

**CENTER FOR DRUG EVALUATION AND RESEARCH**

**Approval Package for:**

***APPLICATION NUMBER:***  
**ANDA 73-680/S-018**

**Name:** Metoclopramide Oral Solution USP,  
5 mg/5 mL

**Sponsor:** Silarx Pharmaceuticals, Inc.

**Approval Date:** September 11, 2009

# CENTER FOR DRUG EVALUATION AND RESEARCH

***APPLICATION NUMBER:***  
**ANDA 73-680/S-018**

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**CENTER FOR DRUG EVALUATION AND RESEARCH**

*APPLICATION NUMBER:*  
**ANDA 73-680/S-018**

**APPROVAL LETTER w/ REMS DOCUMENTS**



ANDA 073680/S-018

**APPROVAL LETTER**

Silarx Pharmaceuticals, Inc.  
Attention: Nayan Raval  
Executive Vice President  
19 West Street  
PO Box 449  
Spring Valley, NY 10977

Dear Mr. Raval:

Please refer to your supplemental ANDA 73-680/S-018 for Metoclopramide Oral Solution USP, 5 mg/5 mL, submitted under section 505(j) of the Federal Food, Drug, and Cosmetic Act (FDCA), dated March 17, 2009.

We acknowledge receipt of your submissions dated March 17, April 3, May 7, June 8, June 16, June 26, and July 17, 2009.

This supplemental new drug application provides for a proposed Risk Evaluation and Mitigation Strategy (REMS) for Metoclopramide Oral Solution as requested in our letter dated February 26, 2009.

We completed our review of this supplemental new drug application, as amended. It is approved, effective on the date of this letter.

### **RISK EVALUATION AND MITIGATION STRATEGY REQUIREMENTS**

Section 505-1 of the Federal Food, Drug, and Cosmetic Act (FDCA) authorizes FDA to require the submission of a Risk Evaluation and Mitigation Strategy (REMS) if FDA becomes aware of new safety information and makes a determination that such a strategy is necessary to ensure that the benefits of the drug outweigh the risks (section 505-1(a)).

Metoclopramide Oral Solution USP, 5 mg/5 mL, was approved on October 27, 1992. Current product labeling warns of the risk of tardive dyskinesia, a serious movement disorder, with chronic metoclopramide treatment. Tardive dyskinesia is often irreversible. Several risk factors, including female gender, advanced age, treatment duration and total cumulative dose have been described. Recently published analyses suggest that metoclopramide has surpassed haloperidol as the most common cause of drug-induced movement disorders. A published FDA analysis of metoclopramide utilization patterns showed that prescription claims for cumulative periods longer than 90 days were recorded for a substantial portion of patients in that study. In addition, we have

become aware of continued spontaneous reports to the FDA of tardive dyskinesia associated with metoclopramide use. Exposure greater than 12 weeks was evident in a majority of these reports. This information was not available when Metoclopramide Oral Solutions were granted marketing authorization. We consider this information to be “new safety information” as defined in FDAAA.

Your proposed REMS, submitted on March 17, 2009, and amended on July 17, 2009, is appended to this letter, and is approved. The REMS consists of a Medication Guide.

Prominently identify the submission containing the proposed REMS modifications with the following wording in bold capital letters at the top of the first page of the submission:

**NEW SUPPLEMENT FOR ANDA 073680  
PROPOSED REMS MODIFICATION**

If you do not submit electronically, please send 5 copies of REMS-related submissions.

**PROMOTIONAL MATERIALS**

All promotional materials for your drug product that include representations about your drug product must be promptly revised to make it consistent with the labeling changes approved in this supplement, including any new safety information [21 CFR 314.70(a)(4)]. The revisions to your promotional materials should include prominent disclosure of the important new safety information that appears in the revised package labeling. Within 7 days of receipt of this letter, submit your statement of intent to comply with 21 CFR 314.70(a)(4) to the following address or by facsimile at 301-847-8444:

Food and Drug Administration  
Center for Drug Evaluation and Research  
Division of Drug Marketing, Advertising, and Communications  
5901-B Ammendale Road  
Beltsville, MD 20705-1266

In addition, as required under 21 CFR 314.81(b)(3)(i), you must submit your updated final promotional materials, and the package insert(s), at the time of initial dissemination or publication, accompanied by a Form FDA-2253, directly to the above address. For instruction on completing the Form FDA 2253, see page 2 of the Form. For more information about submission of promotional materials to the Division of Drug Marketing, Advertising, and Communications (DDMAC), see <http://www.fda.gov/AboutFDA/CentersOffices/CDER/ucm090142.htm>.

**LETTER TO HEALTHCARE PROFESSIONALS**

If you issue a letter communicating important information about this drug product (i.e., a “Dear Health Care Professional” letter), we request that you submit a copy of the letter to this ANDA and a copy to the following address:

MedWatch  
Food and Drug Administration  
Suite 12B05  
5600 Fishers Lane  
Rockville, MD 20857

**REPORTING REQUIREMENTS**

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

If you have any questions, call Sarah Park, Labeling Reviewer, at (240) 276-8995.

Sincerely,

*{See appended electronic signature page}*

Gary Buehler  
Director  
Office of Generic Drugs  
Center for Drug Evaluation and Research

Enclosure: REMS documents

**ANDA 73-680 METOCLOPRAMIDE ORAL SOLUTION, USP 5 MG/ 5 ML  
SILARX PHARMACEUTICALS, INC.  
TELEPHONE: 845-352-4020  
FAX: 845-352-4037**

**Risk Evaluation and Mitigation Strategy (REMS)**

**I. GOAL:**

The goal of this REMS is to minimize the risks of tardive dyskinesia associated with the long-term use of Metoclopramide Oral Solution, USP.

**II. REMS ELEMENTS:**

**A. Medication Guide**

A Medication Guide will be dispensed with each Metoclopramide Oral Solution, USP prescription. Metoclopramide Oral Solution, USP is packaged as a Pint (473 mL) size package.

In accordance with 21 CFR 208.24, Silarx will package a sufficient number of Medication Guides with each box containing 16 oz. of Metoclopramide Oral Solution USP, 5 mg/ 5 mL so that each patient receiving a prescription can receive a copy of the Medication Guide. Based on average dispensing volume of 4 oz, Silarx will provide four Medication Guides with each 16 oz. (473 mL) container.

Because the medication guide is included as a part of the package of Metoclopramide Oral Solution, USP, Silarx Pharmaceuticals, Inc meets the requirements of 21 CFR 208.24 for distributing and dispensing of Medication Guide.

The Medication Guide is appended to the REMS.

**B Communication Plan**

The REMS for Metoclopramide Oral Solution, USP does not include a Communication Plan.

**C Elements To Assure Safe Use**

This REMS for Metoclopramide Oral Solution, USP does not include elements to assure safe use.

**D Implementation System**

Because this REMS for Metoclopramide Oral Solution, USP does not include elements to assure safe use, an implementation system is not required.

**E Timetable for Submission of Assessments**

The REMS for Metoclopramide Oral Solution, USP does not include Timetable for Submission of Assessment of REMS.

## **MEDICATION GUIDE**

### **METOCLOPRAMIDE (met-o-KLO-pra-mide)**

#### **ORAL SOLUTION**

Read the Medication Guide that comes with Metoclopramide before you start taking it and each time you get a refill. There may be new information. If you take another product that contains metoclopramide (such as REGLAN tablets, REGLAN ODT, or REGLAN injection), you should read the Medication Guide that comes with that product. Some of the information may be different. This Medication Guide does not take place of talking to your doctor about your medical condition or your treatment.

#### **What is the most important information I should know about Metoclopramide?**

##### **Metoclopramide can cause serious side effects, including:**

**Abnormal muscle movements called tardive dyskinesia (TD).** These movements happen mostly in the face muscles. You can not control these movements. They may not go away even after stopping metoclopramide. There is no treatment for TD, but symptoms may lessen or go away over time after you stop taking Metoclopramide

Your chances for getting TD go up:

- the longer you take metoclopramide and the more metoclopramide you take. You should not take metoclopramide for more than 12 weeks.
- if you are older, especially if you are a woman
- if you have diabetes

It is not possible for your doctor to know if you will get TD if you take Metoclopramide.

Call your doctor right away if you get movements you can not stop or control, such as:

- lip smacking, chewing, or puckering up your mouth
- frowning or scowling
- sticking out your tongue
- blinking and moving your eyes
- shaking of your arms and legs

See the section “What are the possible side effects of Metoclopramide?”

#### **What is Metoclopramide?**

Metoclopramide is a prescription medicine used:

- in adults for 4 to 12 weeks to relieve heartburn symptoms with gastroesophageal reflux disease (GERD) when certain other treatments do not work. Metoclopramide relieves daytime heartburn and heartburn after meals. It also helps ulcers in the esophagus to heal.

- to relieve symptoms of slow stomach emptying in people with diabetes. Metoclopramide helps treat symptoms such as nausea, vomiting, heartburn, feeling full long after a meal, and loss of appetite. All these symptoms do not get better at the same time.

It is not known if Metoclopramide is safe and works in children.

### **Who should not take Metoclopramide?**

Do not take Metoclopramide if you:

- have stomach or intestine problems that could get worse with Metoclopramide, such as bleeding, blockage or a tear in the stomach or bowel wall
- have an adrenal gland tumor called a pheochromocytoma
- are allergic to Metoclopramide or anything in it. See the end of this Medication Guide for a list of the ingredients in Metoclopramide.
- take medicines that can cause uncontrolled movements, such as medicines for mental illness
- have seizures

### **What should I tell my doctor before taking Metoclopramide?**

**Tell your doctor about all your medical conditions**, including if you have:

- depression
- Parkinson's disease
- high blood pressure
- kidney problems. Your doctor may start with a lower dose.
- liver problems or heart failure. Metoclopramide may cause your body to hold fluids.
- diabetes. Your dose of insulin may need to be changed.
- breast cancer
- you are pregnant or plan to become pregnant. It is not known if Metoclopramide will harm your unborn baby.
- you are breast-feeding. Metoclopramide can pass into breast milk and may harm your baby. Talk with your doctor about the best way to feed your baby if you take Metoclopramide.

**Tell your doctor about all the medicines you take, including prescription and non-prescription medicines, vitamins, and herbal supplements.** Metoclopramide and some other medicines may interact with each other and may not work as well, or cause possible side effects. Do not start any new medicines while taking Metoclopramide until you talk with your doctor.

**Especially tell your doctor if you take:**

- another medicine that contains Metoclopramide, such as REGLAN tablets or REGLAN ODT.
- a blood pressure medicine
- a medicine for depression, especially an Monoamine Oxidase Inhibitor (MAOI)
- insulin
- a medicine that can make you sleepy, such as anti-anxiety medicine, sleep medicines, and narcotics.

If you are not sure if your medicine is one listed above, ask your doctor or pharmacist.

Know the medicines you take. Keep a list of them and show it to your doctor and pharmacist when you get a new medicine.

### **How should I take Metoclopramide?**

- Take Metoclopramide exactly as your doctor tells you.
- You should not take Metoclopramide for more than 12 weeks.
- If you take too much Metoclopramide, call your doctor or Poison Control Center right away.

### **What should I avoid while taking Metoclopramide?**

- Do not drink alcohol while taking Metoclopramide. Alcohol may make some side effects of Metoclopramide worse, such as feeling sleepy.
- Do not drive, work with machines, or do dangerous tasks until you know how Metoclopramide affects you. Metoclopramide may cause sleepiness.

### **What are the possible side effects of Metoclopramide?**

#### **Metoclopramide can cause serious side effects, including:**

- **Abnormal muscle movements.** See “What is the most important information I should know about Metoclopramide?”
- **Uncontrolled spasms of your face and neck muscles, or muscles of your body, arms, and legs (dystonia).** These muscle spasms can cause abnormal movements and body positions. These spasms usually start within the first 2 days of treatment. These spasms happen more often in children and adults under age 30.
- **Depression, thoughts about suicide, and suicide.** Some people who take Metoclopramide become depressed. You may have thoughts about hurting or killing yourself. Some people who take Metoclopramide have ended their own lives (suicide).
- **Neuroleptic Malignant Syndrome (NMS).** NMS is a very rare but very serious condition that can happen with Metoclopramide. NMS can cause death and must be treated in a hospital. Symptoms of NMS include: high fever, stiff muscles, problems thinking, very fast or uneven heartbeat, and increased sweating.
- **Parkinsonism.** Symptoms include slight shaking, body stiffness, trouble moving or keeping your balance. If you already have Parkinson’s disease, your symptoms may become worse while you are receiving Metoclopramide.

