APPLICATION NUMBER:
022549Orig1s000

REMS
RISK EVALUATION AND MITIGATION STRATEGY (REMS)

I. GOAL(S)

The goal of the ADASUVE™ REMS is to mitigate the negative outcomes associated with ADASUVE-induced bronchospasm by:

- Ensuring that ADASUVE is dispensed only in certified healthcare settings that have immediate access on-site to equipment and personnel trained to provide advanced airway management, including intubation and mechanical ventilation.

- Informing healthcare professionals in these settings that ADASUVE can cause bronchospasm that has the potential to lead to respiratory distress and respiratory arrest.

- Informing healthcare professionals in these settings about the safe use of ADASUVE, including appropriate patient selection, monitoring, and management.

II. REMS ELEMENTS

A. Communication Plan

Alexza Pharmaceuticals, Inc will implement a communication plan to healthcare providers to support the implementation of the REMS. This communication plan will include the following:

Dear Healthcare Professional Letter

Alexza will ensure that Dear Healthcare Professional Letters will be distributed at least 2 weeks prior to product launch. The letter will include information on the risks associated with the use of ADASUVE and will explain the requirements of the REMS. The target audience for the letter will include psychiatrists and emergency medicine healthcare practitioners. These include healthcare practitioners who could be involved in the prescribing, dispensing or administration of ADASUVE or the monitoring of patients who are administered ADASUVE, or who may have patients that receive ADASUVE.
Distribution will include, but not be limited to the member lists of the following professional organizations:

- American Psychiatric Association
- American Association for Emergency Psychiatry
- American Academy of Emergency Medicine
- Society for Academic Emergency Medicine
- American College of Emergency Physicians
- Emergency Nurses Association
- American Psychiatric Nurses Association
- College of Psychiatric and Neurologic Pharmacists
- US Psychiatric and Mental Health Congress
- American College of Nurse Practitioners

The letter will be available on the ADASUVE REMS website for 1 year from the date of the mailing.

The Dear Healthcare Professional Letter is part of the ADASUVE REMS and is appended.

B. Elements To Assure Safe Use

1. **ADASUVE will only be dispensed in healthcare settings that are specially certified.**

   a) Alexza® will ensure that ADASUVE will only be dispensed in certain healthcare settings that are specially certified. To become certified to dispense ADASUVE, each healthcare facility must enroll in the ADASUVE REMS Program.

   b) Each healthcare facility must designate an authorized representative to complete enrollment on behalf of the healthcare facility.

   c) Each healthcare facility must have immediate access on-site to equipment and personnel trained to provide advanced airway management, including intubation and mechanical ventilation.

   d) Each healthcare facility must be equipped to provide immediate access on-site to a metered-dose inhaled and nebulized form of a short-acting beta-agonist bronchodilator (e.g., albuterol).
e) Each healthcare facility must:

- Screen patients, prior to treatment with ADASUVE, for a current diagnosis or history of asthma, chronic obstructive pulmonary disease (COPD) or other lung disease associated with bronchospasm, acute respiratory signs/symptoms (e.g. wheezing), and current use of medications to treat airways disease such as asthma or COPD; and examine patients (including chest auscultation) for respiratory abnormalities.

- Monitor patients at least every 15 minutes for a minimum of one hour following treatment with ADASUVE for symptoms and signs of bronchospasm (e.g., vital signs and chest auscultation).

- Limit administration of ADASUVE to a single dose per patient within a 24-hour period.

f) Each healthcare facility must train relevant staff (e.g., staff involved in prescribing, dispensing or administering ADASUVE and monitoring patients after ADASUVE administration) on the safe use of ADASUVE, as described in the ADASUVE REMS Education Program. This training and ongoing training must be documented and is subject to audit.

g) Each healthcare facility must not dispense ADASUVE for outpatient use.

h) Each healthcare facility must renew its enrollment in the ADASUVE REMS Program within 3 years from the date of initial enrollment, and every three years thereafter.

i) Each healthcare facility must obtain ADASUVE from wholesalers/distributors that are enrolled in the ADASUVE REMS Program only.

j) Each healthcare facility must not sell, loan, or transfer any ADASUVE inventory to any other pharmacy, institution, distributor, or prescriber.

k) Each healthcare facility must establish procedures, protocols and/or order sets to help ensure compliance with the safe use conditions required in the ADASUVE REMS, and as described II.A.1.e through j., above. Healthcare facility procedures, protocols and/or order sets must be documented and are subject to audit.

l) The authorized representative must complete and sign the Healthcare Facility Enrollment Form to enroll the healthcare facility. In signing the Healthcare Facility Enrollment Form, the authorized representative is required to acknowledge that:

   i) The representative has reviewed the ADASUVE REMS Education Program and understands that treatment with ADASUVE can cause bronchospasm that has the potential to lead to respiratory distress and respiratory arrest.

   ii) The representative understands that ADASUVE is contraindicated in patients with a current diagnosis or history of asthma, COPD or other lung disease associated with bronchospasm, and patients with acute respiratory signs/symptoms (e.g.,
wheezing) or who are taking medications to treat airways disease, such as asthma or COPD.

iii) The healthcare facility will meet the requirements in b. through j. above.

iv) The representative understands the importance of reporting events of bronchospasm that require intubation or other advanced airway management, in addition to any fatalities that occur following ADASUVE treatment. To report suspected adverse events contact Alexza Pharmaceuticals® at 1-800-284-0062, or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch/report.htm.

m) Alexza will ensure that enrollment can successfully be completed online, by mail, or by faxing the completed forms, and that the ADASUVE REMS Education Program will be available as an in-service or online.

n) Alexza will ensure that as part of the enrollment process, the following materials, that are part of the ADASUVE REMS, are available to healthcare facilities. These materials are appended:

1. Healthcare Facility Enrollment Information and Form
2. Healthcare Provider Brochure
3. Steps for Safe Use of ADASUVE
4. Order Set / Protocol Template
5. ADASUVE Education Program
6. ADASUVE REMS website (www.adasuverems.com)

o) Alexza will ensure that all materials listed in or appended to the ADASUVE REMS will be available through the ADASUVE REMS Program website www.ADASUVEREMS.com or by calling the call center at 1-888-970-7367.

C. Implementation System

1. Alexza will ensure that wholesalers/distributors who distribute ADASUVE are enrolled in the ADASUVE REMS Program. The wholesaler/distributor enrollment process is comprised of the following steps that must be completed by the distributor’s authorized representative, prior to receiving ADASUVE for distribution:

a) Review the distributor ADASUVE REMS Program materials

b) Complete and sign the Wholesaler/Distributor Enrollment Form and send it to Alexza (by fax or mail). In signing the Wholesaler/Distributor Enrollment Form, each wholesaler/distributor is required to indicate they understand that ADASUVE is available only through the ADASUVE REMS Program and acknowledge that they must comply with the following ADASUVE REMS Program requirements:
i) The Wholesaler/Distributor will ensure that ADASUVE is only distributed to healthcare facilities in which enrollment in the ADASUVE REMS Program has been validated.

ii) The Wholesaler/Distributor will cooperate with periodic audits or non-compliance investigations to ensure that ADASUVE is distributed in accordance with the ADASUVE REMS Program requirements.

iii) Wholesalers/Distributors will be required to renew their enrollment in the ADASUVE REMS Program every three (3) years.

c) Alexza will ensure that all forms are complete prior to enrolling a distributor in the ADASUVE REMS Program.

d) Alexza will notify distributors when they are enrolled in the ADASUVE REMS Program and, therefore, able to distribute ADASUVE.

e) The following materials are part of the REMS and are appended:

1) Wholesaler/Distributor Enrollment Form

2. Alexza will maintain a validated and secured database that includes a list of all certified healthcare facilities, which will be available to wholesalers/distributors to ensure distribution of the product only to certified facilities. Alexza will monitor and review enrollment and product distribution data to assess compliance with the requirement that ADASUVE will only be distributed to certified facilities.

3. Alexza will notify certified healthcare facilities and wholesalers/distributors before their enrollment is due to expire of the need to re-enroll in the ADASUVE REMS Program.

