















**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

*APPLICATION NUMBER:*  
**NDA 021928/S-017**

**LABELING**



## HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use CHANTIX safely and effectively. See full prescribing information for CHANTIX.

CHANTIX® (varenicline) Tablets  
Initial U.S. Approval: 2006

### WARNING: SERIOUS NEUROPSYCHIATRIC EVENTS See full prescribing information for complete boxed warning.

- Serious neuropsychiatric events have been reported in patients taking CHANTIX. (5.1 and 6.2)
- Advise patients and caregivers that the patient should stop taking CHANTIX and contact a healthcare provider immediately if agitation, hostility, depressed mood, or changes in behavior or thinking that are not typical for the patient are observed, or if the patient develops suicidal ideation or suicidal behavior while taking CHANTIX or shortly after discontinuing CHANTIX. (5.1 and 6.2)
- Weigh the risks of CHANTIX against benefits of its use. CHANTIX has been demonstrated to increase the likelihood of abstinence from smoking for as long as one year compared to treatment with placebo. The health benefits of quitting smoking are immediate and substantial. (5.1 and 6.2)

### RECENT MAJOR CHANGES

Boxed Warning	7/2009
Contraindications	3/2010
Known Hypersensitivity (4)	
Warnings and Precautions	7/2009
Neuropsychiatric Symptoms and Suicidality (5.1), Angioedema and Hypersensitivity Reactions (5.2), Serious Skin Reactions (5.3), Accidental Injury (5.4)	

### INDICATIONS AND USAGE

CHANTIX is a nicotinic receptor partial agonist indicated for use as an aid to smoking cessation treatment. (1 and 2.1)

### DOSAGE AND ADMINISTRATION

- Begin CHANTIX dosing one week before the date set by the patient to stop smoking. (2.1)
- Starting week: 0.5 mg once daily on days 1-3 and 0.5 mg twice daily on days 4-7. (2.1)
- Continuing weeks: 1 mg twice daily for a total of 12 weeks. (2.1)
- An additional 12 weeks of treatment is recommended for successful quitters to increase likelihood of long-term abstinence. (2.1)
- Renal impairment: Reduce the dose in patients with severe renal impairment (estimated creatinine clearance <30 mL/min). (2.2)
- Consider dose reduction for patients who cannot tolerate adverse effects. (2.1)
- Another attempt at treatment is recommended for those who fail to stop smoking or relapse when factors contributing to the failed attempt have been addressed. (2.1)

- Provide patients with appropriate educational materials and counseling to support the quit attempt. (2.1)

### DOSAGE FORMS AND STRENGTHS

Tablets: 0.5 mg and 1 mg (3)

### CONTRAINDICATIONS

History of serious hypersensitivity or skin reactions to CHANTIX (4)

### WARNINGS AND PRECAUTIONS

- **Angioedema and hypersensitivity reactions:** Such reactions, including angioedema, infrequently life threatening, have been reported. Instruct patients to discontinue CHANTIX and immediately seek medical care if symptoms occur. (5.2 and 6.2)
- **Serious skin reactions:** Rare, potentially life-threatening skin reactions have been reported. Instruct patients to discontinue CHANTIX and contact a healthcare provider immediately at first appearance of skin rash with mucosal lesions. (5.3 and 6.2)
- **Accidental injury:** Accidental injuries (e.g., traffic accidents) have been reported. Instruct patients to use caution driving or operating machinery until they know how CHANTIX may affect them. (5.4)
- **Nausea:** Nausea is the most common adverse reaction (up to 30% incidence rate). Dose reduction may be helpful. (5.5)

### ADVERSE REACTIONS

Most common adverse reactions (>5% and twice the rate seen in placebo-treated patients) were nausea, abnormal (e.g., vivid, unusual, or strange) dreams, constipation, flatulence, and vomiting. (6.1)

To report SUSPECTED ADVERSE REACTIONS, contact Pfizer Inc at 1-800-438-1985 or FDA at 1-800-FDA-1088 or [www.fda.gov/medwatch](http://www.fda.gov/medwatch).

### DRUG INTERACTIONS

- Other smoking cessation therapies: Safety and efficacy in combination with other smoking cessation therapies has not been established. Coadministration of varenicline and transdermal nicotine resulted in a high rate of discontinuation due to adverse events. (7.1)
- Effect of smoking cessation: Pharmacokinetics or pharmacodynamics of certain drugs may be altered due to smoking cessation with CHANTIX, necessitating dose adjustment. (7.2)

### USE IN SPECIFIC POPULATIONS

- **Pregnancy:** CHANTIX should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus (8.1)
- **Nursing Mothers:** Discontinue drug or nursing taking into consideration importance of drug to mother (8.3)
- **Pediatric Use:** Safety and effectiveness not established (8.4)
- **Renal Impairment:** Dosage adjustment is required for severe renal impairment (2.2, 8.6)

See 17 for PATIENT COUNSELING INFORMATION and Medication Guide

Revised: 04/2010

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*In vitro* studies demonstrated that varenicline does not inhibit human renal transport proteins at therapeutic concentrations. Therefore, drugs that are cleared by renal secretion (e.g., metformin [see below]) are unlikely to be affected by varenicline.

*In vitro* studies demonstrated the active renal secretion of varenicline is mediated by the human organic cation transporter OCT2. Co-administration with inhibitors of OCT2 (e.g., cimetidine [see below]) may not necessitate a dose adjustment of CHANTIX as the increase in systemic exposure to CHANTIX is not expected to be clinically meaningful. Furthermore, since metabolism of varenicline represents less than 10% of its clearance, drugs known to affect the cytochrome P450 system are unlikely to alter the pharmacokinetics of CHANTIX [see *Clinical Pharmacology* (12.3)]; therefore, a dose adjustment of CHANTIX would not be required.

**Metformin:** When co-administered to 30 smokers, varenicline (1 mg twice daily) did not alter the steady-state pharmacokinetics of metformin (500 mg twice daily), which is a substrate of OCT2. Metformin had no effect on varenicline steady-state pharmacokinetics.

**Cimetidine:** Co-administration of an OCT2 inhibitor, cimetidine (300 mg four times daily), with varenicline (2 mg single dose) to 12 smokers increased the systemic exposure of varenicline by 29% (90% CI: 21.5%, 36.9%) due to a reduction in varenicline renal clearance.