#### **Call your doctor and get medical help right away if you:**

- feel depressed or have thoughts about hurting or killing yourself
- have high fever, stiff muscles, problems thinking, very fast or uneven heartbeat, and increased sweating
- have muscle movements you can not stop or control
- have muscle movements that are new or unusual

**Common side effects of Metoclopramide include:**

- feeling restless, sleepy, tired, dizzy, or exhausted
- headache
- confusion
- trouble sleeping

You may have more side effects the longer you take Metoclopramide and the more Metoclopramide you take.

You may still have side effects after stopping Metoclopramide. You may have symptoms from stopping (withdrawal) Metoclopramide such as headaches, and feeling dizzy or nervous.

Tell your doctor about any side effects that bother you or do not go away. These are not all the possible side effects of Metoclopramide.

Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA 1088.

**How should I store Metoclopramide?**

- Store Metoclopramide at room temperature, 68°F to 77 °F (20°C to 25°C).
- Keep Metoclopramide in the bottle it comes in. Keep the bottle closed tightly.

**Keep Metoclopramide and all medicines out of the reach of children.**

**General information about Metoclopramide:**

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. Do not use Metoclopramide for a condition for which it was not prescribed. Do not give your Metoclopramide to other people, even if they have the same symptoms that you have. It may harm them.

This Medication Guide summarizes the most important information about Metoclopramide. If you would like more information, talk with your doctor. You can ask your doctor or pharmacist for information about Metoclopramide that is written for healthcare professionals. For more information, call 1-888-974-5279.

**What are the ingredients in Metoclopramide?**

Active ingredient: Metoclopramide

Inactive ingredients: Citric acid, FD&C Yellow No. 6, butterscotch flavor, glycerin, methylparaben, propylparaben, propylene glycol, sodium citrate, sorbitol, water.

Silarx Pharmaceuticals, Inc.  
19 West Street  
Spring Valley, NY 10977  
Revised June 2009

ANDA 073680/S-018

Page 10

This Medication Guide has been approved by the U.S. Food and Drug Administration

Application  
Type/Number

Submission  
Type/Number

Submitter Name

Product Name

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ANDA-73680

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SUPPL-18

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SILARX  
PHARMACEUTICA  
LS INC

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METOCLOPRAMIDE  
HYDROCHLORIDE

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/s/  
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GARY J BUEHLER

09/11/2009

**CENTER FOR DRUG EVALUATION AND RESEARCH**

*APPLICATION NUMBER:*  
**ANDA 73-680/S-018**

**LABELING REVIEW(S)**

**Labeling Review Branch**  
**Division of Labeling and Program Support**  
**Office of Generic Drugs**

**Labeling Supplement Review**

**Application Number:** 73-680/S-018

**Name of Drug:** Metoclopramide Oral Solution USP, 5 mg/5 mL

**Applicant:** Silarx Pharmaceuticals, Inc.

**Material Reviewed:** (specify labeling pieces)

**Submission Date(s):**

(All labeling pieces were submitted electronically.)

March 17, 2009	REMS submission
April 03, 2009	REMS amendment
May 07, 2009	REMS amendment
June 08, 2009	REMS amendment
June 16, 2009	REMS amendment
June 26, 2009	REMS amendment

**Background and Summary**

1. Background:  
On February 26, 2009, an IR letter was sent to the firm under section 505(o)(4) of the FDCA to require safety related label changes to the labeling of Metoclopramide Oral Solution USP, 5 mg/5 mL to address the risk of tardive dyskinesia associated with the use of this product based on new safety information about this risk. Firm was asked to make safety labeling changes to the insert and propose a Medication Guide. Firm was also asked to propose a Risk Evaluation and Mitigating Strategy (REMS). The insert and Medication Guide were approved on June 30, 2009 under S-017
2. This supplemental application provides for a proposed REMS in response to the February 26, 2009 IR letter.
3. RLD is ANDA 74-703/S-006, Metoclopramide Oral Solution USP, 5 mg/5 mL, by Morton Grove Pharmaceuticals Inc., approved on June 30, 2009.  
Previous RLD (currently discontinued in the Orange Book) was NDA 18-821, Reglan Syrup, which was withdrawn on November 12, 2002.  
RLD for the tablet dosage form is Reglan Tablets, NDA 17-854/S-017 approved July 26, 2004.
4. Patent/Exclusivity Statement: none

## Review

The proposed REMS was consulted to the OSE and reviewed by Mary Dempsey, Risk Management Program Coordinator (DRISK). The REMS review signed on June 24, 2009 recommends the following comments to be communicated to the firm.

1. Revise your REMS goal as follows to be consistent with REMS goal for all metoclopramide products:

The goal of this REMS is to minimize the risk of tardive dyskinesia associated with long-term use of Metoclopramide Oral Solution.

2. The Medication Guide distribution procedure is acceptable.
3. We remind you of the requirement to comply with 21 CFR 208.24. A required statement alerting the dispenser to provide the Medication Guide with the product must be on the carton and container of all strengths and formulations. We recommend the following language dependent upon whether the Medication Guide accompanies the product or is enclosed in the carton (for example, unit of use): “Dispense the enclosed Medication Guide to each patient.” or “Dispense the accompanying Medication Guide to each patient.”
4. Please see appended REMS proposal for additional track changes corresponding to comments in this review.

## Recommendation

The submitted REMS is not acceptable. The comments recommended by OSE/DRISK are to be communicated to the firm. The firm is asked to respond as a **REMS-AMENDMENT**.

{ see appended electronic signature }

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Sarah Park  
Labeling Reviewer

### **Supervisory Comment/Concurrence:**

{ see appended electronic signature }

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Koung Lee  
Team Leader

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/s/

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Soojung Sarah Park  
7/15/2009 06:09:35 PM  
LABELING REVIEWER

Koung Lee  
7/17/2009 10:27:36 AM  
LABELING REVIEWER

**Labeling Review Branch**  
**Division of Labeling and Program Support**  
**Office of Generic Drugs**

**Labeling Supplement Review**

**Application Number:** 73-680/S-018

**Name of Drug:** Metoclopramide Oral Solution USP, 5 mg/5 mL

**Applicant:** Silarx Pharmaceuticals, Inc.

**Material Reviewed:** (specify labeling pieces)

**Submission Date(s):**

(All labeling pieces were submitted electronically.)

<b>July 17, 2009</b>	<b>REMS amendment</b> <b>Container Label in final print</b>
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Previous Submissions:

March 17, 2009	REMS submission
April 03, 2009	REMS amendment
May 07, 2009	REMS amendment
June 08, 2009	REMS amendment
June 16, 2009	REMS amendment
June 26, 2009	REMS amendment

**Background and Summary**

1. Background:  
On February 26, 2009, an IR letter was sent to the firm under section 505(o)(4) of the FDCA to require safety related label changes to the labeling of Metoclopramide Oral Solution USP, 5 mg/5 mL to address the risk of tardive dyskinesia associated with the use of this product based on new safety information about this risk. Firm was asked to make safety labeling changes to the insert and propose a Medication Guide. Firm was also asked to propose a Risk Evaluation and Mitigating Strategy (REMS). The insert and Medication Guide were approved on June 30, 2009 under S-017
2. This supplemental application provides for a proposed REMS in response to the February 26, 2009 IR letter.
3. RLD is ANDA 74-703/S-006, Metoclopramide Oral Solution USP, 5 mg/5 mL, by Morton Grove Pharmaceuticals Inc., approved on June 30, 2009.  
Previous RLD (currently discontinued in the Orange Book) was NDA 18-821, Reglan Syrup, which was withdrawn on November 12, 2002.  
RLD for the tablet dosage form is Reglan Tablets, NDA 17-854/S-017 approved July 26, 2004.
4. Patent/Exclusivity Statement: none

## Review

### REMS

The proposed REMS was consulted to the OSE and reviewed by Mary Dempsey, Risk Management Program Coordinator (DRISK). The REMS review signed on June 24, 2009 recommended the following comments to be communicated to the firm.

1. Revise your REMS goal as follows to be consistent with REMS goal for all metoclopramide products:

The goal of this REMS is to minimize the risk of tardive dyskinesia associated with long-term use of Metoclopramide Oral Solution.

2. The Medication Guide distribution procedure is acceptable.
3. We remind you of the requirement to comply with 21 CFR 208.24. A required statement alerting the dispenser to provide the Medication Guide with the product must be on the carton and container of all strengths and formulations. We recommend the following language dependent upon whether the Medication Guide accompanies the product or is enclosed in the carton (for example, unit of use): "Dispense the enclosed Medication Guide to each patient." or "Dispense the accompanying Medication Guide to each patient."
4. Please see appended REMS proposal for additional track changes corresponding to comments in this review.

**The firm submitted revised REMS on July 17, 2009. The firm states: "Silarx will package a sufficient number of Medication Guides with each box containing 16 oz. of Metoclopramide Oral Solution USP, 5 mg/ 5 mL so that each patient receiving a prescription can receive a copy of the Medication Guide. Based on average dispensing volume of 4 oz, Silarx will provide four Medication Guides with each 16 oz. (473 mL) container."**

**The July 17, 2009 revised REMS was also reviewed along with NDA 17-854 (Reglan Tablets), NDA 21-793 (Reglan Orally Disintegrating Tablets), and NDA 17862 (Reglan Injection) by Dr. Tamara Johnson of the Division of Gastroenterology Products, and signed by Dr. Nancy Snow on August 26, 2006. The Division of Gastroenterology Products found Silarx's REMS acceptable with no additional comments.**

### CONTAINER

The firm revised the Medication Guide statement on the container label from "PHARMACIST: PLEASE DISPENSE WITH MEDICATION GUIDE PROVIDED SEPARATELY" to "PHARMACIST: DISPENSE THE ACCOMPANYING MEDICATION GUIDE TO EACH PATIENT"

## Recommendation

The REMS and container label (final print) submitted on July 17, 2009 are **acceptable**.

{ see appended electronic signature }

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Sarah Park  
Labeling Reviewer

### **Supervisory Comment/Concurrence:**

{ see appended electronic signature }

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Koung Lee  
Team Leader

**ANDA 73-680 Metoclopramide Oral Solution, USP 5 mg/ 5 ML**  
**Silarx Pharmaceuticals, Inc.**  
**Telephone: 845-352-4020**  
**Fax: 845-352-4037**

**Risk Evaluation and Mitigation Strategy (REMS)**

**I. GOAL:**

The goal of this REMS is to minimize the risks of tardive dyskinesia associated with the long-term use of Metoclopramide Oral Solution, USP.

**II. REMS ELEMENTS:**

**A. Medication Guide**

A Medication Guide will be dispensed with each Metoclopramide Oral Solution, USP prescription. Metoclopramide Oral Solution, USP is packaged as a Pint (473 mL) size package.

In accordance with 21 CFR 208.24, Silarx will package a sufficient number of Medication Guides with each box containing 16 oz. of Metoclopramide Oral Solution USP, 5 mg/ 5 mL so that each patient receiving a prescription can receive a copy of the Medication Guide. Based on average dispensing volume of 4 oz, Silarx will provide four Medication Guides with each 16 oz. (473 mL) container.

Because the medication guide is included as a part of the package of Metoclopramide Oral Solution, USP, Silarx Pharmaceuticals, Inc meets the requirements of 21 CFR 208.24 for distributing and dispensing of Medication Guide.

The Medication Guide is appended to the REMS.

**B Communication Plan**

The REMS for Metoclopramide Oral Solution, USP does not include a Communication Plan.

**C Elements To Assure Safe Use**

This REMS for Metoclopramide Oral Solution, USP does not include elements to assure safe use.