4. If there are substantive changes to the ADASUVE REMS Program, Alexza will update all affected materials and notify healthcare facilities and wholesalers/distributors of the changes, as applicable.

5. Based on monitoring and evaluation of the ADASUVE REMS Elements to Assure Safe Use, Alexza will take reasonable steps to improve implementation of these elements and to maintain compliance with the ADASUVE REMS Program requirements, as applicable.

III. TIMETABLE FOR SUBMISSION OF ASSESSMENTS

Alexza will submit REMS Assessments to the FDA at 6 and 12 months from the date of the REMS approval, and annually thereafter. 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. Alexza will submit each assessment so that it will be received by the FDA on or before the due date.
HEALTHCARE FACILITY ENROLLMENT INFORMATION

ADASUVE™ is only available from wholesalers and distributors that are enrolled in the ADASUVE REMS Program. A healthcare facility (HCF) that wants to administer ADASUVE must enroll in the ADASUVE REMS Program to order and receive ADASUVE.

3 STEPS TO HEALTHCARE FACILITY ENROLLMENT

For each healthcare facility, an authorized healthcare facility representative is required to complete and sign the Healthcare Facility Enrollment Form acknowledging that the enrolled HCF meets specific requirements. This representative may be a pharmacist, or another healthcare professional with the appropriate level of responsibility within the healthcare facility, and who is authorized to act on behalf of the facility.

1. Review
The authorized healthcare facility representative must review the following:

- Healthcare Facility Enrollment Form to become familiar with the enrollment requirements for healthcare facilities.
- ADASUVE REMS Education Program to become familiar with the safe use conditions for ADASUVE

2. Complete and Sign
The healthcare facility representative completes the Healthcare Facility Enrollment Form on-line at www.adasuerems.com/enrollment, or prints the form and then completes and signs it.

By signing the form, the representative is attesting that the healthcare facility will meet all the ADASUVE REMS Program requirements prior to ordering ADASUVE.

Note: Healthcare facilities must re-enroll every 3 years. You will be notified by fax or email 60 days prior to your re-enrollment date.

3. Submit
If the form was completed on-line, follow the instructions to submit on-line.

OR
Submit completed, signed form via fax at: 1-888-970-2301

OR
Scan completed, signed form and submit via email at: ADASUVEenroll@alexza.com

ORDERING ADASUVE™

- Once the completed enrollment form is received by the ADASUVE REMS Program, it will be entered into the ADASUVE REMS Program database, which is a secured database and is accessed only by the wholesaler/distributor and Alexza Pharmaceuticals.
- When you place an order for ADASUVE through your wholesaler/distributor, they will check the database to confirm that your healthcare facility is enrolled. Once enrollment is confirmed, the wholesaler/distributor is allowed to ship ADASUVE to your facility.
ADASUVE™ REMS Program
HEALTHCARE FACILITY ENROLLMENT FORM

Enrollment must be complete to order and receive ADASUVE™ from your wholesaler/distributor.

☐ New Enrollment  ☐ Re-Enrollment (required every 3 years)

To be enrolled in the ADASUVE REMS Program, complete this form and:
Fax both pages to: 1-888-970-2301 or Scan and e-mail it to: ADASUVEdistribution@Alexza.com

HEALTHCARE FACILITY INFORMATION

Healthcare Facility Name: ____________________________
Facility DEA or NPI Number: ____________________________

Facility Type: ☐ Medical Hospital  ☐ Psychiatric Hospital  ☐ Other (describe): ____________________________
Facility Address: __________________________________________
City: ____________________________ State: ________ Zip: ________
Phone: ____________________________ Fax: ____________________________

AUTHORIZED HEALTHCARE FACILITY REPRESENTATIVE INFORMATION

First Name: ____________________________ Last Name: ____________________________
Position / Title: __________________________________________
Phone: ____________________________ Fax: ____________________________
Email: ____________________________ @ ____________________________
Preferred communication method: ☐ Email  ☐ Fax

HEALTHCARE FACILITY AGREEMENT

As an authorized representative for this facility, I acknowledge that:

i. I am authorized to complete enrollment on behalf of this healthcare facility.

ii. I have reviewed the ADASUVE REMS Education Program and understand that treatment with ADASUVE can cause bronchospasm that has the potential to lead to respiratory distress and respiratory arrest.

iii. I understand that ADASUVE is contraindicated in patients with a current diagnosis or history of asthma, chronic obstructive pulmonary disease (COPD) or other lung disease associated with bronchospasm, and patients with acute respiratory signs/symptoms (e.g. wheezing) or who are taking medications to treat airways disease, such as asthma or COPD.

iv. This healthcare facility has immediate access on-site to equipment and personnel trained to provide advanced airway management, including intubation and mechanical ventilation.

v. This healthcare facility is equipped to provide immediate access on-site to a metered-dose inhaler and nebulized form of a short-acting beta-agonist bronchodilator (e.g., albuterol).
vi. This healthcare facility must establish procedures, protocols and/or order sets that are subject to audit, to help ensure compliance with the safe use conditions required in the ADASUVE REMS including the following:

- Screening patients, prior to treatment with ADASUVE, for a current diagnosis or history of asthma, COPD and other lung disease associated with bronchospasm, acute respiratory signs or symptoms (e.g. wheezing), and current use of medications to treat airways disease such as asthma or COPD; and examine patients (including chest auscultation) for respiratory abnormalities.
- Monitoring patients at least every 15 minutes for a minimum of one hour following treatment with ADASUVE for signs or symptoms of bronchospasm (i.e., vital signs and chest auscultation).
- Limiting administration of ADASUVE to a single dose per patient within a 24-hour period.

vii. This healthcare facility must train relevant staff (e.g., staff involved in prescribing, dispensing or administering ADASUVE and monitoring patients after ADASUVE administration) on the safe use of ADASUVE, as described in the ADASUVE REMS Education Program. This training and ongoing training must be documented and is subject to audit.

viii. This healthcare facility must not dispense ADASUVE for outpatient use.

ix. I understand this healthcare facility must renew its enrollment in the ADASUVE REMS Program within 3 years from the date of initial enrollment, and every three years thereafter.

x. I understand this healthcare facility must obtain ADASUVE from wholesalers / distributors that are enrolled in the ADASUVE REMS Program only.

xi. I understand that this healthcare facility must not sell, loan or transfer any ADASUVE inventory to any other pharmacy, institution, distributor, or prescriber.

xii. The representative understands the importance of reporting events of bronchospasm that require intubation or other advanced airway management, in addition to any fatalities that occur following ADASUVE treatment. To report suspected adverse events contact Alexza Pharmaceuticals® at 1-800-284-0062, FDA at 1-800-FDA-1088 or www.fda.gov/medwatch/report.htm.

I confirm that the information above is correct. I understand that this information will be used to document healthcare facilities that are eligible to receive ADASUVE. I also understand that this information may be shared with government agencies.

Authorized Healthcare Facility Representative **Signature**

Date

Authorized Healthcare Facility Representative (Print)

Title
IMPORTANT DRUG WARNING

- Risk of bronchospasm with ADASUVE™ (loxapine) inhalation powder
- ADASUVE™ available only in enrolled healthcare facilities, under an FDA-required REMS Program

Dear Healthcare Professional:

This letter contains important safety information for ADASUVE™ (loxapine) Inhalation Powder.

ADASUVE is a drug-device combination product that delivers the antipsychotic, loxapine, by oral inhalation. ADASUVE has been approved by the US Food and Drug Administration (FDA) for the acute treatment of agitation associated with schizophrenia or bipolar I disorder in adults. FDA has determined that a Risk Evaluation and Mitigation Strategy (REMS) is necessary to ensure that the benefits of treatment outweigh the risk of bronchospasm in patients treated with ADASUVE.

ADASUVE is not available in an outpatient setting. If you are an outpatient provider, you are receiving this letter because ADASUVE may be, or may have been, administered to one of your patients in an enrolled healthcare facility. Enrolled healthcare facilities, such as an acute care or inpatient setting, must have immediate on-site access to equipment and personnel trained to manage acute bronchospasm, including advanced airway management, eg, intubation and mechanical ventilation. (See below for more facility enrollment requirements.)