**Digoxin:** Varenicline (1 mg twice daily) did not alter the steady-state pharmacokinetics of digoxin administered as a 0.25 mg daily dose in 18 smokers.

**Warfarin:** Varenicline (1 mg twice daily) did not alter the pharmacokinetics of a single 25 mg dose of (R, S)-warfarin in 24 smokers. Prothrombin time (INR) was not affected by varenicline. Smoking cessation itself may result in changes to warfarin pharmacokinetics [see *Drug Interactions* (7.2)].

#### Use with Other Drugs for Smoking Cessation

**Bupropion:** Varenicline (1 mg twice daily) did not alter the steady-state pharmacokinetics of bupropion (150 mg twice daily) in 46 smokers [see *Drug Interactions* (7.1)].

**Nicotine replacement therapy (NRT):** Although co-administration of varenicline (1 mg twice daily) and transdermal nicotine (21 mg/day) for up to 12 days did not affect nicotine pharmacokinetics, the incidence of adverse reactions was greater for the combination than for NRT alone [see *Drug Interactions* (7.1)].

## 13 NONCLINICAL TOXICOLOGY

### 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

**Carcinogenesis** Lifetime carcinogenicity studies were performed in CD-1 mice and Sprague-Dawley rats. There was no evidence of a carcinogenic effect in mice administered varenicline by oral gavage for 2 years at doses up to 20 mg/kg/day (47 times the maximum recommended human daily exposure based on AUC). Rats were administered varenicline (1, 5, and 15 mg/kg/day) by oral gavage for 2 years. In male rats (n = 65 per sex per dose group), incidences of hibernoma (tumor of the brown fat) were increased at the mid dose (1 tumor, 5 mg/kg/day, 23 times the maximum recommended human daily exposure based on AUC) and maximum dose (2 tumors, 15 mg/kg/day, 67 times the maximum recommended human daily exposure based on AUC). The clinical relevance of this finding to humans has not been established. There was no evidence of carcinogenicity in female rats.

**Mutagenesis** Varenicline was not genotoxic, with or without metabolic activation, in the following assays: Ames bacterial mutation assay; mammalian CHO/HGPRT assay; and tests for cytogenetic aberrations *in vivo* in rat bone marrow and *in vitro* in human lymphocytes.

**Impairment of Fertility** There was no evidence of impairment of fertility in either male or female Sprague-Dawley rats administered varenicline succinate up to 15 mg/kg/day (67 and 36 times, respectively, the maximum recommended human daily exposure based on AUC at 1 mg twice daily). However, a decrease in fertility was noted in the offspring of pregnant rats who were administered varenicline succinate at an oral dose of 15 mg/kg/day (36 times the maximum recommended human daily exposure based on AUC at 1 mg BID). This decrease in fertility in the offspring of treated female rats was not evident at an oral dose of 3 mg/kg/day (9 times the maximum recommended human daily exposure based on AUC at 1 mg twice daily).

## 14 CLINICAL STUDIES

The efficacy of CHANTIX in smoking cessation was demonstrated in six clinical trials in which a total of 3659 chronic cigarette smokers ( $\geq 10$  cigarettes per day) were treated with CHANTIX. In all clinical studies, abstinence from smoking was determined by patient self-report and verified by measurement of exhaled carbon monoxide ( $\text{CO} \leq 10$  ppm) at weekly visits. Among the CHANTIX-treated patients enrolled in these studies, the completion rate was 65%. Except for the dose-ranging study (Study 1) and the maintenance of abstinence study (Study 6), patients were treated for 12 weeks and then were followed for 40 weeks post-treatment. Most patients enrolled in these trials were

white (79-96%). All studies enrolled almost equal numbers of men and women. The average age of patients in these studies was 43 years. Patients on average had smoked about 21 cigarettes per day for an average of approximately 25 years.

In all studies, patients were provided with an educational booklet on smoking cessation and received up to 10 minutes of smoking cessation counseling at each weekly treatment visit according to Agency for Healthcare Research and Quality guidelines. Patients set a date to stop smoking (target quit date [TQD]) with dosing starting 1 week before this date.

### 14.1 Initiation of Abstinence

**Study 1** This was a six-week dose-ranging study comparing CHANTIX to placebo. This study provided initial evidence that CHANTIX at a total dose of 1 mg per day or 2 mg per day was effective as an aid to smoking cessation.

**Study 2** This study of 627 patients compared CHANTIX 1 mg per day and 2 mg per day with placebo. Patients were treated for 12 weeks (including one week titration) and then were followed for 40 weeks post-treatment. CHANTIX was given in two divided doses daily. Each dose of CHANTIX was given in two different regimens, with and without initial dose titration, to explore the effect of different dosing regimens on tolerability. For the titrated groups, dosage was titrated up over the course of one week, with full dosage achieved starting with the second week of dosing. The titrated and nontitrated groups were pooled for efficacy analysis.

Forty-five percent of patients receiving CHANTIX 1 mg per day (0.5 mg twice daily) and 51% of patients receiving 2 mg per day (1 mg twice daily) had CO-confirmed continuous abstinence during weeks 9 through 12 compared to 12% of patients in the placebo group (Figure 1). In addition, 31% of the 1 mg per day group and 31% of the 2 mg per day group were continuously abstinent from one week after TQD through the end of treatment as compared to 8% of the placebo group.

**Study 3** This flexible-dosing study of 312 patients examined the effect of a patient-directed dosing strategy of CHANTIX or placebo. After an initial one-week titration to a dose of 0.5 mg twice daily, patients could adjust their dosage as often as they wished between 0.5 mg once daily to 1 mg twice daily per day. Sixty-nine percent of patients titrated to the maximum allowable dose at any time during the study. For 44% of patients, the modal dose selected was 1 mg twice daily; for slightly over half of the study participants, the modal dose selected was 1 mg/day or less.