**D Implementation System**

Because this REMS for Metoclopramide Oral Solution, USP does not include elements to assure safe use, an implementation system is not required.

**E Timetable for Submission of Assessments**

The REMS for Metoclopramide Oral Solution, USP does not include Timetable for Submission of Assessment of REMS.

## REMS Supporting Document

### 1. Background:

Based on the new safety information the agency feels that additional information is required to emphasize the risk of tardive dyskinesia. Additional information need to be added to the patient package insert along with a proposed Risk Evaluation and Mitigation Strategy (REMS) where Medication Guide is necessary for Metoclopramide Oral Solution USP, 5 mg/5mL

### 2. Goals

The goal of this REMS is to minimize the risks of tardive dyskinesia associated with long-term use of Metoclopramide Oral Solution, USP.

### 3. Supporting Information on Proposed REMS Elements

#### a. Additional Potential Elements

##### i. Medication Guide

The Medication Guide provides information on the serious risks involved with the use of Metoclopramide Oral Solution. The emphasis has been placed on tardive dyskinesia which is a serious movement disorder with chronic metoclopramide treatment (greater than 12 weeks). Based on average dispensing volume of 4 oz, four Medication Guides will be provided with each 16 oz. (473 mL) container.

##### ii. Patient Package Insert

The new safety information has been added as a Black Box Warning and in the WARNINGS section.

##### iii. Communication Plan

The REMS for Metoclopramide Oral Solution, USP does not include a Communication Plan.

#### b. Elements to Assure Safe Use

This REMS for Metoclopramide Oral Solution, USP does not include elements to assure safe use.

#### c. Implementation System

Because the REMS for Metoclopramide Oral Solution, USP does not include elements to assure safe use, an implementation system is not required.

#### d. Timetable for Assessment of the REMS

The REMS for Metoclopramide Oral Solution, USP does not include Assessment of REMS.

### 4. Information Needed for Assessments

Not necessary

**5. Other Relevant Information**

Not necessary



NDC 54838-508-80

NDC 54838-508-80

**METOCLOPRAMIDE  
ORAL SOLUTION USP**

**METOCLOPRAMIDE  
ORAL SOLUTION USP**

**5 mg per 5 mL**

**5 mg per 5 mL**

**Rx only**

**Rx only**

Each 5 mL (1 teaspoonful) contains:  
Metoclopramide base..... 5 mg  
(as the monohydrochloride monohydrate)  
In a palatable, aromatic, sugar free vehicle.

For dosage and other prescribing information,  
see accompanying product literature.

Store at controlled room temperature, between  
20° and 25°C (68° and 77°F) (see USP).

**Dispense in a tight, light-resistant container  
with a child-resistant closure (as required).**

**PHARMACIST: DISPENSE  
THE ACCOMPANYING  
MEDICATION GUIDE TO  
EACH PATIENT**

**BULK CONTAINER –  
The container is not  
child-resistant.  
Not for household use.**

Control # & Exp. Date



N  
3 54838-508-80 2

Rev. 07/09

**1 Pint (473 mL)**

Manufactured by:  
Silarx Pharmaceuticals, Inc.  
19 West Street  
Spring Valley, NY 10977 USA

Linked Applications	Submission Type/Number	Sponsor Name	Drug Name / Subject
----- ANDA 73680	----- SUPPL 18	----- SILARX PHARMACEUTICA LS INC	----- METOCLOPRAMIDE HYDROCHLORIDE

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/s/  
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SOOJUNG S PARK  
08/29/2009

KOUNG U LEE  
08/31/2009  
For Wm Peter Rickman

**CENTER FOR DRUG EVALUATION AND RESEARCH**

*APPLICATION NUMBER:*  
**ANDA 73-680/S-018**

**MEDICAL REVIEW(S)**

**DIVISION OF GASTROENTEROLOGY PRODUCTS  
MEDICAL OFFICER'S REVIEW**

FDAAA SAFETY REVIEW OF REMS ELEMENTS FOR  
METOCLOPRAMIDE REFERENCE LISTED DRUGS

Drug Product/Formulation/ Sponsor Name/ NDA or ANDA # (Supplement #)	Indications:	Date of Submission	FDAAA Action Date
Reglan Tablets/Alaven Pharmaceuticals/ NDA 017854 (052)	<ul style="list-style-type: none"> <li>• Diabetic Gastroparesis (Diabetic Gastric Stasis)</li> <li>• Symptomatic Gastroesophageal Reflux Disease (GERD)</li> </ul>	March 25, 2009	August 25, 2009
Reglan Oral Disintegrating Tablets/Alaven Pharmaceuticals/ NDA 021793 (005)		March 25, 2009	
Metoclopramide oral solution/ Morton Grove Pharmaceuticals/ ANDA 074703 (S-007)		March 27, 2009	
Metoclopramide oral solution/ Silarx Pharmaceuticals Inc/ ANDA 073680 (S-018)		March 17, 2009	
Metoclopramide oral solution/Pharmaceutical Associates Inc/ ANDA 072744 (S-011)		March 31, 2009	
Metoclopramide oral solution/ ANI Pharmaceuticals Inc/ ANDA 071402 (S-008)		March 27, 2009	
Reglan Injection/ Baxter Healthcare Corp/ NDA 017862 (063)	<ul style="list-style-type: none"> <li>• Diabetic gastroparesis (diabetic gastric stasis)</li> <li>• Prevention of nausea and vomiting associated with emetogenic cancer chemotherapy</li> <li>• Prevention of postoperative nausea and vomiting</li> <li>• Small bowel intubation</li> <li>• Radiological examination</li> </ul>	July 16, 2009	August 25, 2009

Review completed:  
Reviewer:

August 4, 2009  
Tamara Johnson, MD, MS

### **Purpose**

As authorized under the Food and Drug Administration Amendments Act of 2007 (FDAAA), a class labeling and Risk Evaluation and Mitigation Strategy (REMS) safety initiative for metoclopramide products was initiated, based on concerns related to the risk of developing tardive dyskinesia (TD) with long-term use. The REMS documents for the above listed reference listed drugs (RLD) have been reviewed in accordance with the current product labeling (Package Inserts (PI)) and the recent FDA-proposed boxed warning and warning section language regarding the risk of TD. Because the original RLD for oral solutions has been withdrawn from marketing, the four currently marketed generic oral solutions were reviewed as RLDs.

This review reflects the perspective of the Division of Gastroenterology Products (DGP) on the REMS, and was completed subsequent to reviews performed by the Office of Safety Evaluation's Division of Risk Management (DRISK). Clinical review of the associated medication guides and PI's is included in the June 30, 2009 document co-authored by this reviewer and Dr. Chris Leptak, DGP.

### **Materials Reviewed**

- REMS documents, including medication guides, submitted to NDA's 17-854, 17-862, 21-793 and ANDA's 71-402, 72-744, 73-680, 74-703 in response to the FDA REMS memorandum, dated February 26, 2009.
- Package Insert Labeling submitted to NDA's 17-854, 17-862, 21-793 and ANDA's 71-402, 72-744, 73-680, 74-703 in response to the FDA REMS memorandum, dated February 26, 2009.
- Consultation Reviews completed by Sharon Mills, Mary Dempsey, and Claudia Karwoski of DRISK.

### **Background**

The increasing concern regarding the risk of tardive dyskinesia with prolonged use of metoclopramide has prompted this safety initiative under FDAAA. The medical literature demonstrates that metoclopramide is now the leading cause of drug-induced movement disorders.<sup>1,2</sup> Since the time of cisapride's withdrawal from the US market in 2000, metoclopramide utilization has increased, especially for treatment of symptomatic GERD.<sup>3,4</sup> Adverse event reports submitted to the FDA continue to link tardive dyskinesia to metoclopramide use. The above described new safety information about the risk of tardive dyskinesia authorizes FDA to require a REMS for approved drugs.

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<sup>1</sup> Kenney C, Hunter C, Davidson A, Jankovic J. Metoclopramide, an increasingly recognized cause of tardive dyskinesia. *J Clin Pharmacol* 2008; 48:379-384.

<sup>2</sup> Pasricha PJ, Pehlivanov N, Sugumar A; and Jankovic J. Drug Insight: from disturbed motility to disordered movement – a review of the clinical benefits and medicolegal risks of metoclopramide. *Nat Clin Pract Gastroenterol Hepatol* 2006 Mar; 3(3):138-48.

<sup>3</sup> Kaplan S, Staffa JA, Dal Pan GJ. Duration of therapy with metoclopramide: a prescription claims data study. *Pharmacoepi Drug Saf* 2007; 16: 878-881.

<sup>4</sup> Shaffer D, Butterfield M, Pamer C, Corken Mackey A. Tardive dyskinesia risks and metoclopramide use before and after US market withdrawal of cisapride. *J Am Pharm Assoc* 2004;44:661-665.

## REMS Review

### I. Goal

The REMS goal statements were reviewed from each sponsor and harmonized to provide the best rendition. The agreed upon REMS goal statement follows:

*The goal of this REMS is to minimize the risk of tardive dyskinesia associated with the long-term use of XXXXXX (insert metoclopramide product tradename).*

### II. REMS Elements

DGP concurs with the recommendations from DRISK's review of the elements of the REMS for the above listed metoclopramide RLD products. The Division has the following additional requirements regarding the REMS elements proposed for the branded products.

- a. Reglan tablets (NDA 017854) and Reglan ODT (NDA 021793)
  - i. The sponsor (Alaven) has added the statement, "Medication Guide must be provided with each prescription", on bottle labels of all strengths of Reglan tablets. This differs from the recommended language consistent with 21 CFR 208.24 that was communicated to the sponsor in FDA letter dated July 7, 2009. The sponsor must revise the statement to reflect how the med guide is provided, i.e., "enclosed in" or "accompanying" the container. As the sponsor has already started printing the container without final FDA approval, it was agreed that they would make this change upon the next container printing.
- b. Reglan IV (NDA 017862)
  - i. The sponsor (Baxter) seeks to disseminate the medication guide through (b) (4) means only. This method of communication is not accessible to all healthcare professionals, patient caregivers, and patients. The sponsor is required to include physical medication guides, and consider accompanying tearpads of the medication guide to complement the (b) (4) communication method.
  - ii. The sponsor seeks to perform only (b) (4) (b) (4) earmarks. Although the sponsor reasonably explains why (b) (4) are targeted for (b) (4) rather than (b) (4) there is no justification for (b) (4). The sponsor must adhere to the (b) (4).
  - iii. The carton and container labeling conforms to the recommended language consistent with 21 CFR 208.24, "Dispense the accompanying Medication Guide to each patient."

### Conclusion

This reviewer finds the REMS elements appropriate to meet the goal of this metoclopramide class REMS, once the above noted requirements have been addressed.

Application Type/Number	Submission Type/Number	Submitter Name	Product Name
NDA-21793	SUPPL-5	ALAVEN PHARMACEUTICA L LLC	REGLAN RPT(METOCLOPRAMIDE)5/10 MG TABS
NDA-17854	SUPPL-52	ALAVEN PHARMACEUTICA L LLC	REGLAN
NDA-17862	SUPPL-62	BAXTER HEALTHCARE CORP ANESTHESIA CRITICAL CARE	REGLAN

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/s/

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TAMARA N JOHNSON  
08/25/2009

NANCY C SNOW  
08/26/2009

**CENTER FOR DRUG EVALUATION AND RESEARCH**

*APPLICATION NUMBER:*  
**ANDA 73-680/S-018**

**OTHER REVIEW(S)**



**Department of Health and Human Services  
Public Health Service  
Food and Drug Administration  
Center for Drug Evaluation and Research  
Office of Surveillance and Epidemiology**

Date: June 22, 2009

To: Donna Griebel, MD, Director  
Division of Gastrointestinal Products (DGP)

Gary Buehler, Director  
Office of Generic Drugs (OGD)

Through: Claudia Karwoski, Pharm.D., Director (Acting)  
Division of Risk Management (DRISK)

From: Mary Dempsey, Risk Management Program Coordinator  
(DRISK)

Subject: Review of Risk Evaluation and Mitigation Strategy (REMS)

Drug Name(s): Metoclopramide Oral Solution

Application  
Type/Number: ANDA 73-680

Applicant/sponsor: Silarx Pharmaceuticals, Inc.