It is important that anyone caring for patients treated with ADASUVE be aware of the risk of bronchospasm after administration.

This letter does not contain a complete list of all the risks associated with ADASUVE. Please see the enclosed full prescribing information for more information.
Risk of Bronchospasm With ADASUVE™

- ADASUVE can cause bronchospasm that has the potential to lead to respiratory distress and respiratory arrest

- Patients with asthma, chronic obstructive pulmonary disease (COPD), or other lung diseases associated with bronchospasm are at increased risk of bronchospasm

- ADASUVE is contraindicated in patients with the following:
  - Current diagnosis or history of asthma, COPD, or other lung disease associated with bronchospasm
  - Acute respiratory symptoms or signs (eg, wheezing)
  - Current use of medications to treat airways disease, such as asthma or COPD
  - History of bronchospasm following ADASUVE treatment

- ADASUVE administration is limited to a single dose per patient within a 24-hour period

Other Safety Information

- ADASUVE is also contraindicated in patients with hypersensitivity to loxapine or amoxapine (eg, serious skin reaction)

- Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death. ADASUVE is not approved for the treatment of patients with dementia-related psychosis
To Administer ADASUVE™, Healthcare Facilities Must Enroll in the ADASUVE REMS Program

ADASUVE can only be administered in healthcare facilities that are enrolled in the ADASUVE REMS Program. To enroll in the ADASUVE REMS Program, a healthcare facility must have the following:

- Immediate access on-site to equipment and personnel trained to provide advanced airway management, including intubation and mechanical ventilation
- Immediate access to a metered-dose inhaled and nebulized form of a short-acting beta-agonist bronchodilator (eg, albuterol)
- Established policies, procedures or order sets in place to comply with the necessary screening and monitoring requirements of the ADASUVE REMS Program

Staff who prescribe, dispense, or administer ADASUVE, or monitor patients after receiving ADASUVE, must be trained on the safe use of ADASUVE via the ADASUVE REMS Education Program. The Education Program is available as an in-service, conducted at enrolled healthcare facilities, or can be completed online.

If you would like more information please call 1-888-970-7367 or visit the website at [www.adasuverems.com](http://www.adasuverems.com).

Adverse Event Reporting

Healthcare professionals should report suspected adverse reactions associated with ADASUVE to Alexza Pharmaceuticals® at 1-800-284-0062. In addition, adverse event reports may also be reported to the FDA MedWatch Reporting System by the following methods:

- Online at [www.fda.gov/medwatch/report.htm](http://www.fda.gov/medwatch/report.htm) or
- Phone at 1-800-FDA-1088

Sincerely,

Enclosure: ADASUVE Full Prescribing Information

This letter does not contain a complete list of all the risks associated with ADASUVE. Please see the enclosed full prescribing information for more information.
ADASUVE™ (loxapine) Inhalation Powder

ADASUVE™
Risk Evaluation and Mitigation Strategy (REMS) Program
Healthcare Provider Brochure

This brochure includes information about:
- The risk of bronchospasm
- Recommendations for safe use of ADASUVE
- What to communicate to your patients
- Instructions for Healthcare Facility enrollment

Please share this Healthcare Provider Brochure with anyone in your healthcare setting who is involved in prescribing, dispensing, or administering ADASUVE or who monitors patients after treatment with ADASUVE.

Questions about ADASUVE?
Contact Alexza Medical Services Department at 1-800-284-0062.

Please see Full Prescribing Information, including Boxed Warning.
About This Brochure

The Food and Drug Administration (FDA) has required a Risk Evaluation and Mitigation Strategy (REMS) to ensure that the benefits of ADASUVE™ outweigh the risk of bronchospasm that has the potential to lead to respiratory distress and respiratory arrest. Patients with asthma, chronic obstructive pulmonary disease (COPD), or other pulmonary diseases are at increased risk of bronchospasm after taking ADASUVE. This brochure contains information for providers on the benefits, risks, and safe use of ADASUVE, as well as information on healthcare facility enrollment requirements of the ADASUVE REMS Program; ADASUVE can only be distributed to and administered in healthcare facilities that are enrolled in the ADASUVE REMS Program.

Indications and Usage

ADASUVE is a typical antipsychotic indicated for the acute treatment of agitation associated with schizophrenia or bipolar I disorder in adults.

“Psychomotor agitation” is defined in DSM-IV as “excessive motor activity associated with a feeling of inner tension.” Patients experiencing agitation often manifest behaviors that interfere with their care (eg, threatening behaviors, escalating or urgently distressing behavior, self-exhausting behavior), leading clinicians to the use of rapidly absorbed antipsychotic medications to achieve immediate control of the agitation.

The efficacy of ADASUVE was established in one study of acute agitation in patients with schizophrenia and one study of acute agitation in patients with bipolar I disorder.

Limitations of Use:

As part of the ADASUVE REMS Program to mitigate the risk of bronchospasm, ADASUVE must be administered only in an enrolled healthcare facility.

Important Safety Information

Contraindications

ADASUVE™ is contraindicated in patients with the following:

- Current diagnosis or history of asthma, COPD, or other lung disease associated with bronchospasm
- Acute respiratory symptoms or signs (eg, wheezing)
- Current use of medications to treat airways disease, such as asthma or COPD
- History of bronchospasm following ADASUVE treatment
- Known hypersensitivity to loxapine or amoxapine (eg, serious skin reaction)

Please see Full Prescribing Information, including Boxed Warning.
Boxed Warning for ADASUVE™

Bronchospasm

ADASUVE can cause bronchospasm that has the potential to lead to respiratory distress and respiratory arrest.

Administer ADASUVE only in an enrolled healthcare facility that has immediate access on-site to equipment and personnel trained to manage acute bronchospasm, including advanced airway management (intubation and mechanical ventilation).

Prior to administering ADASUVE, screen patients regarding a current diagnosis, history, or symptoms of asthma, COPD, and other lung diseases and examine (including chest auscultation) patients for respiratory signs. Monitor for signs and symptoms of bronchospasm following treatment with ADASUVE.

Restricted Use to Mitigate Bronchospasm

Because of the risk of bronchospasm, ADASUVE is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) called the ADASUVE REMS. Under the ADASUVE REMS Program, healthcare facilities and distributors must enroll in the program.

Increased Mortality in Elderly Patients With Dementia-related Psychosis

Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death. ADASUVE is not approved for the treatment of patients with dementia-related psychosis.

These risks do not constitute a complete list of all the risks associated with ADASUVE. Please see the enclosed full prescribing information for more information regarding the risks associated with ADASUVE.
Patient Counseling

Discuss the benefits and risks associated with ADASUVE™ therapy with patients and their caregivers.

Helping Patients and Caregivers Understand the Risks

- Explain that in certain patients, ADASUVE may cause narrowing of the airways (bronchospasm) and may cause them to wheeze, cough, feel chest tightness, or have shortness of breath
- Ask patients to tell you if they are currently taking any medications to treat asthma, COPD, or a breathing problem or have a history of asthma, COPD, or other respiratory conditions
- Inform patients that other serious side effects may occur, such as neuroleptic malignant syndrome, tardive dyskinesia, orthostatic hypotension, or seizures
- Inform patients about other common side effects that may include dysgeusia (taste) and sleepiness

Helping Patients and Caregivers Report the Signs and Symptoms of Bronchospasm

- Ask patients to tell you immediately if they experience difficulty breathing or feel chest tightness or wheezing after they have received a treatment
- Tell patients you have a medicine available to treat any breathing problems that might occur

About ADASUVE™

Administration of ADASUVE

- ADASUVE is only administered by oral inhalation
- ADASUVE must be administered only by a healthcare professional, in an enrolled healthcare facility
- Administer only a single dose per patient within a 24-hour period

Required Examination Prior to Dosing

Prior to administering ADASUVE, screen all patients for current use of medications to treat asthma or COPD, a history of asthma, COPD, or other lung disease, and examine patients (including chest auscultation) for respiratory abnormalities (eg, wheezing).

