg strength for institutional use. This blister card provides for a blister package of 7 tablets for use as physicians' samples. In response to a December 9, 1998 request from the DMEDP, the Division of Drug Marketing, Advertising and Communications (DDMAC) has reviewed the proposed physicians' sample blister package and has the following comments:

of osteop	orosis in p				n the treatment vident as early as
three mo	nths.				
/			 		
,	-	•	 -		
-			 	man - makenda / "	

This statement does not adequately convey the important precautionary and administration information that patients be directed to swallow the Fosamax tablet and that they should not chew or suck on the tablet. Therefore, DDMAC would recommend that Merck revise this statement to delete the word 'peplace it with the word "swallow." Furthermore, DDMAC would recommend that Merck add the statement directing patients not to chew or suck on the tablet. Finally, DDMAC would recommend that Merck add the precautionary information that patients not take Fosamax at bedtime or before arising for the day.

		-		
			ould recommend the	
evise the prese he efficacy inf	entation of the risk in ormation.	formation to be cor	nparable to the pres	sentation
The	vould be lacking in	n fair balance.		
	Today of hacking in		uld recommend that	t Merck
with: certain di	to disclose those pat sorders of the esopha- evels of calcium in th	agus, inability to sta	and or sit upright fo	r at leas
osamax.		· <u>·</u>	~ - ·	
		. ж.		
	does not adec	quately convey the	orecautionary inform	mation t
ofter swallowing	does not adec g the Fosamax table		•	
,	-	t, patients should w	ait at least 30 minu	

NDA 20-560

Fosamax (alendronate sodium tablets)

to delete the word 1

Thank you for consulting with DDMAC on this issue. Please do not hesitate to call me if you have any questions, (301) 827-3901.

NDA 20-560

Fosamax (alendronate sodium tablets)

File Name:

C:/MYDOCUMENTS/Fosamaxblister12_9

Draft:

Peterson

2/3/99

Consult:

Ostrove

2/7/99

Concur:

Acker

2/10/99

CC:

HFD 40/NDA 20-560

HFD 40/Chron/Peterson x2/Acker

MACMIS File ID #:

7391

MACMIS Type Code:

CONS

MACMIS Action Code:

INFO

Close out:

Yes

FOI Status:

NOT RELEASABLE

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June 22, 1999

ORIGINAL

SCP-016

Research Laboratories

NDA SUPP AMEND

Mr. Randy Hedin, Senior Regulatory Manager Division of Metabolism and Endocrine Drug Products

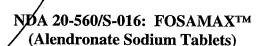
HFD-510, Room 14B-04

Office of Drug Evaluation II (CDER)

Food and Drug Administration

5600 Fishers

Rockville Maryland 20857



Response to Request for Information



Dear Mr. Hedin

Reference is made to the pending supplemental New Drug Application cited above for a Physicians' Sample Blister Package, also known as Patient Starter Kit. Further reference is made to the Agency's March 2, 1999 Approvable letter for this supplemental application and to an April 22, 1999 submission in which Merck Research Laboratories (MRL, a Division of Merck & Co., Inc.) provided an Amendment to Pending Supplement in response to the April 22, 1999 Approvable letter. Reference is also made to a June 21, 1999 telephone conversation between Mr. Randy Hedin and Dr. Michele Flicker (MRL) in which Mr. Hedin requested an additional desk copy of the above referenced supplemental application and amendment.

With this submission, we are providing the requested desk copies as well as a copy of the above referenced Approvable letter.

Questions concerning this submission should be addressed to Michele R. Flicker, MD, PhD (610/397-3193) or, in my absence, Larry P. Bell, MD (610/397-2310).

REVIEWS COMPLETED

CSO ACTION:

STETTER DNAL !

