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      CENTERS FOR MEDICARE AND MEDICAID SERVICES
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      Medicare Coverage Advisory Committee
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     Centers for Medicare and Medicaid Services
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     Panelists
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     Chairperson
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     Alan M. Garber, M.D., Ph.D.
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     Vice Chairperson
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     Alexander H. Krist, M.D.
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     Voting Members
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     Deborah S. Cummins, Ph.D.
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     Deborah Schrag, M.D., M.P.H.
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     Robert S. McDonough, M.D.
13
     Mark Fendrick, M.D.
14
     Clifford Goodman, M.D.
     Daniel D. Foley, M.D.
15
     Norman S. Kato, M.D.
16
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     Alexander Emyr Ommaya, Sc.D., M.A.
     Nora A. Janjan, M.D.
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19
     Catherine A. Glennon, R.N.
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     Nancy Davenport-Ellis, B.A.
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     HCFA Liaison
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     Steve Phurrough, M.D., M.P.A.
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    Consumer Representative
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    Linda A. Bergthold, Ph.D.
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    Industry Representative
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    Kim K. Kuebler, M.N., R.N.
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    Guest Expert Panelist
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    Richard W. Whitten, M.D., F.A.C.P.
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    Executive Secretary
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    Michelle Atkinson
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1 2	PANEL PROCEEDINGS (The meeting was called to orde	r at
3	8:11 a.m., Thursday, March 30, 2006.)	at at
4	MS. ATKINSON: Good morning and	
5	welcome, committee chairperson, members an	
6 7	guests. I am Michelle Atkinson, the execu secretary for the Medicare Coverage Adviso	
8	Committee. The committee is here today to	-

9 the evidence, hear presentations and public 10 comments, and make recommendations regarding the 11 desired characteristics of published compendia 12 that may be utilized by CMS and other insurers to 13 determine the medically accepted indications of 14 drugs and biologics used in an anti-cancer 15 therapeutic regimen. 16 The following announcement addresses 17 conflict of interest issues associated with this 18 meeting and is made part of the record. The 19 conflict of interest statutes prohibit special 20 government employees from participating in matters 21 that could affect their or their employer's 22 financial interests. Each member will be asked to 23 disclose any financial conflicts of interest 24 during their introductions. We ask in the 25 interest of fairness that all persons making

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1 statements or presentations also disclose any 2 current or previous financial involvement in any drug compendia or any manufacturer of anti-cancer 3 4 drugs or biologics. This includes direct 5 financial investments, consulting fees and 6 significant institutional support. If you haven't 7 already received a disclosure statement, they are 8 available on the table outside of the room. 9 We ask that all presenters please 10 adhere to their time limits. We have numerous 11 presenters to hear from today and a very tight 12 agenda, and therefore cannot allow extra time. 13 There is a timer at the podium that you should 14 follow. The light will begin flashing when there 15 are two minutes remaining and then turn red when 16 your time is up. Please know that there is a chair in front of the stage for the next speaker, 17 18 and proceed to the chair when it is your turn. 19 For the record, voting members present 20 for today's meeting are: Alex Krist, Deborah 21 Cummins, Nancy Davenport-Ennis, Deborah Schrag, 22 Robert McDonough, Cliff Goodman, Daniel Foley, 23 Norman Kato, Alexander Ommaya, Nora Janjan, and 24 Mark Fendrick. A quorum is present and no one has 25 been recused because of conflicts of interest.

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1 The entire panel including nonvoting 2 members will participate in the voting. 3 If anyone is requiring a taxi, please 4 sign up at the registration desk during the break 5 or lunch. I would ask that all panel members 6 please speak directly into the mike, and you may 7 have to move the mikes since we have to share. 8 And lastly, please remember to discard your trash 9 in the trash cans located outside of the room. 10 Now I would like to turn the meeting 11 over to Dr. Steve Phurrough.

12 DR. PHURROUGH: Thank you, Michelle. 13 I'm Steve Phurrough, director of the coverage and 14 analysis group here at CMS and the government 15 representative here on this particular advisory 16 committee. 17 We welcome you to this forum, we think 18 this is an important topic. As we have done in 19 some of our recent MCAC contact meetings, we are 20 not focusing on a particular coverage 21 determination that's underway now, we are 22 attempting to define some of the current evidence 23 around particular topics, in this case the use and 24 validity, accuracy of some of the compendia that 25 are currently part of the Medicare system or would

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like to be part of the Medicare system. 1 2 I want to particularly thank the panel 3 for taking part today. This is not just one day 4 in the life of these panel members. We have 5 provided them a lot of information, they do a lot 6 of investigation on their own, and we appreciate 7 the hard work that goes into this meeting. With 8 that, I'll turn it over to the chairman, Dr. 9 Garber. 10 DR. GARBER: Good morning and welcome, 11 everyone. Welcome, panel members. I am Alan 12 Garber, chair of the Medicare Coverage Advisory 13 Committee. I'm a staff physician with the 14 Department of Veterans Affairs and a professor at 15 Stanford University. What I would like to do is 16 have each of the panel members introduce 17 themselves and state their conflicts. 18 I will begin by stating mine. I am not 19 a voting panel member, I should just note, as 20 chair. I don't have any relevant stock holdings. I am on the board of directors of a biotech 21 22 company that does not currently have a product 23 that might be assessed but might at some point in 24 the future, and I have in the past consulted for 25 AmDen, which does have products that are relevant.

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1 Alex. 2 DR. KRIST: My name is Alex Krist. Т 3 am a family physician and associate professor at 4 Virginia Commonwealth University and I have no 5 conflicts of interest. 6 DR. CUMMINS: I'm Deborah Cummins, 7 director or research and evidence analysis at the 8 American Diabetic Association and associate 9 professor at the University of Illinois College of 10 Medicine, and I have no financial conflicts. 11 DR. SCHRAG: My name is Deborah Schrag, 12 I'm a medical oncologist at Memorial 13 Sloan-Kettering Cancer Center, and my institution, 14 I personally do work in collaboration with the

15 MCCN for which we do receive some research 16 support, which has been disclosed. DR. MCDONOUGH: I'm Bob McDonough, and 17 18 I'm a medical director at Aetna. I have no 19 financial conflicts of interest to disclose. 20 DR. GOODMAN: Cliff Goodman, vice president of The Lewin Group. My 401(k) mutual 21 2.2 funds and retirement funds may include stocks in 23 some healthcare product companies. As a salaried 24 employee for The Lewin Group, which is my sole 25 source of income, I have not received financial

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1 support directly from any drug compendia or any 2 manufacturer of anti-cancer drugs or biologics. 3 As part of my salaried employment, I have worked 4 on studies, done teaching and other work under 5 contracts between my employer and the sources of 6 some drug compendia as well as manufacturers of 7 biologics and related products. This list is 8 extensive, but some of them are National 9 Conference of Cancer Networks, Eli Lilly. 10 Bachelor Healthcare, Glaxco Wellcome, SmithKline, Johnson & Johnson, and others. My firm has also 11 worked with physician groups and patient advocacy 12 13 groups that may have an interest in this issue. 14 DR. FOLEY: I'm Dan Foley, I'm an 15 emergency physician and medical director of the 16 Allina Health System, and I have no conflicts. 17 DR. KATO: My name is Norm Kato. I am 18 in the private practice of thoracic surgery in 19 Encino, California. My conflicts are that I own 20 stock in a pharmaceutical company that does 21 manufacture anti-cancer drugs and I have received 22 previous consulting support from two manufacturers 23 of anti-cancer drugs in the past but have not 24 received any (inaudible). 25 DR. OMMAYA: I'm Dr. Alex Ommaya, I'm

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director of the Garth Forum at the Institute of 1 Medicine, which is part of the National Academy of 2 3 Science. No conflicts. 4 DR. JANJAN: My name is Nora Janjan. 5 I'm a professor of radiation oncology at M.D. 6 Andercon Cancer Center, an NCCN-designated 7 facility. My institution does a wide variety of 8 clinical trials with anti-cancer agents and 9 occasionally I do some consulting work with a wide 10 variety of pharmaceutical firms as well. I have 11 no personal holdings with any pharmaceutical 12 firms. 13 MS. GLENNON: Catherine Glennon. I am 14 a nurse at the advanced practice department at 15 Duke University and I am a stockholder in various 16 pharmaceutical companies and I also appear on the 17 speakers bureau for different pharmaceutical

18 companies. 19 DR. FENDRICK: Good morning. I'm Mark 20 Fendrick, professor of internal medicine at the 21 University of Michigan, an NCCN institution. I 22 have consulted for numerous pharmaceutical 23 companies, pharmaceutical benefit managers, health plans and advocacy groups, but I have not worked 24 25 in the cancer area for any of these firms.