Becoming Familiar With ADASUVE

- ADASUVE is provided in a sealed pouch
- The indicator light is off when ADASUVE is removed from the pouch
- The indicator light turns on (green) when the tab is pulled out. The inhaler is then ready for use
- The indicator light turns off after the patient inhales. This indicates that the dose has been delivered
- If the indicator light does NOT turn off, the dose has NOT been delivered. See Instructions for Use

The pictures below show the important features of the ADASUVE product (both sides shown).

ADASUVE is provided with a Medication Guide. If practical, please review the Medication Guide with your patient or their caregiver before administering the product.
Important Administration Instructions

1. Open the pouch.
When ready to use, tear open the foil pouch and remove the inhaler from the package.
When the ADASUVE™ inhaler is removed from the pouch, the indicator light is off.

2. Pull tab.
Firmly pull the plastic tab from the rear of the inhaler. Check that the green light turns on. This indicates that the inhaler is ready for use. Use the inhaler within 15 minutes after removing the tab to prevent automatic deactivation of the inhaler. The green light will turn off, indicating that the inhaler is not usable. Discard the inhaler after one use.

3. Explain procedures to the patient.
Explain the administration procedures to the patient prior to use, and advise the patient that it is important to follow the instructions. Inform the patient that the inhaler may produce a flash of light and a clicking sound, and it may become warm during use. These are normal.

4. Instruct the patient to exhale.
Instruct the patient to hold the inhaler away from the mouth and breathe out fully to empty the lungs.

5. Instruct the patient to inhale.
Instruct the patient to put the mouthpiece of the inhaler between the lips, close the lips, and inhale through the mouthpiece with a steady deep breath. Check that the green light turns off indicating that the dose has been delivered.

6. Instruct the patient to hold breath.
Instruct the patient to remove the mouthpiece from the mouth and hold the breath for as long as possible, up to 10 seconds.

IMPORTANT
If the green light remains on after the patient inhales, the dose of ADASUVE has NOT been delivered. Instruct the patient to repeat Step 4, Step 5, and Step 6 up to 2 additional times. If the green light still does not turn off, discard the inhaler and use a new one.

Monitoring to Assess Safety
Monitor the patient for signs and symptoms of bronchospasm after ADASUVE administration. Perform a physical examination, including chest auscultation, at least every 15 minutes for at least one hour after ADASUVE administration.

Prescribing and Administering ADASUVE™ at Your Healthcare Facility

- ADASUVE will be dispensed only to patients in certain healthcare facilities that are enrolled in the ADASUVE REMS Program
- Wholesalers/distributors will ship ADASUVE only to enrolled healthcare facilities

Healthcare Facility Qualifications for Enrollment
The healthcare facility requirements include having the following:
- Immediate access on-site to equipment and personnel trained to provide advanced airway management, including intubation and mechanical ventilation
- Immediate access on-site to a metered-dose inhaled and nebulized form of a short-acting beta-agonist bronchodilator (e.g., albuterol)
- Procedures, protocols, and/or order sets to ensure the following:
  - Patients are screened, prior to treatment with ADASUVE, for a history of pulmonary disease and for acute respiratory signs and symptoms by physical exam, including taking vital signs and chest auscultation, and inquiring if patient is taking medication to treat asthma or COPD
  - Patients are monitored at least every 15 minutes for a minimum of 1 hour following treatment with ADASUVE for signs and symptoms of bronchospasm, including taking vital signs and chest auscultation
  - Administration of ADASUVE is limited to 1 dose per patient within 24 hours
- Healthcare providers within the facility (prescribers, nurses, monitoring staff, or pharmacists) who are trained on safe use of ADASUVE using the ADASUVE Education Program

Please see Full Prescribing Information, including Boxed Warning.
Prescribing and Administering ADASUVE™ at Your Healthcare Facility (cont’d)

Authorized Healthcare Facility Representative
For each healthcare facility, an authorized healthcare facility representative is required to review the ADASUVE Education Program, and complete and sign the Healthcare Facility Enrollment Form acknowledging that the enrolled healthcare facility meets specific requirements. This representative may be a pharmacist or another healthcare professional with the appropriate level of responsibility within the healthcare facility, who is authorized to act on behalf of the facility.

To enroll your healthcare facility, please read and complete the Healthcare Facility Enrollment Form that is available at www.adasuverems.com.

For questions about the ADASUVE REMS Program, please call 1-888-970-7387.

ADASUVE™ REMS Materials for Enrolled Healthcare Facilities

The following materials are part of the ADASUVE REMS program and will assist enrolled healthcare facilities in complying with ADASUVE REMS requirements. They are available to review, order, or print at www.adasuverems.com or by calling 1-888-970-7387.

1. ADASUVE Education Program
   Must be reviewed by all healthcare providers within an enrolled healthcare facility who will be prescribing or administering ADASUVE or observing patients after ADASUVE is administered.

2. Steps for Safe Use of ADASUVE Poster
   Should be posted where ADASUVE is administered within enrolled healthcare facilities.

3. Order Set/Protocol Template
   For use by enrolled healthcare facilities to assist with designing procedures, protocols, and/or order sets that meet the requirements of the ADASUVE REMS program.

4. ADASUVE Healthcare Provider Brochure
   Contains information for providers on the benefits, risks, and safe use of ADASUVE, as well as information on healthcare facility enrollment requirements of the ADASUVE REMS Program.

Other resources are available at www.adasuverems.com
- Dear Healthcare Professional Letter
- Healthcare Facility Enrollment Information and Form
- Full Prescribing Information
- ADASUVE Instructions for Use
- ADASUVE Medication Guide
Reporting Adverse Events

Healthcare professionals should report suspected adverse reactions associated with ADASUVE\textsuperscript{TM} treatment to Alexza Pharmaceuticals\textsuperscript{®} at 1-800-284-0062. In addition, adverse events may be reported to the FDA MedWatch Reporting System by the following methods:

- Online at [www.fda.gov/medwatch/report.htm](http://www.fda.gov/medwatch/report.htm)
- Phone at 1-800-FDA-1088
- Fax at 1-800-FDA-0718, using the MedWatch Form 3500 (available at [www.fda.gov/medwatch/getforms.htm](http://www.fda.gov/medwatch/getforms.htm))

The Full Prescribing Information and Medication Guide are also available from your local Alexza Pharmaceuticals\textsuperscript{®} sales representative or by calling 1-800-284-0062.

Please share this Healthcare Provider Brochure with anyone in your healthcare setting who is involved in prescribing, dispensing, or administering ADASUVE or who monitors patients after treatment with ADASUVE.

Please see Full Prescribing Information, including Boxed Warning.
**Steps for Safe Use of ADASUVE™**

ADASUVE is indicated for the acute treatment of agitation associated with schizophrenia or bipolar 1 disorder in adults.

ADASUVE can cause bronchospasm that has the potential to lead to respiratory distress and respiratory arrest. Patients with asthma, chronic obstructive pulmonary disease (COPD), or other lung disease associated with bronchospasm are at increased risk of bronchospasm.

---

<table>
<thead>
<tr>
<th>SCREEN</th>
<th>Steps for Safe Use of ADASUVE™</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Ask if patient is taking medication to treat asthma or COPD and/or check medical records</td>
<td></td>
</tr>
<tr>
<td>□ Ask if patient has a current diagnosis or history of asthma, COPD, or other lung disease, and/or check medical records</td>
<td></td>
</tr>
<tr>
<td>□ Examine patients (including chest auscultation) for respiratory abnormalities (eg, wheezing)</td>
<td></td>
</tr>
<tr>
<td>□ Do not use in patients with acute respiratory signs or symptoms; with a current diagnosis or history of asthma, COPD, or other lung disease associated with bronchospasm; or with current use of medications to treat airways disease, such as asthma or COPD</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COUNSEL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Counsel patient/caregiver on potential for bronchospasm that may occur after dosing and the need for them to report symptoms immediately</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MONITOR</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Monitor patient every 15 minutes for at least 1 hour after treatment for signs and symptoms of bronchospasm including chest auscultation</td>
<td></td>
</tr>
<tr>
<td>□ Ask patient every 15 minutes about any difficulty breathing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MANAGE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Treat bronchospasm with an inhaled short-acting beta-agonist bronchodilator (eg, albuterol)</td>
<td></td>
</tr>
<tr>
<td>□ If medically necessary, provide additional therapy for bronchospasm per asthma guidelines, including intubation and mechanical ventilation as needed</td>
<td></td>
</tr>
</tbody>
</table>

www.adasuverems.com

Please see Full Prescribing Information, including Boxed Warning.
This template is to be used as a guideline for developing procedures, protocols and/or order sets around the use of ADASUVE to ensure that REMS requirements are being met.