OSE RCM #: 2009-604

## **1 INTRODUCTION**

This memorandum is in response to a request by the DGP to review the proposed REMS for the innovator and generic metoclopramide products. The comments below reflect our review of the proposed REMS for Metoclopramide Oral Solution. Please send these comments to the sponsor and request the sponsor provide a response to these comments and questions within 2 weeks upon receipt. Please let us know if you would like a meeting to discuss before sending. DRISK's review of the draft Medication Guide was sent to DGP in a separate memorandum dated April 24, 2009.

## **2 MATERIAL REVIEWED**

- ANDA 73-680 Metoclopramide Oral Solution SLC and REMS Notification Letter, dated February 26, 2009
- Silarx Pharmaceuticals proposed REMS submitted March 17, 2009

## **3 CONCLUSION/RECOMMENDATIONS**

DRISK concurs with the elements of the REMS and with the agreed upon goal for all metoclopramide REMS as the following:

The goal of this REMS is to minimize the risk of tardive dyskinesia associated with the long-term use of XXXXX (insert metoclopramide product trade name).

We have the following comments for the Sponsor on the proposed REMS.

### **Comments to Silarx:**

1. Revise your REMS goal as follows to be consistent with REMS goal for all metoclopramide products:

The goal of this REMS is to minimize the risk of tardive dyskinesia associated with long-term use of Metoclopramide Oral Solution.

2. The Medication Guide distribution procedure is acceptable.
3. We remind you of the requirement to comply with 21 CFR 208.24. A required statement alerting the dispenser to provide the Medication Guide with the product must be on the carton and container of all strengths and formulations. We recommend the following language dependent upon whether the Medication Guide accompanies the product or is enclosed in the carton (for example, unit of use): "Dispense the enclosed Medication Guide to each patient." or "Dispense the accompanying Medication Guide to each patient."

4. Please see appended REMS proposal for additional track changes corresponding to comments in this review.

~~Metoclopramide Oral Solution USP~~  
~~5 mg per 5 mL~~

~~*Risk Evaluation Mitigation*~~  
~~*Strategy (REMS)*~~

ANDA 73-680 Metoclopramide Oral Solution, USP 5 mg/ 5 mL

Silarx Pharmaceuticals, Inc.

[insert contact information]

~~New Supplement for ANDA 73-680~~

**Proposed Risk Evaluation and Mitigation Strategy (REMS)**

**Metoclopramide Oral Solution, USP (5mg/ 5mL)**

**I. GOAL:**

The goal of this REMS is to minimize the (b) (4) risks of tardive dyskinesia associated with the long-term use -of Metoclopramide Oral Solution, USP.

**II. REMS ELEMENTS:**

**A. Medication Guide**

A Medication Guide will be dispensed with each Metoclopramide Oral Solution, USP prescription. Metoclopramide Oral Solution, USP is packaged as a Pint (473 mL) size package.

In accordance with 21 CFR 208.24, Silarx will package a sufficient number of Medication Guides with each box containing 16 oz. of Metoclopramide Oral Solution USP, 5 mg/ 5 mL so that each patient receiving a prescription can receive a copy of the Medication Guide. Based on average dispensing volume of 4 oz, Silarx will provide four Medication Guides ~~will be provided~~ with each 16 oz. (473 mL) container.

Because the medication guide is included as a part of the package of Metoclopramide Oral Solution, USP, Silarx Pharmaceuticals, Inc meets the requirements of 21 CFR 208.24 for distributing and dispensing of Medication Guide.

The Medication Guide is appended to the REMS.

**B Communication Plan**

The REMS for Metoclopramide Oral Solution, USP does not include a Communication Plan.

**C Elements To Assure Safe Use**

This REMS for Metoclopramide Oral Solution, USP does not include elements to assure safe use.

**D Implementation System**

Because this REMS for Metoclopramide Oral Solution, USP does not include elements to assure safe use, an implementation system is not required.

**III.E Timetable for Submission of Assessments of REMS**

The REMS for Metoclopramide Oral Solution, USP does not include Timetable for Submission of Assessment of REMS.

## REMS Supporting Document

### 1. Background:

Based on the new safety information the agency feels that additional information is required to emphasize the risk of tardive dyskinesia. Additional information need to be added to the patient package insert along with a proposed Risk Evaluation and Mitigation Strategy (REMS) where Medication Guide is necessary for Metoclopramide Oral Solution USP, 5 mg/5mL

### 2. Goals

The goal of this REMS is to minimize the <sup>(b) (4)</sup> risks of tardive dyskinesia associated with long-term use -of Metoclopramide Oral Solution, USP.

### 3. Supporting Information on Proposed REMS Elements

#### a. Additional Potential Elements

##### i. Medication Guide

The Medication Guide provides information on the serious risks involved with the use of Metoclopramide Oral Solution. The emphasis has been placed on tardive dyskinesia which is a serious movement disorder with chronic metoclopramide treatment (greater than 12 weeks). Based on average dispensing volume of 4 oz, four Medication Guides will be provided with each 16 oz. (473 mL) container.

##### ii. Patient Package Insert

The new safety information has been added as a Black Box Warning and in the WARNINGS section.

##### iii. Communication Plan

The REMS for Metoclopramide Oral Solution, USP does not include a Communication Plan.

#### b. Elements to Assure Safe Use

This REMS for Metoclopramide Oral Solution, USP does not include elements to assure safe use.

#### c. Implementation System

Because the REMS for Metoclopramide Oral Solution, USP does not include elements to assure safe use, an implementation system is not required.

#### d. Timetable for Assessment of the REMS

The REMS for Metoclopramide Oral Solution, USP does not include Assessment of REMS.

### 4. Information Needed for Assessments

Not necessary

**5. Other Relevant Information**  
Not necessary

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Mary Dempsey  
6/24/2009 11:26:25 AM  
DRUG SAFETY OFFICE REVIEWER

Claudia Karwoski  
6/24/2009 11:29:55 AM  
DRUG SAFETY OFFICE REVIEWER

**CENTER FOR DRUG EVALUATION AND RESEARCH**

*APPLICATION NUMBER:*  
**ANDA 73-680/S-018**

**ADMINISTRATIVE and CORRESPONDENCE**  
**DOCUMENTS**

## **Risk Evaluation and Mitigation Strategy (REMS) Memorandum**

**U.S. FOOD AND DRUG ADMINISTRATION  
CENTER FOR DRUG EVALUATION AND RESEARCH  
Office of Drug Evaluation III  
Division of Gastroenterology Products**

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**NDA #:** 17-854  
**Product:** Reglan (metoclopramide tablets, USP) Tablets  
**SPONSOR:** Alaven Pharmaceutical LLC.

**NDA #:** 21-793  
**Product:** Reglan ODT (metoclopramide) Orally Disintegrating Tablets  
**SPONSOR:** Alaven Pharmaceutical LLC.

**ANDA#:** 74-703  
**Product:** Metoclopramide Oral Solution  
**SPONSOR:** Morton Grove Pharmaceuticals, Inc.

**ANDA#:** 71-402  
**Product:** Metoclopramide Oral Solution  
**SPONSOR:** ANI Pharmaceuticals, Inc.

**ANDA#:** 72-744  
**Product:** Metoclopramide Oral Solution  
**SPONSOR:** Pharmaceutical Associates, Inc.

**ANDA#:** 73-680  
**Product:** Metoclopramide Oral Solution  
**SPONSOR:** Silarx Pharmaceuticals, Inc.

**NDA #:** 22-246  
**Products:** Metozolv ODT (metoclopramide) Orally Disintegrating Tablets  
**SPONSOR:** Wilmington Pharmaceuticals

**FROM:** Joyce Korvick, MD MPH  
Deputy Director of Safety

**DATE:** February 26, 2009

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Title IX, Subtitle A, Section 901 of the Food and Drug Administration Amendments Act of 2007 (FDAAA) amends the Federal Food, Drug, and Cosmetic Act (FDCA) to authorize FDA to require the submission of a REMS for an approved drug if FDA becomes aware of new safety information and makes a determination that such a strategy is necessary to ensure that the benefits of the drug outweigh the risks (section 505-1(a)). Section 505-1(a)(1) provides the following factors:

- (A) The estimated size of the population likely to use the drug involved;
- (B) The seriousness of the disease or condition that is to be treated with the drug;
- (C) The expected benefit of the drug with respect to such disease or condition;
- (D) The expected or actual duration of treatment with the drug;
- (E) The seriousness of any known or potential adverse events that may be related to the drug and the background incidence of such events in the population likely to use the drug;
- (F) Whether the drug is a new molecular entity (NME).

Reglan Tablets and Reglan ODT Orally Disintegrating Tablets were approved on December 30, 1980 and June 10, 2005, respectively. The Metoclopramide Oral Solution products were approved on May 28, 1991 (ANDA 72-744), October 27, 1992 (ANDA 73-680), June 25, 1993 (ANDA 71-402), and October 31, 1997 (ANDA 74-703). The NDA for Metozolv ODT, received January 29, 2008, is currently under review. Current product labeling for approved metoclopramide products warns of the risk of tardive dyskinesia, a serious movement disorder, with chronic metoclopramide treatment. Tardive dyskinesia is often irreversible. Several risk factors, including female gender, advanced age, treatment duration and total cumulative dose have been described. Recently published analyses suggest that metoclopramide has surpassed haloperidol as the most common cause of drug-induced movement disorders.<sup>1,2</sup> A published FDA analysis of metoclopramide utilization patterns showed that prescription claims for cumulative periods longer than 90 days were recorded for a substantial portion of patients in that study.<sup>3</sup> In addition, we have become aware of continued spontaneous reports to the FDA of tardive dyskinesia associated with metoclopramide use. Exposure greater than 12 weeks was evident in a majority of these reports. This information was not available when Reglan Tablets, Reglan ODT Orally Disintegrating Tablets, and the four Metoclopramide oral solution products referenced above were granted marketing authorization. We consider this information to be “new safety information” as defined in FDAAA.

After consultations between the Office of New Drugs and the Office of Surveillance and Epidemiology, we have determined that a REMS is necessary to ensure that the benefits of metoclopramide outweigh its risks. In reaching this determination we considered the following:

- A. Drug utilization data indicate that metoclopramide is used in about 2 million patients in the US and the number of patients using the product has been rising. In addition, most of the uses from the years 2002 to 2007 were for gastroesophageal reflux disease (GERD).<sup>4</sup> Although a relatively small proportion of metoclopramide use was for gastroparesis, metoclopramide dominated the market share for use in this condition.
- B. Metoclopramide is approved for the treatment of patients with symptomatic, documented gastroesophageal reflux who fail to respond to conventional therapy, and

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<sup>4</sup> For the purpose of this memo, patients with the labeled indication “gastroesophageal reflux who fail to respond to conventional therapy” are considered to have “gastroesophageal reflux disease” or GERD.

for diabetic gastroparesis (diabetic gastric stasis). The treatment of these patients includes the healing of esophageal ulcers and erosions in addition to symptomatic treatment. Ulcers and erosions can progress to perforations of the esophagus, serious bleeding and potentially cancer of the esophagus. Diabetic gastric stasis is a serious condition that can lead to weight loss due to the inability to ingest an adequate amount of food, malabsorption, and malnutrition. This is a serious issue especially in fragile diabetics making it difficult to control the patient's blood sugar.

- C. Patients with symptomatic gastroesophageal reflux will experience fewer symptoms and, in addition, those with esophageal erosions that are healed may not experience serious bleeding and perforation. Short-term treatment has not been shown to prevent esophageal cancer.

Patients with diabetic gastroparesis who respond to this therapy will have the ability to eat and retain a normal diet volume. In addition, symptoms such as nausea, vomiting, abdominal pain and bloating will improve. These improvements may lead to better nutrition and better blood sugar control.