CSO INITIALS

Sincerely yours,

Michele R. Flicker, MD, PhD

Director

Regulatory Affairs

Federal Express #1

Q:RC\mk-0217\response

Attachments

Desk Copy (Letter Only): NDA 20-560, HFD-510, Room 14B-04 - Federal Express #1

April 22, 1999

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Merck & Co., Inc. P.O. Box 4, BLA-20 West Point PA 19486-0004 Tel 610 397 2905 Fax 610 397 2516

ORIGINAL

Solomon Sobel, M.D., Director
Division of Metabolism and Endocrine Drug Products
HFD-510, Room 14B-04
Office of Drug Evaluation II (CDER)
Food and Drug Administration
5600 Fishers Lane
Rockville, Maryland 20857

SCP-016 MERCK

NDA 20-560/S-016: FOSAMAXTM (Alendronate Sodium Tablets)

Amendment to Pending Supplemental Application

Dear Dr. Sobel:

Reference is made to the pending supplemental new drug application cited above. Further reference is made to the Agency's March 2, 1999 Approvable Letter for this supplemental application which requested that Merck & Co., Inc. submit revised draft Patient Starter Kit labeling in accordance with Agency comments noted in this Approvable letter.

With this submission, we are providing, for Agency review and approval, a complete response to the items cited in the March 2, 1999 Approvable Letter for this supplemental application. This submission includes an Overview/Summary of Revisions section (Attachment 1) which provides a comprehensive summary of our responses to the Agency's comments and 20 mounted copies of the revised draft Patient Starter Kit labeling (Attachment 2).

We consider the filing of this amendment to be a confidential matter, and request that the Food and Drug Administration not make its content, nor any future communications in regard to it, public without first obtaining the written permission of Merck & Co., Inc.

Questions concerning this submission should be addressed to Michelle W. Kloss, Ph.D. (610/397-2905) or, in my absence, Larry P. Bell, M.D. (610/397-2310).

Sincerely yours,

Michelle W. Kloss, Ph.D

REVIEWS COMPLETED

Director

Regulatory Affairs

Q:RC\mk-0217\amends\s016amn4

Attachments

Federal Express #1

Desk Copy: Mr. Randy Hedin, CSO, HFD-510, Room 14B-04 Fed. Ex. #1

ORIGINAL Seposis

Merck & Co., Inc. P.O. Box 4, BLA-20 West Point PA 19486-0004 Tel 610 397 2905 Fax 610 397 2516

April 15, 1999

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MANASUPP AMEND

Solomon Sobel, M.D., Director Division of Metabolism and Endocrine Drug J HFD-510, Room 14B-04 Office of Drug Evaluation II (CDER) Food and Drug Administration 5600 Fishers Lane Rockville, Maryland 20857

IPR 16 1999

NDA 20-560: FOSAMAXTM (Alendronate Sødium Tablets) Response to Request for Information

Dear Dr. Sobel:

1

Reference is made to the new drug application cited above for FOSAMAXTM and to the March 9, 1999 submission in which Merck Research Laboratories (MRL, a Division of Merck & Co., Inc.) provided cancer data from all randomized, placebo-controlled phase 2 and 3 clinical trials of postmenopausal and corticosteroid-induced osteoporosis as requested by the Agency. Further reference is made to a March 18. 1999 facsimile communication from Dr. Solomon Sobel (FDA) to Dr. Michelle Kloss (MRL) which requested that MRL provide additional information. Specifically, the Agency has requested that MRL submit four tables for each of the seven main clinical trials of alendronate in osteoporosis; the complete details of the request are attached. The trials identified are 035 and 037 (osteoporosis treatment), 029, 038, and 055 (osteoporosis prevention), 051 (fracture intervention trial), and 082/083 (corticosteroid-induced osteoporosis)

With the attachment to this submission, we are providing the requested information. Please direct any questions to Michelle Kloss, Ph.D. (610-397-2905) or, in my absence, Larry P. Bell, M.D. (610-397-2310).

511

Muhelle W. Kloss, Ph.D.

Director

Regulatory Affairs

Q:carnal\mk-0217\responses\apr_res

Attachment

Federal Express #1

Desk Copies (2):

Mr. Randy Hedin, HFD-510, Room 14B-04 Federal Express #1

REVIEWS COMPLETED

SUPPL NEW CORRESP

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Merck & Co., Inc. P.O. Box 4, BLA-20 West Point PA 19486-0004 Tel 610 397 2905 Fax 610 397 2516

ORIGINAL

March 9, 1999

Solomon Sobel, M.D., Director Division of Metabolism and Endocrine Drug Products HFD-510, Room 14B-04 Office of Drug Evaluation II (CDER) Food and Drug Administration 9201 Corporate Blvd. Rockville, MD 20850

MERCK MAR 1 0 1999

NDA 20-560/S-016: FOSAMAXTM (Alendronate Sodium Tablets)

Dear Dr. Sobel:

Please refer to your letter dated March 2, 1999 and received by MRL on March 9, 1999 indicating that the above-captioned supplement is approvable. With this letter, we wish to notify you of our intent to file an amendment to this application.

