CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

203108Orig1s000

MICROBIOLOGY / VIROLOGY REVIEW(S)

Product Quality Microbiology Review

06 FEB 2013

NDA: 203-108

Drug Product Name
Proprietary: (b) (4) (proposed) Respimat® Spray
Non-proprietary: Olodaterol spray

Review Number: 1

Dates of Submission(s) Covered by this Review

Submit	Received	Review Request	Assigned to Reviewer
14 MAY 2012	14 MAY 2012	24 MAY 2012	31 MAY 2012
28 SEP 2012	28 SEP 2012	N/A	N/A
08 NOV 2012	08 NOV 2012	N/A	N/A

Applicant/Sponsor
Name: Boehringer Ingelheim Pharmaceuticals, Inc.
Address: 900 Ridgebury Rd
PO Box 368
Ridgefield, CT 06877
Representative: Damon Daulerio
Telephone: 203-482-6346

Name of Reviewer: Jessica G. Cole, PhD

Conclusion: Recommended for approval.

Product Quality Microbiology Data Sheet

A. 1. TYPE OF SUBMISSION: 505(b)(1) Original NDA

2. SUBMISSION PROVIDES FOR: New drug product

3. MANUFACTURING SITE:
Boehringer Ingelheim Pharma GmbH & Co. KG
Binger Strasse 173
55216 Ingelheim / Rhein, Germany
FEI 3002806556

4. DOSAGE FORM, ROUTE OF ADMINISTRATION AND STRENGTH/POTENCY:

- Oral inhalation product in proprietary device
- 2.5 µg olodaterol per actuation
- [redacted] (b) (4) multi-dose solution in a plastic container

5. METHOD(S) OF STERILIZATION: [redacted] (b) (4)

6. PHARMACOLOGICAL CATEGORY: Broncodilator for COPD patients

B. SUPPORTING/RELATED DOCUMENTS: Microbiology review of DMF 26014 dated 06 February 2013.

C. REMARKS: This submission was in the eCTD format. The division did not include microbiology in the filing meeting or any other GRP meetings. This drug product was covered under IND 76,362.

The following information request was sent to the applicant on 29 August 2012 and a response was received on 28 September 2012. A summary of the responses have been incorporated into the relevant sections of this review.

Microbiology Comment:

1. The bioburden sampling point should be [redacted] (b) (4). Please revise the sampling point. The acceptance criteria may also be revised, if desired.
2. Provide a description of the growth media and incubation conditions for the environmental monitoring program.
3. Provide the following information for recent media fills: the number of units filled, the number of units incubated, and the number of positive units.
4. Provide the sterility test method verification studies.

Reference ID: 3257611

The following information request was sent to the applicant on 31 October 2012 and a response was received on 09 November 2012. The responses have been incorporated into the relevant sections of this review.

Microbiology Comment:

1. We note the 28 September 2012 amendment contained a summary of results from 4 media fill conducted June 2011-April 2012. The information request was meant to elicit a full accounting of units from recent media fills. Please provide the following information for recent media fills: the number of units filled, the number of units rejected, the number of units incubated, and the number of positive units. Please indicate the reason for rejection of units. Please provide these data for batches 193198, 193200, 193201 and 292744.
2. Please describe why media fill batch 193199 was not included in revalidation studies (b) (4)

filename: N203108R1.doc

Reference ID: 3257611

Executive Summary

I. Recommendations

A. Recommendation on Approvability – This NDA is recommended for approval.

B. Recommendations on Phase 4 Commitments and/or Agreements, if Approvable – Not applicable.

II. Summary of Microbiology Assessments

A. Brief Description of the Manufacturing Processes that relate to Product Quality Microbiology – This is an (b) (4) drug product for inhalation. The final drug product is a multi-dose (b) (4) solution filled into plastic cartridges and fitted into an inhalation device.

B. Brief Description of Microbiology Deficiencies – Not applicable.

C. Assessment of Risk Due to Microbiology Deficiencies – Not applicable.

III. Administrative

A. Reviewer's Signature _____
Jessica G. Cole, PhD

B. Endorsement Block _____
John Metcalfe, PhD
Senior Microbiology Reviewer

C. CC Block
N/A

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

/s/

JESSICA COLE
02/07/2013

JOHN W METCALFE
02/07/2013
I concur.