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1 MS. DAVENPORT-ENNIS: I'm Nancy 2 Davenport-Ennis, CEO of the Patient Advocate 3 Foundation. We're a nonprofit patient services 4 organization. I do have a 401(K) and a 403(B) and 5 they do have mutual funds and may indeed had 6 pharmaceutical stocks; however, I do not own 7 pharmaceutical stocks directly as a singular 8 person. I am an employee of the Patient Advocate 9 Foundation, I am salaried as an employee of 10 Patient Advocate Foundation. That organization 11 does solicit from and receive unrestricted grant funding from a number of pharmaceutical companies 12 13 in America in order to support direct patient services that we deliver to 4.1 million Americans. 14 15 MS. KUEBLER: My name is Kim Kuebler. 16 I'm a medical scientist for Eagle Pharmaceuticals 17 and I have received PhRMA support in the past. DR. BERGTHOLD: I am Linda Bergthold. 18 19 I am a consultant with Watson Wyatt Worldwide, an 20 employee benefits consulting firm. I personally 21 hold stock in a biologic firm and I'm currently 22 doing some consulting work concerning 23 investigational anti-cancer drugs. 24 DR. WHITTEN: Good morning. I am Dick 25 Whitten, internist and medical director for

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1 Medicare Part B for Washington, Alaska and Hawaii, 2 and no financial conflicts. 3 DR. GARBER: Thank you very much. Just 4 a few brief statements. I want to reiterate what 5 Michelle had said about the importance of timing. 6 These meetings always have less time available 7 than we feel that we could use to fully consider 8 the topics, and we also often feel that we would 9 benefit from more input from the speakers, whether 10 they're designated in advance or people from the 11 public which speak at the meeting and come up to 12 the microphone during the meeting. But I have to 13 reiterate that because of the time constraints, we 14 will be absolutely strict and when your time is up 15 you will be cut off, even if it's midsentence. Т apologize in advance for that, but you do get the 16 17 warning light and we will expect everyone to 18 adhere very strictly to the time limits in order 19 to ensure that everyone who wants to speak has the 20 opportunity to speak during the designated times.

We have an unusual topic before us today. It's one that is, I would say a little more complex than what MCAC has typically dealt with. Some might say that the problem is in some ways amorphous, but it's not really amorphous and

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1 we tried to put a lot of structure on the way we 2 will consider today's topic and how the voting 3 will occur. This may be a little different from 4 what anybody in the audience is used to, whether 5 you have been here before or not. We have a set 6 of voting questions, which I hope everybody has in 7 front of them, and the panelists will be voting on 8 two different boards for some of these voting questions. They have cards on which they will be 9 10 marking their votes and they will hold that up so 11 that the audience can see. We will not have 12 extended discussion about this, but these scores 13 will be compiled and if all goes as planned, we 14 will have some summary statistics, basically, 15 about how the votes have gone. 16 The procedure of this, we will be reviewing Question 1 before the presentation of 17 18 the technology assessment. Question 1 is a sort 19 of ground-setting question about what's important 20 and what's desirable among the characteristics 21 that drug compendia have. I want to just say that 22 as we approach our task, we might think a little 23 bit about the context, and we will hear more about 24 this during the presentation that will follow next

25 by Tara Turner.

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1 But the way that the statute is 2 written, and Tara can correct this if I'm 3 incorrect, there are three compendia listed, and 4 an off label indication must be covered by the 5 Medicare program if it is listed as an appropriate б indication in any one of the compendia. The 7 issue, I think, can be thought of as a type 1 and 8 a type 2 error problem. By that I mean a type 1 9 error would be listing an indication as 10 appropriate when in fact the particular indication 11 for this drug does not provide a health benefit. 12 A type 2 error would be failure to list when it is 13 effective, or saying that it's not effective when 14 it really is effective. 15 Because of the way the law is written, 16 if it's listed in any one compendia it gets 17 covered, even if there is disagreement between the 18 compendia. So having more compendia increases the 19 chances of a type 1 error but decreases the chance 20 of a type 2 error, assuming that they don't agree 21 100 percent of the time and we will find out that 22 that is the case, they don't always agree. And 23 from the point of view of making decisions, a

failure to comment on an indication is the equivalent of saying it doesn't work in this kind

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of context. 1 2 So, I think that as we go through this 3 rather complex assessment of the characteristics 4 of the compendia, you might want to keep in mind 5 at all times how this would be used, what the 6 consequences are of these different kinds of 7 errors. So remember that whether a compendium 8 fails to list an indication or says that there is 9 weak evidence or no evidence that it works, will 10 have the same effect in a decision context, that 11 is, if it's used at least in one compendia as not 12 working, whereas if any compendia says it works, 13 it will count as basically being covered. So 14 specifically, the more compendia that CMS chooses 15 to work with, the greater chance of type 1, the 16 less the chance of a type 2 error. 17 So let me turn now to Tara Turner, who 18 will be presenting on behalf of CMS. LCDR TURNER: It's great to see such a 19 large turnout this morning. Good morning and 20 21 thank you. Chairman Garber, panelists, invited 22 guests, members of the public, I am Lieutenant 23 Commander Tara Turner of the coverage and analysis group. On behalf of the Centers for Medicare and 24 25 Medicaid Service, welcome to today's Medicare 00019 1 Coverage Advisory Committee on compendia and 2 off-label uses of drugs and biologicals in 3 anti-cancer treatment. 4 The CMS panel for today's presentation 5 includes Dr. Jim Rollins and Dr. Lori Paserchia, 6 both medical officers; myself as lead analyst; 7 Captain Michael Lyman as analyst; the MCAC 8 executive secretaries, Michelle Atkinson and 9 Kimberly Long; Dr. Louis Jacques, director of the 10 division of items and devices; and Dr. Steve Phurrough, director of the coverage and analysis 11 12 group. 13 Today's agenda includes a statutory 14 background and overview of the compendia issues 15 which I am presenting, the technology assessments 16 conducted by the Duke and New England Medical 17 Center evidence-based practice centers, presented 18 by Dr. Amy Abernethy, Dr. Douglas McCrory and Dr. 19 Ethan Balk. We will also hear presentations from 20 the six compendia reviewed in the technology 21 assessment and from other members of the public.

22 Following the presentations, the panel will

23 discuss and vote on the questions posed by CMS.
24 In preparation for this meeting, the panel was

25 asked to review the materials listed here. With

1 the exception of the written testimony of 2 presenters, all of the documents are publicly 3 available. 4 According to the Cancer Trends Progress 5 Report, 2005 update, the projected number of new 6 cases of cancer in 2005 was over 1.3 million. You 7 can see the breakdown by the most common cancer 8 types, prostate, female breast, lung and 9 colorectal, which combined represent 55 percent of 10 the projected new cases. In 2004, cancer 11 treatment accounted for an estimated \$72.1 12 billion. This is just under five percent of total 13 United States medical spending for medical 14 treatment. 15 Coverage of drugs and biologicals used 16 in anti-cancer treatment is dictated by Section 17 1861(t)(2)(B)(ii) of the Social Security Act. 18 This states that Medicare will provide coverage 19 for an anti-cancer drug or biological used for a 20 medically accepted indication. This is defined in 21 two ways. First, it includes any use which has 22 been approved by the Food and Drug Administration 23 as stated in product labeling. Second, it also 2.4 includes off-label uses if the following criteria 25 are met: The off-label use must be supported by a

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citation that is included and listed favorably in 1 2 at least one of the designated compendia, or the off-label use is determined to be medically 3 4 accepted based on supportive clinical evidence in 5 the peer reviewed medical literature. The three compendia that are named in 6 7 the statute for this purpose are the American Medical Association Drug Evaluation, the United 8 9 States Pharmacopeia Drug Information, and the 10 American Hospital Formulary Service Drug 11 Information. Medicare-instructed contractors 12 should cover an off-label use if that use is 13 supported by at least one of these compendia. 14 It's important to note that these cannot be listed 15 as not indicated in any of them. In other words, 16 one positive listing results in coverage, while 17 one negative listing results in noncoverage. 18 Now to give a little background on each 19 compendium. In both the AMA and AHFS-DI 20 compendia, information concerning indications are 21 provided in each monograph, including both labeled 22 and unlabeled uses. However, the text must be 23 analyzed to make a determination as to whether a 24 particular use supported. In the USP-DI, 25 indications are rated as accepted, unaccepted, or

