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U.S. DEPARTMENT OF HEALTH AND

HUMAN SERIVCES

FOOD AND DRUG ADMINISTRATION

PUBLIC MEETING

ON BIOSMILAR USER FEE ACT

(BsUFA)

Friday, December 18, 2015

FDA White Oak Campus, 10903 New Hampshire Ave., Bldg. 31 Conference Center Silver Spring, MD

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1	PROCEEDINGS	
2	(9:03 a.m.)	
3	DR. TOIGO: Good morning, everybody, and	
4	welcome to this public meeting on the	
5	reauthorization of the Biosimilar User Fee Act.	
6	My name is Terry Toigo and I'm the Associate	
7	Director for Drug Safety Operations in the Center	
8	for Drug Evaluation and Research. My job is to be	
9	your moderator today.	
10	Today's meeting is an important step to	
11	begin to gather input from stakeholders on	
12	features of the BsUFA program in advance of the	
13	discussions that will occur with the regulated	
14	industry.	
15	We have a full agenda for today's	
16	meeting. We will start with Dr. Janet Woodcock,	
17	Director of the Center for Drug Evaluation and	
18	Research, and she will get us started with opening	
19	remarks. You don't have to come up yet, Janet.	
20	I'm going to go through the logistics.	
21	That will be followed by Leah Christl,	
22	who is the Associate Director for Therapeutic	

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Biologics in the Office of New Drugs in CDER, and she will provide a presentation on the BsUFA background and the reauthorization process. Then we will have panels. The panels 4 will provide perspectives from the following types of groups. We will have consumer and patient advocates, health care professionals, the regulated industry, and then our last panel will be scientific and academic experts. 10 After the panel presentations, Theresa Mullin, Director of the Office of Strategic 11 Programs in CDER, will then provide some remarks. 12 13 At the end of that, there will be an opportunity for public comment. If you wish to 15 speak during the public comment session, you need to sign up at the registration desk, and I ask 17 that you do that before we have the break, then we 18 can figure out how we want to set up the last 19 session. If you want to speak, if something comes 20 up in the first part of the meeting and you decide 21 then you want to speak, as long as you can sign in 22 with the folks at the registration desk, we can

6 take care of that. 2 Each of our panelists will have 10 minutes to present the perspective from their organizations, and we are going to ask you to adhere to that time frame. It will be my job to let you know when you approach your time limit, and your microphone will not cut off, but I will politely ask you to move on if you get to your 10 minute time frame. 10 FDA provided two questions in the Federal Register Notice to help 11 panelists in the preparation of their comments. 12 13 The two questions: What is your assessment of the overall performance of the BsUFA program to date, 15 and what aspects of the BsUFA performance goals 16 should be retained, changed, or discontinued to 17 further strengthen and improve the program. 18 BsUFA reauthorization deals with process enhancements and funding issues. Policy issues are 19 20 beyond the scope of the reauthorization process. 21 There is also a public docket that will be open until January 19 to which you can submit public 22

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1	comments, and speakers, if you have additional	
2	comments after your presentations and you want to	
3	submit something in writing, we ask that you do	
4	that to the docket.	
5	Brief logistics, housekeeping items. We	
6	will have a 20 minute break at 10:30. Food and	
7	beverages are in the lobby. I'm sure most of you	
8	are familiar with that process, since you have	
9	been here before. The restrooms are down the hall	
10	and to the right.	
11	That is our opening and logistics. I'm	
12	going to turn it over to Dr. Woodcock, and she's	
13	going to get us started for today. Thank you all	
14	for coming. We appreciate your participation in	
15	this process.	
16	DR. WOODCOCK: Thanks, Terry. Good	
17	morning, everyone. Here we are, bright and early,	
18	talking about the user fee program. I'd like to	
19	thank everyone for coming today to this meeting.	
20	It's really important to us to have public input	
21	as we go through this renegotiation process.	
22	The purpose of the public meeting really	

8 is to hear the stakeholder views from the wide variety of stakeholders as we consider whether to retain, to change, or discontinue the current BsUFA performance goals in any next BsUFA that there might be. That is really the purpose of the meeting. We really want to hear input from everyone about that. The first Biosimilar User Fee Act or BsUFA was over three years ago and allowed FDA to begin development of the infrastructure it needed to support this new program. We started out with 11 nothing, and we didn't really have an 12 13 appropriation for this program, so it was foreseen that we would develop a user fee program to 15 support these activities. We had to get started before we had appropriation or before we had any 16 17 money for the program. 18 We created for the industry when we started the BsUFA program -- we had the statute 19 20 first, then we got BsUFA, is what I was trying to 21 BsUFA really allowed us to begin this 22 infrastructure and to figure out how to do funding

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1	of the program when in fact we didn't have any	
2	marketed products.	
3	We created the biosimilar product	
4	development program, and that provided a mechanism	
5	and structure for collection of development phased	
6	fees, which is quite different than our other user	
7	fee programs that are related strictly to	
8	applications and marketed products.	
9	We did this because the development	
10	phase for this was unknown, developing a	
11	biosimilar was viewed to be intense, and since the	
12	biosimilars by definition are supposed to have	
13	less in the clinical development phase, it was	
14	felt there would be much more in the product	
15	development and comparison phase, and that would	
16	be during the IND process.	
17	This allowed the agency to work toward	
18	devoting additional resources to meeting with	
19	companies regarding products they were developing	
20	to help streamline that development process, so	
21	that companies as they were developing the new	
22	biosimilars could do the right things and could	

10 get good advice from the agency about what we were looking for. 3 Hopefully, this whole pipeline, once it became mature, would lead to safe, effective, and 5 possibly more accessible biosimilar products for patients. The accomplishments of this program -first of all, we did approve the first biosimilar in the United States in March of 2015. That was RCO, everyone knows, or Filgrastim-sndz, which is a biosimilar to Neupogen or Filgrastim, which is a 11 reference product that is licensed by the FDA, and 12 the indication is to stimulate white blood cell 13 growth in patients with cancer and help them fight 15 infection. It has a number of other uses. published three final guidance's in 2015, and we 16 have published five draft guidance's since 2012. 17 We are aware that development of 18 19 biosimilars is really a global activity, that 20 there has been a program going on in Europe for longer than we have had legislation for 21 22 biosimilars, so we work with the international

11 regulators and others, like the World Health Organization and so forth, on all the different matters that have to do with biosimilars in all these different regions. 5 We hope to make sure we do have regulatory convergence so there is more or less an uniform global structure around biosimilars and how they are developed and how they are regulated. 9 We have begun and we want to continue outreach efforts toward the public and clinicians about biosimilars. I think I've concluded that 11 really targeted outreach, when you approve a 12 Filgrastim, the hematologic community, the oncologists, they are going to be the most 15 interested in that. Your dermatologists aren't 16 going to be interested. 17 We're not going to try to educate the world on these. We're going to try to educate the 19 relevant specialties that use the reference 20 molecules about the biosimilars in a timely 21 manner, when a biosimilar is coming available, so 22 they can understand.

12 I can say for my community, the 1 rheumatologic community, there has been ongoing discussion. I've been at their annual meetings for years talking to them about this. Leah Christl has come with me sometimes and talked about it. I can say there is still considerable 6 concern by the clinical community about the use of biosimilar products and what's going to happen. It's the unknown. Going forward in the next program, as more biosimilars become available, 10 this part of the activity is going to become more 11 important. 12 13 We certainly saw that years ago with the generics program. There was a considerable amount 15 of resistance in the clinical community with the use of generics, that they were inferior. is still some residual of that but not very much 18 since 88 percent of dispensed drugs in the United 19 States are generic drugs. At the beginning of the 20 program, we forget, because it was a long time 21 ago, there was clinical resistance. 22 That is going to be an increasingly

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- 1 important part of the program. First, we built
- 2 the infrastructure, the conceptual framework for
- 3 how biosimilar would be evaluated and how its
- 4 biosimilarity would be evaluated. We need to
- 5 build and publish the conceptual framework for the
- 6 inter- changeability part, and we are working on
- 7 that.
- 8 Then we had to develop the
- 9 infrastructure of the machine to get the reviews
- 10 done, and how we would structure the review
- 11 process for biosimilars and all that would work,
- 12 and we have done that, and then anticipating
- 13 approval of a number of biosimilars over the next
- 14 several years, we're going to have to figure out
- 15 how to work with the clinical community and help
- 16 educate them about this.
- 17 There are challenges as this program is
- 18 dynamically evolving. There is a large number of
- 19 industry biosimilar development programs underway,
- 20 and that is terrific. That is really good news, I
- 21 think, for consumers. It means we are going to
- 22 have a robust program.

14 As of November 2015, there were 59 1 programs in the biosimilar product development That doesn't mean that is every single program. biosimilar program there is in the world. That means that's the people who have signed up for our program and are paying user fees, and are getting advice from us. That is a lot of entities. 8 As I said, when we started out, when the statute was enacted, we didn't get additional resources for this program. We have carved those 10 resources out ourselves out of our appropriation 11 that was existing and we have some increment from 12 the biosimilar development program from the fees 13 that we charge under that, which is the current 15 user fee program, and then there is the 16 application fee. 17 We really need to figure out going 18 forward, if we get a significant proportion of these 59 products come forward and turn into 19 20 applications for marketing, how we are going to 21 get this work done, and how the biosimilar program 22 in the future would be funded to support getting

15 this work done. 2 We do have challenges at FDA. continue at CEDR to have challenges in recruiting and retaining critical staff for review of the biosimilar development programs and the application submissions. This is very complicated science. I think it's very fun, but the people that have to do it every day are also highly sought after in the outside, for much more competitive salary positions outside. 10 11 We need to be able to offer a desirable program here that we can get those scientists and 12 clinicians in-house and build our biosimilar 13 development program. With those challenges, that's what we 15 need to think about as we think about the future 17 of the program. That is what we think about. We also need to know from our stakeholders, many of 19 whom are represented here in this room, what do 20 you think about as what needs to be considered as 21 we consider a second user fee program. 22 I know it's hard for everyone because

16 although we have approved one biosimilar, it's not as if it's like the new drug program, the generic program, we're approving hundreds of applications every year, or in the case of generic, maybe approaching 1,000 products. 5 6 How do we structure a user fee program, what are the needs, what aspects should be considered from each one of the stakeholders. 9 To reiterate, the purpose of this meeting is to hear stakeholder views as we 10 consider whether to retain, to change, or 11 discontinue the current BsUFA performance goals in 12 the next BsUFA program. We'd like to know from those of you here, what is your assessment of the 15 overall performance of the BsUFA program to date, 16 what is your experience, if you have experience with it, and what aspects of the BsUFA performance 18 goals should be retained, changed, or discontinued 19 to further strengthen and improve the program. 20 I would also ask what do you envision, 21 if you could fast forward three to four years, 22 think about those 59 development programs, what do

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   you envision the biosimilar review program looking
    like and needing to look like five years from now,
   and then if so, how we would be able to build that
   program to meet the needs.
              We look forward to hearing all your
   views on the reauthorization of this critical
   program, and this is truly the kick-off of
   starting to think about the future for this
9
   program. Thanks very much. Thank you, Terry.
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             DR. TOIGO: Thank you, Janet.
11
              (Applause.)
              DR. TOIGO: Our next speaker is Dr. Leah
12
   Christl, the Associate Director for Therapeutic
13
   Biologics in OND and CDER.
15
              DR. CHRISTL: Good morning, everyone.
    I'm going to take just a little bit of your time
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   and go through the BsUFA program and the
18
   reauthorization process.
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             What I'll do is give a little bit of
20
   background about BsUFA and the fee structure,
21
   speak very briefly about the workload and
22
   performance, talk about some additional
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18 accomplishments under BsUFA, speak very briefly about the reauthorization process, just to orient folks who might not be as familiar with this process as others, and then touch on FDA's goals for BsUFA 2. The Act directed that FDA develop recommendations for a new user fee program for 351(k) applications. When the Act was passed, it amended the Federal Food, Drug and Cosmetic Act to include 351(k) applications and the definition of 10 "human drug application," enabling FDA to collect 11 the same fees for 351(k) and 351(a) BLAs through 12 September of 2012. 13 At the time, the Act had directed FDA to 14 15 think about a user fee program for the biosimilar 16 products, whether those would be their own user 17 fee program or whether they would get rolled and 18 under PDUFA, how they would do that. FDA did 19 develop recommendations to Congress for a separate 20 user fee program for 351(k) applications through 21 fiscal years 2013 to 2017. Again, we could have kept them under PDUFA or created a new user fee 22