**ORDER SET / PROTOCOL TEMPLATE**

**INDICATION:**
- Agitation associated with bipolar I disorder
- Agitation associated with schizophrenia

**PATIENT SCREENING:**

**Prior to dosing:**
- Assess for acute respiratory symptoms
  - wheezing
  - cough
  - dyspnea
  - other: ________________
- Assess for respiratory signs (include chest auscultation)
  - wheezing
  - other: ________________

**Inquire and/or check medical records for:**
- Current diagnosis or history of asthma, COPD or other lung diseases associated with bronchospasm
- Current use of medications to treat airway disease, such as asthma or COPD
- History of bronchospasm following ADASUVE treatment
- Known hypersensitivity (e.g., serious skin reaction) to loxapine or amoxapine

*If any of the above screening is positive, DO NOT USE ADASUVE™. ADASUVE is contraindicated in these patients.*

**DOSE ADMINISTERED:**

**Time:** ________________

**POST-TREATMENT OBSERVATION / MONITORING:**

**Patient must be monitored every 15 minutes for at least 1 hour after treatment for signs/symptoms of bronchospasm.**

**MONITORING:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Heart rate (rate per minute)</th>
<th>____________</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Respiratory rate (rate per minute)</td>
<td>____________</td>
</tr>
<tr>
<td></td>
<td>Chest auscultation (clear/other)</td>
<td>____________</td>
</tr>
</tbody>
</table>

- Check for respiratory signs/symptoms
  - wheezing
  - cough
  - dyspnea
  - chest tightness
  - other: ________________

**Time:**

<table>
<thead>
<tr>
<th>Heart rate (rate per minute)</th>
<th>____________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory rate (rate per minute)</td>
<td>____________</td>
</tr>
<tr>
<td>Chest auscultation (clear/other)</td>
<td>____________</td>
</tr>
</tbody>
</table>

- Check for respiratory signs/symptoms
  - wheezing
  - cough
  - dyspnea
  - chest tightness
  - other: ________________

**Time:**

<table>
<thead>
<tr>
<th>Heart rate (rate per minute)</th>
<th>____________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory rate (rate per minute)</td>
<td>____________</td>
</tr>
<tr>
<td>Chest auscultation (clear/other)</td>
<td>____________</td>
</tr>
</tbody>
</table>

- Check for respiratory signs/symptoms
  - wheezing
  - cough
  - dyspnea
  - chest tightness
  - other: ________________

**Note:** Treat bronchospasm with inhaled short-acting beta agonist bronchodilator (e.g., albuterol) and other measures as clinically indicated.

Limit ADASUVE use to a single dose per patient within a 24-hour period.

Reference ID: 3235446
ADASUVE™ Risk Evaluation and Mitigation Strategy (REMS) Education Program Content

At the end of this education program, you should understand:

• ADASUVE REMS Program Requirements

• ADASUVE Product Information
  – Indication
  – Dose

• Important safety information
  – Risk of bronchospasm with ADASUVE
  – Use of albuterol rescue treatment to treat bronchospasm in asthma and COPD patients
  – Decreased Forced Expiratory Volume in 1 second (FEV₁) in asthma and COPD patients
  – Safety of ADASUVE in agitation trials
  – Administer only a single dose of ADASUVE per patient within any 24-hour period

For complete safety profile, see the Full Prescribing Information including Boxed Warning.
-continued-

• How to use ADASUVE safely
  – Appropriate patient selection
  – Dosage and administration
  – Observation and management of patient

• How to enroll in the ADASUVE REMS Program
ADASUVE™ REMS Program

• The purpose of the ADASUVE REMS Program is to mitigate the risk of bronchospasm that has the potential to lead to respiratory distress and respiratory arrest.

• To mitigate the risk, the ADASUVE REMS requires that ADASUVE is only administered in enrolled healthcare facilities:
  – With immediate, on-site resources to manage bronchospasm and/or respiratory distress

• The REMS will inform healthcare professionals about:
  – The risk of bronchospasm after ADASUVE administration
  – Appropriate patient selection
  – Monitoring patients after ADASUVE administration
  – Management of ADASUVE induced bronchospasm
Risk of Bronchospasm

• ADASUVE™ can cause bronchospasm that has the potential to lead to respiratory distress and respiratory arrest.

• Administer ADASUVE only in an enrolled healthcare facility that has:
  – Immediate access on-site to equipment and personnel trained to manage acute bronchospasm, including advanced airway management (intubation and mechanical ventilation)

• Prior to administering ADASUVE, ask patients regarding:
  – A history or symptoms of asthma, COPD and other lung diseases
  – Examine (including chest auscultation) patients for respiratory abnormalities (eg, wheezing)
  – Following treatment with ADASUVE, monitor for signs and symptoms of bronchospasm
Contraindications

- ADASUVE™ is contraindicated in patients with the following:
  - Current diagnosis or history of asthma, COPD, or other lung disease associated with bronchospasm
  - Acute respiratory signs or symptoms (eg, wheezing)
  - Current use of medications to treat airways disease, such as asthma or COPD
  - History of bronchospasm following ADASUVE treatment
  - Hypersensitivity to loxapine or amoxapine (eg, serious skin reaction)
ADASUVE™: Product Information

ADASUVE is a typical antipsychotic indicated for the acute treatment of agitation associated with schizophrenia or bipolar I disorder in adults.

- The efficacy of ADASUVE was established in one study of acute agitation in patients with schizophrenia and one study of acute agitation in patients with bipolar I disorder

Dosing and Administration

- ADASUVE is a single-use disposable product that delivers an aerosol of loxapine in a single inhalation
  - ADASUVE is administered only by oral inhalation
  - ADASUVE must be administered only by a healthcare professional, in an enrolled healthcare facility
  - Recommended dose of ADASUVE is 10 mg
  - Only a single dose per patient should be administered in any 24-hour period
Pulmonary Safety Studies in Patients with Asthma and COPD

Albuterol Rescue Treatment after Administration of ADASUVE™

• Dedicated pulmonary safety studies were performed in subjects with mild-to-moderate persistent asthma or mainly moderate-to-severe COPD

• After receiving ADASUVE (Dose 1 and Dose 2):
  – 54% of patients with asthma required treatment with albuterol to treat pulmonary adverse events
  – 23% of patients with COPD required treatment with albuterol

Do not use in patients with acute respiratory signs and symptoms; with a current diagnosis or history of asthma, COPD and other lung disease associated with bronchospasm; or with current use of medications to treat airways disease, such as asthma or COPD.
# Pulmonary Safety Studies in Patients with Asthma and COPD – Use of Rescue Albuterol

<table>
<thead>
<tr>
<th></th>
<th>Placebo (N = 26)</th>
<th>ADASUVE™ (N = 26)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asthma</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of subjects receiving albuterol rescue at any time</td>
<td>3/26 (12%)</td>
<td>14/26 (54%)</td>
</tr>
<tr>
<td>Number receiving rescue after Dose 1</td>
<td>1/26 (4%)</td>
<td>7/26 (27%)</td>
</tr>
<tr>
<td>Number receiving rescue after Dose 2</td>
<td>2/25 (8%)</td>
<td>7/17 (41%)</td>
</tr>
<tr>
<td><strong>COPD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of subjects receiving albuterol rescue at any time</td>
<td>4/27 (15%)</td>
<td>6/26 (23%)</td>
</tr>
<tr>
<td>Number receiving rescue after Dose 1</td>
<td>1/27 (4%)</td>
<td>2/26 (8%)</td>
</tr>
<tr>
<td>Number receiving rescue after Dose 2</td>
<td>3/26 (12%)</td>
<td>4/19 (21%)</td>
</tr>
</tbody>
</table>
Pulmonary Safety Studies in Patients with Asthma and COPD