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- 1 insufficient data. An indication is considered to
- 2 be a medically accepted use only if the indication

3 is listed as accepted. 4 When an unlabeled use does not appear 5 in any of the compendia or is listed as 6 insufficient data or investigational, the CMS 7 relies on peer reviewed medical literature for 8 coverage determinations. In the Medicare Benefit 9 Policy Manual, 15 publications are listed for this 10 purpose. Carriers are not required to maintain copies of these publications. If a claim raises a 11 12 question about an off-label use that is not 13 included in the compendia, the physician is 14 typically asked to submit copies of relevant 15 supporting literature. 16 There have been changes affecting the 17 availability of two of the deemed compendia. The 18 AMA Drug Evaluation is no longer in publication. 19 Thomson Micromedex purchased the content of USP-DI 20 in 1998 and took over responsibility for editorial 21 control in 2004. Under Thomson's agreement with 22 USP, the name USP-DI may not be used after 2007. 23 This posed a problem with the recent enactment of 24 the Deficit Reduction Act of 2005 which requires 25 CMS to recognize and deem any successor 00023 1 publication of the USP-DI. Therefore, AFHS and 2 the successor of USP-DI will be the only 3 statutorily named compendia available for CMS's 4 reference for determining coverage for anti-cancer 5 drugs. б This was the problem. Prior to the new 7 legislation, CMS was faced with the possibility of 8 having to rely on only one compendium. This led 9 to our consideration of whether there is an 10 optimal number of compendia which should be available for determining medically accepted 11 12 indications. Internally we have discussed several 13 options for addressing this issue. 14 The Social Security Act allows the 15 Secretary of Health and Human Services to revise 16 the list of compendia as is appropriate for 17 identifying medically accepted indications of 18 drugs. Under this authority, CMS could recommend 19 that the Secretary add one or more authoritative 20 compendia to the current list. Alternatively, CMS 21 could recommend that the Secretary reconsider the 22 current list and designate one or more compendia 23 instead of the AHFS and USP-DI. Finally, CMS 24 could continue to use the AHFS and USP-DI as the 25 only sources.

- 1 I would like to note here that CMS
- 2 recognizes the value of external expert input in
- 3 the transparent process. Rather than making a
- 4 decision internally, we decided to bring this
- 5 issue to the public domain via the MCAC.

6 To better inform the process, CMS 7 commissioned an external technology assessment 8 through the Agency for Healthcare Research and 9 Quality to assess the quality level of available compendia. In a moment you will hear the results 10 11 of the reviews performed at the Duke and New 12 England Medical Center evidence-based practice 13 centers. 14 If CMS decides to reconsider the 15 current list or to simply add compendia, we 16 questioned the most desired characteristics of a 17 compendium and the quality of the available 18 compendia as judged by the desired 19 characteristics. We will ask the panel to review 20 and evaluate the evidence on these two factors. 21 Before I turn the meeting over to 22 Dr. Garber, I will now present the nine questions 23 that we would like the panel to address. Question Number 1. A good compendium 24

25 should be evidence-based. What additional

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1 characteristics are desirable and of high priority 2 in a robust evidence-based compendium? We have developed a list of 18 characteristics and we are 3 4 asking the panel to rate each one on the 5 desirability, which is represented by the D score, and on its priority, which is represented by the P 6 7 score. Those rating scales are listed here. 8 Please refer to your handout for the 18 9 characteristics to be rated. Note that this list 10 is provided as a reference, and the panel may 11 amend the list. 12 Question 2 asks panel members to rate 13 their confidence that the currently designated compendia have adequately stated evidence-based 14 15 criteria and processes. 16 Question 3 asks panelists to rate their 17 confidence that the currently designated compendia 18 adhere to evidence-based criteria and processes in 19 making recommendations. 20 Question 4 asks panel members to 21 consider separately each of the other available 22 compendia and to rate their confidence that those 23 compendia have adequately stated evidence-based 2.4 criteria. 25 Question 5 again asks panel members to 00026 1 consider separately each of the other available 2 compendia and to rate their confidence that those 3 compendia adhere to evidence-based criteria and

- 4 processes in making recommendations.
- 5 Question 6, considering each compendium
- 6 separately, please rate its performance on each of
- 7 the desired characteristics. For this question,
- 8 we're asking the panel to apply the R scores

listed here to the characteristics that were 9 10 addressed in Question 1. Please refer to your handout for this list. 11 Question 7 asks the panel members if 12 13 they believe that the interests of the Medicare 14 program and its beneficiaries are best served by 15 having a particular number or type of available 16 published compendia on the off-label use of 17 anti-cancer drugs or biologicals for cancer 18 treatment. 19 If the answer to Question 7 is yes, 20 what is the minimum and/or maximum number or type 21 of compendia that should be available? 22 Question 9 asks the panelists to rate 23 their confidence that prescribers can rely on 24 currently available published compendia to 25 determine appropriate off-label uses of drugs and 00027 1 biologicals for anti-cancer chemotherapy. Dr. Garber will now lead the discussion 2 3 of Question Number 1. 4 DR. GARBER: Yes, Mark? Thank you 5 very much, Tara. DR. FENDRICK: Can I just ask a 6 question of clarification? I understand the point 7 8 that was discussed that if one compendia indicated 9 it, that it would lead to coverage. I wasn't clear what you said about when one said it was not 10 11 indicated, I thought you said if one compendium 12 says it is not indicated, does that mean you don't 13 take it? 14 LCDR TURNER: Yes. If there is one not 15 indicated out of the three, then that means that 16 it is not covered. DR. GARBER: However, as Steve just 17 18 pointed out to me, that is a rare occurrence, for 19 one, and my understanding is, and Steve and Tara, 20 correct me if I'm wrong, if the compendium says there is equivocal evidence or something to that 21 22 nature, that does not lead to that sort of veto; 23 isn't that correct? Okay. 24 So just for the, to explain how we will 25 proceed with the discussion and voting on 00028 1 Question 1, we have a large number of 2 characteristics. I hope that everyone has a copy of the voting questions, and these are 3 characteristics that CMS has asked us to consider 4 5 for their desirability as characteristics of 6 compendia. This is obviously going to be 7 complicated. 8 The D scores refer to basically, is 9 this a desirable characteristic or not for a 10 compendium, and the P scores are about how much weight to place on it, is it high priority or does 11

it not matter that much, whether it satisfies 12 13 whether it's desirable or not. 14 We are going to compile the votes in 15 the following way. When an individual gives it, 16 gives a particular characteristic a D score, we 17 then apply their P score as a weight to the D 18 score. So if somebody says high priority, we 19 assign three points to their vote for whatever 20 desired rating they give it; if they say that it's 21 an intermediate priority we give it two points; 22 and if it's low priority we give one point. So 23 they get more weight on their desirability 24 characteristics if they say this is high priority, 25 and that's the meaning of those numbers one, two

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and three that you actually see next to the score. 1 2 I hope this becomes clearer as the session goes 3 on. 4 So let me first ask if there are any 5 questions from the panel about the voting before 6 we get into the substantive question. So if there 7 are no questions, let me re-read Question 1. Α 8 good compendium should be evidence-based. What 9 additional characteristics are desirable and of 10 high priority in a robust evidence-based 11 compendium? Rate each characteristic below on its 12 desirability and on the priority of that 13 desirability rating. This list is provided for 14 reference. The MCAC may amend this list. 15 Now I'm first going to read each one, 16 ask if there are discussions. I think most of 17 these are self-explanatory and the main emphasis 18 will be in your vote, but nevertheless, a 19 discussion may be appropriate for some of these, 20 particularly if in your view the characteristic is 21 worded in an ambiguous way or there is some 22 uncertainty about how to interpret the 23 characteristic. 24 So, A, extensive breadth of listing. 25 Any discussion? If there is no discussion, I 00030 1 would like everyone to vote. People will be 2 writing their votes on these cards, and please 3 hold them up and make sure Kim can see in the 4 front over there. 5 (Votes displayed and recorded by б staff.) 7 DR. GARBER: Question 2, quick 8 throughput from application for inclusion to 9 listing. Does the compendium reactively 10 incorporate the new evidence or does it rapidly 11 incorporate the new application? Any discussion? (Votes displayed and recorded by 12 13 staff.) 14 DR. GARBER: Why don't we move to

discussion of the third one, then. The third one 15 16 is detailed description of the evidence reviewed 17 for every individual listing. 18 (Votes displayed and recorded by 19 staff.) 20 DR. GARBER: Why don't we just collect 21 them. Leave them up so the members of the public 2.2 need to be able to see the scores at least 23 briefly, and then we will be collecting these and 24 there will be a spreadsheet made available. Yes? 25 DR. WHITTEN: I have a comment,

