CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

22-542Orig1s000

MICROBIOLOGY REVIEW(S)

Product Quality Microbiology Review

31 January 2011

NDA: 22-542/N000

Drug Product Name
Proprietary: Viokace
Non-proprietary: Pancrelipase

Review Number: 2

Dates of Submission(s) Covered by this Review

Submit	Received	Review Request	Assigned to Reviewer
01 September 2011	01 September 2011	NA	NA

Submission History (for amendments only) –

Submit Date(s)	Microbiology Review #	Review Date(s)
29 Oct 2009	1	21 June 2010
29 October 2009	Amendment to Review 1	10 November 2010

Applicant/Sponsor
Name: Aptalis Pharma US, Inc
(formerly Axcan Pharma US Inc.)
Address: 22 Inverness Center Parkway
Suite 310
Birmingham AL 35242

Representative: Guy Rousseau
Executive Director, Regulatory Affairs
Telephone: (514) 803-2668

Name of Reviewer: Denise A. Miller

Conclusion: Approve

Product Quality Microbiology Data Sheet

A. 1. TYPE OF SUBMISSION: Original Application

2. SUBMISSION PROVIDES FOR: The manufacture of a non-sterile oral tablet.

3. MANUFACTURING SITE:
Confab Laboratories, Inc.
4355, boulevard Sir Wilfrid Laurier,
St-Hubert, Quebec
Canada J3Y 3X3

FEI: 3000198340

4. DOSAGE FORM, ROUTE OF ADMINISTRATION AND STRENGTH/POTENCY:

- Dosage Form: immediate release tablet
- Route of Administration: Oral
- Strength/Potency: two strengths are proposed. They are listed in Table 1 below:

Table 1: Viokace Product Strengths

Product	Lipase	Amylase	Protease
Viokace 8	10,440 USP units	39,150 USP units	39,150 USP units
Viokace 16	20,880 USP units	78,300 USP units	78,300 USP units

5. METHOD(S) OF STERILIZATION: NA, product not sterile

6. PHARMACOLOGICAL CATEGORY: treatment of exocrine pancreatic insufficiency

B. SUPPORTING/RELATED DOCUMENTS:
DMF (b) (4) Type II Pancreatin/Pancrelipase Manufacture (b) (4) See Page 4 of this review.

C. REMARKS:
1) Application is electronic in CTD format.
2) This product has been marketed as an unapproved product under the name VioKase. The name Viokace was deemed acceptable on 08 December 2011.

filename: N022542N000R2.doc

Executive Summary

I. Recommendations

A. Recommendation on Approvability - Recommend to approve from a quality microbiology standpoint.

B. Recommendations on Phase 4 Commitments and/or Agreements, if Approvable - NA

II. Summary of Microbiology Assessments

A. Brief Description of the Manufacturing Processes that relate to Product Quality Microbiology – This application is for the manufacture and testing of a non-sterile tablet for oral administration.

B. Brief Description of Microbiology Deficiencies – None

C. Assessment of Risk Due to Microbiology Deficiencies - NA

III. Administrative

A. Reviewer's Signature _____

Denise A. Miller
Microbiologist

B. Endorsement Block _____

Stephen E. Langille, Ph.D.
Senior Microbiologist

C. CC Block

N/A

(b) (4)

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

/s/

DENISE A MILLER
02/03/2012

STEPHEN E LANGILLE
02/03/2012

M E M O R A N D U M

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
FOOD AND DRUG ADMINISTRATION
CENTER FOR DRUG EVALUATION AND RESEARCH

DATE: 08 November 2010

TO: NDA 22-542/N000

FROM: Denise Miller
Review Microbiologist
CDER/OPS/New Drug Microbiology Staff

THROUGH: James L. McVey
Team Leader, Quality Microbiology

cc: In DARRTS

SUBJECT: **Addendum to Quality Microbiology Review 21 June 2010**
Product: Viocase
Sponsor: Axcan Pharma US

In the quality microbiology review dated 21 June 2010, DMF (b) (4) was found to be adequate (DMF review 08 June 2010). This finding was part of the basis for the recommendation to approve the application from a quality microbiology perspective.

Additional information and subsequent review of DMF (b) (4) resulted in a request for quality microbiology information (IR dated 27 October 2010). As of 08 November 2010, a response has not been received and as such DMF (b) (4) is currently not supportive of NDA 22-542/N000.

The quality microbiology recommendation on NDA 22-542/N000 has been changed to APPROVABLE pending resolution of the deficiencies cited in DMF (b) (4).

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

/s/

DENISE A MILLER
11/10/2010

JAMES L MCVEY
11/10/2010
I concur.