Please direct questions or need for additional information to Michelle W. Kloss, Ph.D. (610) 397-2905 or, in my absence, Larry P. Bell, M.D. (610) 397-2310.

500

Sincerely,

Muhlle W. Kloss, Ph.D.

Director

Regulatory Affairs

Federal Express #1

(1) Desk Copy: Mr. Randy Hedin, HFD-510, Room 14B-04 – Federal

q:\kloss\fosamax\fdaltrs\sobel3-9-99

REVIEWS COMPLETED

HÉA DINA.I.

CSO INITIALS

DATE

February 1, 1999

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Merck & Co., Inc. P.O. Box 4, BLA-20 West Point PA 19486-0004 Fax 610 397 2516 Tel 610 397 2905 215 652 5000

ORIGINAL



Solomon Sobel, M. D., Director
Division of Metabolism and Endocrine Drug Products
HFD-510, Room 14B-04
Office of Drug Evaluation II
Center for Drug Evaluation and Research
Food and Drug Administration
5600 Fishers Lane
Rockville, Maryland 20857

NDA SUPP AMEND SCP-016 &C

NDA 20-560/S-016: FOSAMAXTM (Alendronate Sodium Tablets)

REVIEWS COMPLETE	D
CSO ACTION: DESCRIPTION: N.A.	. □MEMO
CSO INITIALS	DATE

AMENDMENT TO PENDING SUPPLEMENTAL APPLICATION

Dear Dr. Sobel:

Reference is made to the Supplemental New Drug Application cited above submitted on October 30, 1998 which provides for the addition of a physicians' sample blister package for the 10 mg strength of FOSAMAXTM. Reference is also made to a December 8, 1998 telephone conversation between Dr. Shelly Markofsky (FDA) and Dr. Michelle Kloss (MRL, a Division of Merck & Co., Inc.) in which Dr. Markofsky requested that Merck provide a commitment to place the first lot packaged and an analysis on stability and to report the data in the Annual Report; further reference is made to a December 28, 1998 amendment to this supplemental application which provided this commitment. Additional reference is made to a January 29, 1999 telephone conversation between Dr. Markofsky and Dr. Kloss in which Dr. Markofsky requested that Merck also provide a commitment to place the first lot blistered at the Wilson facility on stability and to report the data in the Annual Report.

With this submission, as requested, Merck provides the commitment that the first lot blistered at Wilson will be placed on stability under the current protocol and that the data will be reported in the Annual Report.

Questions concerning this submission should be addressed to Michelle W. Kloss, Ph.D. (610/397-2905) or, in my absence, Larry P. Bell, M.D. (610/397-2310).

Sincerely,

Michelle W. Kloss, Ph.D. Director, Regulatory Affairs

q/carnal/mk0217/s016amnd

Federal Express #1

Desk copy:

Mr. Randy Hedin, CSO, HFD-510, Room 14B-04 Fed. Ex. #1 Dr. Shelly Markofsky, HFD-510, Room 14B-04 FAX/Fed. Ex. #1

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Merck & Co., Inc. P.O. Box 4, BLA-20 West Point PA 19486-0004 Tel 610 397 2905 Fax 610 397 2516

ORIGINAL

January 20, 1999

Solomon Sobel, M. D., Director
Division of Metabolism and Endocrine Drug Products
HFD-510, Room 14B-04
Office of Drug Evaluation II
Center for Drug Evaluation and Research
Food and Drug Administration
5600 Fishers Lane
Rockville, Maryland 20857

NDA SUPP AMEND SCP-016 BC

NDA 20-560/S-016: FOSAMAXTM (Alendronate Sodium Tablets)

Response to FDA Request for Information

MERCK

SEUTER FORMAN

AN 22 1999

AN 19,95

Congulation

Dear Dr. Sobel:

Reference is made to the Supplemental New Drug Application cited above submitted on October 30, 1998 which provides for the addition of a physicians' sample blister package for the 10 mg strength of FOSAMAXTM. Reference is also made to a December 8, 1998 telephone conversation between Dr. Shelly Markofsky (FDA) and Dr. Michelle Kloss (MRL.) in which Dr. Markofsky requested that Merck Research Laboratories (MRL, a division of Merck & Co., Inc) provide a commitment to place the first lot packaged at / and / on stability and to report the data in the Annual Report. During the same conversation, Dr. Markofsky also requested that MRL provide a complete physicians' sample blister package, including all components, for his review. Further reference is made to a December 28, 1998 submission which provided a response to the first Agency request cited above (i.e., in which MRL provided a commitment that the first lot packaged entirely at each site will be placed on stability and that the data will be reported in the Annual Report). With this submission, we are providing a complete physicians' sample blister package, including all components, in response to the second Agency request cited above.