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1 Dr. Garber. We're just rating these on sort of a 2 single scale as noted, but just to pick an example, even though a single compendium would 3 have a clear desirability to have extensive 4 5 breadth and direct throughput, it might still be 6 valuable in one of several compendia, even if 7 smaller and even with a much smaller segment. So 8 I assume these are the things that staff will look 9 at afterwards, that we're grading these kind of in 10 the abstract as if this were to be a single compendium to be used. But just to pick an 11 12 example, if two were very broad but one were very 13 narrow, it might still be a valuable supplement to 14 the other two. So just to comment, in a way we're forced to rate these on a single scale, and it 15 16 doesn't mean necessarily that one that didn't meet 17 all these criteria might still not be a valuable 18 contributor. Thank you. 19 DR. GARBER: Yes, Mark. 20 DR. FENDRICK: Alan, can you just 21 comment quickly, if we feel something is highly 22 undesirable, would the P score be -- actually it 23 would almost be preferable to be a negative, and

24 I'm trying to figure out how you're going to in 25 your quantitative analysis --

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DR. GARBER: The way that you should 1 rate it if you think it's undesirable in an 2 3 important way is give it a priority score of 4 three, so you give it a one and a three. You 5 can't give negative points in this scheme, but --6 oh, I'm sorry, you're right. So, let me just add 7 one thing. When you're counting up within 8 categories of desirability, you're not putting in 9 any specific desirability so it will show as more 10 undesirable votes, right? 11 DR. FENDRICK: So you're taking care of 12 it? 13 DR. GARBER: Yes. 14 DR. FENDRICK: All right. But how 15 would you recommend we vote the P score for things 16 that we think are highly undesirable, or should we 17 not vote at all, should we not give it a P score?

18 DR. GARBER: No. If you believe it's 19 extremely undesirable in an important way, you 20 give it a D score of one and a P score of three. 21 DR. FENDRICK: Okay. 22 DR. GARBER: And that will show as 23 three votes in the undesired category. 24 DR. FENDRICK: Thank you. 25 DR. KATO: Although technically if 00033 1 you're tallying up the numbers, then I understand 2 your question, because technically you should 3 probably give a one because if you're going to 4 multiply the D score by the P score, then 5 technically --DR. GARBER: We're not adding up the D 6 7 scores, it is just a constant category of D 8 scores. That may be a little misleading, but the 9 numeric scores are just the P scores weighting for 10 the categories of D scores. So if something is 11 really bad from your point of view, give it a P 12 score of three and it shows up as three votes in 13 the undesired category. 14 Okay. So now we're going to move to, 15 display your votes, so pass your votes on C to the 16 right, and display your votes on D, use of 17 prespecified published criteria for weighing 18 evidence. 19 (Votes displayed and recorded by 20 staff.) 21 DR. GARBER: And I will read E, use of 22 prespecified published process for making 23 recommendations. I think you can pass your Ds, 24 and pass them to the right, and put up your votes 25 for E. 00034 1 (Votes displayed and recorded by 2 staff.) DR. GARBER: F is a publicly 3 transparent process for evaluating therapies. 4 5 (Votes displayed and recorded by 6 staff.) 7 DR. GARBER: Please pass your E votes 8 to the right and put up your scores for F. Let me 9 know if I'm going too fast. 10 G is explicit "not recommended" 11 listings when validated evidence is appropriate, 12 that is to not be science but actually state that 13 it is not recommended for that indication. 14 DR. KRIST: Is that for, if there is 15 evidence that it doesn't work or evidence that 16 there is harm, for G? 17 DR. GARBER: I think that from CMS's 18 point of view, if it's ineffective it does not 19 merit coverage, whether there is harm or not. 20 Okay, so F gets passed down and G is put up.

21 (Votes displayed and recorded by 22 staff.) 23 DR. GARBER: And I will read H. Bias 24 toward "recommended" when validated evidence is 25 equivocal. In other words, does the compendium 00035 1 itself make a type 1 error or is it likely to make 2 a type 1 error in that situation? So please pass 3 on your Gs and put up your votes for H. 4 (Votes displayed and recorded by 5 staff.) 6 DR. GARBER: I, bias toward "not 7 recommended" when validated evidence is equivocal, 8 in other words, tending toward a type 2 error. Please pass on your Hs and put up your Is. 9 10 (Votes displayed and recorded by 11 staff.) 12 DR. GARBER: J, explicit listing of 13 combination of therapies. Please pass on your Is 14 and put up your J scores. 15 (Votes displayed and recorded by 16 staff.) 17 DR. GARBER: Please pass on your Js. K, explicit recommendations on the sequential use 18 19 of a therapy or combination in relation to other 20 therapies. 21 (Votes displayed and recorded by 22 staff.) 23 DR. GARBER: Does everybody have their 24 Js up? I'll read K, and please pass your Js to 25 the right. Explicit recommendations -- I'm sorry, 00036 1 pass on your Ks. L -- you can pass on your Ks, and then L. Silence, i.e., no listing when 2 3 validated evidence is equivocal. Now I think in answering this one, it's important to keep in mind 4 5 how it's used by CMS, but that means if it's 6 silent, that means it's the same action as saying 7 not recommended, but it's saying the same as them 8 saying, in other words, its not a default, but it will only be covered then if it is in that 9 10 circumstance such that it is indicated. 11 (Votes displayed and recorded by 12 staff.) 13 DR. GARBER: Okay. Pass on your Ls and we are on M. Explicit equivocal listing when 14 15 validated evidence is equivocal. 16 (Votes displayed and recorded by 17 staff.) 18 DR. GARBER: Okay. N, public 19 identification of the members of the 20 advisory/scientific review committee. Please pass on your Ms and put your N votes up. 21 22 (Votes displayed and recorded by 23 staff.)

24 DR. GARBER: O, public notification of 25 reviewers' and committee members' conflicts of 00037 1 interest, including institutional funding sources. 2 Please pass your Ns to the right and put your O 3 scores up. 4 (Votes displayed and recorded by 5 staff.) 6 DR. GARBER: P, public notification of 7 all funding sources of the compendium and its 8 parent and sibling organizations, including 9 unrestricted grants and gifts. Please pass on 10 your O scores and put up your P votes. 11 (Votes displayed and recorded by 12 staff.) 13 DR. GARBER: Q, net benefit analysis 14 based on potential harm and potential benefit. 15 Please pass on your P scores and put up your Q 16 scores. 17 (Votes displayed and recorded by 18 staff.) 19 DR. GARBER: R, explicit stratification 20 of the risks of available therapies. Please pass your Q votes to the right. 21 22 (Votes displayed and recorded by 23 staff.) 24 DR. GARBER: After you put these scores 25 up and we pass them to the right, I think what we 00038 will need to do is allow some time to compile 1 2 these and if people are comfortable with that, we can move up to the next agenda item and come 3 back to this after we have the compiled scores and 4 have a discussion for variations and any comments 5 6 you want to make. Is everyone comfortable with 7 that? Okay. So we may have further discussion 8 after we see the compiled scores. Now actually, 9 are the TEC presenters ready? Great. Is 10 everybody comfortable with delaying the break until after the presentation of the technology 11 12 assessment? Okay. 13 We will move ahead with the TA with 14 investigators from Duke and New England Medical 15 Center. I don't know in what order they will be 16 speaking, but go ahead. Doug McCrory from Duke 17 will be the first presenter. 18 DR. MCCRORY: Good morning. I'm Doug 19 McCrory. I'm going to be presenting concerning 20 the technology assessment. There will actually be 21 three of us presenting some of their work. The 22 second will be Amy Abernethy, one of my 23 colleagues, and the third will be Ethan Balk from 24 the New England Medical Center. 25 The team that we put together for this