19 program. 2 What we did was create this new user fee program or BsUFA. On July 9, 2012, the President signed FDASIA, which included the authorization of With that passage, BsUFA then allows FDA to collect user fees from the biosimilar biological product industry to supplement the nonuser fee appropriations that the agency spends on the process for review of these products. Again, this was October 2012 through September 2017. 10 11 The basic BsUFA construct is the same construct as any user fee program. These fee 12 funds are added to appropriated non-user fee funds 13 and are intended to increase staffing and other 15 resources to ensure a predictable review process. The user fees are intended to pay for services 17 that benefit those who are paying the fees. 18 The fee discussions with industry, 19 again, this was mentioned previously, they focused 20 on desired enhancements in terms of specific 21 aspects of activities and the process for the review of biosimilar biological product 22

20 applications. 2 Part of those discussions and negotiations look at what new or enhanced processes FDA or industry would want to seek during that period of the user fee program, discussions about what's technically feasible, what resources are required to implement and sustain those enhancements, and again, the user fee negotiations, and the construct of user fee negotiations does not include a discussion of 10 policy. 11 12 Our experience with this user fee program and every user fee program, I think, is the devil is in the details. What are the 15 details? The BsUFA user fees are intended to support FDA staff work against an increasing performance level. The way BsUFA 1 was set up is there are a number of goals, many of them are 19 listed here in this chart. We did note that not 20 all the commitments are listed there. 21 As you can see, for some of them they 22 had an increasing goal over the five years of the

21 user fee program, some of them starting at a 70 percent goal to whatever activity it was within a certain time frame, and then increasing up to 90 percent performance for certain goals by the end of the user fee program in 2017. 6 The goals that are listed here include 7 application reviews, supplement review, including manufacturing supplements, looking at special protocol assessments, clinical hold responses, and then there were a number of goals around scheduling and holding meetings. Again, not all 11 the commitments are listed here. We do have some 12 13 additional commitments about conveying filing issues or review issues and reviewing non-15 proprietary names. 16 The current fee structure, there were a 17 number of principles that guided the BsUFA 18 program. We wanted to ensure sufficient review 19 capacity to support the biosimilar review, to 20 prevent unnecessary delays in development and 21 approval of the 351(k) products. 22 There was an assumption made that the

22 351(k) fees should be comparable to the 351(a) fees for a standard review because of comparable complexities of the review process and the products. We wanted to create a fee structure to ensure that funds were available to support critical development fees for review activities. Again, as Dr. Woodcock had mentioned, there wasn't an existing industry, so we looked very much at the development phase review activities as a part 10 of BsUFA, and really tried to build the program 11 around focusing very heavily on the development 12 13 phase activities. Also, we were very cognizant of avoiding 14 15 redirection of resources from 351(a) application 16 review under PDUFA to 351(k) activities. 17 The current fee structure that was 18 enacted as part of BsUFA 1, there are a number of 19 fees that are here, one of the unique aspects of 20 the BsUFA program is this concept of a biosimilar 21 product development fee, and there is an initial or an annual fee, and this is per product, so it

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- 1 is for each product in the BPD phase, and that was
- 2 set at 10 percent of the human drug application
- 3 fee for that given fiscal year.
- When a sponsor joins, they pay the
- 5 initial fee, and then as long as they are in the
- 6 program, it's an annual fee. It's not a fee for
- 7 service type of system. There's an annual fee
- 8 that covers the interactions with the FDA, be it
- 9 meetings, exchanges through written
- 10 correspondence, so on and so forth.
- If a sponsor does withdraw from the
- 12 program for a certain period of time and wants to
- 13 rejoin and get engaged with FDA about the
- 14 development of that product, they would pay a
- 15 reactivation fee, which was set at twice the
- 16 initial BPDC, and then after that, as long as they
- 17 are in the program, they would then pay the annual
- 18 fee.
- 19 Like the other user fee program, under
- 20 PDUFA, there is also an application fee, and
- 21 again, that is for each biosimilar product that
- 22 will be submitted in the individual application,

24 and that was set equal to the human drug application fee under PDUFA less the sum of the initial and annual and reactivation fee that had already been paid for that product. There is also an establishment and product fee that would be for approved products, and these are annual fees that you can see here. 8 Very briefly about performance and workload that we have seen so far under BsUFA 1, I will just very quickly touch on last year, so fiscal year 2014, BsUFA review meeting on 11 performance. All of the goals are listed up here. 12 13 It's a busy slide. The first section of the blue bars deals 14 with where current performance is for each of those different metrics. The red line in both 17 cases is the goal for that existing year. Again, 18 some of these had increasing goals over time, so 19 you can see on that top portion, the goal for that 20 fiscal year for all of those performance elements was 70 percent, and on the bottom portion of the 21 slide, for those elements, it was 90 percent goal 22

25 for performance. 2 You can see based on that red line there are blue bars that are one side and blue bars that are on the other. There are some things we are meeting the goals on as of last year, and there are some things that the agency has not met the goals, particularly around meeting scheduling, so that would be when meetings were held within the certain time frames that were agreed to in the BsUFA negotiations. 10 You can see, for example, the third line 11 down would be the BPD Type 2 meetings, and the 12 performance was under 70 percent. For the BPD Type 3 meetings, it was above the 70 percent goal. 15 The other portion of the slide, you can see the number of submissions that would have been subject to that particular goal in that given 18 fiscal year. This gives you an idea of the amount of workload that would be against those particular 19 20 goals in addition to FDA's performance for fiscal 21 year 2014 on these goals. This is combined CDER

and CBER performance for fiscal year 2014.

26 In addition to the BsUFA performance 1 goals that I just touched on, there were a number of different accomplishments that we wanted to note that were occurring under BsUFA 1. Again, this is a new program, so there had to be an establishment of the actual program and the review process and how it is that FDA was going to interact with sponsors in terms of development of 9 these products. 10 FDA established three committees to ensure consistency in the regulatory approach and 11 quidance to sponsors for proposed biosimilar 12 product development programs, intended for submission under 351(k), the PHS Act, and then 15 related issues. 16 The committees that were charged with 17 discussing and coordinating issues were the 18 CDER/CBER biosimilar implementation committee, 19 BIC, and then each of the centers has their own 20 biosimilar review committee. The biosimilar 21 implementation committee was focused on policy issues, guidance developments, looking at 22

27 developing policy around the development and approval of the biosimilar products. 3 The biosimilar review committees were charged with more scientific aspects of implementation of BsUFA, so looking at the policy, if it was scientific policy, ensuring 7 implementation, and all these committees were also intended to provide an aspect of central oversight to help promote consistency in the agency's approach as we developed this program. 10 11 CEDR also developed the OND therapeutic biologics and biosimilars staff, of which I am the 12 lead. This is housed in the Office of New Drugs, 13 and the staff was created again to ensure 15 consistency in the approach and advice provided to 16 sponsors. TBBT is one of the few organizations 17 within CEDR that actually sees every development 18 program. We also manage the BRCs, so we are the 19 ones that are bringing issues before the BRC and 20 helping to manage that. 21 Again, this is all around providing 22 consistency in the advice and making sure that the

28 agency is being consistent in their scientific advice and the application of policy to the development and review of these products. We also provide a central point of 4 contact for OND and other staff in addition to industry, so there is a communication portal inside and outside of FDA for this particular review program. 9 The agency also held two public meetings. One was in November of 2010. This 10 meeting was held to obtain input on specific 11 issues and challenges. The comments and 12 discussion that came out of that meeting helped to 13 inform the development of the first three draft 15 guidance's FDA published in February of 2012. 16 There was another public meeting that 17 was held in May of 2012, and this was to obtain 18 input on recently issued draft guidance's, so 19 those draft guidance's that we issued in February, 20 we then had a public meeting in order to receive 21 feedback and make sure as we moved forward in finalizing those guidance's that we weren't just 22

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- 1 taking into account the public comments that were
- 2 received in the docket for these guidance's, but
- 3 we provided an opportunity for stakeholder input
- 4 and discussion and exchange of ideas.
- 5 To date, FDA has issued a total of eight
- 6 guidance documents related to the implementation
- 7 of the BPCI Act. I won't go through each of
- 8 these. I will note they are separated into the
- 9 guidance's that have been issued in final form.
- 10 In addition, the lower portion are the draft
- 11 guidance's that have been issued to date.
- 12 FDA has noted in the guidance agenda
- 13 that they intend to publish additional guidance on
- 14 these topics that are listed up here, and we know
- 15 these are eagerly awaited by both FDA and
- 16 industry.
- 17 In terms of the reauthorization process,
- 18 there are some mandated things that need to occur,
- 19 including a consultation phase, a public review of
- 20 the recommendations, and then the transmittal of
- 21 those recommendations.
- 22 This is our first step in looking at

30 renegotiating BsUFA and moving into the BsUFA 2 negotiations. This is an opportunity for public input, stakeholder input, as we move into the negotiation phase that will start next year. As a part of BsUFA 2, there is going to 5 need to be a discussion of some of the assumptions that went into BsUFA 1 that helped to form not just the performance goals but the conversation around resourcing. 10 There were a number of assumptions that were made including predictable workload with 11 consistent numbers of BPD programs and meetings, 12 13 along with applications that were going to be coming in. 14 15 The assumptions included that there 16 would be eight BPD products on average, with no 17 more than 11 at one time. You heard what Dr. 18 Woodcock said, as of November 30, 2015, there were 19 59 programs in the BPD program. That is quite an 20 increase over the 11 that was anticipated to be in 21 the program at any one time. 22 There was also an assumption that there

31 would be one to two BPD meetings per year, per sponsor, with a total of 16 on average based on that average, eight products in the BPD program at any given time, and if you look back at the performance slide, you can see the number of meeting submissions that occurred during fiscal year 2014, so you can see it's definitely over 16. 8 There was also an expectation there would be 13 351(k) applications through the end of fiscal year 2015. Those companies who have 10 submitted 351(k) BLAs have publicly disclosed -- I 11 think folks are fairly familiar with the 12 13 applications that have been publicly disclosed. Clearly, one of those applications was approved by 15 FDA. 16 Again, there were assumptions that were 17 made, if you remember, on the fee structure around 18 not just the application fees but also product and 19 establishment fees that would be coming in for 20 approved products, so with an expectation there 21 would have been 13 351(k) BLAs that would come in, 22 there was a certain revenue stream that was

32 anticipated during the course of BsUFA 1 based on these assumptions. 3 There were also assumptions that were made regarding the resources required for reviewing the 351(k) development programs and applications. Again, this was thought to be similar to the PDUFA resource requirements for standard applications, so there being a need to discuss some of those assumptions as well regarding not just incoming submissions and that 10 aspect of workload, but actually the work that the 11 agency puts in. 12 13 Also, assumptions that were made around the ability to recruit and hire qualified staff 15 for the BsUFA program. As Dr. Woodcock indicated, 16 there are challenges that the agency has around 17 hiring and recruiting staff with the essential 18 expertise to be reviewing these applications. 19 The agency's priorities for BsUFA 2 20 include to review the existing BsUFA program to 21 further increase the quality and predictability of product development and review for these products. 22

33 Again, to revisit the workload assumptions from BsUFA 1 to ensure there is adequate resourcing and accurate resourcing so we can make sure the program is functioning as soundly as it can, and we are being responsive to industry needs. Also wanting to ensure financial 6 soundness through fair and efficient fee structure enhancements, including financial management and reporting system enhancements. Also, there will be a focus on recruiting and retaining critical staff for the review of the biosimilar product 11 development stage and then also the application 12 13 review. 14 With that, I thank you very much. 15 DR. TOIGO: Thank you, Leah, for that 16 background. I am now going to ask our consumer 17 and patient panel to join us. We have 18 representatives from AARP, the Colon Cancer 19 Alliance, and from the Digestive Disease National 20 Coalition. 21 Our first speaker for this panel is 22 Leigh Purvis from AARP.

