APPLICATION NUMBER:
NDA 21-912

RISK ASSESSMENT and RISK MITIGATION REVIEW(S)
DATE RECEIVED:  
February 15, 2006

DATE OF DOCUMENT:  
January 3, 2006

TO: Badrul Chowdhury, MD  
Director, Division of Pulmonary and Allergy Products  
HFD-570

THROUGH: Linda Kim-Jung, PharmD, Team Leader  
Denise Toyer, PharmD, Deputy Director  
Carol Holquist, RPh, Director  
Division of Medication Errors and Technical Support

FROM: Kristina C. Arnwine, PharmD, Safety Evaluator  
Division of Medication Errors and Technical Support

PRODUCT NAME:  
Aformoterol Tartrate Inhalation Solution  
15 mcg

DA#: 21-912

NDA SPONSOR: Sepracor, Inc.

RECOMMENDATIONS:

DMETS recommends implementation of the label and labeling revisions outlined in section II of this review to minimize potential errors with the use of this product.

DMETS would appreciate feedback of the final outcome of this consult. We would be willing to meet with the Division for further discussion, if needed. If you have further questions or need clarifications, please contact Diane Smith, project manager, at 301-796-0538.
DATE OF REVIEW: March 30, 2006

NDA#: 21-912

NAME OF DRUG: Arformoterol Tartrate Inhalation Solution, 15 mcg

NDA HOLDER: Sepracor, Inc.

I. INTRODUCTION:

This consult was written in response to a request from the Division of Pulmonary and Allergy Products (HFD-570), for a review of the container label, carton and insert labeling of Arformoterol Tartrate Inhalation Solution. Arformoterol Tartrate Inhalation Solution is being developed for the indication of long-term maintenance treatment of bronchoconstriction in patients with chronic obstructive pulmonary disease (COPD), including chronic bronchitis and emphysema. The usual dose of Arformoterol Tartrate Inhalation Solution is 15 mcg inhaled by mouth via nebulizer twice daily. Arformoterol Tartrate Inhalation Solution is supplied as a 2 mL sterile solution in unit-dose, low-density polyethylene (LDPE) vials individually overwrapped in foil in cartons of thirty vials. The proposed proprietary name, Brovana, will be addressed under separate cover (06-0051-1).

II. LABELING, PACKAGING, AND SAFETY RELATED ISSUES:

In the review of the container labels, carton and insert labeling of Arformoterol Tartrate, DMETS has attempted to focus on safety issues relating to possible medication errors. DMETS has identified the following areas of possible improvement, which might minimize potential user error.

A. GENERAL COMMENTS

1. Revise the established name to read “Arformoterol Tartrate Inhalation Solution.” For example, (Arformoterol Tartrate Inhalation Solution) and ensure that the established name and finished dosage forms are presented in the same font type and size.

2. Relocate the product strength so that it is presented immediately underneath the proprietary and established names. Furthermore, include : followed by the For example:

---

b(4)
3. We note the strength is based on the active moiety. Thus, we suggest revising the labels and labeling in one of the three following formats. Please note that DMETS prefers choice ‘a’ because this nomenclature is consistent with USP recommendations on “amount of ingredient per dosage unit”.

   a. 

   b. Tradename
      (Arformoterol Tartrate Inhalation Solution)
      15 mcg/2 mL*

   c. 

4. Per 21 CFR 201.10(g)(2), increase the prominence of the established name so that it is at least \( \frac{1}{2} \) the size of the proprietary name. Additionally, increase the font weight of the text print used for the established name in order to increase the prominence.

B. POUCH LABEL

1. See General Comments A-1 through A-5.

C. CONTAINER LABEL
D. CARTON LABELING

1. See General Comments A-1 through A-5.

E. INSERT LABELING

1. See General Comments A-1 and A-3.

F. PATIENT’S INSTRUCTIONS FOR USE

1. See General Comments A-1 and A-3.

2. DMETS recommends submitting the Patient’s Instructions for Use to the Division of Surveillance, Research, and Communication Support for review and comment.