- D. Symptomatic Gastroesophageal Reflux: Metoclopramide is approved for short-term (4-12 weeks) treatment in adults with symptomatic, documented gastroesophageal reflux who fail to respond to conventional therapy. In addition, for patients with gastroesophageal erosions, 12 weeks of therapy has been successful. Therapy longer than 12 weeks has not been evaluated and is not recommended.

Diabetic Gastroparesis: Metoclopramide is approved for the relief of symptoms associated with diabetic gastroparesis. Product labeling recommends treatment for "two to eight weeks, depending upon response and the likelihood of continued well-being upon drug discontinuation". It further states that since diabetic gastric stasis is frequently recurrent, metoclopramide "should be reinstated at the earliest manifestation." This implies that metoclopramide may be used episodically in these patients.

- E. Chronic treatment with metoclopramide can cause tardive dyskinesia, a serious movement disorder that is often irreversible. The risk of developing tardive dyskinesia increases with the duration of treatment and the total cumulative dose. The elderly, especially elderly women, are most likely to develop this condition.

Metoclopramide therapy should routinely be discontinued in patients who develop signs or symptoms of tardive dyskinesia. There is no known treatment for tardive dyskinesia; however, in some patients symptoms may lessen or resolve after metoclopramide treatment is stopped.

Prolonged treatment (greater than 12 weeks) with metoclopramide should be avoided in all but rare cases where therapeutic benefit is thought to outweigh the risks to the patient of developing tardive dyskinesia.

- F. The drug metoclopramide, found in Reglan Tablets, Reglan ODT Orally Disintegrating Tablets, and the four Metoclopramide Oral Solution products referenced above, and the pending application for Metozolv ODT, is not an NME.

In accordance with section 505-1 of the FDCA, as one element of a REMS, FDA may require the development of a Medication Guide as provided for under 21 CFR Part 208. Pursuant to 21 CFR Part 208, FDA has determined that metoclopramide poses a serious and significant public health concern requiring the distribution of a Medication Guide. The Medication Guide is necessary for patients' safe and effective use of metoclopramide. FDA has determined that metoclopramide is a product that has serious risk(s) (relative to benefits) of which patients should be made aware because information concerning the risk(s) could affect patients' decisions to use, or continue to use metoclopramide. FDA has also determined that metoclopramide is a product for which patient labeling could help prevent serious adverse events.

The elements of the REMS for Reglan Tablets, Reglan ODT Orally Disintegrating Tablets, and Metozolv ODT will be a Medication Guide and a timetable for submission of assessments of the REMS. The elements of the REMS for the four Metoclopramide Oral Solution products referenced above will be a Medication Guide only. To protect the public health, FDA is requiring all sponsors of approved metoclopramide products to submit a proposed REMS within 30 days of receipt of FDA's notification that a REMS for metoclopramide is required. Wilmington Pharmaceuticals, the sponsor of the pending NDA for Metozolv ODT, will need to submit a proposed REMS to its application before evaluation of the NDA can continue.

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<sup>1</sup> Kenney C, Hunter C, Davidson A, Jankovic J. Metoclopramide, an increasingly recognized cause of tardive dyskinesia. *J Clin Pharmacol* 2008; 48:379-384.

<sup>2</sup> Pasricha PJ, Pehlivanov N, Sugumar A, and Jankovic J. Drug Insight: from disturbed motility to disordered movement – a review of the clinical benefits and medicolegal risks of metoclopramide. *Nat Clin Pract Gastroenterol Hepatol* 2006 Mar; 3(3):138-48.

<sup>3</sup> Kaplan S, Staffa JA, Dal Pan GJ. Duration of therapy with metoclopramide: a prescription claims data study. *Pharmacoepi Drug Saf* 2007; 16: 878-881.

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Joyce Korvick  
2/26/2009 09:40:52 AM  
MEDICAL OFFICER



ANDA 73-680

Silarx Pharmaceuticals, Inc.  
Attention: Nayan Raval  
PO Box 449  
Spring Valley, NY 10977

Dear Nayan Raval:

Please refer to your Abbreviated New Drug Application ANDA 73-680 for Metoclopramide Oral Solution USP, 5 mg/5 mL, which was approved on October 27, 1992.

Title IX, Subtitle A, Section 901 of the Food and Drug Administration Amendments Act of 2007 (FDAAA) amends the Federal Food, Drug, and Cosmetic Act (FDCA) to provide FDA with new authorities to require holders of approved drugs to develop and comply with Risk Evaluation and Mitigation Strategies (REMS) (section 505-1 of the FDCA) and to make safety related labeling changes (section 505(o)(4) of the FDCA) based upon new safety information that becomes available after approval of the drug. This provision took effect on March 25, 2008.

Section 505(o)(4) also authorizes FDA to require the holder of an approved application under section 505(j) (an abbreviated new drug application or ANDA) to make safety related label changes based upon new safety information if the same drug approved under section 505(b) is not currently marketed. You are the holder of ANDA 73-680 which references a drug approved under section 505(b) that is withdrawn and not currently marketed.

Your ANDA for Metoclopramide Oral Solution USP, 5 mg/5 mL was approved on October 27, 1992. Current product labeling warns of the risk of tardive dyskinesia, a serious movement disorder, with chronic metoclopramide treatment. Tardive dyskinesia is often irreversible. Several risk factors, including female gender, advanced age, treatment duration and total cumulative dose have been described. Recently published analyses suggest that metoclopramide has surpassed haloperidol as the most common cause of drug-induced movement disorders.<sup>1,2</sup> A published FDA analysis of metoclopramide utilization patterns showed that prescription claims for cumulative periods longer than 90 days were recorded for a substantial

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<sup>2</sup> Pasricha PJ, Pehlivanov N, Sugumar A, and Jankovic J. Drug Insight: from disturbed motility to disordered movement – a review of the clinical benefits and medicolegal risks of metoclopramide. *Nat Clin Pract Gastroenterol Hepatol* 2006 Mar; 3(3):138-48.

portion of patients in that study.<sup>3</sup> In addition, we have become aware of continued spontaneous reports to the FDA of tardive dyskinesia associated with metoclopramide use. Exposure greater than 12 weeks was evident in a majority of these reports. This information was not available when your ANDA was approved. We consider this information to be “new safety information” as defined in FDAAA.

After consideration of the new safety information described above, we believe that safety related changes should be included in the labeling for Metoclopramide Oral Solution USP, 5 mg/5 mL. We have also determined that a REMS for each drug is necessary to ensure that the benefits of the drugs outweigh the risks. These requirements are described further below.

### **SAFETY LABELING CHANGES**

In accordance with section 505(o)(4) of the FDCA, we are notifying you that based on the new safety information described above, we believe that the new safety information should be included in the labeling for Metoclopramide Oral Solution USP, 5 mg/5 mL as follows (additions are noted by underline and deletions are noted by ~~strikethrough~~):

- The addition of a **Boxed Warning** to alert physicians of the risk of tardive dyskinesia with chronic use of metoclopramide, to include the following language:

#### **WARNING: TARDIVE DYSKINESIA**

Chronic treatment with metoclopramide can cause tardive dyskinesia, a serious movement disorder that is often irreversible. The risk of developing tardive dyskinesia increases with the duration of treatment and the total cumulative dose. The elderly, especially elderly women, are most likely to develop this condition.

Metoclopramide therapy should routinely be discontinued in patients who develop signs or symptoms of tardive dyskinesia. There is no known treatment for tardive dyskinesia; however, in some patients symptoms may lessen or resolve after metoclopramide treatment is stopped.

Prolonged treatment (greater than 12 weeks) with metoclopramide should be avoided in all but rare cases where therapeutic benefit is thought to outweigh the risks to the patient of developing tardive dyskinesia. See **WARNINGS**

- Revisions to the **Warnings** section of the label to include the following language as the first subsection:

#### **Tardive Dyskinesia**

~~Tardive dyskinesia, a syndrome consisting of potentially irreversible, involuntary, dyskinetic~~

<sup>3</sup> Kaplan S, Staffa JA, Dal Pan GJ. Duration of therapy with metoclopramide: a prescription claims data study. *Pharmacoepi Drug Saf* 2007; 16: 878-881.

~~movements may develop in patients treated with metoclopramide. Although the prevalence of the syndrome appears to be highest among the elderly, especially elderly women, it is impossible to predict which patients are likely to develop the syndrome. Both the risk of developing the syndrome and the likelihood that it will become irreversible are believed to increase with the duration of treatment and the total cumulative dose.~~

~~Less commonly, the syndrome can develop after relatively brief treatment periods at low doses; in these cases, symptoms appear more likely to be reversible.~~

~~There is no known treatment for established cases of tardive dyskinesia although the syndrome may remit, partially or completely, within several weeks to months after metoclopramide is withdrawn. Metoclopramide itself, however, may suppress (or partially suppress) the signs of tardive dyskinesia, thereby masking the underlying disease process. The effect of this symptomatic suppression upon the long term course of the syndrome is unknown. Therefore, the use of metoclopramide for the symptomatic control of tardive dyskinesia is not recommended.~~

### **Tardive dyskinesia**

Tardive dyskinesia (TD), a potentially irreversible and disfiguring disorder characterized by involuntary movements of the face, tongue, or extremities, can develop in patients treated with metoclopramide. Although the risk of tardive dyskinesia (TD) with metoclopramide has not been extensively studied, one published study reported a TD prevalence of 20% among patients treated for at least 3 months.

The prevalence of the syndrome appears to be highest among the elderly, especially elderly women. It is impossible to predict which patients are likely to develop the syndrome. Both the risk of developing the syndrome and the likelihood that it will become irreversible are believed to increase with the duration of treatment and the total cumulative dose.

There is no known effective treatment for established cases of tardive dyskinesia although the syndrome may remit, partially or completely, within several weeks-to-months after metoclopramide is withdrawn. Metoclopramide itself, however, may suppress (or partially suppress) the signs of tardive dyskinesia, thereby masking the underlying disease process. The effect of this symptomatic suppression upon the long-term course of the syndrome is unknown. Therefore, metoclopramide should not be used for the symptomatic control of tardive dyskinesia.

- The addition of a **Medication Guide**

In addition to the changes described above to the labeling, you should submit a proposed Medication Guide for Metoclopramide Oral Solution USP, 5 mg/5 mL. Your Medication Guide must include information about the serious risk of tardive dyskinesia and will be considered part of the proposed REMS.

In accordance with section 505(o)(4), within 30 days of the date of this letter, you must submit a prior approval supplement proposing changes to the approved labeling for Metoclopramide Oral Solution USP, 5 mg/5 mL in accordance with the above direction, or

notify FDA that you do not believe a labeling change is warranted, and submit a statement detailing the reasons why such a change is not warranted.

Include labeling in both Microsoft Word format and final printed labeling in PDF format. To facilitate review of your submission, provide a highlighted or marked-up copy that shows the changes that are being made.

Use the following designators to prominently label all submissions, including supplements, relating to this safety label change as appropriate:

### **Safety Labeling Changes under 505(o)(4)**

### **RISK EVALUATION AND MITIGATION STRATEGY REQUIREMENTS**

In accordance with section 505-1(a) of the FDCA, we have determined that a REMS is necessary for Metoclopramide Oral Solution USP, 5 mg/5 mL to ensure that the benefits of the drugs outweigh the risks based on the new safety information described above.

Your proposed REMS must include the following:

**Medication Guide:** As one element of a REMS, FDA may require the development of a Medication Guide as provided for under 21 CFR Part 208. The approved Medication Guide submitted as a safety labeling change, noted above, will be considered part of the REMS in accordance with 505-1(a). Pursuant to 21 CFR Part 208 and 505-1(e)(2), FDA has determined that Metoclopramide Oral Solution USP, 5 mg/5 mL poses a serious and significant public health concern requiring the distribution of a Medication Guide. The Medication Guide is necessary for patients' safe use of Metoclopramide Oral Solution USP, 5 mg/5 mL. FDA has determined that Metoclopramide Oral Solution USP, 5 mg/5 mL has serious risks (relative to benefits) of which patients should be made aware because information concerning the risks could affect patients' decisions to use, or continue to use Metoclopramide Oral Solution USP, 5 mg/5 mL. FDA has determined that Metoclopramide Oral Solution USP, 5 mg/5 mL is a product for which patient labeling could help prevent serious adverse events. Under 21 CFR 208 and in accordance with 505-1, you are responsible for ensuring that the Medication Guide is available for distribution to patients who are dispensed Metoclopramide Oral Solution USP, 5 mg/5 mL.