Questions concerning this submission should be addressed to Michelle W. Kloss, Ph.D. (610/397-2905) or, in my absence, Larry P. Bell, M.D. (610/397-2310).

Rovion Completed 2-12-99 SBM

Sincerely,

Michelle W. Kloss, Ph.D. Director, Regulatory Affairs

lelle W. Kloss

q/carnal/mk0217/s016amn2

Attachment

Federal Express #1

Desk copy:

Mr. Randy Hedin, CSO, HFD-510, Room 14B-04 $\,$ Fed. Ex. #1

Dr. Shelly Markofsky, HFD-510, Room 14B-04 Fed. Ex. #1

REVIEWS COMPLETED

CSO ACTION:

LETTER N.A.I. MEMO

S/199

CSO INITIALS

DATE

ORIGINAL

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Merck & Co., Inc. P.O. Box 4. BLA-20 West Point PA 19486-0004 Tel 610 397 2905 Fax 610 397 2516

December 28, 1998

Solomon Sobel, M. D., Director **MERCK** Division of Metabolism and Endocrine Drug Products HFD-510, Room 14B-04 3PM 5-10-99 Office of Drug Evaluation II Center for Drug Evaluation and Research 1P-016 BL Food and Drug Administration 5600 Fishers Lane Rockville, Maryland 20857 60/8≤016:″FOSAMAX™ (Alignaronate Sodium Tablets) SUPPLEMENTAL APPLIE AMENDMENT Dear Dr. Sobel: Reference is made to the Supplemental New Drug Application cited above submitted on October 30, 1998 which provides for the addition of a physicians' sample blister package for the 10 mg strength of FOSAMAXTM. Reference is also made to a December 8, 1998 telephone conversation between Dr. Shelly Markofsky (FDA) and Dr. Michelle Kloss (MRL) in which Dr. Markofsky requested that MRL provide a commitment to place the first lot packaged at , and stability and to report the data in the Annual Report. During the same conversation, Dr. Markofsky also requested that MRL provide a complete physicians' sample blister package, including all components, for his review. With this submission, we are providing a response to the Agency's request for commitment for stability testing cited above; we are currently assembling the complete pysicians' sample blister package in response to the second Agency request cited above and this response will be submitted shortly under separate cover. With this submission, as requested, Merck provides the commitment that the first lot packaged entirely (blistering and final assembly) at each site. and will be placed on stability under the current protocol and that the data will be reported in the Annual Report. Questions concerning this submission should be addressed to Michelle W. Kloss, Ph.D. (610/397-2905) or, in my absence, Larry P. Bell, M.D. (610/397-2310). **REVIEWS COMPLETED** Sincerely, CSO ACTION: □LETTER ☑N.A.I. □MEMO Michelle W. Kloss, Ph.D. Director, Regulatory Affairs **CSO INITIALS** DATE No 5/10/99 q/carnal/mk0217/s016amnd Federal Express #1

Desk copy:

Mr. Randy Hedin, CSO, HFD-510, Room 14B-04 Fed. Ex. #1

Dr. Shelly Markofsky, HFD-510, Room 14B-04 Fed. Ex. #1

Merck & Co., Inc. P.O. Box 4, BLA-20 West Point PA 19486-0004 Fax 610 397 2516 Tel 610 397 2905 215 652 5000

Research Laboratories

These copies are OFFICIAL FDA Copies not desk copies.

October 30, 1998

NDA NO. 20-5/00 REF NO

NDA SUPPL FOR

Solomon Sobel, M.D., Director Division of Metabolism and Endocrine Drug Products HFD-510, Room 14B-04

Office of Drug Evaluation II Center for Drug Evaluation and Research Food and Drug Administration 5600 Fishers Lane Rockville, Maryland 20857

> NDA 20-560: FOSAMAX™ (Alendronate Sodium Tablets)

Supplemental New Drug Application

Dear Dr. Sobel:

Pursuant to Section 505(b) of the Food Drug and Cosmetic Act and in accordance with 21 CFR 314.70 (b), we submit a supplement to NDA 20-560.

