

**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

*APPLICATION NUMBER:*  
**20-929**

**MICROBIOLOGY REVIEW**

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REVIEW FOR HFD-570

SEP 15 1998

OFFICE OF NEW DRUG CHEMISTRY  
MICROBIOLOGY STAFF HFD-805  
Microbiologist's Review #2 of NDA 20-929  
September 2, 1998

- A. 1. APPLICATION NUMBER: 20-929
- APPLICANT: Astra USA  
50 Otis Street  
Westborough, MA 01581-4500
2. PRODUCT NAME: Pulmicort® Respules™
3. DOSAGE FORM AND ROUTE OF ADMINISTRATION: Sterile single-dose budesonide (0.25, and 0.5 mg/mL) nebulizing preservative-free suspension packaged in clear ampules (respules) containers with 2 mL fill volume.
4. METHODS OF STERILIZATION: \_\_\_\_\_
5. PHARMALOGICAL CATAGORY and/or PRINCIPLE INDICATION: Anti-inflammatory corticosteroid treatment for asthma in pediatric patients.
6. DRUG PRIORITY CLASSIFICATION: 1P
- B. 1. DATE OF INITIAL SUBMISSION: November 18, 1997
2. DATE OF AMENDMENT: May 12, 1998
3. DATE OF CONSULT: May 19, 1998
4. ASSIGNED FOR REVIEW: May 21, 1998
- C. REMARKS:

Microbiologist's Review #1 resulted in three questions conveyed (via FAX) to the applicant on April 21, 1998. The applicant's responses are the subject of this review.

During a November 20, 1996 pre-NDA CMC meeting held between Astra and the Division of Pulmonary Drug Products, the FDA requested that Astra produce sterile Pulmicort Respules. A non-sterile product, used primarily in the European market, has been manufactured at Astra, Sweden since 1987.

**D. CONCLUSIONS:**

The submission is recommended for approval for microbiology issues concerning sterility assurance. Specific comments are provided in "E. Review Notes".

ISI

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Neal Sweeney, Ph.D.

cc: NDA 20-929  
HFD-570/Division File  
HFD-570/CSO/G. Trout  
HFD-570/Chemist/Chong-Ho Kim  
HFD-805/Consult File/N. Sweeney

Drafted by: N. Sweeney, March 4, 1998  
R/D initialed by P. Cooney, March 4, 1998

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7. CONCLUSIONS:

The submission is recommended for approval for microbiology issues concerning sterility assurance. Specific comments are provided in "E. Review Notes".

ISI

9/2/98

Neal Sweeney, Ph.D.

PKC 9/15/98

cc: NDA 20-929  
HFD-570/Division File  
HFD-570/CSO/G. Trout ✓  
HFD-570/Chemist/Chong-Ho Kim  
HFD-805/Consult File/N. Sweeney

Drafted by: N. Sweeney, March 4, 1998  
R/D initialed by P. Cooney, March 4, 1998

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MAR 16 1998

REVIEW FOR HFD-570

OFFICE OF NEW DRUG CHEMISTRY  
MICROBIOLOGY STAFF HFD-805  
Microbiologist's Review #1 of NDA 20-929  
March 4, 1998



- A. 1. APPLICATION NUMBER: 20-929
- APPLICANT: Astra USA  
50 Otis Street  
Westborough, MA 01581-4500
2. PRODUCT NAME: Pulmicort® Respules™
3. DOSAGE FORM AND ROUTE OF ADMINISTRATION: Sterile single-dose budesonide (0.25, and 0.5 mg/mL) nebulizing preservative-free suspension packaged in clear ampules (respules) containers with 2 mL fill volume.
4. METHODS OF STERILIZATION: \_\_\_\_\_
5. PHARMALOGICAL CATAGORY and/or PRINCIPLE INDICATION: Anti-inflammatory corticosteroid treatment for asthma in pediatric patients.
6. DRUG PRIORITY CLASSIFICATION: 1P
- B. 1. DATE OF INITIAL SUBMISSION: November 18, 1997
2. RELATED DOCUMENTS: (none)
3. DATE OF CONSULT: December 11, 1997
4. ASSIGNED FOR REVIEW: December 22, 1997
- C. REMARKS: During a November 20, 1996 pre-NDA CMC meeting held between Astra and the Division of Pulmonary Drug Products, the FDA requested that Astra produce sterile Pulmicort Respules. A non-sterile product, used primarily in the European market, has been manufactured at Astra, Sweden since 1987.

**D. CONCLUSIONS:**

The submission is approvable for microbiology issues concerning sterility assurance. Specific comments are provided in "E. Review Notes" and "List of Microbiology Deficiencies and Comments".

151  
Neal Sweeney, Ph.D. 3/4/98  
151 3/16/98

cc: NDA 20-929  
HFD-570/Division File  
HFD-570/CSO/G. Trout  
HFD-570/Chemist/Chong-Ho Kim  
HFD-805/Consult File/N. Sweeney

Drafted by: N. Sweeney, March 4, 1998  
R/D initialed by P. Cooney, March 4, 1998

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