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             MS. PURVIS:
                          Hi. Thank you for having
1
   me here today. My name is Leigh Purvis.
   Director of Health Services Research in AARP's
   Public Policy Institute, and I am responsible for
   developing and helping to guide all of AARP's work
   around prescription drug issues, which I like to
    sum up as "I Do Drugs."
8
              I feel like I'd be remiss in my role as
   a representative from a consumer organization if I
   did not stop and kind of level set as we're
10
   talking about these issues and kind of give you a
11
   better idea of what consumers are experiencing on
12
13
   the ground and why AARP finds this issue so
    important.
14
15
              I don't think this is going to be a
16
    surprise to anyone in this room, but we have
17
    certainly caught on to the fact that biologics
18
    really represent the future of the drug industry.
19
   They represent a growing amount of the drugs that
20
   are in the pipeline.
                          It's obvious that more and
21
   more of them are going to be coming into the
22
   market. They also represent a lot of the top
```

35 selling drugs, so we are spending a lot of money on these products. 3 Something else that is important to note is that the number of indications for these products is expanding, so the way we like to sum it up is that there are a lot more of them coming and a lot more people are using the ones that are already here. 9 Again, no surprise to anyone in this room, part of the reason that AARP has really 10 focused on this issue is the fact that the prices 11 associated with these products are so incredibly 12 high. We're looking at tens of thousands of dollars at this point, which is considered a low price, so they can obviously reach hundreds of thousands of dollars. 16 17 They are also are being used again by 18 more people. One example that we like to point to 19 is the new PCSK9 inhibitors, the new cholesterol That is a proposed patient population of 20 21 anywhere between 10 and 15 million people with an 22 annual cost of around \$14,000 per year.

36 numbers associated with that are just incredible, and it really speaks to perhaps the sustainability of the system and perhaps not being able to sustain those types of spending. Our population is particularly vulnerable to the costs associated with biologics. We use more prescription drugs than any other segment of the population, and we also use them on a chronic basis. The majority of older adults have two or more chronic conditions. When we are talking about prescription drugs, we are talking 11 about costs that they are facing for the rest of 12 their lives. This is not one bad year. 13 something you will face for the rest of your life. 15 Biologics are commonly used to treat 16 conditions that are commonly found in older 17 populations. This is not a population that really can absorb the costs associated with these 19 products. The median income for Medicare 20 beneficiaries is around \$23,000, and more than one 21 in four have less than \$10,000 in savings. 22 If you are prescribed a very expensive

37 product for the rest of your life, you really do not have the means to absorb the costs associated 3 with it. We are kind of unique as a consumer 4 organization in the fact that we represent consumers and we also try to keep an eye on the programs they rely on. Being cognizant of time, I'm just going to talk about Medicare Part B today, which is the part of Medicare related to physician services. 10 11 Under Medicare Part B, beneficiaries are responsible for 20 percent of their prescription 12 drug costs. There is no out of pocket cap. you're prescribed an incredibly expensive drug, 15 you are looking at potentially in some cases as much as \$100,000 in cost sharing every year for 17 the rest of your life. 18 There is no one in this room who can 19 absorb those kinds of costs. That is a huge 20 concern for us. Yes, there are a lot of Medicare 21 beneficiaries that have supplemental coverage, but 22 the fact of the matter is the costs associated

38 with expensive drugs don't just disappear into the They will be rolled back into the supplemental coverage cost sharing and premiums, which will eventually make that type of coverage completely financially prohibitive, which again, kind of defeats the purpose. 7 The Medicare program itself is spending a lot of money on biologics. In 2013, eight out of the top 10 drugs with the highest Medicare Part B expenditures were biologics. That is incredible, that is an incredible amount of money. 11 Part B spent around \$21 billion total, and again, 12 biologics are representing a growing share of those types of costs. 15 All that is a very long way of saying biosimilar competition cannot come soon enough for 16 our members and for the programs they rely on. 17 18 I have seen projections that until 19 biosimilars become available, spending on 20 biologics is projected to grow by more than 10 21 percent annually. This is not something that our

health care system can absorb.

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39 On the other hand, good news, there are 1 a lot of biologics with patents that will be expiring in the near future, so the opportunities for competition are here. We just need to be able to take advantage of them. 6 There are many things that AARP does. We do not manufacture biosimilars, so there is only so much that we can say about this process, and most of it really speaks to an overarching theme that we have about biosimilars, which generally is that we want to make sure there are no unnecessary 11 barriers to competition and to the savings that 12 were intended by the creation of the approval 14 pathway. 15 We can have some level of specificity in terms of what we think, and the two ideas that we really fall into are kind of competing but there is a balance that can be achieved here. One is we 19 want to be sure that FDA has the resources it 20 needs to be able to approve safe and effective 21 biosimilars. We think that is incredibly 22 important. Again, our members rely on these

40 We want to make sure they are reaching them, we want to make sure they are safe, we want to make sure they are effective. However, we are a little concerned in 4 the sense that some of these fees might be high enough that they may disincentivize manufacturers 7 from producing these products. 8 In our eyes, we think it would be helpful if FDA were willing to kind of revisit these fees as they develop more real world 10 experience with approving them, perhaps reducing 11 them, phasing some out, or perhaps even 12 13 considering similar to what we see under PDUFA, perhaps returning some of the fees if a product 15 doesn't not actually get approved at the end of 16 the process. 17 I always like to close, and this is kind of the theme of the entire presentation, close 19 with a little bit of a recap of what this means to 20 our members. 21 The costs associated with these products 22 really are not sustainable for patients or for

41 payers. The health care system simply cannot take the costs associated with biologics. We need the competition. More importantly, patients are reaching 4 the point where they cannot access the products they need to get and stay healthy, and to us, that is just unconscionable. We have to be able to treat patients. The final thought that we find ourselves 9 saying about biosimilars, biologics, and really 10 any prescription drug these days is the fact that 11 medical advancements are meaningless unless 12 13 everyone can afford access to them. 14 Thank you. 15 DR. TOGIO: Thank you, Leah. Next, we will hear from Eric Hargis, who is the CEO of the Colon Cancer Alliance. 17 18 MR. HARGIS: Thank you. I want to thank 19 Dr. Woodcock and the FDA for the opportunity to 20 share the patient advocacy perspective on the reauthorization of the Biosimilar User Fee Act. 21 22 The FDA is being proactive in engaging

42 patients in all areas of drug development and the approval process, and we appreciate that the voice of those who rely on this agency for both innovation and safety is both heard and valued. Biologics are integral to the treatment of colorectal cancer. Thanks to innovative medicines, we are seeing an improvement in both survival and quality of life. While we recognize the value these medicines have for patients and the huge financial investment necessary to create 10 them, their costs has a dramatic impact on 11 patients and their families. 12 The cancer diagnosis doubles the rate of 13 bankruptcy, and in almost half of the 100,000 15 patients who contact our organization every month 16 are in desperate need of financial assistance. 17 Biosimilars have the potential to lessen the 18 financial impact on both patients and payers. 19 While we will not see the type of price 20 drop common with generics, given the high cost of 21 biologics for colorectal cancer, even a 20 percent reduction in price translates to significant 22

43 dollar savings. 2 The Colon Cancer Alliance would welcome biosimilars for colorectal cancer as the lower cost treatment for our community provided first the FDA approves the biosimilar based on evidence it is the therapeutic equivalence of the 7 innovative biologic. Second, that appropriate systems are in place to track adverse events. Third, distinguishable names are used to avoid inadvertent switching, and finally, that switching 10 from innovators to biosimilar or between 11 biosimilars is a decision of the clinician and the 12 patient and not the pharmacy. To accomplish this goal, the FDA must 14 have the financial and human resources to answer 16 the question of how similar must the biologic be 17 so that patients are assured that it will provide the same therapeutic benefit as the innovator 19 biologic. 20 While the public may think of biosimilars in the same way as generics, 21 demonstrating equivalence presents an entirely 22

44 different set of challenges, and we can't expect the FDA to continue this as just another task added to their already shrinking appropriations budget. In addition, the FDA must have the 5 necessary resources to ensure that the facilities producing biosimilars meet the same quality and safety standards as those making the innovator biologic. There is and will continue to be political pressure for the FDA to act swiftly in 10 approving biosimilars, and the agency must 11 withstand a rush to judgment and provide patients 12 the assurance that a reduction in price does not 13 come with a reduction in either efficacy or 15 safety. 16 User fees have become the major source 17 of funding for the FDA to carry out its important 18 work, now representing more than half of the FDA 19 budget. In the current environment, it is highly 20 unlikely Congress will provide the funding 21 necessary to address biosimilars, and the Colon 22 Cancer Alliance strongly supports the

45 reauthorization of the Biosimilar User Fee Act of 2012 to ensure that the FDA can continue its work to make biosimilars widely available. In addition, we believe that this or 4 other legislation must address the unique needs the FDA has to recruit highly specialized staff. FDA must be able to go outside of HHS pay scale for a limited number of staff positions. not suggesting that the FDA staff generally make more money than their HHS colleagues, but the 10 agency needs individuals with specific skills that 11 are in high demand in both the private and public 12 13 sector. 14 How can we justify asking users to pay a 15 fee for timely review if the agency cannot spend 16 some of that money to get the necessary staff talent to conduct the work. 18 While FDA will not be able to offer 19 industry like salaries, going beyond HHS scale 20 will help recruit individuals with these skills 21 who share a passion for public service. 22 Again, we appreciate the opportunity to

46 share the patient advocacy perspective on the reauthorization of the Biosimilar User Fee Act, and we encourage all appropriate steps to ensure the FDA can make biosimilars widely available and in a timely fashion. 6 Thank you. DR. TOGIO: Thank you, Eric. Our last speaker on this panel is Andrew Spiegel from the Digestive Disease National Coalition. 10 MR. SPIEGEL: Good morning, and thank you for the opportunity to comment on this 11 important legislation. 12 While I hold a number of relevant hats 13 in my role as a patient advocate, today as current 15 chair, I'm honored to represent the Digestive Disease National Coalition. Founded in 1978, the 17 DDNC is an advocacy organization comprised of more than 50 national patient and professional 19 organizations who are concerned with ensuring that 20 digestive diseases are on the radar of all health 21 care policy makers. 22 The DDNC focuses on improving public

47 policies related to digestive diseases and increasing public awareness with respect to the many diseases of the digestive system. In addition to my work with the DDNC, I 4 am currently the Executive Director of the Global Colon Cancer Association, an advocacy organization representing the millions of patients worldwide 7 who suffer from colorectal cancer. 9 Finally, I am the founding member and sit on the steering committee of the Alliance for Safe Biologic Medicines, an organization formed in 11 2010 to help support the FDA as they address the 12 unique challenges biosimilars present to 13 regulators. 14 15 For the last five years, we have worked 16 not only with the FDA, but regulators worldwide and the World Health Organization to ensure that 17 18 these unique policy and regulatory challenges are 19 resolved in a way that places a premium on science 20 and safety. 21 We commend the FDA for its commitment to 22 bulletproof science and recognize that a long term

48 sustainable biosimilars program requires such an The arrival of biosimilars to the U.S. promises to offer new treatment options to patients suffering from cancers, as well as other serious conditions, such as rheumatoid arthritis, psoriasis, and Crohn's Disease, as well as colitis. 8 The patient community is excited about the potential of biosimilars to reduce treatment costs which would increase access, but we are 10 mindful that we cannot value speed at the expense 11 of safety or the quantity of biosimilars over 12 13 their quality. 14 Simply put, we recognize that in order for patients to enjoy the benefits of biosimilars, 15 16 the FDA must always have the resources it needs to 17 measure both the timely yet thorough review 18 process. 19 The BsUFA was designed to do just that. 20 It was modeled with long-standing and successful 21 funding mechanisms for medical devices, MDUFA, and

prescription drugs, PDUFA, which have both been

