# CENTER FOR DRUG EVALUATION AND RESEARCH

**APPLICATION NUMBER:** 

203159Orig1s000

**MICROBIOLOGY REVIEW(S)** 

## **Product Quality Microbiology Review**

#### 23 MAR 2012

**NDA:** 203-159/N-000

**Drug Product Name** 

**Proprietary:** Skyla (proposed)

**Non-proprietary:** Levonorgestrel-releasing intrauterine system

**Review Number:** 1

Dates of Submission(s) Covered by this Review

| Submit      | Received    | <b>Review Request</b> | Assigned to Reviewer |  |
|-------------|-------------|-----------------------|----------------------|--|
| 09 DEC 2011 | 09 DEC 2011 | 31 JAN 2012           | 03 FEB 2012          |  |

Applicant/Sponsor

Name: Bayer HealthCare Pharmaceuticals, Inc.

Address: PO Box 1000

Montville, NJ 07045-1000

**Representative:** Jo-Ann Ruane **Telephone:** 973-487-2343

Name of Reviewer: Jessica G. Cole, PhD

**Conclusion:** Recommended for approval.

## **Product Quality Microbiology Data Sheet**

- A. 1. TYPE OF SUBMISSION: Original NDA
  - 2. SUBMISSION PROVIDES FOR: New drug product
  - 3. MANUFACTURING SITE: The drug product is manufactured at Bayer Oy, Turku, Pansiontie 47, 20210 Turku, Finland and sterilized at Bayer Oy
  - 4. DOSAGE FORM, ROUTE OF ADMINISTRATION AND STRENGTH/POTENCY:
    - Intrauterine device with a core for extended drug release
    - 13.5 mg levonorgestrel/device and a release rate of  $\sim$ 10  $\mu$ g/day in weeks 3-4
  - 5. **METHOD(S) OF STERILIZATION**: (b) (4) ethylene oxide
  - **6. PHARMACOLOGICAL CATEGORY:** Prevention of pregnancy for up to 3 years
- B. SUPPORTING/RELATED DOCUMENTS: None
- C. **REMARKS:** This submission was in the eCTD format and the drug product is similar to Mirena, which was approved under NDA 21-225.

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### **Executive Summary**

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- A. Recommendation on Approvability This application is recommended for approval on the basis of product quality microbiology.
- 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 The drug product is sterilized with ethylene oxide gas
  - B. Brief Description of Microbiology Deficiencies Not applicable.
  - C. Assessment of Risk Due to Microbiology Deficiencies Not applicable.

#### III. Administrative

N/A

| <b>A</b> . | Reviewer's Signature |                              |
|------------|----------------------|------------------------------|
|            | _                    | Jessica G. Cole, PhD         |
| В.         | Endorsement Block    |                              |
|            |                      | John Metcalfe, PhD           |
|            |                      | Senior Microbiology Reviewer |
| C.         | CC Block             |                              |

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/s/

JESSICA COLE
03/26/2012

JOHN W METCALFE

JOHN W METCALFE 03/26/2012 I concur.