

**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

*APPLICATION NUMBER:*  
**76394**

**MICROBIOLOGY REVIEW**

# Product Quality Microbiology Review

## Review for HFD-640

28 October 2002

14/ ANDA: 76-394

### Drug Product Name

Proprietary: N/A

~~Non-proprietary: Amiodarone Hydrochloride Injection~~

Drug Product Classification: Anti-Arrhythmic

Review Number: #1

### Subject of this Review

Submission Date: April 4, 2002

Receipt Date: April 10, 2002

Consult Date: N/A

Date Assigned for Review: October 24, 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: Apotex Corp.

Address: 50 Lakeview Parkway, Suite 127, Vernon Hills, IL 60061

Representative: Marcy Macdonald

Telephone: 847-573-9999 X223

Name of Reviewer: Nrapendra Nath

**Conclusion:** The submission is **not recommended** for approval on the basis of sterility assurance.

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## Product Quality Microbiology Data Sheet

- A. 1. **TYPE OF SUPPLEMENT:** N/A
2. **SUPPLEMENT PROVIDES FOR:** N/A
3. **MANUFACTURING SITE:**  
Novex Pharma,  
380 Elgin Mills Road,  
East Richmond Hills, Ontario,  
Canada L4C 5H2
- 
4. **DOSAGE FORM, ROUTE OF ADMINISTRATION AND STRENGTH/POTENCY:** 50 mg/mL; 3-mL/vial; I/V
5. **METHOD(S) OF STERILIZATION:**
6. **PHARMACOLOGICAL CATEGORY:** Anti-Arrhythmic
- B. **SUPPORTING/RELATED DOCUMENTS:** N/A
- C. **REMARKS:** Novex Corporation manufactures the subject drug product for the applicant in their facility in Ontario, Canada. The subject drug product is filled in 2-mL clear glass vials using



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secret and/or

confidential

commercial

information

Micro. Review #1

## H. LIST OF MICROBIOLOGY DEFICIENCIES AND COMMENTS

ANDA: 76-394

APPLICANT: Apotex Corporation

DRUG PRODUCT: Amiodarone Hydrochloride Injection; 50 mg/mL

### A. Microbiology Deficiencies:

1. Please describe the minimum number of units that must be filled in a run and explain the reason for filling less than vials in
2. Please provide volume filled per vial, duration of filling and the filling speed for the (dated 9/27/01) and (dated 2/8/02).
3. Please clarify the rationale for the table 4.53 (vol. 1.4, p. 1456) if the maximum number of vials to be filled is no more than vials as indicated by the data provided for the six performed in 2000-2002.
4. The goal of the filling is to achieve a 'zero' contamination rate. The Action Limits of % for is unrealistic because it is open-ended. Please consider setting a limit on the total number of contaminated units in a run irrespective of the number of units filled.
5. The load list of. does not include containers. Please explain how are the containers sterilized and provide data in its support.

Please clearly identify your amendment to this facsimile as RESPONSE TO MICROBIOLOGY DEFICIENCIES. The RESPONSE TO MICROBIOLOGY DEFICIENCIES should also be noted in your cover page/letter.

Sincerely yours,



Neal J. Sweeney, Ph.D.  
Microbiology Team Leader  
Office of Generic Drugs  
Center for Drug Evaluation and Research

# Product Quality Microbiology Review

## Review for HFD-640

5 February 2003

ANDA: 76-394

### Drug Product Name

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**Proprietary:** N/A

**Non-proprietary:** Amiodarone Hydrochloride Injection

**Drug Product Classification:** Anti-Arrhythmic

**Review Number:** #2

### Subject of this Review

**Submission Date:** January 24, 2003

**Receipt Date:** January 28, 2003

**Consult Date:** N/A

**Date Assigned for Review:** February 4, 2003

### Submission History (for amendments only)

**Date(s) of Previous Submission(s):** April 4, 2002  
(received April 10, 2002)

**Date(s) of Previous Micro Review(s):** October 28, 2002

### Applicant/Sponsor

**Name:** Apotex Corp.

**Address:** 50 Lakeview Parkway, Suite 127, Vernon Hills, IL 60061

**Representative:** Marcy Macdonald

**Telephone:** 847-573-9999 X223

**Name of Reviewer:** Nrapendra Nath

**Conclusion:** The submission is **recommended** for approval on the basis of sterility assurance.

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## Product Quality Microbiology Data Sheet

- A. 1. TYPE OF SUPPLEMENT: N/A
2. SUPPLEMENT PROVIDES FOR: N/A
3. MANUFACTURING SITE:  
Novex Pharma,  
380 Elgin Mills Road,  
East Richmond Hills, Ontario,  
Canada L4C 5H2
- 
4. DOSAGE FORM, ROUTE OF ADMINISTRATION AND STRENGTH/POTENCY: 50 mg/mL; 3-mL/vial; I/V
5. METHOD(S) OF STERILIZATION: .
6. PHARMACOLOGICAL CATEGORY: Anti-Arrhythmic
- B. SUPPORTING/RELATED DOCUMENTS: N/A
- C. REMARKS: None.



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Micro-Review #2