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49 repeatedly reauthorized as we recommend BsUFA should be as well. 3 As patient advocates, we are extremely encouraged by the success of BsUFA in promoting both safe and timely introduction of biosimilars. This past March, we saw the first biosimilar, Zarxio, also called Filgrastim-sndz, approved. Numerous other products are in the various stages 9 of the pipeline. 10 We can see the FDA's cautious science based approach to biosimilar approval is working. 11 Take, for example, its use of distinguishable 12 13 naming, both in the Zarxio approval and in subsequent guidance on biologic naming. It is 15 critical for patients and providers to always be able to clearly identify which biologic product is 16 17 being used throughout treatment. 18 Accurate attribution of adverse events 19 to the correct biologic is also necessary for long 20 term tracking and safety and efficacy. While we see the FDA's long-standing 21 commitment to transparency reflected in Zarxio's 22

50 clear naming, we feel a major obstacle to biosimilar adoption overall could be insufficient transparency on biosimilar labeling. For example, the label of Zarxio neither 4 identifies itself as a biosimilar, does not state whether or not it was interchangeable with its reference product, nor does it provide any analytical or clinical data demonstrating its biosimilarity. It does not tell our physicians whether its approval is based on its indication. 10 11 Say, for example, ulcerative colitis was based on trials in ulcerative colitis or Crohn's 12 patients, where only on extrapolation from trials in rheumatoid arthritis or psoriasis patients. 15 Together, these omissions could impact 16 the ability of patients and physicians to make 17 informed treatment decisions and could potentially 18 undermine physician confidence in biosimilars 19 generally. 20 Similarly, while we are encouraged by 21 BsUFA's progress since its introduction, we would like to see further progress and more biosimilar 22

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- 1 approvals. The FDA has several years to assess
- 2 whether the funding mechanisms provided adequate
- 3 resources to thoroughly evaluate the ever-
- 4 increasing number of biosimilar applications. If
- 5 the FDA were to find more resources when required
- 6 to get safe, effective biosimilars approved and to
- 7 patients to a timely manner, we as patients would
- 8 be supportive of expanding the BsUFA program as a
- 9 funding mechanism.
- 10 Additionally, it is not only important
- 11 that these funds are sufficient to improve review
- 12 times, but that the allocated funds remain
- 13 dedicated to their intended purpose, so that the
- 14 FDA has the tools to perform this role.
- 15 It is important to all of us who want
- 16 safe and effective biosimilars to be successfully
- 17 introduced that the FDA get this right.
- In closing, let me commend the FDA for
- 19 its continued work in bringing biosimilars safely
- 20 to the American patients. BsUFA is a critical
- 21 component of the U.S. biosimilars pathway, and
- 22 without reservation, we recommend it be

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1	reauthorized.	
2	Thank you again for the opportunity to	
3	comment on this important subject.	
4	DR. TOGIO: Thank you, Andrew. That	
5	concludes our consumer/patient panel, and thank	
6	you for your thoughtful comments and the time you	
7	took to prepare them.	
8	Our next panel will be the health care	
9	professionals' perspectives, and we have three	
10	organizations represented, the Academy of Managed	
11	Care Pharmacy, the American College of	
12	Rheumatology, and the American Society of Health-	
13	Systems Pharmacists.	
14	Mary Jo, you can go right to the podium,	
15	and we will go on down.	
16	MS. CARDEN: Thank you. Good morning.	
17	My name is Mary Jo Carden, and I serve as the Vice	
18	President of Government and Pharmacy Affairs at	
19	the Academy of Managed Care Pharmacy.	
20	AMCP's more than 7,000 members that	
21	include pharmacists, physicians, nurses, and other	
22	health care providers and stakeholders, develop	

53 and manage pharmacy benefits for more than 200 million Americans. 3 AMCP is committed to ensuring that individuals in the United States receive access to high quality, affordable, and safe medications. AMCP applauds the Food and Drug Administration for approving the first biosimilar in the United States and its consideration of others. 9 AMCP understands that the approval of a biosimilar is a major milestone, but more work is necessary to provide clarity about the biosimilars 11 pathway and to encourage a robust market for 12 biosimilars. Today, AMCP offers our perspective on the biosimilars pathway and also provides 15 recommendations for FDA to direct user fees in the areas of post- marketing surveillance and 16 educational efforts. 18 First, let me begin by talking about 19 AMCP's position on biosimilars. AMCP supports an 20 abbreviated pathway for approval of biosimilars in 21 the United States. These medications play an increasingly important role for the treatment of 22

54 chronic conditions, and offer hope for many patients who had not had any access to medications. In many cases, biological products are 4 very costly to both patients and the health care system, and the introduction of biosimilars will help increase the competitive marketplace and offer more choices for patients that will result in increased access and lower costs. 10 However, to date, there are still legal and regulatory challenges to the introduction of 11 more biosimilars to the market. FDA has issued 12 guidance on the pathway but has not finalized its thinking in certain areas, including the issue of 15 naming. 16 AMCP supports a naming convention that 17 uses the same Government approved international 18 non-proprietary name as the reference product. 19 The naming convention has proved successful in the 20 generic small molecule market and should be 2.1 continued. 22 As proposed by the FDA, the naming

55 convention that affixes a four letter suffix to the INN would result in confusion to both patients, health care providers, and others. To achieve the stated purpose of achieving a robust pharmacovigilance process, AMCP supports the use of the NDC that is readily available and provides a system to identify the medication, package size, and manufacturer. 9 The addition of more information does not improve safety but rather adds another data 10 element that may result in additional confusion 11 and medication errors. 12 13 Next, AMCP supports interchangeability that recognizes products may be substituted by 15 pharmacists and other dispensers without additional notification to prescribers. believes this reflects the spirit and the intent of BPCIA and that interchangeability is similar to 19 the AB rating on generic products, which share 20 highly similar characteristics. 21 AMCP also supports the approval of different indications for special populations 22

56 related to biosimilars. 2 In regard to active post-marketing surveillance, AMCP supports the use of active NDC based pharmacovigilance systems. To that end, AMCP has launched the biologics and biosimilars collective intelligence consortium, a public service initiative that will draw on large sets of identified pharmacy and medical data to provide unbiased scientific information on the safety and effectiveness of marketed biosimilars and their 10 novel corresponding biologics. 11 12 AMCP recommends that the next steps that the FDA should take is first it should reconsider 13 its naming guidance that would implement a 15 hyphenated-random four letter suffix. AMCP has stated before its concern that current proposals will result in confusion to both the public and health care providers. Other identifiers, 19 including the NDC, are already available to 20 distinguish products. 21 FDA should also seek public comment on 22 interchangeability through written comments and a

57 public hearing. AMCP also recommends that FDA hold a public hearing on the naming issue. Finally, AMCP supports the use of user 3 fees to engage in a broad stakeholder educational campaign to provide unbiased information about biosimilars. This campaign should focus on health care providers, payers, and consumers. 8 As the agency responsible for the public health and safety of the medication supply chain, FDA is a logical choice in providing this 10 education. AMCP is also committed to providing 11 education in this area and believes that a 12 public/private partnership would be effective in ensuring that consumers understand biosimilars. 15 FDA's educational campaign should focus on the needs of the various stakeholders and 17 should provide basic as well as higher level 18 information about biosimilars to health care 19 providers, payers, and decision makers. FDA should 20 also assess the needs of stakeholders before 21 releasing its information. It must also consider a 22 variety of means to communicate this information

58 to accommodate people's differing levels of access to information and understanding, including websites, social media, print, apps, and video. Again, thank you very much, and AMCP 4 supports the FDA's process to approve biosimilars, and thank you for holding this meeting. 7 DR. TOGIO: Thank you, Mary Jo. Our next speaker is Augus Worthing from the American College of Rheumatology. 10 DR. WORTHING: Thanks very much. Angus Worthing, and I'm grateful for the 11 opportunity to be here and comment today on behalf 12 of ACR, the American College of Rheumatology, in 13 support of the reauthorization of BsUFA through 15 the fiscal years 2018 through 2022. 16 On a personal note, it's exciting to be 17 engaging with Government, patient groups, 18 industry, and my colleagues in the provider arena. 19 I'm a practicing rheumatologist in the 20 Metro D.C. area, and a member of the ACR 21 Government Affairs Committee. ACR represents the vast majority of rheumatologists in the United 22

59 States. Rheumatologists, as we all know, specialize in caring for Americans with potentially disabling conditions, like rheumatoid arthritis, lupus, psoriatic arthritis, ankylosing spondylitis, gout, osteoporosis. 6 The FDA's approval of biologic medicines has been a miracle treatment for our patients with these and many other chronic and more rare 9 inflammatory conditions, cancers, and other rare 10 serious illnesses. 11 Not only have biologic medications reduced the burdens of joint pain and organ 12 damage, disability and mortality from rheumatologic diseases, they have improved the 15 quality and quantity of life for thousands of 16 Americans. They are changing the face and course 17 of many diseases in ways unimaginable a few years 18 ago. 19 Rheumatologists utilize and work with 20 biologics in many ways, as basic science and

clinical researchers, clinician prescribers, like

myself, and as monitors of on-site medication

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1	administration in the clinic.	00
2	Rheumatologists' experience with	
3	biologics is different from other pharmaceuticals	
4	in three ways that are pertinent to our discussion	
5	today. They are highly complex, highly	
6	efficacious, and very expensive.	
7	The ACR supports reauthorization of	
8	BsUFA because it allows the FDA to continue its	
9	vital and important work to evaluate emerging	
10	complex biopharmaceuticals, whose approval as	
11	biosimilars could reduce treatment costs.	
12	The ACR's current position statement	
13	regarding biosimilars strongly endorses that safe	
14	and effective treatments should be available to	
15	our patients at the lowest possible cost. It also	
16	states that any decisions regarding approval of	
17	biosimilars must be driven by sound science that	
18	takes into account several observations and	
19	guiding principles, including the following two:	
20	number one, the size and complexity and	
21	heterogeneity of biologics, and thus, biosimilars,	
22	necessitate a greater degree of scrutiny in their	

61 analytical evaluation than what is typically required for small molecule generics. 3 Two, rigorous analysis of clinical trials in humans is necessary to ensure safety and efficacy of biosimilars, and provide the necessary level of confidence in their use by patients and 7 providers. 8 We believe that BsUFA is a critically important means to ensure that the FDA can perform its important work and we offer the following 10 three analyses. 11 12 Number one, about cost and access, that has been touched on before in this presentation today. The price of biologics has increased 15 faster than other components of the health care system, and is predicted to increase further. 16 This has led to reduced access to these valuable 18 therapies, mainly via insurance payers' use of 19 restrictive formularies, creation of various 20 tiering schemes, and co-insurance. 21 We know that at least one in six people with rheumatoid arthritis already reduce their 22

62 medication due to cost, potentially resulting in long-term joint damage. 3 We physicians are extremely frustrated when we see our patients suffer because they can't obtain or use the medicines we have prescribed as recommended by the FDA. 7 We hope the anticipated decrease in costs resulting from the introduction of safe and effective biosimilars will increase access to agents and improve the health of all those who use 10 11 them. Number two, a brief review of BsUFA to 12 date. As was stated at the public meeting here in 13 December 2011, the funding from fees paid by 15 sponsors of biosimilar products would "Provide FDA with needed resources and provide prospective manufacturers of these products with a clear and 17 18 more predictable review pathway in the new product 19 arena." The ACR supports these provisions. 20 As for fee amounts, it is appropriate 21 that the fees are structured based on FDA analysis of the complexity of review required for innovator 22

63 biologics, and are sufficient for the FDA to perform the critical tasks required to ensure the safety of our patients. Thirdly and finally, review of the BsUFA 4 performance goals, ACR supports the performance goals of FDA to promptly and carefully review what look alike and sound alike proprietary names and specifically package labeling. The increased transparency will not only reduce medication errors but also increase prescriber confidence in 10 biosimilar safety and efficacy data, and allow for 11 more extensive pharmacovigilance programs. 12 13 I think it would be appropriate to add four things to product labeling or make sure four 15 things are there, the distinct name, compared to 16 the innovator biologic, the manufacturer, analytic 17 data, and clinical trial data. 18 In summary, ACR supports reauthorization 19 of BsUFA as one of the means for the FDA to 20 adequately and appropriately evaluate important 21 biopharmaceuticals that will ultimately increase our patients' access to these highly effective