As indicated on the attached Form FDA 356h, this supplemental application provides for changes in the Labeling and Chemistry Section(s) of the approved New Drug Application for FOSAMAX™.

This supplemental application provides for the addition of a physicians' sample blister package for the 10 mg strength of FOSAMAX™. Merck & Co., Inc. currently markets a FOSAMAX™ individualized blister card (UNIBLISTER™) with 31 tablets (10 mg strength) for institutional use; this supplemental application provides for a blister package with 7 tablets for use as physicians' samples. Proposed labeling for this physicians' sample blister package is included in this application.

The packaging components in contact with FOSAMAXTM tablets in the proposed physicians' sample blister are identical to the currently marketed UNIBLISTER™ packaging components and are obtained from the same suppliers) as for the currently marketed UNIBLISTERTM. The cavity dimensions are also identical. Both the proposed physicians' sample blister and the UNIBLISTER™ are "push-through", nonchild-resistant configurations supported by a paperboard card. Proposed packaging sites for the physicians' sample blister package, one of which is currently approved for the packaging of the UNIBLISTERTM, are included in the Chemistry, Manufacturing and Controls (CMC) section of this supplemental application.

In accordance with the Food and Drug Administration Modernization Act of 1997, as indicated in the attached Form 3397, no user fee is required for this supplemental application.

Attached in Draft for Approval are the following:

- CMC documentation for the physicians' sample blister package.
- 20 mounted copies of front and back panels of physicians' sample blister package labeling.

Solomon Sobel, M D., Director NDA 20-560: FOSAMAXTM (Alendronate Sodium Tablets) Page 2

Pursuant to 21 CFR 314.70(a), a complete field copy of this supplement has been submitted to the FDA Philadelphia District Office.

Merck is requesting a categorical exclusion from the requirements to prepare an Environmental Assessment under 21 CFR 25.31(a) for this supplemental application.

As required by Section 306(k)(1) of the Generic Drug Enforcement Act [21 U.S.C. 335a (k)(1)], we hereby certify that, in connection with this application, Merck & Co., Inc. did not and will not use in any capacity the services of any person debarred under subsections 306 (a) or (b) of the Act.

We consider the filing of this Supplemental New Drug Application to be a confidential matter, and request the Food and Drug Administration not make its content, nor any future communications in regard to it, public without first obtaining the written permission of Merck & Co., Inc.

Questions concerning this submission should be addressed to Michelle W. Kloss, Ph.D. (610/397-2905) or, in my absence, Larry P. Bell, M.D. (610/397-2310).

Sincerely,

Michelle W. Kloss, Ph.D.

Julle W. Kloss

Director

Regulatory Affairs

q/carnal/mk217/blister

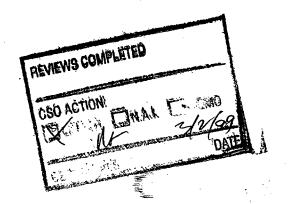
Attachments

Federal Express #1

Desk copy:

Mr. Randy Hedin, CSO, HFD-510, Room 14B-04 - Federal. Express #1

Ms. Debra Pagano
Philadelphia District Office
Food & Drug Administration
U.S. Custom House Room 900
2nd and Chestnut Street
Philadelphia, Pennsylvania 19106-2973 - Federal Express #2