In accordance with section 505-1, within 30 days of the date of this letter, you must submit a proposed REMS. The REMS, once approved, will create enforceable obligations.

We suggest that your proposed REMS submission include two parts: a "Proposed REMS" and a "REMS Supporting Document." Attached is a template for the Proposed REMS that you should complete with concise, specific information (see Appendix A). Include information in the template that is specific to your proposed REMS for Metoclopramide Oral Solution USP, 5 mg/5 mL. Once FDA finds the content acceptable, we will include this document as an attachment to the approval letter that includes the REMS.

The REMS Supporting Document should be a document explaining the rationale for each of the elements included in the proposed REMS (see Appendix B).

If you do not submit electronically, please send 5 copies of your proposed REMS and REMS Supporting Document as an amendment to your ANDA. Prominently identify the amendment containing the proposed REMS with the following wording in bold capital letters at the top of the first page of the submission:

**NEW SUPPLEMENT FOR ANDA 73-680  
PROPOSED REMS**

On the first page of subsequent submissions related to your proposed REMS, prominently identify the submission by including this wording in bold, capital letters at the top of the page:

**SUPPLEMENT <<insert assigned #>>  
PROPOSED REMS-AMENDMENT**

If you have any questions, call Sarah Park, Labeling Reviewer, at 240-276-8995.

Sincerely,

*{See appended electronic signature page}*

Gary Buehler  
Director  
Office of Generic Drugs  
Center for Drug Evaluation and Research

Enclosure: REMS Template

## Appendix A- REMS Template

*If you are not proposing to include one of the listed elements, include a statement that the element is not necessary.*

**Application number TRADE NAME (DRUG NAME)**

Class of Product as per label

Applicant name

Address

Contact Information

### **PROPOSED RISK EVALUATION AND MITIGATION STRATEGY (REMS)**

#### **I. GOAL(S):**

List the goals and objectives of the REMS.

#### **II. REMS ELEMENTS:**

##### **A. Medication Guide or PPI**

*If a Medication Guide is included in the proposed REMS, include the following:*

A Medication Guide will be dispensed with each [drug name] prescription. [Describe in detail how you will comply with 21 CFR 208.24.]

##### **B. Communication Plan**

*If a Communication Plan is included in the proposed REMS, include the following:*

[Applicant] will implement a communication plan to healthcare providers to support implementation of this REMS.

List elements of communication plan. Append the printed material and web shots to the REMS Document

##### **C. Elements To Assure Safe Use**

*If one or more Elements to Ensure Safe Use are included in the proposed REMS, include the following:*

List elements to assure safe use included in this REMS. Elements to assure safe use may, to mitigate a specific serious risk listed in the labeling, require that:

- A. Healthcare providers who prescribe [drug name] have particular training or experience, or are specially certified. Append any enrollment forms and relevant attestations/certifications to the REMS;
- B. Pharmacies, practitioners, or healthcare settings that dispense [drug name] are specially certified. Append any enrollment forms and relevant attestations/certifications to the REMS ;
- C. [Drug name] may be dispensed to patients only in certain healthcare settings (e.g., hospitals);
- D. [Drug name] may be dispensed to patients with documentation of safe-use conditions;
- E. Each patient using [drug name] is subject to certain monitoring. Append specified procedures to the REMS; or
- F. Each patient using [drug name] be enrolled in a registry. Append any enrollment forms and other related materials to the REMS Document.

#### **D. Implementation System**

*If an Implementation System is included in the proposed REMS, include the following:*

Describe the implementation system to monitor and evaluate implementation for, and work to improve implementation of, Elements to Assure Safe Use (B), (C), and (D), listed above.

#### **E. Timetable for Submission of Assessments**

*If a Timetable for Submission of Assessments is included in the proposed REMS, include the following:*

Specify the timetable for submission of assessments of the REMS. The timetable for submission of assessments at a minimum must include an assessment by 18 months, 3 years, and in the 7th year after the REMS is initially approved, with dates for additional assessments if more frequent assessments are necessary to ensure that the benefits of the drug continue to outweigh the risks.

## **Appendix B - REMS Supporting Document Template**

This REMS Supporting Document should include the following listed sections 1 through 5, as well as a table of contents. If you are not proposing to include one of the listed elements, the REMS Supporting Document should simply state that the element is not necessary. Include in section 3 the reason you believe each of the potential elements you are proposing to include in the REMS is necessary to ensure that the benefits of the drug outweigh the risks.

1. Background
2. Goals
3. Supporting Information on Proposed REMS Elements
  - a. Additional Potential Elements
    - i. Medication Guide
    - ii. Patient Package Insert
    - iii. Communication Plan
  - b. Elements to Assure Safe Use, including a statement of how the elements to assure safe use will mitigate the observed safety risk
  - c. Implementation System
  - d. Timetable for Assessment of the REMS
4. Information Needed for Assessments
5. Other Relevant Information

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

-----  
Robert L. West  
2/26/2009 01:02:41 PM  
Deputy Director, for Gary Buehler

**LABELING SUPPLEMENT -  
PRIOR APPROVAL**

March 17, 2009

OGD/CDER/FDA  
Division of Labeling and Program Support  
Attention: Robert L. West  
Document Control Room, MPN II, Room 150  
7500 Standish Place  
Rockville, MD 20855-2773

Reference: Metoclopramide Oral Solution, 5 mg per 5 mL  
ANDA 73-680

Dear Dr. West:

The insert labeling of Metoclopramide Oral Solution is revised as per attached communication of February 26, 2009 from the Agency. The changes have been made to the following sections of the insert labeling of Metoclopramide Oral Solution USP as per agency recommendation:

- Added Black Box Warning
- Warnings

In addition a proposed Risk Evaluation Mitigation Strategy, REMS Supporting Document, and proposed Medication Guide for Metoclopramide Oral Solution USP are provided in this submission under Module 1.14.1.3.

Please note that the original application for Metoclopramide Oral Solution (ANDA # 73-680) was submitted in the non-CTD paper format. We are submitting this supplement (# 073680-0002) in e-CTD format containing the following:

- Module 1

The labeling of Metoclopramide Oral Solution in "MS WORD" and in "PDF" is provided within the XML backbone under Module 1.14.1 and 1.14.3 of this supplement.

If you have any questions or need additional information, please contact me at 845-352-4020.

Sincerely yours,  
Silarx Pharmaceuticals, Inc.

A handwritten signature in black ink, appearing to read "Nayan Raval", is written over a horizontal line.

Nayan Raval  
Exec. VP

Enclosure

## LABELING AMENDMENT

April 03, 2009

OGD/CDER/FDA  
Division of Labeling and Program Support  
Attention: Sarah Park  
Document Control Room, MPN II, Room 150  
7500 Standish Place  
Rockville, MD 20855-2773

Reference: Labeling Supplement of March 17, 2009 for  
Metoclopramide Oral Solution, 5 mg per 5 mL, ANDA 73-680

Dear Dr. Park:

Reference is made to your phone call of April 2 regarding the labeling supplement that was submitted on March 17, 2009 for Metoclopramide Oral Solution USP. The agency has requested to revise the container label to include the statement "Pharmacist: Dispense with Medication Guide", and provide the final printed (artwork) of the revised container labeling for Metoclopramide Oral Solution USP, 5 mg per 5 mL.

Herewith, we are submitting a Labeling Amendment of Metoclopramide Oral Solution to provide the revised container label along with side-by-side comparison, as requested by the Agency. A CD containing the revised container labeling in the e-CTD format is provided for this labeling amendment.

The container labeling of Metoclopramide Oral Solution in "MS Word" and "PDF" is provided under Module 1.14.1 in the XML backbone. In addition, the artwork of the final container labeling is provided in "PDF" under Module 1.14.2.

If you have any questions or need additional information, please contact me at 845-352-4020.

Sincerely yours,  
Silarx Pharmaceuticals, Inc.



Nayan Raval  
Exec. VP

Enclosure

## REQUEST FOR CONSULTATION

TO (Office/Division): **Nina Ton, Pharm.D.**  
**Safety Regulatory Manager**  
**OSE**

FROM (Name, Office/Division, and Phone Number of Requestor):  
**Kristen Everett, Safety Regulatory Manager, DGP**

DATE  
**April 3, 2009**

IND NO.

NDA NO.  
**multiple- see  
below**

TYPE OF DOCUMENT

DATE OF DOCUMENT  
**March 17, 2009 (earliest  
submission)**

NAME OF DRUG  
**metoclopramide class**

PRIORITY CONSIDERATION  
**FDAAA**

CLASSIFICATION OF DRUG  
**motility modifiers**

DESIRED COMPLETION DATE  
**May 1, 2009**

NAME OF FIRM: **Alaven Pharm., ANI, Silarx, Morton Grove, Pharmaceutical Associates**

### REASON FOR REQUEST

#### I. GENERAL

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> NEW PROTOCOL                    | <input type="checkbox"/> PRE-NDA MEETING         | <input type="checkbox"/> RESPONSE TO DEFICIENCY LETTER     |
| <input type="checkbox"/> PROGRESS REPORT                 | <input type="checkbox"/> END-OF-PHASE 2a MEETING | <input type="checkbox"/> FINAL PRINTED LABELING            |
| <input type="checkbox"/> NEW CORRESPONDENCE              | <input type="checkbox"/> END-OF-PHASE 2 MEETING  | <input type="checkbox"/> LABELING REVISION                 |
| <input type="checkbox"/> DRUG ADVERTISING                | <input type="checkbox"/> RESUBMISSION            | <input type="checkbox"/> ORIGINAL NEW CORRESPONDENCE       |
| <input type="checkbox"/> ADVERSE REACTION REPORT         | <input type="checkbox"/> SAFETY / EFFICACY       | <input type="checkbox"/> FORMULATIVE REVIEW                |
| <input type="checkbox"/> MANUFACTURING CHANGE / ADDITION | <input type="checkbox"/> PAPER NDA               | <input checked="" type="checkbox"/> OTHER (SPECIFY BELOW): |
| <input type="checkbox"/> MEETING PLANNED BY              | <input type="checkbox"/> CONTROL SUPPLEMENT      |  |

#### II. BIOMETRICS

- |   |   |
|---|---|
| <input type="checkbox"/> PRIORITY P NDA REVIEW  | <input type="checkbox"/> CHEMISTRY REVIEW       |
| <input type="checkbox"/> END-OF-PHASE 2 MEETING | <input type="checkbox"/> PHARMACOLOGY           |
| <input type="checkbox"/> CONTROLLED STUDIES     | <input type="checkbox"/> BIOPHARMACEUTICS       |
| <input type="checkbox"/> PROTOCOL REVIEW        | <input type="checkbox"/> OTHER (SPECIFY BELOW): |
| <input type="checkbox"/> OTHER (SPECIFY BELOW): |   |

#### III. BIOPHARMACEUTICS

- |   |  |
|---|--|
| <input type="checkbox"/> DISSOLUTION            | <input type="checkbox"/> DEFICIENCY LETTER RESPONSE  |
| <input type="checkbox"/> BIOAVAILABILTY STUDIES | <input type="checkbox"/> PROTOCOL - BIOPHARMACEUTICS |
| <input type="checkbox"/> PHASE 4 STUDIES        | <input type="checkbox"/> IN-VIVO WAIVER REQUEST      |

#### IV. DRUG SAFETY

- |  |  |
|--|--|
| <input type="checkbox"/> PHASE 4 SURVEILLANCE/EPIDEMIOLOGY PROTOCOL                | <input type="checkbox"/> REVIEW OF MARKETING EXPERIENCE, DRUG USE AND SAFETY |
| <input type="checkbox"/> DRUG USE, e.g., POPULATION EXPOSURE, ASSOCIATED DIAGNOSES | <input type="checkbox"/> SUMMARY OF ADVERSE EXPERIENCE                       |
| <input type="checkbox"/> CASE REPORTS OF SPECIFIC REACTIONS (List below)           | <input type="checkbox"/> POISON RISK ANALYSIS                                |
| <input type="checkbox"/> COMPARATIVE RISK ASSESSMENT ON GENERIC DRUG GROUP         |  |

#### V. SCIENTIFIC INVESTIGATIONS

- |                                   |                                      |
|-----------------------------------|--------------------------------------|
| <input type="checkbox"/> CLINICAL | <input type="checkbox"/> NONCLINICAL |
|-----------------------------------|--------------------------------------|

COMMENTS / SPECIAL INSTRUCTIONS: DGP and OGD request your expertise in the review of the medication guides and REMS documents submitted for the products listed below. EDR links, where available, are provided for the submissions. In addition, package inserts, MGs, and REMS documents will be available in the GI eRoom (Safety folder, REMS/FDAAA Safety Labeling under review, metoclopramide subfolder). The class language that needs to be harmonized across the medication guides is the Boxed warning, and the Tardive Dyskinesia subsection under Warnings (this language is also provided in the supplement request letter sent to the sponsors). The REMS documents should also be fairly similar in that the REMS goal should be the same; however, sponsors may have different methods of distributing the medication guide.