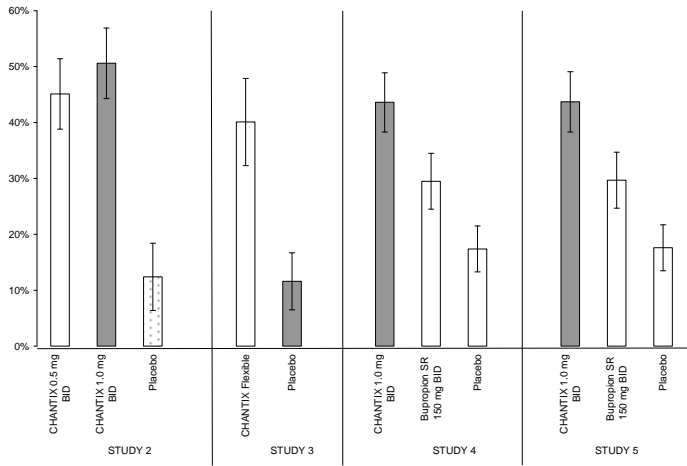
Of the patients treated with CHANTIX, 40% had CO-confirmed continuous abstinence during weeks 9 through 12 compared to 12% in the placebo group. In addition, 29% of the CHANTIX group were continuously abstinent from one week after TQD through the end of treatment as compared to 9% of the placebo group.

**Study 4 and Study 5** These identical double-blind studies compared CHANTIX 2 mg per day, bupropion sustained-release (SR) 150 mg twice daily, and placebo. Patients were treated for 12 weeks and then were followed for 40 weeks post-treatment. The CHANTIX dosage of 1 mg twice daily was achieved using a titration of 0.5 mg once daily for the initial 3 days followed by 0.5 mg twice daily for the next 4 days. The bupropion SR dosage of 150 mg twice daily was achieved using a 3-day titration of 150 mg once daily. Study 4 enrolled 1022 patients and Study 5 enrolled 1023 patients. Patients inappropriate for bupropion treatment or patients who had previously used bupropion were excluded.

In Study 4, patients treated with CHANTIX had a superior rate of CO-confirmed abstinence during weeks 9 through 12 (44%) compared to patients treated with bupropion SR (30%) or placebo (17%). The bupropion SR quit rate was also superior to placebo. In addition, 29% of the CHANTIX group were continuously abstinent from one week after TQD through the end of treatment as compared to 12% of the placebo group and 23% of the bupropion SR group.

Similarly in Study 5, patients treated with CHANTIX had a superior rate of CO-confirmed abstinence during weeks 9 through 12 (44%) compared to patients treated with bupropion SR (30%) or placebo (18%). The bupropion SR quit rate was also superior to placebo. In addition, 29% of the CHANTIX group were continuously abstinent from one week after TQD through the end of treatment as compared to 11% of the placebo group and 21% of the bupropion SR group.

**Figure 1: Continuous Abstinence, Weeks 9 through 12**



**Table 2: Continuous Abstinence, Weeks 9 through 12 (95% confidence interval)**

	CHANTIX 0.5 mg BID	CHANTIX 1 mg BID	CHANTIX Flexible	Bupropion SR	Placebo
Study 2	45% (39%, 51%)	51% (44%, 57%)			12% (6%, 18%)
Study 3			40% (32%, 48%)		12% (7%, 17%)
Study 4		44% (38%, 49%)		30% (25%, 35%)	17% (13%, 22%)
Study 5		44% (38%, 49%)		30% (25%, 35%)	18% (14%, 22%)

BID = twice daily

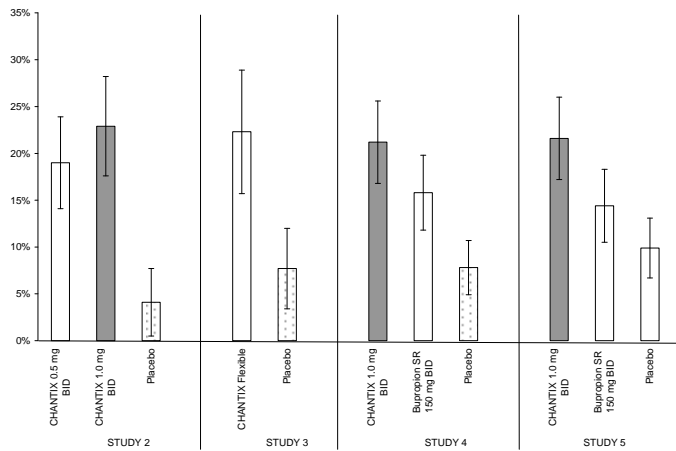
#### 14.2 Urge to Smoke

Based on responses to the Brief Questionnaire of Smoking Urges and the Minnesota Nicotine Withdrawal scale “urge to smoke” item, CHANTIX reduced urge to smoke compared to placebo in all studies.

#### 14.3 Long-Term Abstinence

Studies 1 through 5 included 40 weeks of post-treatment follow-up. In each study, CHANTIX-treated patients were more likely to maintain abstinence throughout the follow-up period than were patients treated with placebo (Figure 2, Table 3).

**Figure 2: Continuous Abstinence, Weeks 9 through 52**



**Table 3: Continuous Abstinence, Weeks 9 through 52 (95% confidence interval) across different studies**

	CHANTIX 0.5 mg BID	CHANTIX 1 mg BID	CHANTIX Flexible	Bupropion SR	Placebo
Study 2	19% (14%, 24%)	23% (18%, 28%)			4% (1%, 8%)
Study 3			22% (16%, 29%)		8% (3%, 12%)
Study 4		21% (17%, 26%)		16% (12%, 20%)	8% (5%, 11%)
Study 5		22% (17%, 26%)		14% (11%, 18%)	10% (7%, 13%)

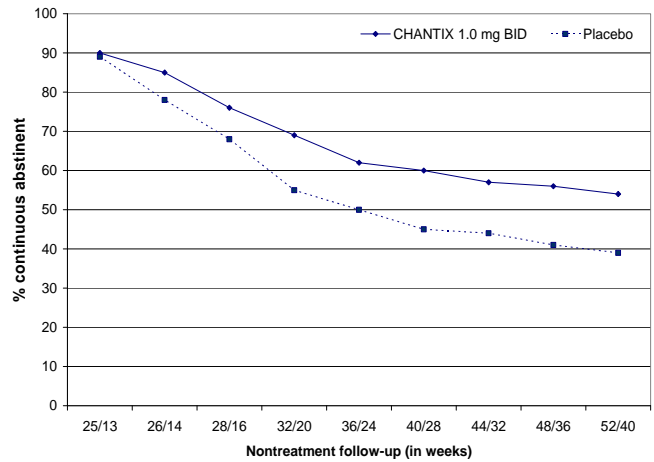
BID = twice daily

**Study 6** This study assessed the effect of an additional 12 weeks of CHANTIX therapy on the likelihood of long-term abstinence. Patients in this study (n=1927) were treated with open-label CHANTIX 1 mg twice daily for 12 weeks. Patients who had stopped smoking for at least a week by Week 12 (n=1210) were then randomized to double-blind treatment with CHANTIX (1 mg twice daily) or placebo for an additional 12 weeks and then followed for 28 weeks post-treatment.