1 project included several of our colleagues at 2 Duke, including people with wide backgrounds 3 including oncology pharmacists, general 4 internists, people with a background in health 5 services research and research assistants that you 6 see here. I think the background of the project 7 has been covered. Let me describe a little bit about what we took away as our message or what we 8 9 were trying to summarize. 10 First of all, what we wanted to analyze 11 was the method which the compendia used to collect 12 and evaluate evidence, specifically focusing on 13 anti-cancer drugs and biologics, and specifically 14 for off-label indications, so that the first thing 15 when we were looking at the methods was more 16 generic, not tied to particular drugs or 17 indications per se. We subsequently went to 18 another part of the project where we identified 14 19 specific drug indications and combinations, all of 20 which were not FDA-approved, and analyzed the 21 compendium listings. We then compared that with 22 what their statement was for the indication or 23 combination, or what they thought about it. And then finally, we conducted our own independent 2.4 25 literature review. We used a method consistent

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1 with what we would generally do for an 2 evidence-based center project, you know, 3 structured a wide literature review followed by 4 selection of literature with prespecified criteria 5 to develop a current set of evidence bearing on the question. And finally, I think you will see б 7 by the end of the presentation that this gives us a rich set of data from which to present to the 8 9 committee evidence as well. 10 So, the compendia that we selected for 11 this analysis included the ones named in the 12 statute, the AHFS, as well as USP-DI at the 13 bottom, and while certainly not the (inaudible) 14 publications. In addition, we selected several 15 other drug information resources and we did this 16 in a way to get a representative, a broader 17 representation of the drug information process, 18 since they don't all share some of the 19 characteristics, so we looked purposely for the 20 relationships between things like Clinical 21 Pharmacology and other publications such as 22 DRUGDEX and USP-DI, the Micromedex publications. 23 We also looked at Facts & Comparisons and then the 24 National Comprehensive Cancer Network, which is a 25 compendium as well as some practice guidelines.

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1 Again, those two were evaluated as compendia,

2 though.

3 Now I'm going to focus for a moment on 4 our first goal, which was our evaluation 5 methodology. We had a five-step sequence of 6 events. We would initially go to the publications 7 and abstract their descriptive information, and 8 their methods section was usually contained in the 9 foreword or some other printed material. We 10 initially planned to submit our initial abstract 11 to the editors of the compendia before 12 interviewing them. However, time constraints led 13 us to schedule the interviews first and then move 14 to step four later, sending the completed table to 15 the editors for their comment. During the 16 interview, we verified the information that we had 17 in the abstract, and additionally delved a little 18 more deeply into the areas about the compendium, 19 not only those that we covered in Question 1 a few 20 moments ago, but also outline characteristics. 21 And finally we prepared a report that summarized, this was the first part of the draft report, which 22 23 was publicly available for review. 24 In looking at the characteristics of 25 each compendium's use of the off-label indication,

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1 we were guided by two instruments. One was the 2 AGREE instrument, which is an instrument used to 3 evaluate quality of (inaudible). We felt that the 4 compendia were like guidelines because they do 5 endorse certain drugs for particular indications, б which is particularly true for off-label 7 indications. We were also guided by the QUORUM 8 statement, which ascribes desirable 9 characteristics for medical use, such as a 10 systematic review and meta-analysis, so looked to see if they identified a drug as such-and-such, 11 12 and then a body of evidence. 13 This approach does lead to a problem 14 because a compendia is none of those things, and 15 we recognized that we were as part of our 16 evaluation looking at small parts and were maybe 17 not getting a complete view of what the compendia were, so we looked at what we considered to be a 18 19 reasonable approach. So for the next few slides 20 I'm going to show you certain information that we 21 took out of the compendia. These are abstracts of 22 tables that are more completely reported in the 23 draft report, so for those of you that have access 24 to the draft report, there is certainly more 25 detailed information, and we sort of abbreviated

- 1 them, and you may refer to the draft report to
- 2 fill in where the information on the table is
- 3 lacking.
- 4 So these are the various compendia
- 5 listed across the top, and we'll go through some

6 of the information in each row. For the publisher 7 list, we looked at both print and electronic 8 editions of the compendia where those were 9 available and found the most recent version, went 10 to the library and pulled the books off the shelf. 11 And the print cycles are such that some were just 12 getting ready to be updated on some we saw. The 13 update cycles on the print editions was annual for 14 most that were put out, but NCCN is probably more 15 frequent since they have updates posted by topic. 16 We looked at electronic editions where 17 those were available for each of the compendium, 18 and in many cases there were multiple flexible 19 types of editions, sometimes only on CD-ROM and 20 some had various on-line editions. They varied in 21 terms of the update cycle, and by update cycle 22 here I mean how soon after new information was 23 available and approved by the editors does it make 24 it into the on-line vision. So most of these 25 updated the information very quickly, in some

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1 cases it varied between the print and on-line version and so forth. The dates listed on this 2 table are the dates that we pulled the 3 4 information, so in some cases we looked again for 5 more recent information, but in general it was all collected in January and February. 6 7 And finally, the information we 8 evaluated included the published information both 9 in print and electronic, and we did interviews and 10 in a number of instances we got additional information either from the editors or were 11 12 directed by the editors to the corporate web site. 13 This slide, the purposes of the compendia, this is the overall purpose, not just 14 15 for off-label use of the medications. We 16 paraphrased very liberally in this slide and there 17 are more complete quotes from the materials 18 available in the report, but I wanted to point out 19 just the highlights of their stated purposes. 20 So AHFS-DI describes evidence-based as 21 being one of the key points in their purpose 22 statement. Clinical Pharmacology emphasizes 23 usability and conciseness. DRUGDEX and F&C are 2.4 similar, and highlight an unbiased approach to 25 prescribe, order or dispense. The NCCN perhaps is

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1 a little bit unique in that their clinical

- 2 practice guideline was the initial product, and
- 3 the compendia I believe was envisioned as the
- 4 second step, and they emphasized the
- 5 decision-making aspect as I think being the most
- 6 emphasized aspect.
- 7 And USP-DI emphasized safe and
- 8 effective use once a drug is prescribed, so if

there is a possible exception, they emphasize the 9 selection between the alternative drug products. 10 11 The scope varied as well. Many 12 included prescription as well as over the counter, 13 and some included investigational drugs. NCCN 14 also was different in that it listed only 15 anti-cancer drugs and was even more so specific to 16 those that were listed in the NCCN clinical 17 practicing guidelines. 18 The final important point for this 19 project was whether non-FDA-approved indications 20 were included in the compendium. We only selected 21 compendia that did, and in some circumstances that 22 included off-label indications. There were 23 various ways the compendia characterized their 24 policies to include non-approved medications. 25 There were a few concepts here that I want to

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1 point out. One, many compendia noted that they 2 evaluated current practice and the degree of 3 interest in a particular agent for a particular 4 indication as one of the things they considered when deciding whether to approve a medication, and 5 that is obviously in addition to the evidence. 6 7 Some of them didn't provide precise criteria or 8 situations when they would include or exclude, and 9 we will come back to some of these things a little 10 bit later. The strength of evidence scales varied 11 and these would be scales that described the 12 13 number, quality, the magnitude of effect, so the 14 overall pharmacological effect. AHFS-DI described 15 a scale that divided it into four categories, 16 DRUGDEX used a similar four-category scale. Actually, I quess NCCN used a three-category 17 18 scale. The precise wording for definitions of A, 19 B and C are identified or contained in the draft 20 report, and I think the difference is not quite so 21 important as the fact that they used one or didn't 22 use one. 23 Grading recommendations was slightly 24 lower in contrast. As opposed to ratings, the 25 number of studies to the magnitude of effect, the

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1 grade of the recommendations would include not 2 only the strength of evidence but also the belief about how important the risk versus benefit might 3 be. And in the case of NCCN for example, how much 4 5 agreement there was, whether it was uniform or not 6 uniform. Again, only one compendium used a rating 7 scale alone, the others used a variety. We also 8 heard that USP-DI used accepted, acceptance but 9 not established, or not accepted. Some of the 10 other scales were a little more explicit in terms 11 of whether there was agreement on whether the

12 indication should be used. In fact in comparison, 13 the F&C addresses safety concerns and specific 14 reasons why the drug might not be recommended. 15 The other point about the grading 16 recommendations, the point I wanted to make was 17 that a grading, a grading recommendation that a 18 certain medication is not accepted, or 19 insufficient or poor, would allow a compendia to 20 put in an off-label request and qualify it as 21 being equivocal evidence or even negative 22 evidence. So conversely, the inability to use an 23 insufficient or poor grading recommendation makes 24 it a little bit more difficult for a publication 25 to list something and then qualify it as not

