Food and Drug Administration
Center for Drug Evaluation and Research

Summary Minutes of the Oncologic Drugs Advisory Committee
March 29, 2017

Location: Sheraton College Park North Hotel, Chesapeake Ballroom, 4095 Powder Mill Road, Beltsville, Maryland

Topic: The committee discussed biologics license application (BLA) 761064, rituximab/hyaluronidase injection for subcutaneous use, submitted by Genentech, Inc. The proposed indications (uses) for this product are for: (1) The treatment of patients with relapsed or refractory, follicular lymphoma as a single agent; (2) previously untreated follicular lymphoma in combination with first line chemotherapy and, in patients achieving a complete or partial response to rituximab/hyaluronidase for subcutaneous injection in combination with chemotherapy, as single-agent maintenance therapy; (3) non-progressing (including stable disease), follicular lymphoma as a single agent after first-line cyclophosphamide, vincristine, and prednisone (CVP) chemotherapy; (4) the treatment of patients with previously untreated diffuse large B-cell lymphoma (DLBCL) in combination with cyclophosphamide, doxorubicin, vincristine, prednisolone (CHOP) or other anthracycline based chemotherapy regimens; and (5) in combination with fludarabine and cyclophosphamide (FC), for the treatment of patients with previously untreated and previously treated chronic lymphocytic leukemia (CLL).

These summary minutes for the March 29, 2017, meeting of the Oncologic Drugs Advisory Committee of the Food and Drug Administration were approved on April 10, 2017.

I certify that I attended the March 29, 2017, meeting of the Oncologic Drugs Advisory Committee of the Food and Drug Administration and that these minutes accurately reflect what transpired.

/S/	**/S**
Lauren D. Tesh, PharmD, BCPS	Bruce J. Roth, MD
Designated Federal Officer, ODAC	*Chairperson, ODAC*

Summary Minutes
Oncologic Drugs Advisory Committee Meeting
March 29, 2017

The following is the final report of the Oncologic Drugs Advisory Committee (ODAC) meeting held on March 29, 2017. A verbatim transcript will be available in approximately six weeks, sent to the Office of Hematology and Oncology Products and posted on the FDA website at: https://www.fda.gov/AdvisoryCommittees/CommitteesMeetingMaterials/Drugs/OncologicDrugsAdvisoryCommittee/ucm547155.htm

All external requests for the meeting transcript should be submitted to the CDER Freedom of Information Office.

The Oncologic Drugs Advisory Committee (ODAC) of the Food and Drug Administration, Center for Drug Evaluation and Research met on March 29, 2017 from 8:00 a.m. until 12:30 p.m. at the Sheraton College Park North Hotel, Chesapeake Ballroom, 4095 Powder Mill Road, Beltsville, Maryland. Prior to the meeting, members and temporary voting members were provided copies of the briefing materials from the FDA, and the Sponsor, Genentech, Inc. The meeting was called to order by Bruce J. Roth, MD, (Chairperson); the conflict of interest statement was read into the record by Lauren D. Tesh, PharmD, BCPS (Designated Federal Officer). There were approximately 115 people in attendance. There were no Open Public Hearing speakers.

Issue: The committee discussed biologics license application (BLA) 761064, rituximab/hyaluronidase injection for subcutaneous use, submitted by Genentech, Inc. The proposed indications (uses) for this product are for: (1) The treatment of patients with relapsed or refractory, follicular lymphoma as a single agent; (2) previously untreated follicular lymphoma in combination with first line chemotherapy and, in patients achieving a complete or partial response to rituximab/hyaluronidase for subcutaneous injection in combination with chemotherapy, as single-agent maintenance therapy; (3) non-progressing (including stable disease), follicular lymphoma as a single agent after first-line cyclophosphamide, vincristine, and prednisone (CVP) chemotherapy; (4) the treatment of patients with previously untreated diffuse large B-cell lymphoma (DLBCL) in combination with cyclophosphamide, doxorubicin, vincristine, prednisolone (CHOP) or other anthracycline based chemotherapy regimens; and (5) in combination with fludarabine and cyclophosphamide (FC), for the treatment of patients with previously untreated and previously treated chronic lymphocytic leukemia (CLL).