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1	treatments, as well as reduce their morbidity and	01
2	mortality, and improve their quality of life.	
3	Thank you very much.	
4	DR. TOGIO: Thank you, Angus. Our last	
5	speaker is from ASHP, Christopher Topoleski.	
6	MR. TOPOLESKI: Good morning. My name	
7	is Chris Topoleski. I serve as ASHP's Director of	
8	Federal Legislative Affairs. Two weeks ago, I was	
9	the Director of Regulatory Affairs, so I am	
10	holding two jobs at the moment, which as you all	
11	know is the easiest thing. I'll be doing	
12	interviews at the break if anyone wants to do reg	
13	work.	
14	AHSP represents pharmacists who serve as	
15	patient care providers in acute and ambulatory	
16	settings. The organization's more than 43,000	
17	members include pharmacists, student pharmacists,	
18	and pharmacy technicians.	
19	For over 70 years, AHSP has been on the	
20	forefront of efforts to improve medication use and	
21	enhance patient safety.	
22	I appreciate the opportunity to present	

65 the views of AHSP on the performance of the biosimilar user fee program. 3 FDA's public health mission is to ensure the safety and effectiveness of drugs, biologics, and medical devices. No other agency or private sector entity serves this vital public health purpose in our society. 8 AHSP believes that the allocation of sufficient Federal resources to the FDA to meet its mission is a necessity, and those funds should 10 be achieved primarily through Federal 11 appropriations. AHSP strongly supports increased 12 13 appropriations for the agency and is working to achieve that through our work with the Alliance 15 for a Stronger FDA. We're pleased to see the 16 increases for the FDA proposed in the recent 17 omnibus package. 18 AHSP has a long-standing professional 19 policy that supports legislation and regulations 20 that promote greater patient access to less 21 expensive biologic products. AHSP's policy emphasizes that safety comes first and a desire to 22

66 rush drugs to market should never surpass the need to ensure that products are safe and effective. 3 Drug user fees do not replace the need for increased appropriations from Congress. However, AHSP does recognize that with the agency's increasing applications for biological products with the passage of the BPCIA, biosimilar user fees represent an important and viable means to help bring safe and effective biological products to market. 10 11 My comments today will focus on the current state of post-marketing surveillance, one 12 13 of the activities for which the FDA may spend the user fees collected on. 15 The AHSP policy shown on this slide supports a biological product naming convention as 16 17 consistent with international naming standards 18 developed by recognized authorities such as the 19 WHO, USAN, and the United States Pharmacopeia. In 20 addition, this naming convention is also supported 21 by other national organizations, including the 22 NCPDP.

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1	These organizations have developed a	
2	harmonized biosimilar naming approach based on a	
3	shared non-proprietary name for originator	
4	biological products, related biological products,	
5	and biosimilars. Under their authority, these	
6	products essentially share the same non-	
7	proprietary name but can be individually	
8	identified through their unique NDC or other	
9	unique codified identifiers, and trade names.	
10	FDA has proposed a non-proprietary	
11	naming process that deviates from existing	
12	standardized approaches that have been applied by	
13	international authorities such as INN and	
14	USAN.	
15	Under FDA's proposal, a unique randomly	
16	generated suffix composed of four lower case	
17	numbers will or suffixes related to the licensed	
18	holder of the product, which could change over	
19	time, would be applied to the originator	
20	biological products, related biological products,	
21	and biosimilars.	
22	AHSP is concerned that this approach	

68 varies from the naming processes that are already in practice in other developed countries such as those in Europe. Furthermore, using randomly generated 4 suffixes would be unlikely to achieve FDA's goals of product recognition and recall by prescribers, patients, and others. Non-meaningful, unpronounceable suffixes are unlikely to be 9 readily recalled or accurately associated with specific products. 10 11 Consistent with other standard setting groups, national pharmacy organizations and the 12 WHO, AHSP does not believe there is a need to 13 develop a naming convention that differs from the 15 current standard. Without well designed testing, 16 it is unclear whether FDA's proposal for a naming 17 convention would achieve the high level 18 pharmacovigilance or would cause confusion among 19 clinicians and patients who rely principally on 20 proprietary names for self reporting about branded 21 products. 22 FDA is also planning to change the

69 official names for biologics with globally adopted INNs and USANs. Initially, this would apply to a small number of products but eventually would retrospectfully change the names of a broad group of existing products to include unique randomly generated four letter suffixes. Such a naming change would require extensive education and potentially require reprogramming of health information technology systems. This could result in significant risk for medication errors. 10 11 AHSP supports a biosimilar naming approach that relies on the ability to track 12 medications by NDC or by other standard product 13 identifiers. While all hospitals and health 15 systems may not currently have the ability to fully track drug products by the NDC, they will be 16 17 required to have that capability pursuant to the 18 Drug Supply Chain Safety Act, which requires 19 package level NDC tracking by 2022. 20 In addition, there are at least two 21 other options available to health care organizations that could be implemented until more 22

70 permanent solutions are developed. The first is to apply the current vaccine adverse event reporting system model to the biologic and biosimilar products. This regulatory framework already exists 5 for vaccines in all clinical settings and could be 7 applied by the FDA to ensure that pharmacovigilance regardless of where a patient receives the biologic. 10 The second option is to manually enter an NDC into the patient's electronic health 11 record. Given that the current universe of 12 biologic and biosimilar products proposed by the FDA is small, this could serve as an initial solution while a more permanent one is developed. 15 16 The AHSP is prepared to work closely with the FDA 17 to develop such a solution. 18 AHSP believes there is a great deal more 19 to be discussed regarding the appropriate non-20 propriety naming policy that should be employed by 21 the FDA. We believe it is premature to implement the draft guidance until the agency has engaged in 22

71 a robust stakeholder discussion. 2 Therefore, we believe it to be in the best interest of public health for the FDA to delay finalization of the guidance and proposed rule pending a meeting in accordance with 21 CFR Part 15 to hear the opinions and concerns of all related parties that would be impacted by a nonproprietary naming policy that deviates from the current conventions. 10 AHSP appreciates the opportunity to comment at this meeting today. We look forward to 11 working with the agency over the coming months as 12 13 they prepare for BsUFA reauthorization. 14 you. 15 DR. TOGIO: Thank you, Chris. That concludes our health professional panel. Thank you 16 17 for taking the time to prepare the comments and 18 come and present them. We appreciate your input. 19 We will now take a break. We are ahead 20 of schedule. According to the agenda, we are 21 supposed to be back at 10:50, but how about we are all back at 10:45, and we will start at 10:45. 22

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   Thank you.
1
2
               (Recess.)
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              DR. TOGIO: This is last call for public
   speakers. I have two people who have signed up
   alreadv.
            If you want to speak during the open
   public hearing, you need to come see me now.
              If Kay, Juliana, David, and Michael can
   join me at the front, we will be ready to get
   started.
10
              This is our second to last panel, and
    these are perspectives from the regulated
11
   industry, and we will hear from BIO, Coherus
12
   Biosciences, GPhA, and PhRMA. Kay Holcombe is
   going to get us started. I did not put the name
15
   tags in the right order, but that is okay, Kay,
   you are listed on the agenda first, so you can go
    first. I know you like to go first.
18
             MS. HOLCOMBE: I just think this is an
19
   example, Terry, of the last shall be first.
20
              The Biotechnology Industry Organization
21
   greatly appreciates the opportunity to speak with
   you today regarding the Biosimilar User Fee Act.
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73 BIO is the world's largest trade 1 association representing biotechnology companies, academic institutions, state biotechnology centers, and related organizations across the United States and in more than 30 other countries. 6 BIO supports the timely reauthorization of BsUFA, and may I just say that when we started user fees, we created the monster acronym, UFA, and BsUFA has almost taken us over the edge, acronym-wise. 10 11 We believe that this reauthorization should strive to clarify and enhance the processes 12 and tools FDA uses to regulate biosimilars and 13 improve the transparency, sustainability, and 15 financial accountability of the BsUFA program. 16 When BsUFA was enacted, it established a program of user fees associated with a category of 18 products new to the U.S. market and the U.S. 19 regulatory system. Therefore, unlike when the 20 grandfather of user fee programs, PDUFA, began, 21 there was no market, and neither the FDA nor other 22 stakeholders had a good idea of what the volume of

74 applications, products, or facilities would be, and how long it would take for an application volume and a market to grow to the point where a user fee program constructed like PDUFA could be viable. 6 In discussing this reauthorization, stakeholders will have more information, although certainly not the level of understanding that existed when the other user fee programs were established. It, therefore, will be extremely 10 important for us to learn from FDA how the program 11 is proceeding. 12 13 While we have seen the reports of the extent to which the agency is currently meeting 15 performance goals, it will be more important to 16 know how the agency is allocating resources in 17 this program, how many FTEs are required to 18 conduct the anticipated meetings, and to evaluate 19 applications, and the extent to which and how the 20 agency predicts this workload will change as the number of sponsors interested in entering this 21 22 market and the number of applications increase.

75 As PDUFA evolved over its nearly 25 1 years, to include multiple activities related to the review of human drug applications, we anticipate this program will evolve as well. Biosimilar user fees already are designed to support a wide range of FDA activities, including meeting with sponsors during development, BLA review, and post-market safety. 9 With this new to the U.S. category of products, this latter is especially important. Not 10 because these new highly similar products are 11 inherently higher risk, but because they are 12 biological products that have the potential to 13 cause unexpected immunogenic responses, because 15 they are highly similar but not identical risks, 16 the reference products in lieu of which they may 17 be prescribed and used, and because they are new. Both prescribers and patients need to be 18 19 educated and well informed throughout the course 20 of biosimilar development and use, so that this 21 new category of products will result in a robust 22 market.

		76
1	As interest in the U.S. biosimilars	7 0
2	market grows, the structure of this program will	
3	undoubtedly need to change. We welcome the	
4	opportunity to discuss with FDA and other	
5	stakeholders what changes make sense and how fee	
6	changes or fee structure modifications can be	
7	phased in effectively and judicially as the	
8	numbers of applications and products increase.	
9	Beyond fee adjustments are questions of	
10	what additional activities need to be undertaken	
11	to ensure a robust and patient- centered	
12	biosimilars marketplace in the U.S., and to what	
13	extent such activities are appropriate for	
14	discussion in the context of BsUFA.	
15	For example, there is significant	
16	interest in increasing the number of final	
17	guidance documents that will provide sponsors with	
18	greater understanding about FDA's expectations	
19	regarding data needed in biosimilar applications,	
20	both in general and in specific product	
21	categories.	
22	While FDA has issued several final	

77 quidance's, there are also important documents still in draft which need to move forward. Additional guidance also is needed and planned by FDA. For example, we need guidance regarding 5 how FDA will make determinations of interchangeability, and regarding labeling of 7 biosimilar products. Regulatory guidance as we all know plays a critical role in the development of any new class of products, and is in the best interest of all stakeholders, whether they are 11 companies trying to decide if this is a 12 13 marketplace they can and wish to enter, or providers and patients who may want to and will 15 use these products. Timely and appropriate regulatory guidance can help the development of a 16 robust biosimilars market. 18 We understand that specific policy 19 outcomes or change are not appropriate user fee 20 discussions. However, the development of guidance 21 and the time frames around such development are 22 clearly in bounds. It will be helpful to

78 understand as well the extent to which existing BsUFA resources have been used for policy and guidance development, and how FDA sees this playing out in the future. As to BsUFA performance goals, it is 5 hard to estimate whether and how agency 7 performance can or should improve, because of the relatively small numbers to date. We have little visibility into the length of time or the FTE effort needed to review an application, and we have similarly limited understanding of the 11 resource needs for the other aspects of the 12 biosimilars program that would help us determine whether the current BsUFA structure is appropriate 15 for long term program sustainability. 16 The BsUFA program must continue to 17 evolve to the benefit of patients and to support 18 FDA's ongoing implementation of a well-constructed 19 science based pathway for the approval of 20 biosimilar products. To this end, for BsUFA 2, 21 BIO will work with PhRMA to advance and support policies to achieve the goals I mentioned at the