ANDA 71-402ANI (oral syrup) submitted: 3/26/09 - insert, med guide, REMS (missing container label)  
\\CDSESUB1\EVSPROD\ANDA071402\0001

ANDA 74-703Morton Grove (oral syrup) submitted: 3/26/09 - insert, med guide, REMS, container label  
\\FDSWA150\NONECTD\N74703\S\_006\2009-03-26

ANDA 73-680 Silarx (oral syrup) submitted: 3/17/09 - insert, med guide, REMS (missing container label)  
\\CDSESUB1\EVSPROD\ANDA073680\0002

ANDA 72-744 Pharmaceutical Associates (oral syrup) submitted: 3/30/09 - med guide and REMS (missing insert and container label) - Not sure if this is electronic. OGD is waiting for their document room to check.

NDA 17-854 Alaven (Reglan Tablets) submitted 3-25-09

Med Guide submission: S-051

The network location is : \\FDSWA150\NONECTD\N17854\S\_051\2009-03-25

REMS Submission: S-052

The network location is : \\FDSWA150\NONECTD\N17854\S\_052\2009-03-25

NDA 21-793, Alaven (Reglan ODT) submitted 3-25-09

Med Guide submission: S-004

The network location is : \\FDSWA150\NONECTD\N21793\S\_004\2009-03-25

REMS Submission: S-005

The network location is : \\FDSWA150\NONECTD\N21793\S\_005\2009-03-25

SIGNATURE OF REQUESTOR

Kristen Everett/Joyce Korvick

METHOD OF DELIVERY (Check one)

DFS

EMAIL

MAIL

HAND

PRINTED NAME AND SIGNATURE OF RECEIVER

PRINTED NAME AND SIGNATURE OF DELIVERER

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

-----  
Kristen Everett  
4/3/2009 02:27:52 PM

**REQUEST FOR CONSULTATION**

TO (Office/Division): Wayne Amchin, DDMAC

FROM (Name, Office/Division, and Phone Number of Requestor): Kristen Everett, SRPM, DGP

DATE  
April 6, 2009

IND NO.

NDA NO.  
multiple- see  
below

TYPE OF DOCUMENT  
REMS - MG

DATE OF DOCUMENT  
March 17, 2009 (earliest  
submission)

NAME OF DRUG  
metoclopramide class

PRIORITY CONSIDERATION

CLASSIFICATION OF DRUG  
motility modifiers

DESIRED COMPLETION DATE  
May 1, 2009

NAME OF FIRM: Alaven Pharma, ANI, Silarx, Morton Grove, Pharmaceutical Associates

**REASON FOR REQUEST**

**I. GENERAL**

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> NEW PROTOCOL                    | <input type="checkbox"/> PRE-NDA MEETING         | <input type="checkbox"/> RESPONSE TO DEFICIENCY LETTER     |
| <input type="checkbox"/> PROGRESS REPORT                 | <input type="checkbox"/> END-OF-PHASE 2a MEETING | <input type="checkbox"/> FINAL PRINTED LABELING            |
| <input type="checkbox"/> NEW CORRESPONDENCE              | <input type="checkbox"/> END-OF-PHASE 2 MEETING  | <input type="checkbox"/> LABELING REVISION                 |
| <input type="checkbox"/> DRUG ADVERTISING                | <input type="checkbox"/> RESUBMISSION            | <input type="checkbox"/> ORIGINAL NEW CORRESPONDENCE       |
| <input type="checkbox"/> ADVERSE REACTION REPORT         | <input type="checkbox"/> SAFETY / EFFICACY       | <input type="checkbox"/> FORMULATIVE REVIEW                |
| <input type="checkbox"/> MANUFACTURING CHANGE / ADDITION | <input type="checkbox"/> PAPER NDA               | <input checked="" type="checkbox"/> OTHER (SPECIFY BELOW): |
| <input type="checkbox"/> MEETING PLANNED BY              | <input type="checkbox"/> CONTROL SUPPLEMENT      |  |

**II. BIOMETRICS**

- |   |   |
|---|---|
| <input type="checkbox"/> PRIORITY P NDA REVIEW  | <input type="checkbox"/> CHEMISTRY REVIEW       |
| <input type="checkbox"/> END-OF-PHASE 2 MEETING | <input type="checkbox"/> PHARMACOLOGY           |
| <input type="checkbox"/> CONTROLLED STUDIES     | <input type="checkbox"/> BIOPHARMACEUTICS       |
| <input type="checkbox"/> PROTOCOL REVIEW        | <input type="checkbox"/> OTHER (SPECIFY BELOW): |
| <input type="checkbox"/> OTHER (SPECIFY BELOW): |   |

**III. BIOPHARMACEUTICS**

- |  |  |
|--|--|
| <input type="checkbox"/> DISSOLUTION             | <input type="checkbox"/> DEFICIENCY LETTER RESPONSE  |
| <input type="checkbox"/> BIOAVAILABILITY STUDIES | <input type="checkbox"/> PROTOCOL - BIOPHARMACEUTICS |
| <input type="checkbox"/> PHASE 4 STUDIES         | <input type="checkbox"/> IN-VIVO WAIVER REQUEST      |

**IV. DRUG SAFETY**

- |  |  |
|--|--|
| <input type="checkbox"/> PHASE 4 SURVEILLANCE/EPIDEMIOLOGY PROTOCOL                | <input type="checkbox"/> REVIEW OF MARKETING EXPERIENCE, DRUG USE AND SAFETY |
| <input type="checkbox"/> DRUG USE, e.g., POPULATION EXPOSURE, ASSOCIATED DIAGNOSES | <input type="checkbox"/> SUMMARY OF ADVERSE EXPERIENCE                       |
| <input type="checkbox"/> CASE REPORTS OF SPECIFIC REACTIONS (List below)           | <input type="checkbox"/> POISON RISK ANALYSIS                                |
| <input type="checkbox"/> COMPARATIVE RISK ASSESSMENT ON GENERIC DRUG GROUP         |  |

**V. SCIENTIFIC INVESTIGATIONS**

- |                                   |                                      |
|-----------------------------------|--------------------------------------|
| <input type="checkbox"/> CLINICAL | <input type="checkbox"/> NONCLINICAL |
|-----------------------------------|--------------------------------------|

COMMENTS / SPECIAL INSTRUCTIONS: DGP and OGD request your expertise in the review of the medication guides and REMS documents submitted for the products listed below. EDR links, where available, are provided for the submissions. In addition, package inserts, MGs, and REMS documents will be available in the GI eRoom (Safety folder, REMS/FDAAA Safety Labeling under review, metoclopramide subfolder). The class language that will be harmonized across the medication guides is the Boxed warning, and the Tardive Dyskinesia subsection under Warnings (this language is also provided in the supplement request letter sent to the sponsors). The REMS documents should also be fairly similar in that the REMS goal should be the same; however, sponsors may have different methods of distributing the medication guide. For the package insert, DGP requests only that DDMAC review the class language of the Boxed Warning and warnings section.

ANDA 71-402ANI (oral syrup) submitted: 3/26/09 - insert, med guide, REMS (missing container label)  
\\CDSESUB1\EVSPROD\ANDA071402\0001

ANDA 74-703Morton Grove (oral syrup) submitted: 3/26/09 - insert, med guide, REMS, container label  
\\FDSWA150\NONECTD\N74703\S 006\2009-03-26

ANDA 73-680 Silarx (oral syrup) submitted: 3/17/09 - insert, med guide, REMS (missing container label)  
\\CDSESUB1\EVSPROD\ANDA073680\0002

ANDA 72-744 Pharmaceutical Associates (oral syrup) submitted: 3/30/09 - med guide and REMS (missing insert and container label) - Not sure if this is electronic. OGD is waiting for their document room to check.

NDA 17-854 Alaven (Reglan Tablets) submitted 3-25-09

Med Guide submission: S-051

The network location is : \\FDSWA150\NONECTD\N17854\S\_051\2009-03-25

REMS Submission: S-052

The network location is : \\FDSWA150\NONECTD\N17854\S\_052\2009-03-25

NDA 21-793, Alaven (Reglan ODT) submitted 3-25-09

Med Guide submission: S-004

The network location is : \\FDSWA150\NONECTD\N21793\S\_004\2009-03-25

REMS Submission: S-005

The network location is : \\FDSWA150\NONECTD\N21793\S\_005\2009-03-25

SIGNATURE OF REQUESTOR Kristen Everett/Joyce Korvick	METHOD OF DELIVERY (Check one) <input checked="" type="checkbox"/> DFS <input type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> HAND
PRINTED NAME AND SIGNATURE OF RECEIVER	PRINTED NAME AND SIGNATURE OF DELIVERER

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

/s/

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Kristen Everett  
4/6/2009 12:05:13 PM

## AMENDMENT TO LABELING SUPPLEMENT

May 7, 2009

OGD/CDER/FDA  
Division of Labeling and Program Support  
Attention: Sarah Park  
Document Control Room, MPN II, Room 150  
7500 Standish Place  
Rockville, MD 20855-2773

Reference: Labeling Supplement of March 17, 2009 for  
Metoclopramide Oral Solution, 5 mg per 5 mL, ANDA 73-680

Dear Dr. Park:

Reference is made to your phone call of May 6 regarding revisions required for the insert labeling and medication guide that was submitted in the labeling supplement on March 17, 2009 for Metoclopramide Oral Solution USP.

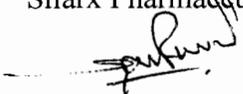
The insert labeling and medication guide for Metoclopramide Oral Solution have been revised as per labeling text provided by the Agency (see attached Agency recommendations).

Herewith, we are submitting a Labeling Amendment of Metoclopramide Oral Solution to provide the revised insert labeling and medication guide along with side-by-side comparison, as requested by the Agency. A CD containing the revised insert labeling and medication guide in the e-CTD format is provided for this labeling amendment.

The revised labeling of Metoclopramide Oral Solution in "MS Word" and "PDF" is provided under Module 1.14.1 and 1.14.3 in the XML backbone.

If you have any questions or need additional information, please contact me at 845-352-4020.

Sincerely yours,  
Silarx Pharmaceuticals, Inc.

  
Nayan Raval  
Exec. VP

Enclosure

## AMENDMENT TO LABELING SUPPLEMENT

June 8, 2009

OGD/CDER/FDA  
Division of Labeling and Program Support  
Attention: Sarah Park  
Document Control Room, MPN II, Room 150  
7500 Standish Place  
Rockville, MD 20855-2773

Reference: Labeling Supplement of May 7, 2009 for  
Metoclopramide Oral Solution, 5 mg per 5 mL, ANDA 73-680

Dear Dr. Park:

Reference is made to your e-mail of June 8<sup>th</sup> regarding revisions required for the medication guide that was submitted in the labeling supplement on May 7, 2009 for Metoclopramide Oral Solution USP.

