Dear Ms. Steinbock:

Please refer to your supplemental Biologics License Application (sBLA) dated and received August 29, 2016, and your amendments, submitted under section 351(a) of the Public Health Service Act for “Vectibix (panitumumab) injection, for intravenous use, 20 mg/mL.”

This Prior Approval supplemental biologics application provides for the following updates to the prescribing information:

- To modify the indicated population for both of the indications from the treatment of patients with wild-type KRAS (exon 2 codons 12 or 13) metastatic colorectal cancer as determined by an FDA-approved test to the treatment of patients with wild-type RAS (defined as wild-type in both KRAS and NRAS) metastatic colorectal cancer as determined by an FDA-approved test for:
  - As first-line therapy in combination with FOLFOX.
  - As monotherapy following disease progression after prior treatment with fluoropyrimidine-, oxaliplatin-, and irinotecan-containing chemotherapy.

This modification to the approved indications is reflected in the highlights and in the following full prescribing information sections or subsections, including: Indication and Usage, Metastatic Colorectal Cancer (1.1); Dosage and Administration, Patient Selection (2.1); and Warnings and Precautions, Increased Tumor Progression, Increased Mortality, or Lack of Benefit in Patients with RAS-Mutant mCRC (5.2).

- To revise the Dosage and Administration, Preparation for Administration (2.4) subsection to state that only a 21-gauge or larger gauge (i.e., smaller bore) needle should be used to withdraw product from single use vials, based on reports of coring of the rubber stopper with larger bore needles.
To remove the 200-mg vial strength and deletion of information on this strength from sections Dosage Forms and Strengths (3), Description (11), and How Supplied/Storage and Handling (16).

To revise Warnings and Precautions to include a new subsection, Embryo-fetal Toxicity (5.10), describing the potential risks of Embryo-fetal Toxicity based on the results of reproductive toxicology studies conducted in cynomolgus monkeys and to update the Use in Specific Populations, (8.1, 8.2, and 8.3) subsections, for compliance with the Pregnancy and Lactation Labeling Rule ( PLLR). Data previously described under Nonclinical Toxicology, Animal Toxicology and/or Pharmacology (13.2) subsection, has been moved to Use in Specific Populations (8.1) and Warnings and Precautions (5.10) and Animal Toxicology and/or Pharmacology (13.2) subsection was deleted.

To update the Adverse Reactions, Immunogenicity (6.2) subsection, to include an assessment for binding and neutralizing testing from Study 20100007.

To revise the Use in Specific Populations, Pediatric Use (8.4) subsection, to include the results of the pharmacokinetics of panitumumab in pediatric patients.

To modify the product description in Dosage and Administration (2) and How Supplied/Storage and Handling (16) sections regarding the description of particulates in the product.

To delete the Drug Interactions (7) section, which stated “No formal drug-drug interaction studies have been conducted between Vectibix and oxaliplatin or fluoropyrimidine” in accordance with current FDA labeling practices and to remove subsections which describe only the absence of risks.

To update the Description (11) section to include pharmacologic class and route of administration.

**APPROVAL & LABELING**

We have completed our review of this supplemental application, as amended. It is approved, effective on the date of this letter, for use as recommended in the enclosed, agreed-upon labeling text.

**WAIVER OF HIGHLIGHTS SECTION**

We are waiving the requirements of 21 CFR 201.57(d)(8) regarding the length of Highlights of prescribing information. This waiver applies to all future supplements containing revised labeling unless we notify you otherwise.
**CONTENT OF LABELING**

As soon as possible, but no later than 14 days from the date of this letter, submit, via the FDA automated drug registration and listing system (eLIST), the content of labeling [21 CFR 601.14(b)] in structured product labeling (SPL) format, as described at http://www.fda.gov/ForIndustry/DataStandards/StructuredProductLabeling/default.htm, that is identical to the enclosed labeling (text for the prescribing information) and include the labeling changes proposed in any pending “Changes Being Effectuated” (CBE) supplements. Information on submitting SPL files using eLIST may be found in the guidance for industry titled “SPL Standard for Content of Labeling Technical Qs and As” at http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM072392.pdf.

The SPL will be accessible via publicly available labeling repositories.

Also within 14 days, amend all pending supplemental applications that include labeling changes for this BLA, including pending “Changes Being Effectuated” (CBE) supplements, for which FDA has not yet issued an action letter, with the content of labeling [21 CFR 601.12(f)] in MS Word format that includes the changes approved in this supplemental application.

**REQUIRED PEDIATRIC ASSESSMENTS**

Under the Pediatric Research Equity Act (PREA) (21 U.S.C. 355c), all applications for new active ingredients, new indications, new dosage forms, new dosing regimens, or new routes of administration are required to contain an assessment of the safety and effectiveness of the product for the claimed indication(s) in pediatric patients unless this requirement is waived, deferred, or inapplicable.

Because none of these criteria apply to your application, you are exempt from this requirement.

**PROMOTIONAL MATERIALS**

You may request advisory comments on proposed introductory advertising and promotional labeling. To do so, submit, in triplicate, a cover letter requesting advisory comments, the proposed materials in draft or mock-up form with annotated references, and the prescribing information to:

OPDP Regulatory Project Manager  
Food and Drug Administration  
Center for Drug Evaluation and Research  
Office of Prescription Drug Promotion  
5901-B Ammendale Road  
Beltsville, MD 20705-1266
Alternatively, you may submit a request for advisory comments electronically in eCTD format. For more information about submitting promotional materials in eCTD format, see the draft Guidance for Industry (available at: [http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM443702.pdf](http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM443702.pdf)).

As required under 21 CFR 601.12(f)(4), you must submit final promotional materials, and the prescribing information, at the time of initial dissemination or publication, accompanied by a Form FDA 2253. Form FDA 2253 is available at [http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Forms/UCM083570.pdf](http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Forms/UCM083570.pdf). Information and Instructions for completing the form can be found at [http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Forms/UCM375154.pdf](http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Forms/UCM375154.pdf). For more information about submission of promotional materials to the Office of Prescription Drug Promotion (OPDP), see [http://www.fda.gov/AboutFDA/CentersOffices/CDER/ucm090142.htm](http://www.fda.gov/AboutFDA/CentersOffices/CDER/ucm090142.htm).

**REPORTING REQUIREMENTS**

We remind you that you must comply with reporting requirements for an approved BLA (in 21 CFR 600.80 and in 21 CFR 600.81).

If you have any questions, call Missiratch (Mimi) Biable, Senior Regulatory Health Project Manager, at (301) 796-0154.

Sincerely,

{See appended electronic signature page}

Patricia Keegan, M.D.
Director
Division of Oncology Products 2
Office Hematology and Oncology Products
Center for Drug Evaluation and Research

**ENCLOSURE(S):**
- Content of Labeling
- Carton and Container Labeling
This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

PATRICIA KEEGAN
06/29/2017