CENTER FOR DRUG EVALUATION AND RESEARCH

Approval Package for:

APPLICATION NUMBER:

19-430/S054

Trade Name: EpiPen®

Generic Name: epinephrine

Sponsor: Mylan Specialty L.P.

Approval Date: 7/23/2013

CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

19-430/s054

CONTENTS

Reviews / Information Included in this NDA Review.

Approval Letter	✓
Other Action Letters	
Labeling	
REMS	
Summary Review	
Officer/Employee List	
Office Director Memo	
Cross Discipline Team Leader Review	
Medical Review(s)	
Chemistry Review(s)	✓
Environmental Assessment	
Pharmacology Review(s)	
Statistical Review(s)	
Microbiology Review(s)	✓
Clinical Pharmacology/Biopharmaceutics Review(s)	
Other Reviews	
Risk Assessment and Risk Mitigation Review(s)	
Proprietary Name Review(s)	
Administrative/Correspondence Document(s)	✓

CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

19-430/s054

APPROVAL LETTER

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration
Silver Spring MD 20993

NDA 19430/S-054

APPROVAL LETTER

Meridian Medical Technologies, Inc.
Attention: Ellen Kay Losciuto
Manager, Regulatory Affairs
1945 Craig Road
St. Louis, MO 63146

Dear Ms. Losciuto:

Please refer to your Supplemental New Drug Application (sNDA) submitted February 6, 2013 and received February 7, 2013, under section 505(b) of the Federal Food, Drug, and Cosmetic Act for EpiPen® and EpiPen® Jr (Epinephrine) Auto-Injector.

This "Changes Being Effected in 30 days" supplemental application proposes [redacted] (b) (4) with a [redacted] (b) (4) in the [redacted] (b) (4) area.

We have completed our review of this supplemental new drug application. This supplement is approved.

We remind you that you must comply with the requirements for an approved NDA set forth under 21 CFR 314.80 and 314.81.

If you have any questions, call Youbang Liu, Regulatory Project Manager, at (301) 796-1926.

Sincerely,

{See appended electronic signature page}

Ramesh Raghavachari, Ph.D.
Acting Branch Chief, Branch IX
Division of New Drug Quality Assessment III
Office of New Drug Quality Assessment
Center for Drug Evaluation and Research

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/s/

RAMESH RAGHAVACHARI
07/23/2013

CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

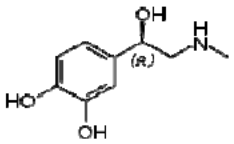
19-430/s054

CHEMISTRY REVIEW(S)

Chemistry Review #1	1. ONDQA (HFD-510)	2. NDA/Suppl. Number 19-430/S-054
3. Name and Address of Applicant Meridian Medical Technologies – a Pfizer Co. Attention: Ellen Kay Losciuto, CQA, RAC 1945 Craig road, St. Louis, MO 63146		**4. Date of:** Submission 2/6/13 User Fee 8/7/13
5. Name of Drug: Epipen Auto-injector	**6. Nonproprietary Name** Epinephrine injection	
7. Supplement, CBE-30, Provides for: (b) (4)		**8. Amendment(s)**
9. Pharmacological Category	**10. How Dispensed: Rx**	**11. Related Documents**:
12. Dosage Form Injection	**13. Potency(ies):**	

15. Drug Name: Epinephrine, R-(-)-L-Epinephrine or R-(-)-L-adrenaline

Structure:



16. Comments:

1. Division of Microbiology has reviewed the submission and recommended approval of the supplemental application. Review is available in DARRTS.

2. No other CMC changes are associated to this supplemental application.

17. Conclusions and Recommendations: Recommend approval.

18. Name: **Signature** **Date**

Review Chemist: Bart Ho, Chemist

Acting Branch Chief
Ramesh Raghavacheri Ph.D.

19430S054 Micro Meridian

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/s/

BARTHOLOME C HO
07/22/2013

RAMESH RAGHAVACHARI
07/22/2013

CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

19-430/s054

MICROBIOLOGY REVIEW(S)

Product Quality Microbiology Review

14 June 2013

NDA: 19-430/S-054

Drug Product Name
Proprietary: EpiPen® and EpiPen® Jr Auto Injectors
Non-proprietary: Epinephrine Injection

Review Number: 1

Dates of Submission(s) Covered by this Review

Submit	Received	Review Request	Assigned to Reviewer
02/06/2013	02/07/2013	04/26/13	05/02/13

Submission History (for 2nd Reviews or higher) – N/A

Applicant/Sponsor
Name: Meridian Medical Technologies, Inc.
Address: 1945 Craig Road, St. Louis, MO 63146
Representative: Ellen Kay Losciuto
Telephone: 314-682-3088

Name of Reviewer: Neal J. Sweeney, Ph.D.

Conclusion: Recommended for Approval

Product Quality Microbiology Data Sheet

A. 1. TYPE OF SUBMISSION: CBE-30 Supplement

2. SUBMISSION PROVIDES FOR: (b) (4)

3. MANUFACTURING SITE: Meridian Medical Technologies, Inc.
(b) (4)

4. DOSAGE FORM, ROUTE OF ADMINISTRATION AND STRENGTH/POTENCY: sterile injectable solution (0.3 mg/0.3 mL, 0.15 mg/0.3 mL) in EpiPen® and EpiPen® Jr. Auto Injectors, for IM injection

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

6. PHARMACOLOGICAL CATEGORY: (b) (4) ndicated for treatment of anaphylaxis.

B. SUPPORTING/RELATED DOCUMENTS: (b) (4) was approved under NDA 19-430/S-032 on August 16, 2006.

C. REMARKS: (b) (4)

filename: N19430S054R1.doc

Executive Summary

I. Recommendations

A. Recommendation on Approvability - Recommended for Approval.

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 [redacted] (b) (4). The applicant proposes to [redacted] (b) (4)

B. Brief Description of Microbiology Deficiencies – No microbiology deficiencies were identified based upon the information provided.