Decreased Forced Expiratory Volume in One Second (FEV₁) after ADASUVE™ Administration

• Dedicated pulmonary safety studies were performed in subjects with mild-to-moderate persistent asthma or mainly moderate-to-severe COPD

• There were significantly more asthma and COPD patients who experienced a decrease in FEV₁ of >10%, >15%, and >20% in the ADASUVE treated patients compared to the placebo treated patients

Do not use in patients with acute respiratory signs and symptoms; with a current diagnosis or history of asthma, COPD and other lung disease associated with bronchospasm; or with current use of medications to treat airways disease, such as asthma or COPD.
# Maximum Decrease in FEV\textsubscript{1} from Baseline in Healthy Volunteer, Asthma and COPD Trials

<table>
<thead>
<tr>
<th>Maximum % FEV\textsubscript{1} ↓</th>
<th>Healthy Volunteer</th>
<th>Asthma</th>
<th>COPD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Placebo N (%)</td>
<td>ADASUVE N (%)</td>
<td>Placebo N (%)</td>
</tr>
<tr>
<td>After any Dose</td>
<td>N=26</td>
<td>N=26</td>
<td>N=26</td>
</tr>
<tr>
<td>≥10</td>
<td>7 (27%)</td>
<td>7 (27%)</td>
<td>3 (12%)</td>
</tr>
<tr>
<td>≥15</td>
<td>1 (4%)</td>
<td>5 (19%)</td>
<td>1 (4%)</td>
</tr>
<tr>
<td>≥20</td>
<td>0</td>
<td>1 (4%)</td>
<td>1 (4%)</td>
</tr>
<tr>
<td>After Dose 1</td>
<td>N=26</td>
<td>N=26</td>
<td>N=26</td>
</tr>
<tr>
<td>≥10</td>
<td>4 (15%)</td>
<td>5 (19%)</td>
<td>2 (8%)</td>
</tr>
<tr>
<td>≥15</td>
<td>1 (4%)</td>
<td>2 (8%)</td>
<td>1 (4%)</td>
</tr>
<tr>
<td>≥20</td>
<td>0</td>
<td>0</td>
<td>1 (4%)</td>
</tr>
<tr>
<td>After Dose 2</td>
<td>N=26</td>
<td>N=25</td>
<td>N=25</td>
</tr>
<tr>
<td>≥10</td>
<td>5 (19%)</td>
<td>6 (24%)</td>
<td>3 (12%)</td>
</tr>
<tr>
<td>≥15</td>
<td>0</td>
<td>5 (20%)</td>
<td>1 (4%)</td>
</tr>
<tr>
<td>≥20</td>
<td>0</td>
<td>1 (4%)</td>
<td>1 (4%)</td>
</tr>
</tbody>
</table>

FEV\textsubscript{1} categories are cumulative, i.e. a subject with a maximum decrease of 21% is included in all 3 categories. Patients with a >20% decrease in FEV\textsubscript{1} did not receive a second dose of study drug.

Dose 1 = time 0, Dose 2 = 10 hours after time 0
Increased Pulmonary Adverse Events after Dose 2 of ADASUVE™

• A higher percentage of patients required albuterol treatment after Dose 2 compared to Dose 1 (Slide 9)

• A higher percentage of patients treated with ADASUVE had a decrease in FEV₁ after Dose 2 compared to Dose 1 (Slide 11)

• FEV₁s did not return to baseline up to 24 hours after administration of the second dose of ADASUVE (Slide 13)

ADASUVE may only be administered to a patient once in 24 hours.

Healthcare facilities must have policies in place to limit administration of ADASUVE to a single dose per patient in a 24-hour period.
Mean Change from Baseline in FEV₁ in Patients with Asthma

Subjects in the ADASUVE group who had a >20% decrease in FEV₁ or developed respiratory symptoms after the first dose did not receive a second dose of ADASUVE in the pulmonary safety studies. Therefore 9 of 26 (35%) subjects in the asthma study did not receive a second dose.
In subjects who developed bronchospasm after a first dose of ADASUVE™:  

• Timing:  
  – Symptoms occurred with a median time of 4 minutes in asthma subjects and 10 minutes in COPD subjects  
  – In 11/12 subjects with asthma or COPD, symptoms began within 25 minutes  

• Outcome:  
  – When treatment was required, bronchospasm resolved with use of an inhaled bronchodilator (via metered-dose inhaler or nebulizer), without sequelae
Profile of Bronchospasm Occurring after a First Dose\textsuperscript{a} of ADASUVE\textsuperscript{TM} in Subjects with Asthma or COPD

-continued-

In subjects who developed bronchospasm after a first dose of ADASUVE:

- Albuterol was used by:
  - 7/26 (26.9\%) asthma subjects after ADASUVE 10 mg, compared with 1/26 (3.8\%) after placebo
  - 2/26 (7.7\%) COPD subjects after ADASUVE 10 mg, compared with 1/27 (3.7\%) after placebo

- After albuterol treatment, FEV\textsubscript{1}\textsuperscript{b} was documented to return to within 10\% of baseline in \leq 1 hour
  - Asthma subjects: in 7/8 (87.5\%) instances
  - COPD subjects: in 2/3 (66.7\%) instances
  - At later, scheduled spirometry time points in the remaining 2 instances

\textsuperscript{a} And before Dose 2 in those who received it at the 10-hour time point
\textsuperscript{b} Forced expiratory volume in 1 second, as measured by spirometry
### Bronchospasm in Agitation Trials

- Bronchospasm (including reports of wheezing, shortness of breath, or cough) was reported in premarketing Phase 2 and 3 trials in patients with agitation associated with Schizophrenia or Bipolar I Disorder

<table>
<thead>
<tr>
<th></th>
<th>ADASUVE™ 10 mg</th>
<th>Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.8% (2/259)</td>
<td>0% (0/263)</td>
</tr>
</tbody>
</table>

- One episode of bronchospasm was treated with albuterol via metered-dose inhaler and oxygen via nasal cannula, and responded promptly
  - The other event resolved without intervention
ADASUVE™ Adverse Reactions\textsuperscript{a} in Premarketing Agitation Trials

Adverse Reactions in Short Term, Placebo-Controlled Phase 2 and 3 Trials

<table>
<thead>
<tr>
<th>Adverse Reaction</th>
<th>Placebo (n = 263)</th>
<th>10 mg ADASUVE (n = 259)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dysgeusia</td>
<td>5%</td>
<td>14%</td>
</tr>
<tr>
<td>Sedation</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Throat Irritation</td>
<td>0%</td>
<td>3%</td>
</tr>
</tbody>
</table>

\textsuperscript{a} Adverse reactions (incidence > 2% and greater than placebo) for ADASUVE 10 mg
Steps to Reduce Risk of Bronchospasm

This poster is available to enrolled healthcare facilities to reinforce how to use ADASUVE™ safely.

Healthcare facilities are encouraged to post this where ADASUVE will be administered.

Additional copies can be ordered at www.adasuverems.com or by calling 1-888-970-7367.
Steps for Safe Use of ADASUVE™

- Ask if patient is taking medication to treat asthma or COPD and/or check medical records.
- Ask if patient has a current diagnosis or history of asthma, COPD or other lung disease and/or check medical records.
- Examine patients (including chest auscultation) for respiratory abnormalities (eg, wheezing).
- **Do not use in patients with acute respiratory signs or symptoms, with a current diagnosis or history of asthma, COPD or other lung disease associated with bronchospasm; or with current use of medications to treat airways disease, such as asthma or COPD.**

- Counsel patient/caregiver on potential for bronchospasm that may occur after dosing and the need to report symptoms immediately.

- Monitor patients every 15 minutes for at least 1 hour after treatment for signs or symptoms of bronchospasm, including chest auscultation.
- Ask patient every 15 minutes about any difficulty breathing.

- Treat bronchospasm with an inhaled short-acting beta-agonist bronchodilator (eg, albuterol).
- If medically necessary, provide additional therapy for bronchospasm per asthma guidelines, including intubation and mechanical ventilation as needed.
Healthcare professionals should understand the importance of reporting events of bronchospasm that require intubation or other advanced airway management, in addition to any fatalities that occur following ADASUVE treatment.