Product Quality Microbiology Review

21 June 2010

NDA: 22-542/N000

Drug Product Name
Proprietary: Viocase
Non-proprietary: Pancrelipase

Review Number: 1

Dates of Submission(s) Covered by this Review

Submit	Received	Review Request	Assigned to Reviewer
29 OCT 2009	30 OCT 2009	5 NOV 2009	10 NOV 2009

Submission History (for amendments only) – NA

Applicant/Sponsor
Name: Axcan Pharma US Inc.
Address: 22 Inverness Center Parkway
Birmingham AL 35242

Representative: Nicole Brufatto, Director, Regulatory Affairs
i3 CanReg Inc. (authorized representative)
Telephone: (866) 722-6734 ext 1234

Name of Reviewer: Denise A. Miller

Conclusion: Approve

Product Quality Microbiology Data Sheet

A. 1. TYPE OF SUBMISSION: Original Application

2. SUBMISSION PROVIDES FOR: The manufacture of a non-sterile oral tablet.

3. MANUFACTURING SITE:
Confab Laboratories, Inc.
4355, boulevard Sir Wilfrid Laurier,
St-Hubert, Quebec
Canada J3Y 3X3

FEI: 3000198340

4. DOSAGE FORM, ROUTE OF ADMINISTRATION AND STRENGTH/POTENCY:

- Dosage Form: immediate release tablet
- Route of Administration: Oral
- Strength/Potency: two strengths are proposed. They are listed in Table 1 below:

Table 1:

Product	Lipase	Amylase	Protease
Viocase 8	10,440 USP units	39,150 USP units	39,150 USP units
Viocase 16	20,880 USP units	78,300 USP units	78,300 USP units

5. METHOD(S) OF STERILIZATION: NA, product not sterile

6. PHARMACOLOGICAL CATEGORY: treatment of exocrine pancreatic insufficiency

B. SUPPORTING/RELATED DOCUMENTS:
DMF (b) (4) Type II Pancreatin/Pancrelipase Manufacture (b) (4) The PEC 1252 pancrelipase listed in this application is (b) (4) 1206 enzyme concentrate. The 1206 manufacturing process was reviewed on 8 June 2010 and found adequate.

C. REMARKS:
1) Application is electronic in CTD format.
2) This product has been marketed as an unapproved product under the name VioKase. The name Viocase was deemed acceptable on 22 Jan 2010 and is the name used throughout this review.

filename: N022542N000R1.doc

Executive Summary

I. Recommendations

A. Recommendation on Approvability - Recommend to approve from a quality microbiology standpoint.

B. Recommendations on Phase 4 Commitments and/or Agreements, if Approvable - NA

II. Summary of Microbiology Assessments

A. Brief Description of the Manufacturing Processes that relate to Product Quality Microbiology – This application is for the manufacture and testing of a non-sterile tablet for oral administration.

B. Brief Description of Microbiology Deficiencies – None

C. Assessment of Risk Due to Microbiology Deficiencies - NA

III. Administrative

A. Reviewer's Signature _____
Denise A. Miller, Microbiologist

B. Endorsement Block _____
Stephen E. Langille, Ph.D.

C. CC Block
N/A

4 Page(s) has been Withheld in Full as b4 (CCI/TS) immediately following this page

Application Type/Number	Submission Type/Number	Submitter Name	Product Name
NDA-22542	ORIG-1	AXCAN PHARMA US INC	VIOKASE (PANCRELIPASE)UNCOATED TABLETS

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

/s/

DENISE A MILLER
06/21/2010

STEPHEN E LANGILLE
06/21/2010

PRODUCT QUALITY MICROBIOLOGY FILING CHECKLIST

NDA Number: 22-542 **Applicant:** Axcan Pharma **Letter Date:** 30-OCT-2009

Drug Name: pancrelipase **NDA Type:** 505(b)(2) **Stamp Date:** 30-OCT-2009

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?	√		
2	Has the applicant submitted an overall description of the manufacturing processes and microbiological controls used in the manufacture of the drug product?	√		
3	Has the applicant submitted protocols and results of validation studies concerning microbiological control processes used in the manufacture of the drug product?	√		
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?		√	
5	Has the applicant submitted preservative effectiveness studies (if applicable) and container-closure integrity studies?	NA		
6	Has the applicant submitted microbiological specifications for the drug product and a description of the test methods?	√		
7	Has the applicant submitted the results of analytical method verification studies?	√		
8	Has the applicant submitted all special/critical studies/data requested during pre-submission meetings and/or discussions?	NA		
9	Is this NDA fileable? If not, then describe why.	√		

Additional Comments: Product is an oral tablet.

Denise A. Miller, Microbiologist Date 12/07/2009

Bryan S. Riley, Ph.D.

Application Type/Number	Submission Type/Number	Submitter Name	Product Name
NDA-22542	ORIG-1	AXCAN PHARMA US INC	VIOKASE (PANCRELIPASE)UNCOATED TABLETS

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

/s/

DENISE A MILLER
12/07/2009

BRYAN S RILEY
12/07/2009
I concur.