

**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

*APPLICATION NUMBER:*

**203756Orig1s000**

**MICROBIOLOGY REVIEW(S)**

# Product Quality Microbiology Review

10 October 2012

**NDA:** 203-756/N000

**Drug Product Name**

**Proprietary:** Cometriq  
**Non-proprietary:** cabozantinib (S)-malate

**Review Number:** 1

**Dates of Submission(s) Covered by this Review**

Submit	Received	Review Request	Assigned to Reviewer
08 March 2012	09 March 2012	30 May 2012	31 May 2012

**Submission History (for amendments only) – NA**

**Applicant/Sponsor**

**Name:** Exelixis, Inc.  
**Address:** 210 East Grand Ave.  
San Francisco, CA 94083  
**Representative:** Kirk Rosemark, RAC  
VP, Regulatory Affairs  
**Telephone:** (650) 837-7038

**Name of Reviewer:** Denise A. Miller

**Conclusion:** Approve

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## Product Quality Microbiology Data Sheet

- A. 1. TYPE OF SUBMISSION:** Original Drug Application
- 2. SUBMISSION PROVIDES FOR:** This is an original application for the commercial manufacture of the oral drug product.
- 3. MANUFACTURING SITE:**  
(b) (4)  

- 4. DOSAGE FORM, ROUTE OF ADMINISTRATION AND STRENGTH/POTENCY:**
- Dosage Form: Capsules packaged in either a blister package system in three card configurations; a 140mg, 100mg and a 60 mg dosage card. The 20 mg capsule is also provided in a bottle packaging system.
  - Route of Administration: Oral
  - Strength/Potency: 20 mg and 80 mg/capsule
- 5. METHOD(S) OF STERILIZATION:** NA
- 6. PHARMACOLOGICAL CATEGORY:** Anti-cancer treatment for unresectable, locally advanced, or metastatic medullary thyroid cancer.
- B. SUPPORTING/RELATED DOCUMENTS:** NA
- C. REMARKS:**  
This NDA was a rolling submission for which the CMC portion was received on 28 May 2012.

**filename:** N203756N000R1.doc

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## **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 is a non-sterile solid oral product. (b) (4)  

- 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, OPS/NDMS
- B. Endorsement Block** \_\_\_\_\_  
Stephen E. Langille, Ph.D.  
Senior Microbiologist, OPS/NDMS
- C. CC Block**  
N/A

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/s/  
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DENISE A MILLER  
10/11/2012

STEPHEN E LANGILLE  
10/16/2012

## PRODUCT QUALITY MICROBIOLOGY FILING CHECKLIST

**NDA Number: 203-756**

**Applicant: Exelixis, Inc**

**Letter Date: 08 March 2012**

**Drug Name: cabozantinib  
(XL184)**

**NDA Type: 505 (b)(1)**

**Stamp Date: 09 March 2012**

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: This is a non-sterile oral drug product.

This application is a rolling submission in which the final portion was submitted on 29 May 2012.

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Denise A. Miller

Microbiologist, OPS/NDMS

Date

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Stephen E. Langille, Ph.D.

Senior Microbiologist, OPS/NDMS

Date

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/s/  
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DENISE A MILLER  
06/27/2012

STEPHEN E LANGILLE  
06/27/2012