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desirable or equivocal. That point's going to 1 2 come up later in specific indications. 3 A further point I wanted to make is 4 contrasting the links between the recommendations 5 and evidence. We looked as thoroughly as we could 6 to find out how a specific off-label indication 7 was linked to a general strength of evidence by 8 references to the same, you know, citations, and 9 we found that with no exceptions, those are 10 contained in the electronic versions only, so we 11 related that almost entirely to that phase of the project. 12 13 The editors were asked to provide an 14 assessment for the validity of studies that were 15 identified and cited in the compendia. All of 16 them used a subjective process by editorial staff. 17 Some of them were more formal than others as to 18 items which were published or included in the 19 supplemental materials that we received. Several 20 of them describe their procedure as some of the more accepted critical techniques, and some of 21 22 them more extensive than others. The NCCN 23 publication had a permanent editorial staff that 24 evaluated the materials and others were done by 25 staff, either permanent staff or that hired by the

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1 committee. 2 The specific criteria for selecting 3 items to be published in the compendium, almost 4 all of them emphasized well designed and published 5 controlled studies, and there was some difference б in whether they would include lower level studies 7 and particular case reports. So one of the 8 factors for comparison, for example, some of them 9 said that they did not include case reports, and 10 others allowed almost any study to be included. 11 Several of the others described the process where 12 there was some sort of discretion such that if 13 they found little good quality, they would look at 14 maybe lower level of data for pharmacology, but

15 for some of the others, basically were phased into 16 whether two studies would be just as effective and 17 would result in a routine evaluation. 18 Finally, we had difficulty in 19 addressing what would be the policy on equivocal 20 evidence. We initially thought we had a handle on 21 that but once we fed it back to the editors and 2.2 what we gleaned from our discussions, each of them 23 had some comments that it didn't quite work that 24 way, so this is a revised version. One thing we 25 found was that the policy is difficult to state,

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1 and often the technique of the compendium on a 2 case-by-case basis will make a decision based on 3 their validity assessment, their evidence ratings 4 and their grading criteria, but I think that we 5 ended up taking it if they have a grading or 6 recommendation scale that will allow them to list 7 an indication with the appropriate amount of 8 evidence and qualify it, I mean, the quality that 9 the data would generate, so I think it's maybe 10 more constructive to look and see what the compendia actually did, which we will look at in a 11 12 few moments. But I wanted to make a point that 13 all three of these issues required a great deal of 14 subjective analysis. 15 So to sum up, common themes that we 16 elicited from our initial undertaking, the print 17 and electronic versions were different. One thing 18 that will come out I think a little bit later was 19 the dates of publication, either when it was 20 printed or the date of last update in the 21 electronic versions didn't always correspond to, 22 it was difficult to determine when the last search 23 for evidence was conducted and how a given topic 2.4 was assessed within this editorial process.

25 An interesting result of the

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interviews, each of the editors of the compendia 1 2 recognized that the landscape for medical 3 decision-making is becoming evidence-based and 4 each of them has plans to become more 5 evidence-based, and there were various points in 6 terms of implementing these changes. 7 And finally, as we'll see later, I 8 think the recency of the reviews wasn't always 9 determined. 10 I think in the interest of time I'm 11 going to skip over and just briefly show the 12 appearance of some of the on-line versions that we 13 were looking at, which don't really project 14 particularly well, but each of them would describe 15 fairly clearly and sometimes with Word documents, 16 off-label indications. And with that, I'm going 17 to turn it over to Amy Abernethy. Thank you.

DR. ABERNETHY: I'm number two in 18 19 speaking on this discussion, but I'm going to talk 20 to you about compendia listing and our findings 21 from Duke. And as I venture into this topic, I'm 22 going to address for you three things. First, 23 I'll tell you a little bit about the methodology 24 that both the Duke and New England Medical Center 25 EPCs used. The second thing that I will do is 00052 1 give you an example of what we observed as we were 2 doing our analyses. And then thirdly, what I will 3 do is give you a snapshot view across all the 4 compendia. 5 To make sure that everybody is 6 comfortable with what it was that we were asked at 7 Duke to do, let me first show you our three key 8 questions that we were asked to address in this 9 part of the project. First, for chosen drugs and 10 biologics and their off-label indications, 11 evaluate the published compendia on the following: 12 Level of detail on the evidence reviewed; any 13 recommendations that were made; silence, in other words, no listing when the evidence is equivocal; 14 15 and then presence of bias, for example, 16 recommended when the evidence is equivocal or not 17 recommended when the evidence was equivocal. And 18 as you can see, this issue of equivocal evidence 19 is a recurring theme. 20 Our second question is: Is there an 21 analysis of potential harms and potential benefits 22 in the assessment of biologics and 23 chemotherapeutic agents included in the compendia, 24 and if yes, what components are used and how are 25 they quantified? 00053 1 Our third question: Which compendia 2 have listings on the off-label use of drugs and 3 biologics? Specifically considering the compendia 4 and the drugs and disease combinations that we 5 talked about within this report, and if these drug 6 combinations and specified off-label indications 7 are included in the compendia, how do the 8 compendia compare to their own stated methods? 9 Also, how do they compare to the other compendia?

10 And thirdly, how do they compare to the EPC's

11 review of the evidence?

12 So in order to address these three key

13 questions, we had the following methodology that 14 walked through these five steps. First, we 15 identified each cancer agent singly or in 16 combination, covering a range of different 17 variables. So we were looking at new versus old 18 agents, we looked at common cancers and more rare 19 cancers, and drugs and biologics. What we were 20 trying to do was address a broad combination or at

- 21 least within the scope of what we could get done 22 before this MCAC meeting. 23 Secondly, we identified the compendia
- 23 Secondry, we identified the compendia
- 24 and the clinical practice guidelines, and that was
- 25 done as just presented to you.

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1 Thirdly, we abstracted the agreed-upon 2 information from the compendia, so we identified 3 what the compendium had to say about each of these 4 combinations. Then we performed an evidence-based 5 practice center search, an EPC search, and looked 6 at how much these two searches agreed, the 7 compendia matters and the EPC. 8 I would like to highlight for you as we 9 look at the EPC methodology, we are talking about 10 an abbreviated EPC methodology and I'll explain to 11 you why in a moment. So in order to address that 12 score, which was getting the EPC methodology 13 completed, first we conducted a MEDLINE search. 14 We did limit this to MEDLINE in an attempt to 15 maintain efficiency, and we looked at this through 16 January 20, 2006. We focused on studies in English that dealt with people, agents and the 17 diseases of interest, we specifically focused on 18 19 those. We looked at any study design from phases 20 I through IV, and we also looked through the 21 abstracts from the American Society of Clinical 22 Oncology focusing on 2004 and 2005, assuming that 23 things in 2003 and backwards had had the 24 opportunity to be presented. 25 Importantly, we extracted these data

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1 into tables and within these tables we tried to 2 lay out the main information. And here we were 3 abbreviating what we were doing, we were trying to 4 get things in the table that we could look 5 globally across the compendia. So we looked 6 author and publication year, dose of the agent for 7 the indicated use, the co-interventions that were 8 evaluated, the comparator that it was evaluated against, a brief description of the cancer stage 9 10 where these were evaluated in, an indicated line 11 of treatment therapy, study design. Outcomes, we 12 put in tumor response rate, survival, duration of 13 survival, progression-free survival, quality of 14 life and symptoms. And then finally, adverse 15 events, which we evaluated by time, severity, 16 organ, and frequency. 17 We think about how this is an 18 abbreviated methodology, and here are some of the 19 things that we did not do. For example, I 20 mentioned that we limited ourselves to MEDLINE, 21 that we only looked at the American Society of 22 Clinical Oncology as a source of abstracts and did

not look at other venues. In addition, we did not

24 have the opportunity or the time to assess

25 methodological quality of all the studies, which

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1 would normally be incorporated into an EPC 2 assessment. We also did not quantify the 3 magnitude of the outcomes, so we were not trying 4 to give you an efficacy endpoint for these 5 different combinations, but rather look at what 6 was the breadth of information out there and in 7 the different categories. 8 At Duke we looked at these 9 combinations. As I mentioned before, we were 10 trying to get a different kind of grouping of 11 different drugs and diseases. So we looked at 12 bevacizumab, also known as Avastin, for both 13 breast and lung cancer. So this was a new product 14 for use on common cancers, breast cancer is 15 approximately 32 percent of all cancers in women, 16 and lung cancer is 13 percent in men and 12 17 percent in women. Bevacizumab was FDA-approved 18 for colorectal cancer in February 2004. 19 One of the other drugs we looked at was oxaliplatin, also known as Eloxatin, and we looked 20 21 at oxali in both breast and lung cancer. This 2.2 drug was FDA-approved in February 2004. 23 Next, irinotecan or Camptosar, this 24 time looking at breast cancer, and this drug was 25 FDA-approved in October 1998 for colorectal