Suspected adverse events may be reported by the following methods:

- Alexza Pharmaceuticals® at 1-800-284-0062
- FDA at 1-800-FDA-1088
- FDA at www.fda.gov/medwatch/report.htm
Patient Counseling

Discuss the benefits and risks associated with ADASUVE™ treatment with patients and their caregivers.

Helping Patients and Caregivers Understand Risks

- Explain that certain patients may have bronchospasm after using ADASUVE
- Ask patients to tell you if they are currently taking medications to treat asthma, COPD, other breathing problems
- Inform patients of other common side effects that may occur with ADASUVE (taste and sleepiness)
- Inform patients of other serious side effects that can occur with antipsychotics, in general

Helping Patients Report Signs / Symptoms of Bronchospasm

- Ask patients to tell you immediately if they experience:
  - Difficulty breathing
  - Chest tightness
  - Wheezing
- Tell patients you have a medicine available to treat breathing problems that might occur
Administration of ADASUVE™

• ADASUVE is only administered by oral inhalation

• ADASUVE must be administered only by a healthcare professional, in an enrolled healthcare facility

Required Examination Prior to Dosing:
• Prior to administering ADASUVE, screen all patients for:
  – Current use of medications to treat asthma or COPD
  – History of asthma, COPD or other pulmonary disease
  – Examine patients (including chest auscultation) for respiratory abnormalities (eg, wheezing)
Becoming Familiar with ADASUVE™

- ADASUVE is provided in a sealed pouch
- The indicator light is off when ADASUVE is removed from the pouch
- The indicator light turns on (green) when the tab is pulled out. The product is then ready for use
- The indicator light turns off after the patient inhales. This indicates the dose has been delivered
- If the indicator light does NOT turn off, the dose has NOT been delivered

The pictures below show the important features of the ADASUVE product

(both sides shown)
Before administering ADASUVE:

1. **Open the pouch.** When ready to use, tear open the foil pouch and remove the inhaler from the package.

   When the ADASUVE inhaler is removed from the pouch, the indicator light is off.

2. **Pull tab.** Firmly pull the plastic tab from the rear of the inhaler. Check that the green light turns on. This indicates that the inhaler is ready for use.

   Use the inhaler within 15 minutes after removing tab to prevent automatic deactivation of the product.

   The green light will turn off, indicating that the inhaler is not usable. Discard the inhaler after one use.
3. **Explain procedures to the patient.** Explain the administration procedures to the patient prior to use, and advise the patient that it is important to follow the instructions.

Inform the patient that the inhaler may produce a flash of light and a clicking sound, and it may become warm during use. These are normal.

4. **Instruct the patient to exhale.** Instruct the patient to hold the inhaler away from the mouth and breathe out fully to empty the lungs.
5. **Instruct the patient to inhale.** Instruct the patient to put the mouthpiece of the inhaler between the lips, close the lips, and inhale through the mouthpiece with a steady deep breath.

Check that the green light turns off indicating that the dose has been delivered.

6. **Instruct the patient to hold breath.** Instruct the patient to remove the mouthpiece from the mouth and hold the breath for as long as possible, up to 10 seconds.

**Important:** If the green light remains on after the patient inhales, the dose of ADASUVE has NOT been delivered. Instruct the patient to repeat Step 4, Step 5, and Step 6 up to 2 additional times. If the green light still does not turn off, discard the inhaler and use a new one.
• Monitor the patient for signs or symptoms of bronchospasm after ADASUVE administration.

• Perform a physical examination, including chest auscultation, at least every 15 minutes for at least one hour after ADASUVE administration.
How to Enroll in the ADASUVE™ REMS Program

- ADASUVE will be dispensed only to patients in certain healthcare facilities that are enrolled in the ADASUVE REMS Program
- Wholesalers / Distributors will ship ADASUVE only to enrolled healthcare facilities
- Healthcare facility qualifications for enrolling include having:
  - Immediate access on-site to equipment and personnel trained to provide advanced airway management, including intubation and mechanical ventilation
  - Immediate access on-site to a metered-dose inhaled and nebulized form of a short-acting beta-agonist bronchodilator (e.g., albuterol)
  - Healthcare providers within the facility (prescribers, nurses, monitoring staff, or pharmacists) who are trained on safe use of ADASUVE using the ADASUVE Education Program
  - Procedures, protocol and / or order sets guiding safe use of ADASUVE
Procedures, Protocols, Order Sets for Safe Use of ADASUVE™

Procedures, protocols and / or order sets to ensure the following:

• Patients are screened, prior to treatment with ADASUVE:
  – for a history of pulmonary disease
  – for acute respiratory signs and symptoms by physical exam, including taking vital signs and chest auscultation
  – inquiring if patient is taking medication to treat asthma or COPD

• Patients are monitored at least every 15 minutes for a minimum of 1 hour following treatment with ADASUVE for signs and symptoms of bronchospasm
  – Taking vital signs
  – Chest auscultation

• Administration of ADASUVE is limited to one dose per patient within 24 hours

Order Set / Protocol templates are available to review, order, or print at www.adasuverems.com or by calling 1-888-970-7367
Designate an Authorized Healthcare Facility Representative

For each facility, an authorized healthcare facility representative is required to:

• Review the ADASUVE™ Education Program
• Complete and sign the Healthcare Facility Enrollment Information and Form
  – Acknowledging that the enrolled healthcare facility meets specific requirements
• Healthcare Facility Representative:
  – May be a Pharmacist or another healthcare professional with appropriate level of responsibility within the facility
  – Authorized to act on behalf of the facility
Authorized Healthcare Facility Representative Actions

- Review the *Healthcare Facility Enrollment Information and Form* to become familiar with the enrollment requirements
- Review the *ADASUVE REMS Education Program* to become familiar with safe use conditions for ADASUVE
- Complete and sign the *Healthcare Facility Enrollment Form*
- Submit the completed form on-line, via fax, via email

The *Healthcare Facility Enrollment Information and Form* are available at [www.adasuverems.com](http://www.adasuverems.com) or by calling 1-888-970-7367
ADASUVE™ REMS Materials for Enrolled Healthcare Facilities

The following materials are part of the ADASUVE REMS Program and will assist enrolled healthcare facilities in complying with ADASUVE REMS requirements. They are available to review, order or print at www.adasuverems.com or by calling 1-888-970-7367.

1. **ADASUVE REMS Education Program**
   - Must be reviewed by all healthcare providers within an enrolled healthcare facility who will be prescribing or administering ADASUVE, or observing patients after ADASUVE is administered.

2. **Steps for Safe Use of ADASUVE poster**
   - Should be posted where ADASUVE is administered within enrolled healthcare facilities.

3. **Order Set / Protocol Template**
   - For use by enrolled healthcare facilities to assist with designing procedures, protocols and / or order sets that meet the requirements of the ADASUVE REMS Program.

4. **ADASUVE Healthcare Provider Brochure**
   - Contains information for providers on the benefits, risks, and safe use of ADASUVE.
   - Information on healthcare facility enrollment requirements of the ADASUVE REMS Program.
Other Resources Available at
www.adasuverems.com

• Dear Healthcare Professional Letter
• Healthcare Facility Enrollment Information and Form
• Full Prescribing Information
• ADASUVE™ Instructions for Use
• ADASUVE™ Medication Guide
At the end of this education program, you should understand:

• ADASUVE REMS Program Information
  – The ADASUVE REMS Program is necessary to mitigate the risk of bronchospasm that has the potential to cause respiratory distress and respiratory arrest

• Important safety information
  – ADASUVE can cause bronchospasm
  – Patients with active airways disease (asthma, COPD) are at increased risk of bronchospasm after dosing with ADASUVE
  – It is important to report events of bronchospasm that require intubation or other advanced airway management, in addition to any fatalities, that occur following ADASUVE treatment
  – Administer only a single dose of ADASUVE per patient within any 24-hour period
ADASUVE™ Education Program Summary

- continued -

• How to use ADASUVE safely
  – SCREEN patients to identify and select appropriate ADASUVE patients
  – OBSERVE and MONITOR patients every 15 minutes for at least 1 hour after ADASUVE treatment
  – MANAGE bronchospasm with an inhaled short-acting beta-agonist bronchodilator or if necessary, with advanced airway equipment

• How to enroll in the ADASUVE REMS Program
  – A healthcare facility must meet specific requirements including immediate access on-site to equipment and personnel trained to provide advanced airway management, including intubation and mechanical ventilation
  – For each facility, an authorized healthcare facility representative is required to complete and sign the Healthcare Facility Enrollment Information and Form acknowledging that the enrolled healthcare facility meets specific requirements
  – Find more information at www.adasuverems.com
ADASUVE™ REMS Program

ADASUVE™ is a dry-powder nebulizer product that delivers an aerosol of the anticholinergic agent ipratropium in a single oral inhalation. ADASUVE™ has been approved by the U.S. Food and Drug Administration (FDA) for the acute treatment of agitation associated with schizophrenia and bipolar disorder in adults.