Attendance:
ODAC Members Present (Voting): Harold J. Burstein, MD, PhD; Bernard F. Cole, PhD; Heidi D. Klepin, MD, MS; Courtney J. Preusse, MA *(Consumer Representative)*; Bruce J. Roth, MD *(Chairperson)*; Alice T. Shaw, MD, PhD; Thomas S. Uldrick, MD, MS

ODAC Members Present (Non-Voting): Phuong Khanh (P.K.) Morrow, MD, FACP (*Industry Representative*)

ODAC Members Not Present (Voting): Grzegorz S. Nowakowski, MD; Vassilliki A. Papadimitrakopoulou, MD; Alberto S. Pappo, MD; Gregory J. Riely, MD, PhD; Brian I. Rini, MD, FACP

Temporary Members (Voting): Arthur F. Harralson, PharmD, BCPS; Adel Karara, BPharm, PhD, FCP; Paul V. Majkowski, JD *(Patient Representative)*; Scott Waldman, MD, PhD, FCP, FAHA

FDA Participants (**Non-Voting):** Richard Pazdur, MD; Ann Farrell, MD; R. Angelo de Claro, MD; Alexandria Schwarsin, MD; Lanre Okusanya, PharmD, MS; Jingjing Ye, PhD

Designated Federal Officer (Non-Voting): Lauren D. Tesh, PharmD, BCPS

Open Public Hearing Speakers: None

The agenda proceeded as follows:

8:00 a.m.	Call to Order and Introduction of Committee	**Bruce J. Roth, MD** Chairperson, ODAC
8:05 a.m.	Conflict of Interest Statement	**Lauren Tesh, PharmD, BCPS** Designated Federal Officer, ODAC
8:10 a.m.	Opening Remarks	**R. Angelo de Claro, MD** Medical Team Leader Division of Hematology Products (DHP) Office of Hematology and Oncology Products (OHOP) Office of New Drugs (OND), CDER, FDA
8:15 a.m.	**APPLICANT PRESENTATIONS**	**Genentech, Inc.**
	Rituximab SC Development Rationale	**Nancy Valente, MD** Head of Global Hematology Development Genentech
	Rituximab SC Clinical Perspective	**Andrew Davies, BM PhD** Associate Professor in Medical Oncology University of Southampton
	Rituximab SC Clinical Pharmacology	**Peter Morcos, PharmD** Clinical Pharmacologist Genentech
	Rituximab SC Clinical Development Concluding Remarks	**Axel Boehnke, MD** Global Development Team Leader Genentech

9:00 a.m.	**FDA PRESENTATIONS**	
	Rituximab and Hyaluronidase - BLA 761064	
	Clinical Pharmacology	**Lanre Okusanya, PharmD, MS** Clinical Pharmacologist Division of Clinical Pharmacology V (DCPV) Office of Clinical Pharmacology (OCP) Office of Translational Sciences (OTS), CDER, FDA
	Efficacy	**Jingjing Ye, PhD** Mathematical Statistician Division of Biometrics V (DBV) Office of Biometrics (OB), OTS, CDER, FDA
	Safety	**Alexandria Schwarsin, MD** Medical Officer DHP, OHOP, OND, CDER, FDA
	Patient Preference and Patient Reported Outcomes	**Vishal Bhatnagar, MD** Medical Officer DHP, OHOP, OND, CDER, FDA
9:45 a.m.	Clarifying Questions to the Presenters	
10:15 a.m.	**BREAK**	
10:30 a.m.	Open Public Hearing	
11:30 a.m.	Questions to the Committee/Committee Discussion	
12:30 p.m.	**ADJOURNMENT**	

Questions to the Committee:

1. **VOTE:** Is the benefit-risk favorable for the above drug product for the proposed indications in follicular lymphoma (FL), diffuse large B-cell lymphoma (DLBCL), and chronic lymphocytic leukemia (CLL)?

   YES: 11 **NO: 0** **ABSTAIN: 0**

   Committee Discussion:

   The committee unanimously voted in favor of the benefit-risk for biologics license application (BLA) 761064, rituximab and hyaluronidase injection for subcutaneous use for the proposed

indications in follicular lymphoma (FL), diffuse large B-cell lymphoma (DLBCL), and chronic lymphocytic leukemia (CLL). One committee member noted concern about a fixed

dose being used for those patients who have a small body surface area relative to the difference in area under the curve and suggested the product be dose adjusted for those with a smaller body surface area. Committee members commented that the data presented by the sponsor was compelling, and availability of the subcutaneous formulation will allow patients to receive rituximab treatment in approximately five minutes versus 1-2 hours for the intravenous product. The committee members also stated that there would be a role for the subcutaneous formulation in clinical practice. Please see the transcript for details of the committee discussion.

The meeting was adjourned at approximately 10:57 a.m.