12/10/98

DEPARTMENT OF HEALTH AND HUMAN SER	VICES			
PUBLIC HEALTH SERVICE FOOD AND DRUG ADMINISTRATION	j	·		
·		REQUEST FOR CO	NSULTATION	
		FROM: HFD-510		
IND NO.	NDA NO.	TYPE OF DOCUMENT	DATE OF DOCUMENT	
mber 9,1998	NDA 20-560	Physicians' Sample Pak	October 30, 1998	
PRIORITY		CLASSIFICATION OF DRUG	DESIRED COMPLETION DATE	
Fosamax (alendronate sodium) CONSIDERATION S		S	January 9, 1999	
NAME OF FIRM Merck Research Laboratories				
REASON FOR REQUEST				
I. GENERAL				
□ NEW PROTOCOL	□ PRE-NDA MEETING	□ RESPONSE TO DEFICIENCY LETTER		
□ PROGRESS REPORT	□ END OF PHASE II MEETIN	G □ FINAL PRINTED LABELING		
NEW CORRESPONDENCE	□ RESUBMISSION	X LABELING R		
DRUG ADVERTISING	□ SAFETY/EFFICACY	□ ORIGINAL NI	EW CORRESPONDENCE	
□ ADVERSE REACTION REPORT	□ PAPER NDA	□ FORMULATI	VE REVIEW	
☐ MANUFACTURINGCHANGE/ADDITION☐ MEETING PLANNED BY	□ CONTROL SUPPLEMENT	□ OTHER (SPE	ECIFY BELOW)	
		METRICS		
STATISTICAL EVALUATION	N BRANCH	STATISTICAL APPLICATION BRANCH		
□ TYPE A OR B NDA REVIEW		□ CHEMISTRY REVIEW		
		□ PHARMACOLOGY		
□ CONTROLLED STUDIES □ PROTOCOL REVIEW		□ BIOPHARMACEUTICS		
D OTHER				
OTHER	III DIODUA	I RMACEUTICS		
□ DISSOLUTION	ііі. БІОРПА	XD DEFICIENCY LETTER RESPONS		
BIOAVAILABILTY STUDIES		□ PROTOCOL-BIOPHARMACEUTIC		
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-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	□ PHASE IV STUDIES □ IN-VIVO WAIVER REQUEST IV. DRUG EXPERIENCE			
☐ PHASE IV SURVEILLANCE/EPIDEMIOLOG		□ REVIEW OF MARKETING EXPER	IENCE DRUGUSE AND	
□ DRUG USE e.g. POPULATION EXPOSURE		SAFETY		
ASSOCIATED DIAGNOSES		□ SUMMARY OF ADVERSE EXPERIENCE		
SE REPORTS OF SPECIFIC REACTION	IS(List below)	□ POISON RISK ANALYSIS		
PARATIVE RISK ASSESSMENT ON C	SENERIC DRUG GROUP			
	V. SCIENTIFIC	INVESTIGATIONS		
□ CLINICAL		□ PRECLINICAL		
COMMENTS/SPECIAL INSTRUCTIONS: Ple	ease review the attached	supplement containing a new p	hysicians' sample blister package.	
If you have any questions please cont	act Randy Hedin at 827-6	3392. The medical officer is Dr	. Bruce Schneider 827-6425, and	
the chemist is Dr. Sheldon Markofsky	827-6383. /	·	-	
SIGNATURE OF REQUESTER	\neg //	METHOD OF DELIVERY (Check one,)	
Kak		□ MAIL	⊠ HAND	
SIGNATURE OF RECEIVER	676	SIGNATURE OF DELIVERER		
	w /	, .		
FFD and We				

Consult.070





NDA 20-560/S-016

Food and Drug Administration Rockville MD 20857

NOV 1 7 1998

Merck Research Laboratories Sumneytown Pike P.O. Box 4 BLA-20 West Point, PA 19486

Attention: Michelle W. Kloss, Ph.D.

Director,

Regulatory Affairs

Dear Ms. Kloss:

We acknowledge receipt of your supplemental application for the following:

Name of Drug:

Fosamax® (Alendronate Sodium Tablets)

NDA Number:

20-560

Supplement Number:

S-016

Date of Supplement:

October 30, 1998

Date of Receipt:

November 2, 1998

Unless we find the application not acceptable for filing, this application will be filed under Section 505(b)(1) of the Act on January 1, 1999, in accordance with 21 CFR 314.101(a).

All communications concerning this NDA should be addressed as follows:

Center for Drug Evaluation and Research
Division of Metabolic and Endocrine Drug Products, HFD-510
Office of Drug Evaluation II
Attention: Document Control Room 14B-19
5600 Fishers Lane
Rockville, MD 20857

Sincerely,

Enid Galliers

Chief, Project Management Staff
Division of Metabolic and Endocrine

Drug Products, HFD-510 Office of Drug Evaluation II

Center for Drug Evaluation and Research

NDA 20-560/S-016 Page 2

cc:

Original NDA 20-560/S-016 HFD-510/Div. Files HFD-510/CSO/R. Hedin

filename: C:\DATA\WPFILES\20560ACK.