C. Assessment of Risk Due to Microbiology Deficiencies – Not applicable

D. Contains Potential Precedent Decision(s)- ☐ **Yes** ☒ **No**
(If yes, provide a brief description and a reference to the page where the precedent is discussed in depth)

III. Administrative

A. Reviewer's Signature _____
Neal J. Sweeney, PhD

B. Endorsement Block
Bryan S. Riley, PhD Acting Microbiology Team Leader

C. CC Block
N/A

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/s/

NEAL J SWEENEY
06/17/2013

BRYAN S RILEY
06/17/2013
I concur.

CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

19-430/s054

ADMINISTRATIVE and CORRESPONDENCE DOCUMENTS

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
FOOD AND DRUG ADMINISTRATION

CMC MICRO & STERILITY ASSURANCE REVIEW REQUEST

TO *(Division/Office)*: **New Drug Microbiology Staff**

E-mail to: **CDER OPS IO MICRO**

Paper mail to: **WO Bldg 51, Room 4193**

FROM: Youbang Liu, ONDQA (301-796-1926)

PROJECT MANAGER *(if other than sender):*

REQUEST DATE	IND NO.	NDA NO.	TYPE OF DOCUMENT	DATE OF DOCUMENT
4/26/2013		19430/S-054	CBE-30 Supplement	2/7/13

NAMES OF DRUG	PRIORITY CONSIDERATION	PDUFA DATE	DESIRED COMPLETION DATE
EPIPEN JR		8/8/13	6/25/13

NAME OF APPLICANT OR SPONSOR: MERIDIAN MEDICAL TECHNOLOGIES INC.

GENERAL PROVISIONS IN APPLICATION

- ☐ 30-DAY SAFETY REVIEW NEEDED
- ☐ NDA FILING REVIEW NEEDED BY: _____
- ☐ BUNDLED
- ☐ DOCUMENT IN EDR
- ☐ CBE-0 SUPPLEMENT
- ☒ CBE-30 SUPPLEMENT
- ☐ CHANGE IN DOSAGE, STRENGTH / POTENCY

COMMENTS / SPECIAL INSTRUCTIONS:

The micro information needs to be reviewed.

Paper submission, a jacket will be delivered to Micro Staff.

SIGNATURE OF REQUESTER

Youbang Liu

REVIEW REQUEST DELIVERED BY (Check one):

☒ DARRTS ☐ EDR ☒ E-MAIL ☐ MAIL ☐ HAND

DOCUMENTS FOR REVIEW DELIVERED BY (Check one):

☐ EDR ☐ E-MAIL ☐ MAIL ☒ HAND

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/s/

YOUBANG LIU
04/26/2013

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration
Silver Spring MD 20993

NDA 19430/S-054

CBE SUPPLEMENT – ACKNOWLEDGEMENT

Meridian Medical Technologies, Inc.
Attention: Ellen Kay Losciuto
Manager, Regulatory Affairs
1945 Craig Road
St. Louis, MO 63146

Dear Ms. Losciuto:

We have received your Supplemental New Drug Application (sNDA) submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act (FDCA or the Act) for the following:

NDA NUMBER: 19430

SUPPLEMENT NUMBER: S-054

PRODUCT NAME: EpiPen® and EpiPen® Jr (Epinephrine) Auto-Injector

DATE OF SUBMISSION: February 6, 2013

DATE OF RECEIPT: February 7, 2013

This supplemental application, submitted as a "Changes Being Effected in 30 days" supplement, proposes to (b) (4) with a (b) (4) in the (b) (4) area.

Unless we notify you within 60 days of the receipt date that the application is not sufficiently complete to permit a substantive review, we will file the application on April 8, 2013, in accordance with 21 CFR 314.101(a). If the application is filed, the user fee goal date will be August 7, 2013.

Cite the application number listed above at the top of the first page of all submissions to this application. Send all submissions, electronic or paper, including those sent by overnight mail or courier, to the following address:

Food and Drug Administration
Center for Drug Evaluation and Research
Division of Pulmonary, Allergy and Rheumatology Products
5901-B Ammendale Road
Beltsville, MD 20705-1266

All regulatory documents submitted in paper should be three-hole punched on the left side of the page and bound. The left margin should be at least three-fourths of an inch to assure text is not obscured in the fastened area. Standard paper size (8-1/2 by 11 inches) should be used; however, it may occasionally be necessary to use individual pages larger than standard paper size. Non-standard, large pages should be folded and mounted to allow the page to be opened for review without disassembling the jacket and refolded without damage when the volume is shelved. Shipping unbound documents may result in the loss of portions of the submission or an unnecessary delay in processing which could have an adverse impact on the review of the submission. For additional information, see http://www.fda.gov/Drugs/DevelopmentApprovalProcess/FormsSubmissionRequirements/DrugMasterFilesDMFs/ucm073080.htm.

If you have questions, call me, at (301) 796-1926.

Sincerely,

{See appended electronic signature page}

Youbang Liu
Regulatory Project Manager
Division III of New Drug Quality Assessment
Office of New Drug Quality Assessment
Center for Drug Evaluation and Research

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/s/

YOUBANG LIU
03/01/2013