79 beginning, to clarify and enhance the processes and tools FDA uses to regulate biosimilars, and to assure transparency and financial sustainability of the BsUFA program. BIO looks forward to engaging with FDA, other stakeholders, and Congress to consider the best pathway forward to timely BsUFA reauthorization. Thank you for the opportunity to talk with you today. 10 DR. TOGIO: Thank you, Kay. Next, we will hear from Juliana Reed, who is speaking on 11 behalf of The Biosimilars Forum. 12 MS. REED: Thank you. A special thanks 13 to the FDA for holding the workshop today and for 15 the invitation to speak. As mentioned, I am Juliana Reed. I am the current President of the 17 new organization this year, The Biosimilars Forum. 18 A little bit about The Biosimilars 19 We are a non-profit organization working 20 to advance biosimilars in the United States. 21 are the first non-profit organization solely dedicated to biosimilars and expanding access to 22

80 biosimilars. 2 Right now, our member companies are developing at least 70 percent of the current proposed biosimilar products that are currently advancing at the FDA. The members of The Biosimilars Forum and 6 one of the reasons why we came together was because as you can see, we represent a very diverse and in some cases, especially in this town, an unlikely group of bed fellows. We came together as folks know with the biosimilars 11 industry being a new industry. We also felt that 12 we needed a place, and why we have the name the 13 "forum," we needed a forum to work on this new 15 industry and the policies that will govern this 16 new industry. 17 We were able to come together, as you see, we have innovators, we have start-up's like 19 Coherus and EPIRUS, and we have traditional 20 generic manufacturers like Teva, altogether to support again the new biosimilars industry and to 21 22 work together to advance it.

		81
1	As I mentioned, the Forum represents the	
2	majority of the current programs under	
3	consideration at the FDA in biosimilars. We also	
4	are very honored to have Sandoz as a member,	
5	having the first U.S. approved biosimilar to date,	
6	but also the members represent the majority of	
7	biosimilars approved outside the U.S.	
8	The Biosimilars Forum supports the	
9	reauthorization of the user fees. We're very glad	
10	to hear several of the things today that support	
11	the user fees, support biosimilars, but also we	
12	believe we share several of the positions and	
13	things that the FDA is seeing as well, so we look	
14	forward to working with the FDA team on the user	
15	negotiations as we go forward.	
16	It's vital to all of our members and the	
17	biosimilar sponsors in the U.S. that we have a	
18	productive dialogue that will lead to the timely	
19	product approvals. It's important for us to	
20	continue to lower the cost of biologic drugs in	
21	the U.S.	
22	Some considerations we would like to	

82 move forward with as we continue this dialogue with the FDA. It is crucial that we continue to maintain our current momentum and build on our experience, but here are some key things. One, we would like to continue with 5 aggressive but also realistic time frames for review and approval. We would like to work with the FDA to ensure that there are adequate and skilled resources for the review of these products. Meaningful and frequent communications 10 between biosimilar application sponsors and the 11 12 agency are important to our members. 13 Also, as you noticed in our membership, leveraging the scientific knowledge of the 15 experienced manufacturers and scientific experts 16 in the industry is important to the FDA, and we 17 look forward to supporting you on that. 18 Education of stakeholders including 19 industry, providers, and patients, is a key 20 principle and foundational goal of the Forum, and 21 we again would like to support the FDA in that as

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well.

83 Using lessons learned to improve our 1 outcomes and meeting expectations. This is a new industry. It is a new user fee program. We are coming with open minds and changing the lens and the paradigm of how user fees in the industry can succeed. This is a tremendous opportunity for both the industry but also the agency and the patients, and we are all in the same place with the goal to advance a high quality and robust 10 biosimilars market. We look forward to continuing 11 to work with the agency and with our other 12 stakeholders here on shaping the market and 13 renewing the user fees. 15 Thank you. 16 DR. TOGIO: Thank you, Juliana. Our 17 next speaker is representing the generic drug 18 industry from GPhA and the Biosimilars Council, 19 David Gaugh. 20 DR. GAUGH: Thank you. Good morning, 21 everyone, and thank you for allowing us to speak 22 in front of you on this very important program,

84 the reauthorization of BsUFA. 2 I'm David Gaugh, Senior Vice President for Sciences and Regulatory Affairs, representing the Generic Pharmaceutical Association, and more importantly, the Biosimilars Council, which is a division of GPhA. The Biosimilars Council works to ensure a positive environment for patient access to biosimilar medicines. The Biosimilars Council is a leading source of information about the safety and efficacy of these affordable alternatives to 11 the costly brand biologic products. 12 Areas of focus include public health, 13 expert education, strategic partnership, 15 government affairs, legal affairs, and regulatory policy. Of course, for those of you who would like more information about the Biosimilars Council, we have put our website on here so you 19 can check it out. 20 The Biosimilars Council is currently a 21 13 member organization, so these companies 22 represent the Council, and as my esteemed

85 colleague just before me stated, a couple of the companies, Sandoz and Teva, for example, are the lead outside the United States for biosimilars and also some of the leads on the biosimilar applications that have been filed with the agency thus far. 7 The impact of biosimilars on patients. Biosimilars as interchangeable biologic products holds promise not just for consumers and the pharmaceutical industry, but for sustaining a 10 health care system with very finite resources. By 11 2016, it is predicted that 8 out of the top 10 12 most dispensed pharmaceuticals in the United 13 States will be biologics. 15 In a recent study by Express Scripts, it was estimated that the potential savings of \$250 billion in the next decade will occur with the 17 18 approval of just 11 biosimilar products. 19 Where things with implementing BsUFA 1. 20 FDA has expanded a considerable effort in drafting 21 quidance's, some of which are now final. FDA has

met with multiple sponsors to date. There are

86 estimated to be well over 50 products under development in the United States under the BsUFA pathway. Although it may be too soon to judge the 4 agency's performance on applications given the number of submissions, the BsUFA program can be elevated for the biosimilar related work that consumes the greatest amount of FDA resources development phase support. To date, eight BLAs have been announced as submitted to the FDA, and the actions to date for five of these submissions 11 has passed. 12 13 We only know of the review outcomes and timing of two of those five, and for the two, FDA 15 has completed their review within the 10 month 16 goal, Sandoz's Filgrastim, for example, with an 17 approval, and Pfizer's epoetin alfa with a 18 complete response letter. 19 Of the remaining three, we do not have 20 public information available to us concerning 21 their status. Overall, there are fewer biosimilar 22 approvals at this point than what either the

87 industry or FDA predicted several years ago. 2 Where things stand, continued. Development phase support and meeting management is a predominant activity where improvement is needed. For 2013, the BsUFA performance report found that all three goals not met were related to meeting management. For 2014, which is a preliminary report, found that seven goals where there is potential to miss, six relating to meeting management. 10 11 According to the Eastern Research Group, BsUFA workload study meetings and policy 12 development consumed a majority of the CEDR staff activities, 45 percent for meeting activities, 19 percent for policy activities, and 7 percent for BLA review. 16 17 An assessment of the current BsUFA 18 processes. We have found interactions with FDA under BsUFA to be very constructive. We believe 19 20 that a 10 month review clock for biosimilars, 21 which is two months less than that of the standard 22 PDUFA drug review, is justified because FDA is

88 granting multiple development meetings prior to the BLA submission, allowing for extensive feedback and aligning prior to the submission in order to improve the completeness of the quality of the BLAs. These multiple meetings permitted under 6 BsUFA enable industry to obtain extensive feedback 7 which in turn led to improved dossiers. 9 At present, FDA is expanding a very significant portion of biosimilar resources on 10 regulatory policy issues. We are hopeful that 11 these issues will be resolved in the very near 12 future, which will free up significant resources 13 to provide timely and detailed feedback to the 15 sponsors on the product reviews. 16 To date, FDA has issued four final and 17 eight draft biosimilar guidance's plus a proposed 18 rule on non-proprietary naming. It is critical 19 that FDA continues to provide guidance's to 20 industry and proceed with the outstanding 21 guidance's the agency has said they would be

introducing this year, which includes

89 interchangeability, labeling, and statistical considerations for demonstrating analytical similarities. 3 Additionally, FDA should prepare a 4 guidance to address life cycle management or postapproval requirements, covering topics such as requirements for biosimilars and interchangeable biosimilars as well as supporting manufacturing changes, such as the need to establish similarity to the originator or comparability to approved 10 11 biosimilars. 12 From a future state standpoint, increase 13 and strengthen FDA resources and capabilities to improve the review and approval of these critical 15 products. Staffing goals should be met at the FDA 16 commitment levels. Advisory committees that increase the number of scientific experts from 17 18 outside the agency, more analytical and functional 19 experts with a strong understanding of the science 20 of comparison, and the assessment of biosimilarity should be added. 21 22 These are imperative since the risk

90 based considerations for biosimilars are highly driven by analytical and functional data. 3 Maximizing the efficiencies of FDA meetings and improving the outcomes, a clear process where time lines should be established for follow up clarification to any BsUFA meeting. Application orientation meetings permitted under PDUFA and very beneficial to FDA reviewers should be encouraged under BsUFA. Additional touch points during the review of the 351(k) is very 10 11 important. 12 Finally, Type 2 meetings should be specifically authorized to provide written advice 13 on whether the achievement of certain pre-defined product quality attributes would enable the use of 16 targeted clinical programs and allow for the 17 determination of interchangeability. 18 FDA and the industry need to work 19 collaboratively to create a public education 20 campaign around biosimilars. These collaborative 21 educational efforts will provide a key and 22 independent source of information regarding

91 biosimilar products, their safety, and the scientific development. 3 Additionally, other key stakeholders, payers, patients, and clinicians would contribute to an extensive educational campaign. 6 With that, I want to thank the agency for this time and allowing us to present our position and some of our thoughts for a future under the reauthorization negotiations that will soon be taking effect, and given the strong public 10 need for more affordable biologics, it is critical 11 for FDA and industry to focus negotiations on 12 efforts to ensure timely patient access to these 13 more affordable high quality biosimilars. The Biosimilars Council thanks FDA for 15 their accomplishments under BsUFA 1, and we look 17 forward to working with the agency under BsUFA 2 18 reauthorization. Thank you very much. 19 DR. TOGIO: Thank you, David. Our last 20 speaker for this panel is Michael Levy from PhRMA. 21 MR. LEVY: Thank you. As just stated, 22 my name is Michael Levy. I'm Deputy Vice

92 President in Science and Regulatory Advocacy at Pharmaceutical Research and Manufacturers of America, otherwise known as PhRMA. PhRMA is pleased to have the opportunity 4 to respond to the Food and Drug Administration's request for comments on the overall performance of the Biosimilar User Fee Act, and to participate in the upcoming reauthorization of BsUFA. 9 PhRMA is a voluntary non-profit association that represents the country's leading 10 pharmaceutical research and biotechnology 11 companies, which are devoted to inventing 12 medicines that allow patients to live longer, 13 healthier, and more productive lives. 15 PhRMA's membership includes several leading biopharmaceutical companies actively 16 17 developing biosimilar medicines and working with 18 the Food and Drug Administration to bring these to 19 patients. 20 In 2011, PhRMA was a participant in the 21 technical negotiations with FDA that together with input from groups representing patients and health

93 care providers resulted in the first BsUFA performance goals letter. At that time, there was little experience in reviewing and approving biosimilar medicines on which to base the content of the performance goals letter. 6 Now, with more collective experience, PhRMA remains committed to working with FDA and other stakeholders to reauthorize BsUFA in a data driven manner, which ensures FDA continues to receive funding necessary to review biosimilar 10 applications in a timely manner, without diverting 11 resources from the review of innovative medicines. 12 PhRMA has long backed the establishment 13 of an approval pathway for biosimilars that 15 involves the thorough assessment of their safety 16 and efficacy. We supported the enactment of the Biologics Price Competition and Innovation Act, 18 and have actively participated in FDA's ongoing 19 efforts to implement the statute. 20 It is imperative to ensure that the 21 continued implementation of BPCIA matches the original legislative intent to ensure patient 22