The continuous abstinence rate from Week 13 through Week 24 was higher for patients continuing treatment with CHANTIX (70%) than for patients switching to placebo (50%). Superiority to placebo was also maintained during 28 weeks post-treatment follow-up (CHANTIX 54% versus placebo 39%).

In Figure 3 below, the x-axis represents the study week for each observation, allowing a comparison of groups at similar times after discontinuation of CHANTIX; post-CHANTIX follow-up begins at Week 13 for the placebo group and Week 25 for the CHANTIX group. The y-axis represents the percentage of patients who had been abstinent for the last week of CHANTIX treatment and remained abstinent at the given timepoint.

**Figure 3: Continuous Abstinence Rate during Nontreatment Follow-Up**



#### 16 HOW SUPPLIED/STORAGE AND HANDLING

CHANTIX is supplied for oral administration in two strengths: a 0.5 mg capsular biconvex, white to off-white, film-coated tablet debossed with “Pfizer” on one side and “CHX 0.5” on the other side and a 1 mg capsular biconvex, light blue film-coated tablet debossed with “Pfizer” on one side and “CHX 1.0” on the other side. CHANTIX is supplied in the following package configurations:

	Description	NDC
Packs	Starting Month PAK (First month of therapy): Pack includes 1 card of 0.5 mg x 11 tablets and 3 cards of 1 mg x 14 tablets	NDC 0069-0471-97
	Continuing Month PAK (Continuing months of therapy): Pack includes 4 cards of 1 mg x 14 tablets	NDC 0069-0469-97
Bottles	0.5 mg - bottle of 56	NDC 0069-0468-56
	1 mg - bottle of 56	NDC 0069-0469-56

Store at 25 C (77 F); excursions permitted to 15–30 C (59–86 F) (see USP Controlled Room Temperature).

#### 17 PATIENT COUNSELING INFORMATION

See Medication Guide

##### 17.1 Set Quit Date and Continue to Attempt to Quit if Lapse

Instruct patients to set a date to quit smoking and to initiate CHANTIX treatment one week before the quit date. Encourage patients to continue to attempt to quit if they have early lapses after quit day [see Dosage and Administration (2.1)].

##### 17.2 How To Take

Advise patients that CHANTIX should be taken after eating, and with a full glass of water [see Dosage and Administration (2.1)].

##### 17.3 Starting Week Dosage

Instruct patients on how to titrate CHANTIX, beginning at a dose of 0.5 mg/day. Explain that one 0.5 mg tablet should be taken daily for the first three days, and that for the next four days, one 0.5 mg tablet should be taken in the morning and one 0.5 mg tablet should be taken in the evening [see *Dosage and Administration (2.1)*].

#### 17.4 Continuing Weeks Dosage

Advise patients that, after the first seven days, the dose should be increased to one 1 mg tablet in the morning and one 1 mg tablet in the evening [see *Dosage and Administration (2.1)*].

#### 17.5 Dosage Adjustment for CHANTIX or Other Drugs

Inform patients that nausea and insomnia are side effects of CHANTIX and are usually transient; however, advise patients that if they are persistently troubled by these symptoms, they should notify the prescribing physician so that a dose reduction can be considered.

Inform patients that some drugs may require dose adjustment after quitting smoking [see *Dosage and Administration (2.1)*].

#### 17.6 Counseling and Support

Provide patients with educational materials and necessary counseling to support an attempt at quitting smoking [see *Dosage and Administration (2.1)*].

#### 17.7 Neuropsychiatric Symptoms

Inform patients that some patients have experienced changes in mood (including depression and mania), psychosis, hallucinations, paranoia, delusions, homicidal ideation, aggression, anxiety, and panic, as well as suicidal ideation and suicide when attempting to quit smoking while taking CHANTIX. If patients develop agitation, hostility, depressed mood, or changes in behavior or thinking that are not typical for them, or if patients develop suicidal ideation or behavior, they should be urged to discontinue CHANTIX and report these symptoms to their healthcare provider immediately [see *Boxed Warning, Warnings and Precautions (5.1), Adverse Reactions (6.2)*].

#### 17.8 History of Psychiatric Illness

Encourage patients to reveal any history of psychiatric illness prior to initiating treatment.

#### 17.9 Nicotine Withdrawal

Inform patients that quitting smoking, with or without CHANTIX, may be associated with nicotine withdrawal symptoms (including depression or agitation) or exacerbation of pre-existing psychiatric illness.

#### 17.10 Angioedema

Inform patients that there have been reports of angioedema, with swelling of the face, mouth (lip, gum, tongue) and neck (larynx and pharynx) that can lead to life-threatening respiratory compromise. Instruct patients to discontinue CHANTIX and immediately seek medical care if they experience these symptoms [see *Warnings and Precautions (5.2), and Adverse Reactions (6.2)*].

#### 17.11 Serious Skin Reactions

Inform patients that serious skin reactions, such as Stevens-Johnson Syndrome and erythema multiforme, were reported by some patients taking CHANTIX. Advise patients to stop taking CHANTIX at the first sign of rash with mucosal lesions or skin reaction and contact a healthcare provider immediately [see *Warnings and Precautions (5.3), and Adverse Reactions (6.2)*].

#### 17.12 Driving or Operating Machinery

Advise patients to use caution driving or operating machinery until they know how quitting smoking and/or varenicline may affect them [see *Warnings and Precautions (5.5)*].

#### 17.13 Vivid, Unusual, or Strange Dreams

Inform patients that they may experience vivid, unusual or strange dreams during treatment with CHANTIX.

#### 17.14 Pregnancy and Lactation

Patients who are pregnant or breastfeeding or planning to become pregnant should be advised of: the risks of smoking to a pregnant mother and her developing baby, the potential risks of CHANTIX use during pregnancy and breastfeeding, and the benefits of smoking cessation with and without CHANTIX [see *Use in Specific Populations (8.1 and 8.3)*].