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1 cancer. 2 I suspect you're seeing a trend here, 3 looking at common cancers and looking at drugs 4 that had other FDA indications. The other drug that we looked at was 5 б docetaxel or Taxotere, and we evaluated it in 7 gastric, esophageal and ovarian cancer. Taxotere 8 was FDA-approved in May of 1996 for breast cancer, 9 and later received an FDA indication for lung and 10 prostate cancer, and I think as maybe some of you know, just last week it received an indication for 11 12 gastric cancer, which was one of the topics here. 13 These were some of our less common cancers that we 14 were looking at, and we specifically focused on 15 esophageal and gastric, and did not focus so much 16 on ovarian, given the time line for this project. 17 Tufts New England Medical will tell you about these agents and these combinations. 18 19 So at Duke for the drug bevacizumab 20 directed at breast and lung, oxaliplatin directed 21 at breast and lung, irinotecan at breast, and 22 docetaxel at esophageal, gastric and ovarian, we 23 identified a total of 798 specific citations in 24 MEDLINE, pre-MEDLINE, the Cochrane database and 25 the ASCO abstracts. Of those individual reviews,

1 19 percent met our initially stated criteria for 2 inclusion and were actually abstracted into 3 tables. 4 This completes the first point that I 5 wanted to make, which was how we were doing this. 6 And now what I'm going to do is move forward into 7 an example. As I've mentioned, we got a number of 8 different drugs in these combinations, and you can 9 go to the current version of the draft report to 10 look at these in complete tables as to what we 11 have for the evidence and how this evidence is 12 matched to the compendia. There were a number of 13 themes that emerged during this project, and I 14 think that bevacizumab in breast cancer and lung 15 cancer presents from the Duke EPC side a good 16 example of some of the themes that we were finding 17 during this project, and so I'm going to focus on 18 this combination in this next segment. 19 So here we're looking at the compendia 20 publications for bevacizumab for breast cancer. 21 The yellow across the top are the six compendia 22 evaluated and you see there the various 23 abbreviations I'm using for those compendia, and 2.4 down across the left-hand column, you're seeing 25 actually the row headings for the different topics

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1 that we were evaluating the compendium on as we 2 moved across compendia. We actually have a number 3 of other rows that are included within the tables 4 and certainly the tables have much more detail, 5 but for the purpose of today's discussion I am 6 going to focus on these points. 7 So first we see in the first row whether or not an off-label indication was 8 9 discussed and/or indicated in these different 10 compendia. As you can see, only two of the 11 compendia, DRUGDEX and NCCN actually present 12 information about an off-label indication for 13 bevacizumab in breast cancer. DRUGDEX says it's 14 Level III or inconclusive, and NCCN says it's Level 2A, so that they felt like there was uniform 15 16 information when it was not completely conclusive. 17 They do give us information on stage and whether 18 or not it should be given as monotherapy or in 19 combination, and DRUGDEX mentioned the outcomes 20 that they're basing this on. 21 Importantly, consistent with our 22 findings among almost all of our drug-disease 23 combinations, the compendia actually do pretty 24 much always represent toxicity data when we're 25 looking at this, although these toxicity reports

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- 1 may not be specific to this particular disease.
- 2 Here these two compendia where they did

3 have information on off-label usage actually 4 indicated a dose, and they both start to give us 5 information about where they base this evidence. 6 And DRUGDEX specifically states one citation which 7 was from 2001, and NCCN states one citation from 8 2003. The DRUGDEX citation actually is of a Phase 9 II trial that was presented in abstract form only 10 and as you will see in a moment, this information 11 was cited in DRUGDEX from 2001 and indeed, there 12 was actually a 2003 abstract later presented 13 updating this information. The NCCN single 14 abstract that was cited in 2003, and as you will 15 see, there is a 2005 abstract that has now updated 16 this information. 17 There are, these data as identified by 18 the EPC, it's a difficult table to read and 19 believe it or not is actually quite abbreviated, 20 so let me quickly tell you that what you see here 21 is that we've got a total of 10 citations across 22 these that addressed bevacizumab's use in breast 23 cancer. Of these, two were Phase III studies,

24 three were Phase II, two Phase I/II, and three in 25 other groupings.

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1 This table highlights for you several 2 points. First of all, that Phase II and Phase III 3 studies did exist and indeed, there were two Phase 4 III studies. That importantly, sometimes it can be difficult, so there were three studies were 5 other, and actually looking at those, they 6 7 included patients who had cancers and received 8 bevacizumab for other indications, including 9 non-FDA indications, and that there was both new 10 adjuvant and metastatic disease represented across these several studies. 11 12 We also see that in the Phase III 13 studies, there is information about tumor 14 response, survival, quality of life and symptoms, 15 but otherwise, that information is not uniformly 16 presented across the other studies, as you would 17 expect. 18 Now let's compare that to what the 19 compendia have for this particular combination. 20 What we can see is that DRUGDEX and NCCN both had 21 one citation each and neither of those citations 22 were common with the EPC search. Why were they 23 missed? Well, both of these were missed because 24 there was actually updated information available. 25 As I mentioned before, the DRUGDEX search had the

- 1 2001 abstract, this was an abstract that was Phase
- 2 II data with more recent information presented in
- 3 another abstract two years later.
- 4 The second was the NCCN. Again, it had
- 5 an abstract indication in one of the Phase III

6 trials, but that had been updated at the American 7 Society of Oncology meeting last year in June, as 8 well as the preceding (inaudible). 9 If we look at what were the main Phase 10 III studies, just focusing on Phase III here, we 11 see that there were two Phase III studies, both 12 with the same first author. The first of these 13 was actually published in full text in the Journal 14 of Clinical Oncology last summer and there they 15 looked at bevacizumab with capecitabine in late 16 stage, heavily pretreated women who had metastatic 17 breast cancer. It demonstrated statistically and 18 clinically significant tumor response but no 19 survival benefit, and this was demonstrated in the 20 full text. 21 Secondly, again Miller in 2005, 22 combined with paclitaxel in advanced breast cancer 23 in the front line setting, and there were 24 statistically and clinically significant 25 improvement in tumor response, progression-free 00063 1 survival and overall survival, but importantly, 2 the second study where the progression-free survival wasn't even an endpoint, they only 3 4 submitted preliminary data in abstract form and 5 the published study has not met its final 6 endpoints. 7 These other four compendia, as you can 8 see, have remained silent on the issue. If we 9 compare back to what they had said about equivocal 10 data or silence in listing, AHFS-DI said they 11 would be silence or listing; ClinPhar, silence; 12 DRUGDEX listing with qualifier, which is what they 13 did do; Facts & Comparisons, silence, which is what they needed to do; NCCN, silence or 14 15 qualifier, which is where they were; USP-DI, 16 listing. 17 There were some similar discrepancies 18 when you look across these, such as the update 19 dates suggest data that wasn't there. Also, 20 secondly, their stated methodology focused on the 21 fact that they would present new advanced studies, 22 especially those in Phase III, some even said 23 Phase II and Phase III, but these data were not always available. And they also, if they didn't 24 25 state the specific evidence for the indication, 00064

1 you did not know whether or not it was unexamined, 2 inadequate, equivocal, there was no benefit or it 3 was harmful. 4 The other thing I would like to point 5 out here is the influence of time, so here is the 6 time line for bevacizumab in breast cancer. So if 7 we kind of imagine that back in the red is

8 somewhere around 2001 when we didn't really have

9 any good information, and as we move into yellow 10 it becomes more unclear, and as we move into 11 green, some might argue that there's more 12 information now to suggest the role of bevacizumab 13 in breast cancer. 14 So as you see, and I've put some of the 15 actual studies in here, we've got a Phase II in 16 2001 that was positive and it makes us perhaps 17 think that there is equivocal evidence of a clear 18 phase. Now there's a Phase III that did not meet 19 its progression to survival, it didn't have 20 evidence of improved tumor response, and that one 21 was first submitted in abstract form in 2002, and 22 then when we get to Phase III, it is not quite 23 completed yet, which was first submitted and 24 recognized by the NCCN in 2003, moving it into 25 this area of more information for bevacizumab in