94 safety while at the same time balancing increased competition from biosimilar products with the need to provide biopharmaceutical researchers with certainty to make long term research and development decisions and support future medical innovation. 7 PhRMA's consideration of biosimilar policies is guided by our support for the following five things: a science based implementation of the BPCIA and regulatory 10 decision making. Patient safety through effective 11 identification of biologics and robust 12 pharmacovigilance. Health care provider and patient choices, regulatory transparency that 15 enables stakeholders to understand the basis for FDA's decisions, and long term stability of the 17 biosimilar user fee through financial 18 transparency, efficiency, and accountability. 19 The BsUFA agreement developed in 2012 20 provides the agency with the resources and 21 regulatory framework to meet its public health mission and to ensure patient safety. BsUFA 2 and 22

95 FDA's continued policy development related to biosimilars should further advance these activities. 3 PhRMA is committed to working with FDA 4 and other stakeholders to review the existing performance goals and consider enhancements that can improve the program. 8 To date, the agency has issued several draft and final guidance documents to assist sponsors in generating data to support biosimilar 10 applications. FDA guidance and regulation provide 11 insight into the agency's current thinking 12 regarding how it will evaluate and understand 13 significant regulatory questions. 15 Key guidance's that remain on the agency's agenda include but are not limited to 16 17 quidance on the labeling for biosimilar biological 18 products and guidance for industry considerations 19 in demonstrating interchangeability to a reference 20 product. 21 In addition to issuing these guidance's, the agency should provide clarity on how FDA will 22

- 1 interpret statutory provisions that apply to
- 2 biosimilar applications. For example, those that
- 3 reference innovative products that are covered by
- 4 the transition provision in Section 7002 of the
- 5 Affordable Care Act.
- 6 We urge the FDA to issue the necessary
- 7 guidance's and regulations to implement fully the
- 8 BPCIA, as these are critical to provide
- 9 predictability and transparency to sponsors in
- 10 order to help them design effective development
- 11 strategies to meet patient needs and FDA
- 12 regulatory expectations.
- 13 We agree with FDA that implementation of
- 14 a robust modern pharmacovigilance program for all
- 15 products is essential to ensure patient safety.
- 16 All biologic medicines have the potential to cause
- 17 unwanted immune responses in the body that could
- 18 have serious adverse effects.
- 19 A feature called immunogenicity.
- 20 Although rare, these serious safety risks may not
- 21 be detectable during pre-approval clinical testing
- 22 because the size of the population exposed may not

- 1 be large enough to assess very rare events.
- 2 Because of this, it is even more critical that we
- 3 ensure adequate pharmacovigilance systems are in
- 4 place as we introduce biosimilar biological
- 5 products to the marketplace.
- 6 PhRMA believes that all original
- 7 biologic and biosimilar products should share a
- 8 common non-proprietary name that is accompanied by
- 9 a unique memorable suffix to distinguish them from
- 10 one another. This will help to ensure that
- 11 physicians can remember the names of the biologics
- 12 that they prescribe, and patients can remember the
- 13 names of the biologics that are prescribed for
- 14 them. Such identifiability is essential for
- 15 monitoring drug side effects, and we applaud FDA
- 16 for issuing guidance on this critical policy area.
- 17 PhRMA believes that to facilitate
- 18 patient-centric prescribing and choice, there
- 19 should be appropriate regulatory transparency in
- 20 biosimilar labeling, including a statement of
- 21 biosimilarity. Biosimilar labeling should state
- 22 that the product has been approved as a biosimilar

98 for stated indications and routes of administration. The labeling should also identify the reference product. A statement on interchangeability. Biosimilar labeling should state whether or not the FDA has made a determination of interchangeability with the reference product, and include any such FDA finding. 9 A description of data supporting approval. Biosimilar labeling should describe the 10 basis of approval for each indication by 11 identifying the relevant data for the reference 12 product and biosimilar that support a finding of biosimilarity. 15 In summary, PhRMA supports the 16 reauthorization of the Biosimilar User Fee Act in 17 a way that is consistent with the original 18 legislative intent. 19 The BsUFA performance goals agreement is 20 a means of advancing public health by making 21 adequate resources available to FDA for the

regulatory review of biosimilar products,

		99
1	consistent with the agency's high standards for	
2	scientific rigor and patient safety.	
3	PhRMA and its member companies are	
4	committed to working closely with FDA and all	
5	stakeholders to reauthorize this important program	
6	to maintain, improve, and expand upon its science	
7	based approach to the development and review of	
8	biosimilar products.	
9	PhRMA, therefore, urges Congress to	
10	reauthorize BsUFA in 2017, and compliment the user	
11	fees with congressional appropriations.	
12	Thank you.	
13	DR. TOIGO: Thank you, Mike. Thank you	
14	to our panel members for presenting the industry	
15	perspective, and for keeping to the time	
16	commitment. We appreciate your cooperation.	
17	We have one more panel, although we have	
18	one panel of one person, so we have one person,	
19	Dr. Antonio Moreira, who is going to talk to us	
20	about the perspective of the scientific and	
21	academic community.	
22	DR. MOREIRA: Good morning, and thank	

100 you so much to the FDA for giving me the opportunity and inviting me to be with you this morning and present some perspectives from the scientific and academic community on the BsUFA 5 process. 6 I feel a bit lonely being the only 7 member on this panel, but I'll do my best to oblige to the request. 9 I am Tony Moreira, Vice Provost for Academic Affairs at the University of Maryland, 10 Baltimore County. I'm a Professor of Chemical, 11 Biochemical, and Environmental Engineering. 12 have been in the biotech business for about 35 13 years, both in academia and in industry. I teach 15 courses in regulatory science at UMBC, and also 16 I'm a member of a DARPA funded project that deals 17 with manufacture of therapeutic proteins at the 18 point of care, and these are applications for 19 biosimilars, so I'm very much personally 20 interested in the progress of the biosimilars field and what we can do in academia to support 21 22 this activity.

101 As we look at the intent of BsUFA in 1 terms of providing resources for the FDA to develop at the end of the day a better managed and biosimilar product review process and making sure we have high quality product therapies that come to the market as needed by the patients, we have to realize that we are talking about developing products, similar bioproducts, to very complex molecules, orders of magnitude more complex than simple chemical synthesized, well defined small 10 11 molecules. Thus, the use of the language of "highly 12 13 similar" as opposed to being the same or identical product, again, because of the unique 15 characteristics of these products as a function of 16 the manufacturing process used for that manufacturer. 17 18 Again, the need for somehow identifying 19 what we mean by "similar structure," and the major 20 impact of having strong analytical technology 21 packages that can compare the biosimilar product with the reference material from the innovator 22

102 compound. 2 Thus, in the definition of "biosimilar" from the BPCI Act, words like "being highly similar to the reference product, " notwithstanding minor differences in clinical and active components, and the "no clinical and meaningful differences" being observed between the biological product and the reference product in terms of safety, purity, and potency. 10 Probably the words here "highly similar and no clinical and meaningful differences" bring 11 about many questions from the science point of 12 view in terms of making sound scientific decisions of the biosimilarity approach in terms of the 15 product being defined. 16 I liked a previous slide from Dr. Christl's presentation because I think it provides 18 a very good pictorial of the process for the step-19 wise approach in terms of generating data and 20 evaluating what the FDA has labeled as the evaluation of the uncertainty, starting from the 21 very strong analytical package and then moving

103 down the line in terms of animal studies, clinical PKPD, and potentially additional clinical studies that again are looking at the totality of the evidence, a decision being made for the process. 5 This leads to a pathway for biosimilar development that starts by looking at the reference product licensed in the U.S., reengineer a clone that develops then a product that will be comparable to the innovator molecule based on the analytical studies, develop the manufacturing 10 process, and realizing again because of the 11 complexity of these molecules, we are always 12 talking about some differences possibly occurring 13 between the two products. 15 Following the development of the 16 manufacturing process with clinical development 17 work, again, as defined here, leading to a 18 demonstration of efficacy and safety after 19 assessing immunogenicity as well, and again, some 20 of the concepts you already heard earlier in terms 21 of how to extrapolate across indications and the 22 potential or not for interchangeability or

104 substitution decision making, again, becoming a very important part of the deliberations in terms of biosimilarity. Again, all of these eventually lead to or come as a result of scientific studies that will support the decision-making. I think these are just in my view some of the scientific topics with the introduction of the biosimilar discussions in the U.S. that has caused us to work in terms of the development. 10 11 How to establish that the molecule profile is highly comparable to the innovator 12 molecule, and then leading to the development of 13 manufacturing processes, efficient, optimized, and 15 high yield in terms of making products of final 16 high quality. 17 Science and technology has advanced 18 tremendously since the days when the innovator 19 molecule was developed, so I think we have now 20 novel expression systems, novel tools, improved 21 analytics, single use systems, a lot of new 22 technologies and knowledge that allow us to use

105 those to make these biosimilar products. 2 Science has developed to the point where there are exciting opportunities to develop products of high quality and compare them to the innovator molecule. This comes to a question of how much statistical packaging we need to establish for making these decisions, so again, I know the FDA is working on these concepts of how to develop these statistical analyses so they are scientifically sound to establish biosimilarity. 10 11 Also, the clinical trial design that will be necessary in terms of the uncertainties in 12 13 decision making, a new way of looking at these studies to prove the biosimilarity. 15 These are whole new ways of looking at 16 this product. It really is a paradigm shift in 17 the regulatory approval process and review, which 18 I think brings the scientific topics where again 19 the development in science can be very important 20 and helpful to make those decisions. 21 We are looking, as I was saying before, 22 in my laboratory at point of care delivery, so I

106 think we are looking at how biosimilars even can interface in personalized therapies. It will be an interesting topic, I think, looking at ways where academic institutions, where we are doing discovery and new science and bringing new knowledge to the table, how can we be more successful in whatever we discover in the academic world that can be ultimately marketed through successful clinical trials or these approaches to biosimilarity. I think it will become quite 10 important for us to interface with the FDA and 11 industry. 12 13 Again, these are some of the challenges, one might call. I would rather see them as 15 opportunities in biosimilar development. When we 16 look at what is necessary to define the target 17 profile of the biosimilar material, what are the 18 methodologies necessary that are sensitive enough 19 to look at the differences in similarities between 20 products, and understanding what's critical in manufacturing, what are the quality attributes and 21

related to key process parameters.

107 1 The structure and functional relationships and all the strengths of the analytical package necessary even before we initiate any pre-clinical or clinical studies. Defining how similar is similar. What can we tolerate or accept considering even the innovative molecule, of course, is also a variable in its properties. 9 As I said, with this paradigm shift, it brings about as far as I can see it from my academic perspective, brings in the opportunity 11 for true innovation in biologics manufacturing, 12 which will impact the biosimilar industry, but 13 also the biotech industry in general. I think we 15 are all looking at really new ways and scientifically sound approaches for biologics 16 17 development at the end of the day. 18 When I look at these kinds of scientific 19 opportunities, my thought is at this point is 20 really as you look forward to the BsUFA 21 reauthorization, which I am obviously supportive of, for the FDA to consider the academic community

108 as a partner as well, with the scientific opportunities that we can have in academia. 3 For instance, the FDA can give us quidance on what are the important questions that we should be looking at in academia that can support the FDA's mission in specifically biosimilar development. We do lots of things in academia. We look at many new technologies, new science, new discoveries. 10 How can we model or mold those studies and that research in order to provide information, 11 provide knowledge to the FDA in helping answer the 12 questions that are part of the biosimilar process flow. 14 15 Also, the FDA can help us in looking at 16 the training of staff that is needed by the FDA. The FDA can provide the ideas for projects that 17 18 our students can work on at the Master's or Ph.D. 19 level. Not only they will be doing work that is 20 important and useful for the FDA, but they will be 21 trained in issues and problems and topics that 22 then they can come and work for the FDA, in terms