LAB-0327-12.0

## MEDICATION GUIDE

### CHANTIX® (CHANT-iks)

#### (varenicline) Tablets

Read the Medication Guide that comes with CHANTIX before you start taking it and each time you get a refill. There may be new information. This information does not take the place of talking with your doctor about your condition or treatment.

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

Some people have had changes in behavior, hostility, agitation, depressed mood, and suicidal thoughts or actions while using CHANTIX to help them quit smoking. Some people had these symptoms when they began taking CHANTIX, and others developed them after several weeks of treatment, or after stopping CHANTIX.

If you, your family, or caregiver notice agitation, hostility, depression or changes in behavior or thinking that are not typical for you, or you develop any of the following symptoms, stop taking CHANTIX and call your healthcare provider right away:

- thoughts about suicide or dying, or attempts to commit suicide
- new or worse depression, anxiety, or panic attacks
- feeling very agitated or restless
- acting aggressive, being angry, or violent
- acting on dangerous impulses



- an extreme increase in activity and talking (mania)
- abnormal thoughts or sensations
- seeing or hearing things that are not there (hallucinations)
- feeling people are against you (paranoia)
- feeling confused
- other unusual changes in behavior or mood

When you try to quit smoking, with or without CHANTIX, you may have symptoms that may be due to nicotine withdrawal, including urge to smoke, depressed mood, trouble sleeping, irritability, frustration, anger, feeling anxious, difficulty concentrating, restlessness, decreased heart rate, and increased appetite or weight gain. Some people have even experienced suicidal thoughts when trying to quit smoking without medication. Sometimes quitting smoking can lead to worsening of mental health problems that you already have, such as depression.

Before taking CHANTIX, tell your doctor if you have ever had depression or other mental health problems. You should also tell your doctor about any symptoms you had during other times you tried to quit smoking, with or without CHANTIX.

See “**What are the possible side effects of CHANTIX?**”

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Some people can have allergic reactions to CHANTIX. Some of these allergic reactions can be life-threatening and include: swelling of the face, mouth, and throat that can cause trouble breathing. If you have these symptoms, stop taking CHANTIX and get medical attention right away.

Some people can have serious skin reactions while taking CHANTIX. These can include rash, swelling, redness, and peeling of the skin. Some of these reactions can become life-threatening. If you have a rash with peeling skin or blisters in your mouth, stop taking CHANTIX and see your doctor right away.

### **What is CHANTIX?**

CHANTIX is a prescription medicine to help adults stop smoking.

Quitting smoking can lower your chances of having lung disease, heart disease or getting certain types of cancer that are related to smoking.

CHANTIX is not recommended for people under 18 years of age.

CHANTIX has not been studied with other treatments for stopping smoking.

### **Who should not take CHANTIX?**

Do not take CHANTIX if you have had a serious allergic or skin reaction to CHANTIX, which may include:

- swelling of the face, mouth, and throat that can cause trouble breathing.
- rash, swelling, redness, and peeling of the skin.

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

Before you take CHANTIX, tell your doctor if you:

- have ever had depression or other mental health problems. See “What is the most important information I should know about CHANTIX?”
- have kidney problems or get kidney dialysis. Your doctor may prescribe a lower dose of CHANTIX for you.
- have any allergies. See the end of this Medication Guide for a complete list of ingredients in CHANTIX.
- have any other medical conditions

- are pregnant or plan to become pregnant. Ask your doctor for help to stop smoking before you get pregnant because smoking during pregnancy puts you and your baby at risk for problems during pregnancy. CHANTIX has not been studied in pregnant women. It is not known if CHANTIX will harm your unborn baby.
- are breastfeeding. CHANTIX has not been studied in breastfeeding women. It is not known if CHANTIX passes into breast milk. You and your doctor should talk about the best way to feed your baby if you take CHANTIX.

Tell your doctor about all your other medicines, including prescription and nonprescription medicines, vitamins and herbal supplements. Especially, tell your doctor if you take:

- insulin
- asthma medicines
- blood thinners

**When you stop smoking, there may be a change in how these and other medicines work for you.**

You should not use CHANTIX while using other medicines to quit smoking. Tell your doctor if you use other treatments to quit smoking.

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

**How should I take CHANTIX?**

- Take CHANTIX exactly as prescribed by your doctor.
  1. Choose a **quit date** when you will stop smoking.
  2. Start taking CHANTIX 1 week (7 days) before your **quit date**. This lets CHANTIX build up in your body. You can keep smoking during this time. Make sure that you try and stop smoking on your **quit date**. If you slip-up and smoke, try again. Some people need to take CHANTIX for a few weeks for CHANTIX to work best.
  3. Take CHANTIX after eating and with a full glass (8 ounces) of water.
  4. Most people will take CHANTIX for up to 12 weeks. If you have completely quit smoking by 12 weeks, your doctor may prescribe CHANTIX for another 12 weeks to help you stay cigarette-free.
- CHANTIX comes as a white tablet (0.5 mg) and a blue tablet (1 mg). You start with the white tablet and then usually go to the blue tablet. See the chart below for dosing instructions.

<u>Day 1 to Day 3</u>	<ul style="list-style-type: none"> <li>• <u>White</u> tablet (0.5 mg)</li> <li>• Take 1 tablet each day</li> </ul>
<u>Day 4 to Day 7</u>	<ul style="list-style-type: none"> <li>• <u>White</u> tablet (0.5 mg)</li> <li>• Take 1 in the morning and 1 in the evening</li> </ul>
<u>Day 8 to end of treatment</u>	<ul style="list-style-type: none"> <li>• <u>Blue</u> tablet (1 mg)</li> <li>• Take 1 in the morning and 1 in the evening</li> </ul>

- This dosing schedule may not be right for everyone. Talk to your doctor if you are having side effects such as nausea, strange dreams, or sleep problems. Your doctor may want to reduce your dose.
- If you miss a dose of CHANTIX, take it as soon as you remember. If it is close to the time for your next dose, wait. Just take your next dose at your regular dose.

**What should I avoid while taking CHANTIX?**

Use caution driving or operating machinery until you know how CHANTIX may affect you. Some people who use CHANTIX may feel sleepy, dizzy, or have trouble concentrating, that can make it hard to drive or perform other activities safely.