SUPPLEMENT ACKNOWLEDGEMENT

DEPARTMENT OF HEALTH AND HUMAN SERVICES PUBLIC HEALTH SERVICE FOOD AND DRUG ADMINISTRATION

Form Approved: OMB No. 0910-0297 Expiration Date: 04-30-01

USER FEE COVER SHEET

See Instructions on Reverse	Side Before Completing This Form
APPLICANT'S NAME AND ADDRESS	3. PRODUCT NAME
	Fosamax
Merck & Co., Inc. Sumneytown Pike, BLA-10 P. O. Box 4	4. DOES THIS APPLICATION REQUIRE CLINICAL DATA FOR APPROVAL? IF YOUR RESPONSE IS "NO" AND THIS IS FOR A SUPPLEMENT, STOP HERE AND SIGN THIS FORM.
West Point, PA 19486	IF RESPONSE IS 'YES', CHECK THE APPROPRIATE RESPONSE BELOW:
	THE REQUIRED CLINICAL DATA ARE CONTAINED IN THE APPLICATION.
	THE REQUIRED CLINICAL DATA ARE SUBMITTED BY REFERENCE TO
. TELEPHONE NUMBER (Include Area Code)	(APPLICATION NO. CONTAINING THE DATA).
(610) 397–2383	
. USER FEE I.D. NUMBER	6. LICENSE NUMBER / NDA NUMBER
. IS THIS APPLICATION COVERED BY ANY OF THE FOLLOWING USER FEE	EXCLUSIONS? IF SO, CHECK THE APPLICABLE EXCLUSION.
A LARGE VOLUME PARENTERAL DRUG PRODUCT APPROVED UNDER SECTION 505 OF THE FEDERAL FOOD, DRUG, AND COSMETIC ACT BEFORE 9/1/92 (Self Explanatory)	A 505(b)(2) APPLICATION THAT DOES NOT REQUIRE A FEE (See item 7, reverse side before checking box.)
THE APPLICATION QUALIFIES FOR THE ORPHAN EXCEPTION UNDER SECTION 736(a)(1)(E) of the Federal Food, Drug, and Cosmetic Act (See item 7, reverse side before checking box.)	THE APPLICATION IS A PEDIATRIC SUPPLEMENT THAT QUALIFIES FOR THE EXCEPTION UNDER SECTION 736(a)(1)(F) of the Federal Food, Drug, and Cosmetic Act (See item 7, reverse side before checking box.)
THE APPLICATION IS SUB GOVERNMENT ENTITY FO COMMERCIALLY (Self Explanatory)	BMITTED BY A STATE OR FEDERAL DR A DRUG THAT IS NOT DISTRIBUTED
FOR BIOLOG	ICAL PRODUCTS ONLY
WHOLE BLOOD OR BLOOD COMPONENT FOR TRANSFUSION	A CRUDE ALLERGENIC EXTRACT PRODUCT
AN APPLICATION FOR A BIOLOGICAL PRODUCT FOR FURTHER MANUFACTURING USE ONLY	AN "IN VITRO" DIAGNOSTIC BIOLOGICAL PRODUCT LICENSED UNDER SECTION 351 OF THE PHS ACT
BOVINE BLOOD PRODUC APPLICATION LICENSED	T FOR TOPICAL BEFORE 9/1/92
8. HAS A WAIVER OF AN APPLICATION FEE BEEN GRANTED FOR THIS API	PLICATION? YES NO (See reverse side if answered YES)
A completed form must be signed and accompany of supplement. If payment is sent by U.S. mail or courie	each new drug or biologic product application and each new r, piease include a copy of this completed form with payment.
	istimated to average 30 minutes per response, including the time for reviewing hing the data needed, and completing and reviewing the collection of information. This collection of information, including suggestions for reducing this burden to:
DHHS, Reports Clearance Officer Paperwork Reduction Project (0910-0297) Hubert H. Humphrey Building, Room 531-H 200 Independence Avenue, S.W. Washington, DC 20201	An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.
	ETURN this form to this address.
SIGNATURE OF AUTHORIZED COMPANY REPRESENTATIVE	TITLE Bonnie J. Goldmann, M.D. AATE Vice President, Domestic Liaison Regulatory Affairs