CENTER FOR DRUG EVALUATION AND RESEARCH

APPROVAL PACKAGE FOR:

APPLICATION NUMBER

19-558-S-043

Microbiology Review(s)

Product Quality Microbiology Review
Review for HFD-110

11 JULY 2002

NDA: 19-558/SE5-043

Drug Product Name
Proprietary: PRINIVIL
Non-proprietary: Lisinopril
Drug Product Classification: S

Review Number: 1

Subject of this Review
Submission Date: 24 September 2001
Receipt Date: 25 September 2001
Consult Date: 9 July 2002
Date Assigned for Review: 9 July 2002

Submission History (for amendments only)
Date(s) of Previous Submission(s): N/A
Date(s) of Previous Micro Review(s): N/A

Applicant/Sponsor
Name: Merck & Co., Inc.
Address: Sumneytown Pike, PO Box 4, BLA-20; West Point, PA
Representative: Michael C. Elia, Ph.D., DABT; Dir., Regulatory Affairs
Telephone: 484-344-3180

Name of Reviewer: Bryan S. Riley, Ph.D.

Conclusion: Recommend Approval

Product Quality Microbiology Data Sheet

A. 1. **TYPE OF SUPPLEMENT:** Prior Approval

2. **SUPPLEMENT PROVIDES FOR:** Pediatric use of a suspension

3. **MANUFACTURING SITE:** Merck & Co.

4. **DOSAGE FORM, ROUTE OF ADMINISTRATION AND STRENGTH/POTENCY:** 2.5, 5, 10, 20, 40 mg; oral

5. **METHOD(S) OF STERILIZATION:** N/A

6. **PHARMACOLOGICAL CATEGORY:** Anti-hypertensive

B. **SUPPORTING/RELATED DOCUMENTS:** Microbiology review of IND [ ] for Vasotec oral suspension (17 March 1999).

C. **REMARKS:** The applicant has submitted data to support pediatric use of a suspension made from the drug product tablets. A similar drug product suspension made using the same syrup vehicle and buffer with a different drug product was previously reviewed (see section B. above).

filename: 19558s43.doc

Executive Summary

I. Recommendations

A. Recommendation on Approvability – This submission is recommended for approval on the basis of product quality microbiology.

B. Recommendations on Phase 4 Commitments and/or Agreements, if Approvable – N/A

II. Summary of Microbiology Assessments

A. Brief Description of the Manufacturing Processes that relate to Product Quality Microbiology – The drug product is a suspension of a non-sterile tablet in a preserved syrup.

B. Brief Description of Microbiology Deficiencies – N/A

C. Assessment of Risk Due to Microbiology Deficiencies – The results of the antimicrobial effectiveness test (USP <51>) performed on the drug product suspension indicate that the preservatives are sufficient to prevent microbial proliferation over the 4 week shelf-life. Therefore, the pediatric suspension presents little risk from a product quality microbiology standpoint.

III. Administrative

A. Reviewer's Signature /S/

B. Endorsement Block
Bryan S. Riley, Ph.D. (Microbiology Reviewer)
Peter H. Cooney, Ph.D. (Microbiology Supervisor)

C. CC Block
N/A

1 Page(s) Withheld

✓ § 552(b)(4) Trade Secret / Confidential

_____ § 552(b)(5) Deliberative Process

_____ § 552(b)(5) Draft Labeling

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

/s/

Bryan Riley
7/11/02 10:27:15 AM
MICROBIOLOGIST

Peter Cooney
7/15/02 03:27:46 PM
MICROBIOLOGIST