**What are the possible side effects of CHANTIX?**

- **Some patients have had new or worse mental health problems.** See "What is the most important information I should know about CHANTIX?"

- The most common side effects of CHANTIX include:
  - nausea
  - sleep problems (trouble sleeping or vivid, unusual, or strange dreams)
  - constipation
  - gas
  - vomiting

Tell your doctor about side effects that bother you or that do not go away.

These are not all the side effects of CHANTIX. Ask your doctor or pharmacist for more information.

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 CHANTIX?**

- Store CHANTIX at room temperature, 59 to 86°F (15 to 30°C).
- Safely dispose of CHANTIX that is out of date or no longer needed.
- **Keep CHANTIX and all medicines out of the reach of children.**

General information about CHANTIX

**Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. Do not use CHANTIX for a condition for which it was not prescribed. Do not give your CHANTIX 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 CHANTIX. If you would like more information, talk with your doctor. You can ask your doctor or pharmacist for information about CHANTIX that is written for healthcare professionals.

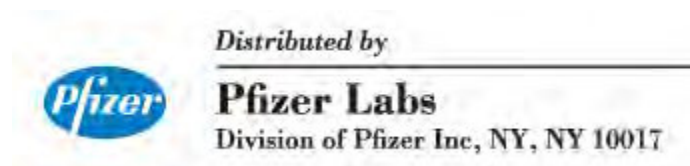
For more about CHANTIX and tips on how to quit smoking, go to [www.CHANTIX.com](http://www.CHANTIX.com) or call 1-877-CHANTIX (877-242-6849).

#### **What are the ingredients in CHANTIX?**

**Active ingredient:** varenicline tartrate

**Inactive ingredients:** microcrystalline cellulose, anhydrous dibasic calcium phosphate, croscarmellose sodium, colloidal silicon dioxide, magnesium stearate, Opadry® White (for 0.5 mg), Opadry® Blue (for 1 mg), and Opadry® Clear (for both 0.5 mg and 1 mg)

**Rx only**



LAB-0328-9.0

Revised April 2010

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

**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

*APPLICATION NUMBER:*  
**NDA 021928/S-017**

**REMS**

NDA 21-928  
Chantix (Varenicline) Tablets  
Nicotinic Receptor Partial Agonist  
Aid to Smoking Cessation

Pfizer Inc  
235 East 42<sup>nd</sup> Street  
New York, NY 10017-5755  
212-733-1808

RISK EVALUATION AND MITIGATION STRATEGY (REMS)

**I. GOAL**

The goal of this REMS is to inform patients about the serious risks associated with the use of CHANTIX, including the potential risk of serious neuropsychiatric symptoms in patients taking CHANTIX.

**II. REMS ELEMENTS**

**A. Medication Guide**

Pfizer in accordance with 21 CFR 208.24 will provide the currently approved Medication Guides to pharmacists to be given to patients with each Chantix prescription dispensed.

Pfizer must provide copies of the Medication Guide for each unit of use bottle. Pfizer will make tear pads containing the Medication Guide available in pharmacies for direct distribution to patients.

Pfizer acknowledges the requirement to comply with 21 CFR 208.24 and will modify Starting Month Packs and Continuing Month Packs to include the instruction, "ALWAYS DISPENSE WITH ENCLOSED MEDICATION GUIDE." Similarly, labels on bottles will include the instruction, "ALWAYS DISPENSE WITH MEDICATION GUIDE."

**B. Timetable for Submission of Assessments**

Pfizer will submit REMS Assessments to FDA 18 months, 3 years, and 7 years following the initial REMS approval of October 19, 2009. To facilitate inclusion of as much information as possible, while allowing reasonable time to prepare the submission, the reporting interval covered by each assessment should conclude no earlier than 60 days before the submission date for that assessment.

Pfizer Inc will submit each assessment so that it will be received by the FDA on or before the due date.

**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

*APPLICATION NUMBER:*  
**NDA 021928/S-017**

**OTHER REVIEW(S)**

# REGULATORY PROJECT MANAGER LABELING REVIEW

## Division of Anesthesia and Analgesia Products

**Application Number:** NDA 21-928/SLR-014  
NDA 21-928/SLR-017

**Name of Drug:** Chantix (varenicline) tablets, 0.5 mg and 1 mg

**Applicant:** Pfizer, Inc.

### Material Reviewed:

**Submission Date(s):** July 20, 2009, January 14, 17, and February 25, 2010

**Receipt Date(s):** July 20, 2009, January 14, 17, and February 25, 2010

**Submission Date of Structure Product Labeling (SPL):** N/A

**Type of Labeling Reviewed:** WORD

### **Reviews Completed:**

Ayanna Augustus, Ph.D., Regulatory Project Manager, March 12, 2010  
Parinda Jani, Chief, Project Management Staff, -concur  
Celia Winchell, M.D., Clinical Team Leader, -concur March 31, 2010

Jessica M. Diaz, Patient Product Information Reviewer, OSE/DRISK, February 8, 2010  
Mathilda Fienkeng, Regulatory Reviewer, DDMAC, November 11, 2009  
Richardae Araojo, PharmD, Regulatory Reviewer, Maternal Health Team, November 6, 2009  
Elizabeth Durmowicz, M.D., Medical Officer, Pediatric and Maternal Health Staff, November 4, 2009  
Iris Masucci, PharmD, Regulatory Reviewer, SEALD November 6, 2009

### Background and Summary

The sponsor submitted in Supplement-014 a revised package insert that was reformatted in order to comply with 21 CFR 201.56 and 21 CFR 201.57. The package labeling is in physicians labeling rule (PLR) format and is considered new labeling. However, changes were made to the **CONTRAINDICATIONS** sections in the package insert. As a result, these changes resulted in changes to the Medication Guide to include the section: **Who should not take Chantix?** This change required a modification of the Risk Evaluation and Mitigation Strategy approved on October 19, 2009. The sponsor was notified in an e-mail dated December 30, 2009 that a submission of a REMS modification and REMS assessment was necessary. The sponsor submitted their REMS supplement (SLR-017) on January 14, 2009.

Page 2

Additional editorial changes were made to the Package insert and Medication Guide to improve readability and minimize redundancy. Comments and recommendations made by SEALD, DDMAC, PMHS, and DRISK were noted and incorporated in to the package insert and Medication guide where appropriate.

