DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration
Silver Spring MD 20993

NDA 021912/S-012

SUPPLEMENT APPROVAL

Sunovion Pharmaceuticals Inc.
84 Waterford Drive
Marlborough, MA 01752-7010

Attention: Renee´ M Carroll, MS, RAC
Director, Regulatory Affairs

Dear Ms. Carroll:

Please refer to your Supplemental New Drug Application (sNDA) dated March 19, 2010, received March 19, 2010, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act (FDCA) for Brovana (arformoterol) Inhalation Solution.

We acknowledge receipt of your amendments dated May 13, and 24, August 20, September 9, and October 29, 2010, and January 7, 2011.

This Prior Approval supplemental new drug application provides for a proposed risk evaluation and mitigation strategy (REMS) for Brovana (arformoterol) Inhalation Solution.

We have completed our review of this supplemental application, as amended. It is approved, effective on the date of this letter, for use as recommended in the enclosed, agreed-upon labeling text.

RISK EVALUATION AND MITIGATION STRATEGY REQUIREMENTS

Section 505-1 of the FDCA authorizes FDA to require the submission of a REMS, if FDA becomes aware of new safety information and makes a determination that such a strategy is necessary to ensure that the benefits of the drug outweigh the risks [section 505-1(a)]. The details of the REMS requirements were outlined in our REMS notification letter dated February 18, 2010.

Since Brovana (arformoterol) Inhalation Solution was approved on October 6, 2006, we have become aware of serious asthma outcomes (asthma-related death, intubations, and hospitalizations) with the use of the class of long acting beta agonists (LABAs), of which Brovana (arformoterol) Inhalation Solution is a member. Our information was obtained from the Salmeterol Multi-Center Asthma Research Trial (SMART) and the clinical trial data presented as a meta-analysis at the December 10-11, 2008, joint meeting of the Pulmonary Allergy Drugs, Drug Safety and Risk Management, and Pediatric Advisory Committees, and the discussion at the joint Advisory Committee meeting, which raised concerns regarding the use of LABA

without concomitant asthma controller therapy, particularly in pediatric and adolescent patients. We considered this information to be "new safety information" as defined in section 505-1(b) of the FDCA.

Your proposed REMS, submitted on January 7, 2011, and appended to this letter, is approved. The REMS consists of a Medication Guide, communication plan, and a timetable for submission of assessments of the REMS. The Medication Guide for Brovana (arformoterol) Inhalation Solution was approved on June 2, 2010.

The REMS assessment plan should also include, but is not limited to, the following:

1. An evaluation of the patients' understanding of the serious risks associated with Brovana (arformoterol) Inhalation Solution including the increased risk of asthma-related deaths.
2. An evaluation of the prescriber understanding of the increased risk of asthma-related deaths and the safe use of LABAs.
3. A description of specific measures that would be taken to increase awareness if the assessment of the prescribers indicates that the prescribers' awareness is not adequate.
4. A narrative summary with analysis of all reported asthma-related deaths during the reporting period
5. An annual assessment and conclusions regarding the success of the REMS in meeting the stated goals.
6. Drug use patterns (reasons for use, patient demographics, length of therapy, prescribing medical specialties)
7. An assessment of the communication plan including:

    a. The date of launch of the communication plan (DHCP letter, website, and communication to professional societies)
    b. The number of recipients of the DCHP letter distribution
    c. Date(s) of distribution of the DHCP letter
    d. A copy of all documents included in each distribution
    e. The professional societies that you communicated with
    f. The information that the professional societies disseminated to their members and the timing of the dissemination

Assessments of an approved REMS must include, under section 505-1(g)(3)(B) and (C), information on the status of any postapproval study or clinical trial required under section 505(o) or otherwise undertaken to investigate a safety issue. With respect to any such postapproval study, you must include the status of such study, including whether any difficulties completing the study have been encountered. With respect to any such postapproval clinical trial, you must include the status of such clinical trial, including whether enrollment has begun, the number of participants enrolled, the expected completion date, whether any difficulties completing the clinical trial have been encountered, and registration information with respect to requirements under subsections (i) and (j) of section 402 of the Public Health Service Act. You can satisfy these requirements in your REMS assessments by referring to relevant information included in the most recent annual report required under section 506B and 21 CFR 314.81(b)(2)(vii) and including any material or significant updates to the status information since the annual report was

prepared. Failure to comply with the REMS assessments provisions in section 505-1(g) could result in enforcement action.

In addition to the assessments submitted according to the timetable included in the approved REMS, you must submit a REMS assessment and may propose a modification to the approved REMS when you submit a supplemental application for a new indication for use as described in section 505-1(g)(2)(A) of FDCA.

If you currently distribute or plan to distribute an authorized generic product under this NDA, you must submit a complete proposed REMS that relates only to the authorized generic product. Submit a proposed REMS, REMS supporting document, and any required appended documents as a prior approval supplement. Approval of the proposed REMS is required before you may market your authorized generic product.

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

NDA 021912 REMS ASSESSMENT

NEW SUPPLEMENT FOR NDA 021912
PROPOSED REMS MODIFICATION
REMS ASSESSMENT

NEW SUPPLEMENT (NEW INDICATION FOR USE)
FOR NDA 021912
REMS ASSESSMENT
PROPOSED REMS MODIFICATION (if included)

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

PROMOTIONAL MATERIALS

You may request advisory comments on proposed introductory advertising and promotional labeling. To do so, submit the following, in triplicate, (1) a cover letter requesting advisory comments, (2) the proposed materials in draft or mock-up form with annotated references, and (3) the package insert(s) to:

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

You must submit final promotional materials and package insert(s), accompanied by a Form FDA 2253, at the time of initial dissemination or publication [21 CFR 314.81(b)(3)(i)]. Form FDA 2253 is available at http://www.fda.gov/opacom/morechoices/fdaforms/cder.html; instructions are provided on page 2 of the form. For more information about submission of promotional materials to the Division of Drug Marketing, Advertising, and Communications (DDMAC), see http://www.fda.gov/AboutFDA/CentersOffices/CDER/ucm090142.htm.

LETTERS TO HEALTH CARE PROFESSIONALS

If you decide to issue a letter communicating important safety-related information about this drug product (i.e., a "Dear Health Care Professional" letter), we request that you submit, at least 24 hours prior to issuing the letter, an electronic copy of the letter to this NDA to the following address:

MedWatch Program
Office of Special Health Issues
Food and Drug Administration
10903 New Hampshire Ave
Building 32, Mail Stop 5353
Silver Spring, MD 20993

REPORTING REQUIREMENTS

We remind you that you must comply with reporting requirements for an approved NDA (21 CFR 314.80 and 314.81).

If you have any questions, call Eunice Chung, Regulatory Project Manager, at (301) 796-4006.

Sincerely,

{See appended electronic signature page}

Sally Seymour, M.D.
Deputy Director for Safety
Division of Pulmonary, Allergy, and Rheumatology Products
Office of Drug Evaluation II
Center for Drug Evaluation and Research

ENCLOSURE(S):
REMS

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

/s/

SALLY M SEYMOUR
02/01/2011