CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

202543Orig1s000

MICROBIOLOGY REVIEW(S)

Product Quality Microbiology Review

October 11, 2011

NDA: 202 543

Drug Product Name
Proprietary: Levetiracetam Injection 500 mg/100 mL, 1000 mg/100 mL & 1500 mg/100 mL
Non-proprietary: N/A

Review Number: 2

Dates of Submission(s) Covered by this Review

Submit	Received	Review Request	Assigned to Reviewer
September 30, 2011	September 30, 2011	N/A	N/A

Submission History (for amendments only)

Submission Date(s)	Microbiology Review #	Review Date(s)
January 13, 2011	1	September 12, 2011

Applicant/Sponsor
Name: HQ Specialty Pharma, LLC.
Address: 120 Route 17 North, Paramus, NJ 07652
Representative: Joseph M. Pizza, President, HQ Pharma Corppration.
Telephone: 201-857-8290

Name of Reviewer: Vinayak B. Pawar, Ph.D.

Conclusion: Recommended for approval.

Product Quality Microbiology Data Sheet

A. 1. TYPE OF SUBMISSION: Amendment to NDA.

2. SUBMISSION PROVIDES FOR: A new presentation of an approved product.

3. MANUFACTURING SITE: (b) (4)

4. DOSAGE FORM, ROUTE OF ADMINISTRATION AND STRENGTH/POTENCY: 500 mg/100mL (5 mg/mL) (b) (4) solution for intravenous administration. Two additional strengths added: 1000 mg/100 mL & 1500 mg/100 mL.

5. METHOD(S) OF STERILIZATION: (b) (4) (b) (4)

6. PHARMACOLOGICAL CATEGORY: Epilepsy treatment.

B. SUPPORTING/RELATED DOCUMENTS: N/A

C. REMARKS:
The subject submission, sequence Sn0007, is a response to the deficiencies cited in the original review of this NDA. The deficiencies were communicated to the sponsor on September 27, 2011.

filename: N202543R2

Executive Summary

I. Recommendations

A. Recommendation on Approvability – Recommended for approval.

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 main steps of the manufacturing (b) (4)

B. Brief Description of Microbiology Deficiencies – N/A

C. Assessment of Risk Due to Microbiology Deficiencies – N/A

III. Administrative

A. Reviewer's Signature _____
Vinayak B. Pawar, Ph.D., NDMS, OPS, CDER

B. Endorsement Block _____
Bryan S. Riley, Ph.D., NDMS, OPS, CDER

C. CC Block
N/A

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/s/

VINAYAK B PAWAR
10/14/2011

BRYAN S RILEY
10/14/2011
I concur.

Product Quality Microbiology Review

September 23, 2011

NDA: 202 543

Drug Product Name
Proprietary: Levetiracetam Injection 500 mg/100 mL, 1000 mg/100 mL & 1500 mg/100 mL
Non-proprietary: N/A

Review Number: 1

Dates of Submission(s) Covered by this Review

Submit	Received	Review Request	Assigned to Reviewer
January 13, 2011	January 13, 2011	January 27, 2011	February 1, 2011
April 26, 2011	April 26, 2011	Gratuitous Amendment (see remarks section)	N/A

Submission History (for amendments only) – N/A

Applicant/Sponsor
Name: HQ Specialty Pharma, LLC.
Address: 120 Route 17 North, Paramus, NJ 07652
Representative: Joseph M. Pizza, President, HQ Pharma Corppration.
Telephone: 201-857-8290

Name of Reviewer: Vinayak B. Pawar, Ph.D.

Conclusion: The application is approvable pending resolution of the deficiencies listed in Section 3 of this review.

Product Quality Microbiology Data Sheet

A. 1. TYPE OF SUBMISSION: NDA 505 (b) (2)

2. SUBMISSION PROVIDES FOR: A new presentation of an approved product.

3. MANUFACTURING SITE: [redacted]

4. DOSAGE FORM, ROUTE OF ADMINISTRATION AND STRENGTH/POTENCY: 500 mg/100mL (5 mg/mL), [redacted] solution for intravenous administration. Two additional strengths added: 1000 mg/100 mL & 1500 mg/100 mL.