## **Review**

Please note that the Division's proposed omissions are indicated by strikeovers, inclusions by underlined text.

### **HIGHLIGHTS:**

#### **CONTRAINDICATIONS:**

History of serious hypersensitivity or skin reactions to CHANTIX (4)

### **FULL PRESCRIBING INFORMATION:**

#### **CONTRAINDICATIONS**

CHANTIX is contraindicated in patients with a known history of serious hypersensitivity reactions or skin reactions to CHANTIX.

### **MEDICATION GUIDE:**

#### **Who should not take CHANTIX?**

Do not take CHANTIX if you have had a serious allergic or skin reaction to CHANTIX, which may include:

- swelling of the face, mouth, and throat that can cause trouble breathing.
- rash, swelling, redness, and peeling of the skin.

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


Tell your doctor about all of your medical conditions including if you:

- ~~are pregnant or plan to become pregnant. CHANTIX has not been studied in pregnant women. It is not known if CHANTIX will harm your unborn baby. It is best to stop smoking before you get pregnant.~~
- ~~are breastfeeding. Although it was not studied in humans, CHANTIX may pass into breast milk. You and your doctor should talk about the best way to feed your baby if you take CHANTIX.~~



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

Before you take CHANTIX, tell your doctor if you:

-  (b) (4)
- are pregnant or plan to become pregnant. Ask your doctor for help to stop smoking before you get pregnant because smoking during pregnancy puts you and your baby at risk for problems during pregnancy. CHANTIX has not been studied in pregnant women. It is not known if CHANTIX will harm your unborn baby.
- are breastfeeding. CHANTIX has not been studied in breastfeeding women. It is not known if CHANTIX passes into breast milk. You and your doctor should talk about the best way to feed your baby if you take CHANTIX.

## **Recommendations**

The revised package labeling is recommended for approval.

\_\_\_\_\_  
Ayanna Augustus, Ph.D.  
Regulatory Project Manager

Supervisory Comment/Concurrence:

\_\_\_\_\_  
Parinda Jani  
Chief, Project Management Staff

\_\_\_\_\_  
Celia Winchell, M.D.  
Clinical Team Leader

Drafted: AA/3/16/10

Revised/Initialed:

Finalized:

Filename: CSO Labeling Review Template (updated 1-16-07).doc

Application Type/Number	Submission Type/Number	Submitter Name	Product Name
NDA-21928	SUPPL-14	PFIZER INC	CHANTIX
NDA-21928	SUPPL-17	PFIZER INC	CHANTIX

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/s/

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AYANNA S AUGUSTUS  
04/19/2010

PARINDA JANI  
04/20/2010

CELIA J WINCHELL  
04/20/2010  
Concur

**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

*APPLICATION NUMBER:*  
**NDA 021928/S-017**

**ADMINISTRATIVE and CORRESPONDENCE  
DOCUMENTS**

**MEMORANDUM**

DEPARTMENT OF HEALTH AND HUMAN  
SERVICES

PUBLIC HEALTH SERVICE

FOOD AND DRUG ADMINISTRATION

CENTER FOR DRUG EVALUATION AND  
RESEARCH

**DATE:** 2/18/09

**TO:** Pfizer, Inc

**THROUGH :** Ayanna Augustus, Ph.D., RPM

**FROM:** DAARP

**SUBJECT:** Comments on modified REMS for Chantix

**APPLICATION/DRUG:** NDA 21928/Chantix

Comments were communicated to the sponsor via email on February 11, 2010

See the appended Chantix (varenicline) REMS proposal for track changes corresponding to comments on the REMS modification.

1. GOAL

Revise your goal as follows:

*The goal of this REMS is to inform patients about the serious risks associated with the use of CHANTIX (varenicline).*

This revision is consistent with other approved REMS that include Medication Guides.

We have some editorial comments in the proposed REMS.

2. We note your proposal to conduct (b) (4) surveys to assess patients' understanding about risks and safe use of Chantix. We have the following comments and questions about this proposal:

- a) Clarify if any non-respondent follow-up or reminders will be completed, and the planned frequency.

Explain if an incentive or honorarium will be offered, and the intended amount.

- b) We encourage you to offer respondents multiple options for completing the survey. This is especially important for inclusion of the lower literacy population. For example, surveys could be completed online or through email, in writing or by mail, over the phone, or in person.

If other than paper surveys will be utilized, explain how surveyors will be trained.

- c) Submit for review the introductory letter that will be used to inform respondents about the purpose of the survey.

Potential respondents should be told that their answers will not affect their ability to receive or take Chantix, and that their answers and personal information will be kept confidential and anonymous.

- d) Respondents should not be eligible for more than one wave of the survey.

- e) Submit for review the survey instrument.

- f) The survey should include a section with questions asking about the specific risks or safety information conveyed in the Medication Guide to see if the patient not only understands the information, but knows what to do if they experience the event.

Most of the risk-specific questions should be derived from information located in the "What is the Most Important Information I should know about Chantix?" section of the Medication Guide. The questions should be about understanding the risk, the symptoms, and what to do if the event occurs:

- changes in behavior, hostility, agitation, depressed mood, suicidal thoughts or actions
- life-threatening allergic reactions
- serious skin reactions

The risk-specific questions should be non-biased, non-leading, multiple choice questions with the instruction to “select all that apply.” Each question should have an “I don’t know” answer option.

The order of the multiple choice responses should be randomized on each survey.