109 of their knowledge of the regulatory science and the needs of this kind of industry. I think that interface where we can 3 really use the FDA as essentially the critical component to help us design our research, design our studies, so we can be helpful to the FDA, I think, will be a very important component. 8 I'd like to recommend highly leveraging the resources of the academic community to support 10 these efforts. Ultimately, I think as we look at the 11 FDA and this industry coming together, perhaps 12 developing best practices that we all share, and that could support these efforts going forward. 15 Again, we can have an efficient process that brings these medicines to the market in a timely 17 manner as needed by our patients, and as we can in 18 the academic world and in scientific communities 19 support the FDA and industry in making this 20 happen. 21 I think bringing this triangle together 22 and FDA thinking of academia as a catalyst to

110 develop these sources of knowledge that can be directly supportive of the FDA's needs in terms of their science and staffing levels, that is something the academic world is open to, and looking forward to work with the FDA and industry in these endeavors. 7 Thank you very much. DR. TOIGO: Thank you, Dr. Moreira. To wrap up the panel presentations, we are going to have Theresa Mullin do some closing remarks, and then we will have a brief open public hearing 11 session. Theresa? 12 13 DR. MULLIN: It's still morning, so good morning, everyone, and again, thank you for coming 15 today to this meeting. It's a very important 16 milestone for us, both in terms of this 17 reauthorization process and also a milestone 18 because this is the first reauthorization program 19 which is still, as I think you have been hearing 20 from the various stakeholders who have been able 21 to share their views today, still a new program. 22 This is the first reauthorization.

111 quess we would agree with some of the views that we are also trying to get a better understanding of the resources required to do these kinds of reviews and to support this program. I'm going to just try to close with a 5 I have been making notes throughout quick recap. the morning. Recap of some of the key messages that I think we have been hearing from you today. 9 I will start with we hear there is a need for biosimilar competition and to improve the 10 affordability of needed biologic therapies, the 11 cost of biologics can be quite high, and 12 competition would be valuable, but yet the need 13 for rigorous science, the bulletproof science, I 15 think I heard, and sufficient staffing of 16 qualified experts to really underpin and address 17 these policy challenges, there are new regulatory 18 challenges and policy challenges associated with 19 biosimilars, and they take a much more complex 20 approach to both develop them and to manufacture 21 them than would be needed for say a small molecule generic product, generic drug. 22

112 There is a need for naming that would 1 minimize the confusion in the health care system and at the same time support accurate, clear attribution of adverse events so that you can have effective risk management and follow up of any safety issues that may emerge in these new projects, which are again more complex as we have been hearing, and we need the resources to be able to accomplish this. 10 User fee reauthorization appears to be generally supported by the public in the input we 11 have received today, and that the fee level should 12 13 be in line with the cost of running this program in an efficient manner. 15 It was also noted that the development 16 pathway here is different, it's different from the 17 new drug 351(a) or from the generic drug pathway, and from a scientific standpoint, there is a 19 paradigm shift, and this presents both challenges 20 and opportunities to be really pursued. 21 Also, with all that and the paradigm 22 shift, there is a need to really get an

113 understanding of the resources that are needed for this program and the structure of a program that would be successful in this case, considering that it is a different type of pathway, and the evolving program. 6 We hear there is a continuous desire for continued communication between FDA and sponsors as they work through these new pathways throughout development, and the need for continuing guidance and policy development, that there has been a 10 significant part of the workload in the early 11 years, we are really now finishing up the third 12 13 year of this program, and it's acknowledged that guidance is much needed and additional guidance 15 may also be needed. 16 These products are complex products, and 17 complex policy issues and new products and new 18 development programs sometimes raise additional 19 new issues. 20 User fee negotiations and discussions I 21 will note focus on process. They are about 22 review, process enhancement, not policy issues.

114 The discussions we will be undertaking in the next several months with the regulated industry will not involve naming, they will not involve payment policy, they won't involve labeling policy. They might involve identifying, industry 5 may say, more guidance is needed, but not what would go in the guidance. They may identify an area where they would wish for more guidance. 9 We have been successful to date in funding careful, rigorous review of safety and 10 effectiveness and providing a timely and 11 predictable process using industry user fees by 12 13 making it clear that the timely process is a value and benefit for industry, and it doesn't promise a 15 particular answer, so we do not tie fee payment or 16 we certainly don't return fees after doing that 17 careful review, depending on the answer. 18 It's quite critical that this is the way 19 the program be structured to ensure program 20 integrity and public confidence in these programs, 21 and public confidence is quite critical as we know 22 in the case of biosimilars to ensure timely

115 uptake. 1 2 Finally, I want to conclude by reiterating Dr. Christl's comments about our priorities for BsUFA 2. We want to further increase the quality and predictability of this program in development of these products. We want to revisit the workload assumptions as we have been hearing, the paradigm shift, the complexity, and even the greater than we expected desire by companies for consultation throughout the 10 development phase. 11 12 That is very important, but we may need to revisit how we structure and finance the 13 program to ensure soundness in that financing so 15 we can continue to sustain this program and meet the promises that our patients and others have in 17 it, and that we recruit and retain the scientists 18 that we need for timely review, so we are able to 19 accomplish this. 20 With that, I'll close. Thank you again. 21 We look forward to a very robust discussion to 22 support timely reauthorization of this program.

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- 1 Thank you again for coming today. Happy holidays.
- DR. TOIGO: Thank you, Theresa. We have
- 3 two people who have signed up to speak in the open
- 4 public session. Dr. Hillel Cohen from Sandoz, and
- 5 Dr. Sumant Ramachandra, from Pfizer. We will
- 6 start with Dr. Cohen. Gentlemen, I will ask you to
- 7 keep it to about five minutes. Thank you.
- 8 DR. COHEN: Good afternoon. I'm Hillel
- 9 Cohen, Executive Director of Scientific Affairs at
- 10 Sandoz, Inc., a Novartis company. We would like to
- 11 thank the FDA for holding this meeting.
- 12 At present, Sandoz is the only company
- 13 that has taken a product through the entire
- 14 biosimilar development FDA review and approval
- 15 process. We have had more than 30 meetings with
- 16 the FDA to discuss development of biosimilars.
- 17 Our experiences provide a unique perspective, and
- 18 we welcome the opportunity to share them at this
- 19 meeting.
- 20 There are many aspects of BsUFA that
- 21 worked well and that we would like to retain. Our
- 22 interactions with the FDA under BsUFA were

117 excellent and constructive. The multiple meetings permitted under BsUFA enabled us to obtain extensive feedback, which in turn led to improved dossiers. We believe that the 10 month review clock for biosimilars was successful and is 7 justified. The extensive interactions prior to submission allow FDA to obtain an overall familiarity with the contents of the dossier. 10 FDA has expended and continues to expend a very significant portion of biosimilar resources 11 on drafting guidance's to industry to provide 12 clarity on the development pathway and to resolve 13 remaining regulatory and policy issues. 15 We are hopeful that the remaining issues will be resolved in the near future, which will 17 allow FDA to allocate more resources to providing 18 rapid feedback to sponsors and to product reviews. 19 There are several ways in which the U.S. 20 biosimilars development pathway can be enhanced. 21 First, it is apparent that non-biased education 22 is needed to ensure that health care professionals

118 and the public understand and accept biosimilars. The FDA acknowledges this need, but at present, these activities are not funded. It is important that a mechanism be developed to address this critical need. Second, a clear process with time lines is needed for follow up clarifications to a BsUFA meeting. The existing guidance meetings are extremely useful, but at times, there are residual uncertainties about the outcomes. A mechanism should be created to resolve any residual 11 uncertainty from either the meeting itself or the meeting minutes. This would greatly benefit all parties.

15 Third, FDA is currently taking the

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- 16 approach that a sponsor must first obtain approval
- of a given biological drug, that is a biosimilar,
- 18 and only after initial approval can the sponsor
- 19 seek approval of the same product as an
- 20 interchangeable biologic. The reason stated by
- 21 the FDA is that they are not yet ready to evaluate
- 22 interchangeability as a part of the initial

119 application. 2 In the interim, companies must submit a supplemental license application in order to obtain an interchangeability designation, even if the data was available, and incorporate it into the initial submission. The current supplement fee is in the neighborhood of \$1 million. Congress never intended that FDA review of interchangeability be automatically subjected to 10 an additional user fee. This situation must be 11 addressed. 12 We have specific suggestions for these highlighted items, as well as other suggestions on how BsUFA could be improved. We will provide those 15 to the groups that will discuss BsUFA reauthorization on our behalf. 16 17 Thank you very much for your time. 18 DR. TOIGO: Thank you, Dr. Cohen. Dr. 19 Ramachandra? 20 DR. RAMACHANDRA: Thank you for the 21 opportunity to provide Pfizer's views on the 22 reauthorization of the biosimilar user fee

120 program, BsUFA 2. 2 My name is Sumant Ramachandra, and I'm the Senior Vice President and head of Research and Development for Pfizer's Global Established Products. We believe that Pfizer's experience 6 under BsUFA 1 having seven products in development in the U.S., including one product pending approval by the FDA, may offer important insights 10 for FDA and relevant trade associations as they begin the reauthorization process. 11 12 Any potential changes to BsUFA should be data driven and informed by FDA's review 13 performance. We encourage FDA and the trade 15 associations to develop that evidence base during 16 the course of the negotiations. 17 Despite significant progress by the 18 agency, only one 351(k) BLA application has been 19 approved by the FDA to date, with another seven 20 applications still pending. Based on publicly 21 available information, this equates to an overall 22 25 percent first cycle review approval rate. By

121 comparison, in recent years, the PDUFA program has achieved a first cycle approval rate for NMEs ranging from 80 to 95 percent. Furthermore, we estimate the number of applications will significantly increase in 2016 and 2017. 6 Understanding this performance and Pfizer's experience, we have identified three high 8 level priorities for BsUFA 2. First, the program 9 should be appropriately resourced to ensure that the FDA has adequate capacity to provide advice 10 and feedback to biosimilar sponsors both during 11 development and on pending applications. 12 Second, the FDA should commit to 13 training and workforce development to ensure that 15 FDA staff fully appreciate the difference between the review of a biosimilar and a new therapeutic 16 17 biologic. This is a paradigm shift and defers 18 from both novel products and generic reviews. 19 Third, FDA should enhance the clarity, 20 consistency, and timeliness in its feedback to 21 sponsors during biosimilar product development 22 meetings and the BLA review process.

122 In summary, based on Pfizer's experience 1 and leadership in biosimilars and biologics development, we look forward to contributing to the BsUFA reauthorization process. By enhancing consistency in reviews and ensuring adequate resources and staffing trained, we believe that BsUFA 2 will provide FDA with the infrastructure necessary to anticipate and respond to the next wave of biosimilar applications. 10 Thank you again for the opportunity to provide the views of Pfizer, and we would be happy 11 to provide any clarifications needed through the 12 13 process. Thank you very much. 14 DR. TOIGO: Thank you, Dr. Ramachandra. 15 That concludes our meeting for today. 16 Thank you all, to the speakers who took the time 17 to prepare and come and present, to the FDA staff 18 who did a lot of work to get the meeting 19 organized, and to our participants who came and 20 participated in the process. 21 FDA takes seriously its responsibilities 22 related to public input into our regulatory

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   processes.
              Thank you, and remember that the docket
 2
   is open until January 19 for any additional public
   comments you want to provide.
              Safe travels, and that's it.
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               (Whereupon, at 11:42 a.m., the meeting
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              was concluded.)
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