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

/s/

Kristina Arnwine
6/27/2006 04:13:02 PM
DRUG SAFETY OFFICE REVIEWER

Linda Kim-Jung
6/27/2006 04:16:05 PM
DRUG SAFETY OFFICE REVIEWER

Denise Toyer
6/27/2006 04:22:45 PM
DRUG SAFETY OFFICE REVIEWER

Carol Holquist
6/27/2006 04:26:12 PM
DRUG SAFETY OFFICE REVIEWER
REQUEST FOR CONSULTATION

TO: (Division/Office): Director, Division of Medication Errors and Technical Support (DMETS), HFD-420
WO22, RM 4447

FROM: Ladan Jafari, Regulatory Project Manager
Division of Pulmonary & Allergy Products
301-796-1231

DATE: April 12, 06
IND NO.: 21-912
NDA NO.: Type of Document: New NDA/Correspondent
DATE OF DOCUMENT: March 31, 2006

NAME OF DRUG: Brovana
PRIORITY CONSIDERATION: S
CLASSIFICATION OF DRUG: Respiratory
DESIRE COMPLETION DATE: August 4, 2006
NAME OF FIRM: Sepracor

REASON FOR REQUEST

I. GENERAL
☐ NEW PROTOCOL
☐ PROGRESS REPORT
☐ NEW CORRESPONDENCE
☐ DRUG ADVERTISING
☐ ADVERSE REACTION REPORT
☐ MANUFACTURING CHANGE/ADDITION
☐ MEETING PLANNED BY
☐ PRE-nda MEETING
☐ END OF PHASE II MEETING
☐ RESUBMISSION
☐ SAFETY/EFFICACY
☐ PAPER NDA
☐ CONTROL SUPPLEMENT
☐ RESPONSE TO DEFICIENCY LETTER
☐ FINAL PRINTED LABELING
☐ LABELING REVISION
☐ ORIGINAL NEW CORRESPONDENCE
☐ FORMULATIVE REVIEW
☐ OTHER (SPECIFY BELOW): Trade name review

II. BIOMETRICS

STATISTICAL EVALUATION BRANCH
☐ TYPE A OR B NDA REVIEW
☐ END OF PHASE II MEETING
☐ CONTROLLED STUDIES
☐ PROTOCOL REVIEW
☐ OTHER (SPECIFY BELOW):

STATISTICAL APPLICATION BRANCH
☐ CHEMISTRY REVIEW
☐ PHARMACOLOGY
☐ BIOPHARMACEUTICS
☐ OTHER (SPECIFY BELOW):

III. BIOPHARMACEUTICS

☐ DISSOLUTION
☐ BIOAVAILABILITY STUDIES
☐ PHASE IV STUDIES
☐ DEFICIENCY LETTER RESPONSE
☐ PROTOCOL-BIOPHARMACEUTICS
☐ IN-VIVO WAIVER REQUEST

IV. DRUG EXPERIENCE

☐ PHASE IV SURVEILLANCE/EPIDEMIOL OGY PROTOCOL
☐ DRUG USE e.g., POPULATION EXPOSURE, ASSOCIATED DIAGNOSES
☐ CASE REPORTS OF SPECIFIC REACTIONS (List below)
☐ COMPARATIVE RISK ASSESSMENT ON GENERIC DRUG GROUP
☐ REVIEW OF MARKETING EXPERIENCE, DRUG USE AND SAFETY
☐ SUMMARY OF ADVERSE EXPERIENCE
☐ POISON RISK ANALYSIS

V. SCIENTIFIC INVESTIGATIONS

☐ CLINICAL
☐ PRECLINICAL

COMMENTS/SPECIAL INSTRUCTIONS: This is an all electronic submission. The new NDA was submitted on December 8, 2005, (uploaded on the EDR dated January 3, 2006). No tradename was submitted at that point. This new tradename was submitted on March 31, 2006,

PDUFA DATE: October 12, 2006
ATTACHMENTS: Draft Package Insert, Container and Carton Labels
CC: Archival IND/NDA 21-912
HFD-570/Division File
HFD-Jafari/RPM
HFD-570/Reviewers and Team Leaders

NAME AND PHONE NUMBER OF REQUESTER
Ladan Jafari, 301-796-1231

METHOD OF DELIVERY (Check one)
☒ DFS ONLY ☐ MAIL ☐ HAND

SIGNATURE OF RE CeIVER

SIGNATURE OF DELIVERER

5/28/05
This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

Ladan Jafari
4/12/2006 10:49:50 AM