- g) The order of the questions should be such that the risk-specific questions are asked first, followed by questions about receipt of the Medication Guide. Demographic questions should be collected last.
- h) Include questions about receipt of the Medication Guide in the patient survey as a way to fulfill the obligation to report on the distribution of the Medication Guide.
- i) Just prior to the questions about receipt of the Medication Guide, include text explaining what is a Medication Guide. For example,
 

Now we are going to ask you some questions about the Medication Guide you may have received with Chantix. The Medication Guide is a paper handout that contains important information about the risks associated with use of Chantix and how to use Chantix safely. Medication Guides always include the title “Medication Guide”.
- j) Use the following (or similar) questions to assess receipt and use of the Medication Guide.
  - Who gave you the Medication Guide for Chantix? (Select all that apply)
    - a) My doctor or someone in my doctor’s office
    - b) My pharmacist or someone at the pharmacy
    - c) Someone else - please explain: \_\_\_\_\_
    - d) I did not get a Medication Guide for Chantix
  - Did you read the Medication Guide?
    - All,
    - Most,
    - Some,
    - None
  - Did you understand what you read in the Medication Guide?
    - All,
    - Most,
    - Some,
    - None

- Did someone offer to explain to you the information in the Medication Guide?
    - Yes, my doctor or someone in my doctor's office
    - Yes, my pharmacist or someone at the pharmacy
    - Yes, someone else – please explain:  
\_\_\_\_\_
    - No
  - Did you accept the offer? Yes or No
  - Did you understand the explanation that was given to you?
    - All,
    - Most,
    - Some,
    - None
  - Did or do you have any questions about the Medication Guide? Yes or No (If Yes, list your question(s) below) Note: This is an open text field that should be grouped/coded by the sponsor prior to submitting to FDA
  - k) Results should be analyzed on an item-by-item or variable-by-variable basis. The data may be presented using descriptive statistics, such as sample size, mean, standard deviation, median, minimum and maximum (for continuous variables), and frequency distributions (for categorical variables).
  - l) Data may be stratified by any relevant demographic variable, and also presented in aggregate. We encourage you to submit with your assessments all methodology and instruments that were used to evaluate the effectiveness of the REMS.
  - m) Submit for review the responses to the above requested information. This information should be submitted at least 90 days before the evaluation will be conducted. The submission should be coded "REMS Correspondence." The submission should include all methodology and instruments that will be used to evaluate the patients' knowledge about the risks associated with and safe use of Chantix.
3. We agree that the "periodic assessments of distribution and dispensing of the Medication Guide" and "a report on the failures to adhere to distribution and dispensing requirements, and corrective actions to address noncompliance" are not necessary when a product is distributed in unit-of-use that includes a Medication Guide with a quantity of product dispensed to a single patient and not divided. You will however, be required to assess these components if you include bottle sizes that are likely to be repackaged by the pharmacists in non-Pfizer packaging. The recommended questions above may help you obtain that information.

Please let us know if you have any questions.

2 Page(s) has been Withheld in Full as b4 (CCI/TS) immediately following this page

**Augustus, Ayanna**

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**From:** Augustus, Ayanna  
**Sent:** Thursday, February 11, 2010 10:05 AM  
**To:** 'Donohew, Lilya'  
**Subject:** RE: Chantix/PLR labeling  
**Attachments:** OSE DRISK comments 2-10.doc

Hi Lilya,

As you may know, due to the severe winter weather in the DC area, the federal government has been closed since Monday, February 8th. Therefore, the review team has not had a chance to discuss Pfizer's recent proposed change to the Pregnancy language for the Chantix PI. Nevertheless, enclosed are comments from OSE/DRISK on the revised REMS. There are no additional changes to the Medication guide. Please review and submit a final revised REMS and Medication Guide as an amendment to the current REMS supplement (SLR-017), by COB, Wednesday, February 17, 2009.

Please email me if you have any additional questions.

Regards,  
Ayanna

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**From:** Donohew, Lilya [mailto:Lilya.Donohew@pfizer.com]  
**Sent:** Tuesday, February 09, 2010 11:44 AM  
**To:** Augustus, Ayanna  
**Subject:** RE: Chantix/PLR labeling

Hi Ayanna,

Hope all is well with you!

As a follow up to my email below containing our proposed verbiage for the PLR pregnancy statement, I'm forwarding a draft corresponding PLR copy showing in track changes this proposed statement. I look forward to hearing from you on this.

In addition, I wanted to let you know that we reviewed the Agency's feedback on the Pregnancy Cohort protocol (1078) provided in the Advice/Information Request letter dated Jan 20, 2010 and I'm planning to forward to you our response and the revised protocol by Feb 16.

Thanks so much,  
Lilya

Lilya I. Donohew, Ph.D.  
Director, Worldwide Regulatory Strategy  
Pfizer Inc.  
tel: 212-733-5856  
email: [lilya.donohew@pfizer.com](mailto:lilya.donohew@pfizer.com)



Application Type/Number	Submission Type/Number	Submitter Name	Product Name
----- NDA-21928	----- SUPPL-17	----- PFIZER INC	----- CHANTIX

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/s/

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AYANNA S AUGUSTUS  
02/18/2010



DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration  
Silver Spring MD 20993

NDA 21-928/S-017

**PRIOR APPROVAL SUPPLEMENT**

Pfizer, Inc.  
235 East 42<sup>nd</sup> Street  
New York, NY 10017

Attention: Lilya Donohew, Ph.D.  
Director, Worldwide Regulatory Affairs

Dear Dr. Donohew:

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

Name of Drug Product: Chantix (varenicline) Tablets; 0.5 mg and 1 mg

NDA Number: 021928

Supplement number: 017

Review Priority Classification: Standard (S)

Date of supplement: January 14, 2010

Date of receipt: January 14, 2010

This supplemental application proposes changes to the approved REMS, REMS assessment and Medication Guide.

Unless we notify you within 60 days of the receipt date that the application is not sufficiently complete to permit a substantive review, we will file the application on March 15, 2010 in accordance with 21 CFR 314.101(a).

Please cite the application number listed above at the top of the first page of all submissions to this application. Send all submissions, electronic or paper, including those sent by overnight mail or courier, to the following address:

Food and Drug Administration  
Center for Drug Evaluation and Research  
Division of Anesthesia, Analgesia, and Rheumatology Products  
5901-B Ammendale Road

Beltsville, MD 20705-1266

If you have questions, contact Ayanna Augustus, Regulatory Project Manager, at [ayanna.augustus@fda.hhs.gov](mailto:ayanna.augustus@fda.hhs.gov) or (301) 796-3980.

Sincerely,

*{See appended electronic signature page}*

Ayanna Augustus, Ph.D.  
Regulatory Project Manager  
Division of Anesthesia, Analgesia and  
Rheumatology Products  
Office of Drug Evaluation II  
Center for Drug Evaluation and Research

Application Type/Number	Submission Type/Number	Submitter Name	Product Name
----- NDA-21928	----- SUPPL-17	----- PFIZER INC	----- CHANTIX

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/s/  
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AYANNA S AUGUSTUS  
02/02/2010