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

6. PHARMACOLOGICAL CATEGORY: Epilepsy treatment.

B. SUPPORTING/RELATED DOCUMENTS: DMF [redacted] was referenced for information on [redacted] was found acceptable per OPS Microbiology review of DMF (March 18, 2010).

C. REMARKS:

This New Drug Application -505(b) (2) for Levetiracetam Injection, [redacted] 500 mg/100 mL (5mg/mL) is based upon the reference listed drug (RLD) product Keppra Injection, 500 mg/5 mL approved July 31, 2006 (NDA 21-872). The holder of NDA 21-872 is UCB Inc. The subject drug product will be manufactured by [redacted] received a satisfactory FDA inspection in [redacted] and recently a satisfactory PAI [redacted] in [redacted] the Agency received a gratuitous amendment to include additional strengths of the product namely, the 1000 mg/100 mL & 1500 mg/100 mL presentations. The IQA was provided by ONDQA on February 4, 2011.

filename: N202543R1

Executive Summary

I. Recommendations

A. Recommendation on Approvability – The application is approvable pending resolution of the deficiencies listed in Section 3 of this review.

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 main steps of the manufacturing begin with (b) (4)

B. Brief Description of Microbiology Deficiencies – The deficiencies listed in Section 3 of this review relate to insufficient data for (b) (4) product and a high drug product release specification for endotoxin.

C. Assessment of Risk Due to Microbiology Deficiencies – Some risk of releasing a product due to the deficiencies listed in Section II.B, above.

III. Administrative

A. Reviewer's Signature _____
Vinayak B. Pawar, Ph.D., NDMS, OPS, CDER

B. Endorsement Block _____
Bryan S. Riley, Ph.D., NDMS, OPS, CDER

C. CC Block
N/A

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/s/

VINAYAK B PAWAR
09/26/2011

BRYAN S RILEY
09/26/2011
I concur.

PRODUCT QUALITY MICROBIOLOGY FILING CHECKLIST

NDA Number: 202543 **Applicant:** HQ Specialty Pharma **Letter Date:** January 13, 2011

Drug Name: Levetiracetam **NDA Type:** Original **Stamp Date:** January 13, 2011

(b) (4)

500 mg/100mL (5 mg/mL).

The following are necessary to initiate a review of the NDA application:

	Content Parameter	Yes	No	Comments
1	Is the product quality microbiology information described in the NDA and organized in a manner to allow substantive review to begin? Is it legible, indexed, and/or paginated adequately?	X		
2	Has the applicant submitted an overall description of the manufacturing processes and microbiological controls used in the manufacture of the drug product?	X		Section 3.2.P.3.3 Flow diagram in Figure 3.2.P.3.3-1.
3	Has the applicant submitted protocols and results of validation studies concerning microbiological control processes used in the manufacture of the drug product?	X		Section 3.2.P.3.5 (sub sections 5.2.1)
4	Are any study reports or published articles in a foreign language? If yes, has the translated version been included in the submission for review?		X	
5	Has the applicant submitted preservative effectiveness studies (if applicable) and container-closure integrity studies?	X		Preservative Effectiveness studies – N/A
6	Has the applicant submitted microbiological specifications for the drug product and a description of the test methods?	X		
7	Has the applicant submitted the results of analytical method verification studies?	X		
8	Has the applicant submitted all special/critical studies/data requested during pre-submission meetings and/or discussions?			N/A
9	Is this NDA fileable? If not, then describe why.	X		

Additional Comments: (b) (4)

Reviewing Microbiologist: Vinayak B. Pawar, Ph.D. **Date**

Secondary Concurrence: Bryan S. Riley, Ph.D. **Date**

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/s/

VINAYAK B PAWAR
03/16/2011

BRYAN S RILEY
03/17/2011
I concur.