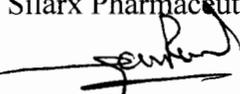
The medication guide for Metoclopramide Oral Solution has been revised as per labeling text provided by the Agency (see attached Agency recommendations).

Herewith, we are submitting a Labeling Amendment of Metoclopramide Oral Solution to provide the revised medication guide along with side-by-side comparison, as requested by the Agency. A CD containing the revised medication guide in the e-CTD format is provided for this labeling amendment.

The revised labeling of Metoclopramide Oral Solution in "MS Word" and "PDF" is provided under Module 1.14.1 and 1.14.3 in the XML backbone.

If you have any questions or need additional information, please contact me at 845-352-4020.

Sincerely yours,  
Silarx Pharmaceuticals, Inc.

  
Nayan Raval  
Exec. VP

Enclosure

## Nayan Raval

---

**From:** Park, Sarah Soojung [Sarah.Park@fda.hhs.gov]  
**Sent:** Monday, June 08, 2009 10:53 AM  
**To:** nayanr@silarx.com  
**Subject:** ANDA 73-680/S-017 Metoclopramide Oral Solution USP, 5 mg/5 mL (by Silarx)

Dear Mr. Rayan Naval,

This email is in reference to your ANDA 73-680/S-017 for Metoclopramide Oral Solution USP, 5 mg/5 mL. Please make the following revisions to your Medication Guide:

1. Under **Especially tell your doctor if you take:**

Revise the first bullet to read: "another medicine that contains Metoclopramide, such as REGLAN tablets, REGLAN ODT." [Use small case for "tablets".]

2. Under **Metoclopramide can cause serious side effects, including:**

Revise the last bullet as follows: "**Parkinsonism**. Symptoms include slight shaking, body stiffness, trouble moving or keeping your balance. If you already have Parkinson's disease, your symptoms may become worse while you are receiving Metoclopramide."

3. Please bold the phrase "**Call your doctor and get medical help right away if you:**"

If possible, please respond as an amendment to the supplement by **Wednesday June 10, 2009**. Please include a Word copy with your proposed Track Changes (if any).

Thank you,

Sarah Park

Sarah Park, Pharm.D.  
Labeling Reviewer  
Division of Labeling and Program Support  
Office of Generic Drugs  
Food and Drug Administration  
240-276-8995  
240-276-8999 (fax)  
[sarah.park@fda.hhs.gov](mailto:sarah.park@fda.hhs.gov)

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## AMENDMENT TO LABELING SUPPLEMENT

June 16, 2009

OGD/CDER/FDA  
Division of Labeling and Program Support  
Attention: Sarah Park  
Document Control Room, MPN II, Room 150  
7500 Standish Place  
Rockville, MD 20855-2773

Reference: Labeling Supplement of June 08, 2009 for  
Metoclopramide Oral Solution, 5 mg per 5 mL, ANDA 73-680

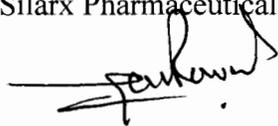
Dear Dr. Park:

Reference is made to your email of June 11, 2009 requesting final print of package insert, medication guide and container label for Metoclopramide Oral Solution.

Herewith, we are submitting final printed (artwork) for package insert, medication guide, and container label of Metoclopramide Oral Solution. A CD containing the final printed (artwork) labeling in the e-CTD format is provided for this labeling amendment.

If you have any questions or need additional information, please contact me at 845-352-4020.

Sincerely yours,  
Silarx Pharmaceuticals, Inc.



Nayan Raval  
Exec. VP

Enclosure

**AMENDMENT TO LABELING SUPPLEMENT  
73680 - 0007**

June 26, 2009

OGD/CDER/FDA  
Division of Labeling and Program Support  
Attention: Dr. Sarah Park  
Document Control Room, MPN II, Room 150  
7500 Standish Place  
Rockville, MD 20855-2773

Reference: Labeling Supplement of June 16, 2009 for  
Metoclopramide Oral Solution, 5 mg per 5 mL, ANDA 73-680

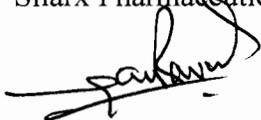
Dear Dr. Park:

Reference is made to your email of June 24, 2009 requesting revisions to the insert labeling, and medication guide as well as the final printed labels of the insert labeling, medication guide, and container label for Metoclopramide Oral Solution.

Herewith, we are submitting the revised insert and medication guide as well as final printed (artwork) insert labeling, medication guide, and container label of Metoclopramide Oral Solution. A CD containing the revised labeling in WORD and PDF along with side-by-side comparison are provided under Module 1.14.1 and Module 1.14.3. In addition, the final printed (artwork) labeling is provided under Module 1.14.2.

If you have any questions or need additional information, please contact me at 845-352-4020.

Sincerely yours,  
Silarx Pharmaceuticals, Inc.



Nayan Raval  
Exec. VP

Enclosure



ANDA 73-680/S-018

**INFORMATION REQUEST LETTER**

Silarx Pharmaceuticals, Inc.  
Attention: Nayan Raval  
Executive Vice President  
19 West Street  
PO Box 449  
Spring Valley, NY 10977

Dear Mr. Raval:

Please refer to your supplemental new drug application ANDA 73-680 for Metoclopramide Oral Solution USP, 5 mg/5 mL, which was approved on October 27, 1992.

We also refer to your submissions dated March 17, 2009.

We are reviewing the REMS section of your submissions and have the following comments and information requests. We request a prompt written response by July 20, 2009 in order to continue our evaluation of your REMS.

**Goal of REMS**

1. Revise your REMS goal as follows to be consistent with REMS goal for all metoclopramide products:

The goal of this REMS is to minimize the risk of tardive dyskinesia associated with long-term use of Metoclopramide Oral Solution.

**Medication Guide**

2. The Medication Guide distribution procedure is acceptable.
3. We remind you of the requirement to comply with 21 CFR 208.24. A required statement alerting the dispenser to provide the Medication Guide with the product must be on the carton and container of all strengths and formulations. We recommend the following language dependent upon whether the Medication Guide accompanies the product or is enclosed in the carton (for example, unit of use): "Dispense the enclosed Medication Guide to each patient." or "Dispense the accompanying Medication Guide to each patient."

Please see appended REMS proposal for additional track changes corresponding to comments in this review. Submit the revised REMS with appended materials and documents by **July 20, 2009**. It is preferable that the entire REMS and appended materials be submitted as a single WORD document. If certain documents are only in PDF format, they may be submitted as such, but the preference is a single WORD document.

If you have any questions, please call Sarah Park, Labeling Reviewer, at (240) 276-8995.

Sincerely yours,

*{See appended electronic signature page}*

Wm Peter Rickman  
Director  
Division of Labeling and Program Support  
Office of Generic Drugs  
Center for Drug Evaluation and Research

~~Metoclopramide Oral Solution USP  
5 mg per 5 mL~~

~~*Risk Evaluation Mitigation  
Strategy (REMS)*~~

ANDA 73-680 Metoclopramide Oral Solution, USP 5 mg/ 5 mL

Silarx Pharmaceuticals, Inc.

[insert contact information]

~~New Supplement for ANDA 73-680~~

**Proposed Risk Evaluation and Mitigation Strategy (REMS)**

**Metoclopramide Oral Solution, USP (5mg/ 5mL)**

**I. GOAL:**

The goal of this REMS is to minimize the <sup>(b) (4)</sup> risks of tardive dyskinesia associated with the long-term use -of Metoclopramide Oral Solution, USP.

**II. REMS ELEMENTS:**

**A. Medication Guide**

A Medication Guide will be dispensed with each Metoclopramide Oral Solution, USP prescription. Metoclopramide Oral Solution, USP is packaged as a Pint (473 mL) size package.

In accordance with 21 CFR 208.24, Silarx will package a sufficient number of Medication Guides with each box containing 16 oz. of Metoclopramide Oral Solution USP, 5 mg/ 5 mL so that each patient receiving a prescription can receive a copy of the Medication Guide. Based on average dispensing volume of 4 oz, Silarx will provide four Medication Guides ~~will be provided~~ with each 16 oz. (473 mL) container.

Because the medication guide is included as a part of the package of Metoclopramide Oral Solution, USP, Silarx Pharmaceuticals, Inc meets the requirements of 21 CFR 208.24 for distributing and dispensing of Medication Guide.

The Medication Guide is appended to the REMS.

**B Communication Plan**

The REMS for Metoclopramide Oral Solution, USP does not include a Communication Plan.

**C Elements To Assure Safe Use**

This REMS for Metoclopramide Oral Solution, USP does not include elements to assure safe use.

**D Implementation System**

Because this REMS for Metoclopramide Oral Solution, USP does not include elements to assure safe use, an implementation system is not required.

**III.E Timetable for Submission of Assessments of REMS**

The REMS for Metoclopramide Oral Solution, USP does not include Timetable for Submission of Assessment of REMS.

## REMS Supporting Document

### 1. Background:

Based on the new safety information the agency feels that additional information is required to emphasize the risk of tardive dyskinesia. Additional information need to be added to the patient package insert along with a proposed Risk Evaluation and Mitigation Strategy (REMS) where Medication Guide is necessary for Metoclopramide Oral Solution USP, 5 mg/5mL

### 2. Goals

The goal of this REMS is to minimize the <sup>(b) (4)</sup> risks of tardive dyskinesia associated with long-term use -of Metoclopramide Oral Solution, USP.

### 3. Supporting Information on Proposed REMS Elements

#### a. Additional Potential Elements

##### i. Medication Guide

The Medication Guide provides information on the serious risks involved with the use of Metoclopramide Oral Solution. The emphasis has been placed on tardive dyskinesia which is a serious movement disorder with chronic metoclopramide treatment (greater than 12 weeks). Based on average dispensing volume of 4 oz, four Medication Guides will be provided with each 16 oz. (473 mL) container.

##### ii. Patient Package Insert

The new safety information has been added as a Black Box Warning and in the WARNINGS section.

##### iii. Communication Plan

The REMS for Metoclopramide Oral Solution, USP does not include a Communication Plan.

#### b. Elements to Assure Safe Use

This REMS for Metoclopramide Oral Solution, USP does not include elements to assure safe use.

#### c. Implementation System

Because the REMS for Metoclopramide Oral Solution, USP does not include elements to assure safe use, an implementation system is not required.

#### d. Timetable for Assessment of the REMS

The REMS for Metoclopramide Oral Solution, USP does not include Assessment of REMS.

### 4. Information Needed for Assessments

Not necessary

**5. Other Relevant Information**  
Not necessary

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

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Koung Lee  
7/14/2009 12:27:19 PM  
For Wm Peter Rickman

**SUPPLEMENT – ANDA 73-680/S-018  
PROPOSED REMS-AMENDMENT**

July 17, 2009

OGD/CDER/FDA  
Division of Labeling and Program Support  
Attention: Dr. Sarah Park  
Document Control Room, MPN II, Room 150  
7500 Standish Place  
Rockville, MD 20855-2773

Reference: Metoclopramide Oral Solution, 5 mg per 5 mL  
ANDA 73-680/S-018

Dear Dr. Park:

The Risk Evaluation Mitigation Strategy (REMS) and REMS Supporting Document are revised as per the email communication of July 15, 2009 from the Agency for Metoclopramide Oral Solution USP, ANDA 73-680.

The Risk Evaluation Mitigation Strategy (REMS) and REMS Supporting Document are provided in a single word document under Module 1.14.1.

Please note that we have also revised the container label to include the following statement for pharmacist, as recommended by the Agency:

PHARMACIST:  
DISPENSE THE ACCOMPANYING  
MEDICATION GUIDE TO EACH PATIENT

The revised container label artwork in PDF is provided under Module 1.14.2.

Please note that we have posted insert labeling and Medication Guide of Metoclopramide Oral Solution on Silarx website.

If you have any questions or need additional information, please contact me at 845-352-4020.

Sincerely yours,  
Silarx Pharmaceuticals, Inc.

A handwritten signature in black ink, appearing to read "Nayan Raval", written over a horizontal line.

Nayan Raval  
Exec. VP

Enclosure