The FDA has determined that a Risk Evaluation and Mitigation Strategy (REMS) is necessary for ADASUVE to ensure that the benefits of treatment outweigh the risks of bronchospasm.

This purpose of the ADASUVE REMS Program is to mitigate the risk of bronchospasm that has the potential to lead to respiratory distress and respiratory arrest. In order to mitigate the risk, the ADASUVE REMS Program requires that ADASUVE™ is only administered in enrolled healthcare facilities with immediate, on-site resources to manage bronchospasm in acute respiratory distress.

In addition, the REMS Program will inform healthcare professionals about:

- The risk of bronchospasm after ADASUVE™ administration
- Appropriate patient selection
- Monitoring patients after ADASUVE™ administration
- Management of bronchospasm if it occurs

Important Safety Information About ADASUVE™

Risk of Bronchospasm

ADASUVE™ can cause bronchospasm that has the potential to lead to respiratory distress and respiratory arrest. ADASUVE™ can cause bronchospasm in patients with a history of chronic obstructive pulmonary disease (COPD) or other lung disease associated with bronchospasm because they are at increased risk of bronchospasm.

ADASUVE™ is contraindicated in patients with a current diagnosis or history of asthma, chronic obstructive pulmonary disease (COPD), or other lung disease associated with bronchospasm because they are at increased risk of bronchospasm. ADASUVE™ is also contraindicated in patients with acute respiratory signs/symptoms (eg, wheezing) or who are currently taking medications to treat asthma, such as salbutamol or COPD.

ADASUVE™ is contraindicated in patients with a history of bronchospasm following ADASUVE™ treatment.

Prior to administering ADASUVE™, screen patients regarding a current diagnosis or history of asthma, COPD, and other lung diseases, and examine (including chest auscultation) patients for respiratory signs. Monitor for signs and symptoms of bronchospasm following treatment with ADASUVE™.

The Use of ADASUVE™ Should Be Accompanied by a 6-step Process of Screening, Counseling, Monitoring, and Management

**Steps for Safe Use of ADASUVE™**

1. **Screen**
   - Ask if patient is taking medication that may exacerbate asthma or COPD, and other chronic medical conditions.
   - Ask if patient has a current diagnosis of or history of asthma, COPD, or other lung disease and assess their current status.
   - Screen patients using chest auscultation for respiratory signs/symptoms (eg, wheezing).

2. **Counsel**
   - Do not use ADASUVE™ in patients with acute respiratory signs/symptoms, with a current diagnosis or history of asthma, COPD, or other lung disease associated with bronchospasm, or in patients with severe exacerbations of chronic obstructive pulmonary disease (COPD). If symptoms worsen, seek immediate medical attention.
   - Counsel patient on the potential for bronchospasm that may occur after using ADASUVE™ and the need to report symptoms immediately.

3. **Monitor**
   - Monitor patient every 15 minutes for at least 1 hour after treatment for signs and symptoms of bronchospasm including wheezing.
   - Ask patient every 15 minutes about any difficulty breathing.

4. **Manage**
   - Treat bronchospasm with an inhaled short-acting beta-2 agonist (eg, salbutamol).
   - If medically necessary, provide additional therapy for bronchospasm per asthma guidelines, including intubation and mechanical ventilation as needed.

These risks do not constitute a complete list of all the risks associated with ADASUVE™. Please see the Full Prescribing Information, including Boxed Warning, for more information regarding the risks associated with ADASUVE™.

Reference ID: 3235446
ADASUVE™ REMS Program Enrollment

ADASUVE will be dispensed only to patients in healthcare facilities that are enrolled in the ADASUVE REMS Program.

Authorized Healthcare Facility Representative
For each healthcare facility, an authorized healthcare facility representative is required to complete and sign the Healthcare Facility Enrollment Form acknowledging that the enrolled healthcare facility meets specific requirements. The representative may be a pharmacist, or another healthcare professional with the appropriate level of responsibility within the healthcare facility, who is authorized to act on behalf of the facility.

Healthcare Facility Qualifications for Enrollment
The healthcare facility requirements include having the following:
- Immediate access to the equipment and personnel trained to provide advanced airway management, including intubation and mechanical ventilation
- Immediate access to intubation equipment and personnel trained to provide advanced airway management, including intubation and mechanical ventilation
- Procedures, protocols, and/or order sets to ensure the following:
  - Patients are screened, prior to treatment with ADASUVE, for a history of pneumonia, bronchospasm, and for any respiratory signs or symptoms of respiratory failure, including tachypnea, and other acute exacerbations, and requiring intubation or bronchodilator therapy
  - Patients are monitored at least every 15 minutes for a minimum of 1 hour following treatment with ADASUVE for signs and symptoms of bronchospasm, including tachypnea and other acute exacerbations
  - Administration of ADASUVE is limited to 1 dose per patient within 24 hours
- Healthcare providers within the facility (nurses, physicians, monitoring staff, or pharmacists) who are trained in the safe use of ADASUVE using the ADASUVE Education Program

ADASUVE™ Wholesaler/Distributor Enrollment
ADASUVE is only accessible to enrolled wholesalers/distributors that agree to the following requirements:
- We will only distribute ADASUVE to healthcare facilities in which enrollment in the ADASUVE REMS Program has been validated
- To agree to cooperate with periodic audits or noncompliance inspections to ensure that ADASUVE is distributed in accordance with the program requirements
- Understand that wholesalers/distributors are required to renew enrollment in the ADASUVE REMS Program every three (3) years

These rules do not constitute a complete list of all the rules associated with ADASUVE. Please see the Safety Information, including bolus warning, for more information regarding the risks associated with ADASUVE.
ADASUVE™ REMS Program

WHOLESALER / DISTRIBUTOR ENROLLMENT FORM

Enrollment must be complete to distribute ADASUVE™. Please complete this form and:

Fax it to: 1-888-970-2301 or Email it to: ADASUVEdistribution@Alexza.com

WHOLESALER / DISTRIBUTOR AGREEMENT

I understand that ADASUVE™ is available only through the ADASUVE REMS Program and acknowledge that I must comply with the following program requirements:

- I will ensure that ADASUVE is only distributed to healthcare facilities in which enrollment in the ADASUVE REMS Program has been validated.
- I agree to cooperate with periodic audits or non-compliance investigations to ensure that ADASUVE is distributed in accordance with the program requirements.
- I understand I will be required to renew the wholesaler / distributor’s enrollment in the ADASUVE REMS Program every three (3) years.
- I understand that this information may be shared with government agencies.

Wholesaler / Distributor Authorized Representative Signature __________________________ Date __________

Wholesaler / Distributor Authorized Representative (Print) __________________________ Title __________________________

WHOLESALER / DISTRIBUTOR INFORMATION

Wholesaler / Distributor Name: __________________________

Primary Ship to Address: __________________________

City: __________________________ State: _________ Zip: _________

Office Phone: __________________________ Fax: __________________________

AUTHORIZED REPRESENTATIVE INFORMATION

First Name: __________________________ Last Name:________________________

Position / Title: __________________________

Phone: __________________________ Fax: __________________________

Email: __________________________ @ __________________________

Phone 1-888-970-7367 Fax 1-888-970-2301 www.ADASUVEdrems.com/enrollment

Reference ID: 3235446
This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

MITCHELL V Mathis
12/21/2012