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1 breast cancer. 2 What we can see is DRUGDEX makes their 3 first statement and their only statement about the evidence here is unclear, referencing an abstract 4 from 2001, and NCCN is referencing an abstract 5 from 2003, and this is where we are on that time 6 7 line. And again, we have four other compendia 8 that we don't know what they've done with this 9 information. As a comparison, and quickly I'll show 10 11 you lung cancer with bevacizumab. As an example 12 here, we have five of the six compendia stating an 13 off-label indication for this, giving a setting 14 predominantly of advanced or metastatic disease. 15 They are more clearly inclusive and uniform, 16 although the information may vary as far as how clear they are in their statement of the off-label 17 18 indication. 19 We look at the citations and we see 20 that across those five compendia, there are 21 approximately zero to three citations indicated, 22 most of them including at least one, except for 23 Facts & Comparison which does not mention any citations, but the other citations are from 2004 24 25 and 2005. These citations that are uniformly 00066 1 included across the compendia are abstracts, and 2 actually as you will see in a moment, the same 3 abstract, which is nice to see, they're all

4 finding the same one. The number of journal

5 articles is also a little bit different by

6 compendia.

7 Here's what we found. We found five

8 citations, one Phase III, which is the same one

9 that all the compendia are finding, two Phase IIs,

10 and then so forth. And if we compare back and

11 forth between the number of compendia citations

and the citations which were common with the 12 13 evidence-based practice center, we see that 14 for the most part we are finding the same group of 15 citations. So that four of the six compendia are 16 listing references, and all of them are listing 17 the one same abstract which was presented at the 18 American Society of Oncology meeting in 2005. 19 Here we see that carboplatin/paclitaxel 20 resulted in statistically and clinically 21 significant improvement in tumor response, 22 progression-free survival, and overall survival. 23 Here we have a mature study that has gone to its 24 primary endpoint and has not been published yet. 25 Here is a table for equivocal data.

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AHFS-DI says silence or listing, while the others 1 2 have been more clear with their listing, as you 3 can see here as to what they state or they don't 4 with respect to their methodology. 5 Finally, this takes me to part three 6 and this is just going to be a quick snapshot and 7 you can take a look at the rest of these data in 8 our full report. First of all, the question about 9 what we knew about study quality. We did not 10 establish quality clearly across all these 11 studies, but this is just a sense of what quality 12 looks like for the Phase IIIs, and I think the 13 most important part of the Phase III data that we 14 do have are really the emerging data in abstract 15 form, and it's really difficult to establish what 16 quality these reports are. If we look at 17 reporting quality for the published studies for 18 bevacizumab and breast cancer, and docetaxel for 19 gastric cancer, we see that they come up with a 20 JADAD score of two to three, which is moderate 21 quality. 22 If we look at off-label indications and 23 now look across our drug-disease combinations,

24 what we see is that bevacizumab for breast cancer, 25 two compendia state information. I'm not saying

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1 to you whether or not they tell us if this is 2 something that should be used and they advocate 3 use, but I'm telling you that they state 4 information. Five for bevacizumab in lung cancer, 5 one for oxaliplatin in breast cancer, none for 6 oxaliplatin in lung cancer, one for irinotecan in 7 breast cancer, four for docetaxel in esophageal 8 cancer, and five for docetaxel in gastric cancer. 9 And as you can see, it's not uniform across the 10 groups. So if we come back, the way they address 11 equivocal evidence and the citations are similar 12 to what we've seen earlier. 13 So my main observations as I complete 14 this segment, there is a need to continue to work

15 on a clear rigorous method for how these 16 drug-disease combinations are dealt with within 17 the compendia. There is an issue about regular updating and I think there is also a risk of delay 18 19 whether there is or is not regular updates. There 20 is not much in the way of presentation of evidence 21 pro or con on these indications. There is an 2.2 issue about whether or not the purpose of the 23 compendia are pharmacopeia or as clinical practice 24 guidelines, as Doug has already touched on. We 25 see variations across the compendia, as we've

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1 seen. We have a hard time figuring out what 2 initiates evaluation of an off-label indication. We see here the influence of time is very 3 important. When we look at the compendia, what 4 5 we're seeing right now is a static snapshot in 6 time, so we have not had the opportunity to figure 7 out if there is some way we can see what has 8 happened over time with the compendia and how they 9 may have changed or not changed their approach to 10 the indication. And finally, we don't know what silence means, and silence was very common. 11 12 DR. BALK: I'm Ethan Balk, I'm with the 13 Tufts Medical Center EPC, and let me get this 14 going. So, I worked on this with Gowri Raman, who has joined me here, and several other people, 15 16 including the director of our EPC, Joseph Lau. I 17 may skip over some of the slides for the sake of 18 time, but briefly, again, we looked at gemcitabine 19 for bladder, ovarian and biliary tract cancer, 20 rituximab for chronic lymphocytic leukemia, and 21 erlotinib for head and neck, and pancreatic 22 cancer, again, a mix of common and rare drugs, 23 common and rare cancers, newer and older drugs, 2.4 and drugs and biologics. 25 Again, the literature search was done

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around the new year, and here's an example from 1 2 one of our comparisons. Gemcitabine used for 3 biliary tract cancer, with the gemcitabine 4 combination, there tends to be a fair number of 5 studies available. There were 29 peer reviewed 6 articles that we found, plus four abstracts from 7 2004 to 2005. As with most of the combinations, 8 the large majority of the articles were Phase II 9 trials, and again as common with most of the 10 combinations, tumor response, survival and adverse 11 events were almost universally reported, quality 12 of life and patient symptoms were rarely reported. 13 Across all the different combinations 14 that are listed over here, you can see, again, 15 that for gemcitabine there are a fair number, 25 16 to almost 50 articles available, likewise for 17 rituximab. For the two cancers with erlotinib,

18 there are a small number of studies. Again, Phase II trials are most common, and there were few 19 20 Phase III trials in these agent-cancer 21 combinations. For the gemcitabine actually, there 22 were two articles, but they both represent the 23 same trial, and for the ovarian cancer, there was 24 one Phase III trial that we looked at in 25 connection with the other trial, and that was 00071 1 published within the last couple of months, in 2 2006, so we wouldn't expect that to be included in 3 a compendium. 4 Again, with the gemcitabine biliary 5 tract combination, three of the compendia were silent, there was no discussion about this 6 7 combination, three of the compendia, Facts & 8 Comparisons, NCCN and USP-DI, did include a 9 discussion of this combination. As you can see, 10 the number of citations that were used varies 11 widely across the compendia and again, this 12 compares to the 29 that we found. USP-DI had the largest number on this combination, NCCN looked at 13 just a couple, or included just a couple of 14 15 citations, and for this combination, Facts & 16 Comparisons did not list any citations. There was 17 fairly good overlap in the citations that were 18 used in the compendia and the citations that we 19 found. 20 In this case, there were a couple of 21 citations that we had missed that we ended up 22 adding in that were in the USP-DI. Generally 23 citations were common across the combinations. 24 Several of the citations did not meet our

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1 language or they were review articles, textbooks 2 and so forth. For this combination, most of the 3 studies were relatively old, they were published 4 in 1998 to 2003, but there continued to be 5 publications in 2004 and '5, and I would expect to 6 find them in the different compendia, depending on 7 when they updated. 8 I realize that this will be more 9 difficult to read than on my computer, but this is 10 one of the examples of the tables that compares 11 all the different compendia and the different 12 factors, and reading this over I'm just going to 13 get examples, again, for different combinations. 14 For whether the off-label citation was 15 explicitly cited for gemcitabine in biliary tract 16 cancer, again, these three compendia stated it. 17 We actually had NCCN as unclear; they did state 18 that there was some data; however, in our 19 interpretation of data at the NCCN, NCCN doesn't 20 differentiate FDA-approved and off-label uses, so

criteria, mostly because they were either foreign

- 21 we marked that as unclear.
- 22 To give an example of toxicity
- 23 reporting, all of the compendia except NCCN

24 reported toxicity, adverse events, none of them

25 for this combination reported a cancer-specific

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1 adverse event. They did all report severity of adverse events, frequency of events and what organ 2 3 they had occurred in. The NCCN, the version that 4 we looked at did not include any listing of the 5 adverse events across all of the combinations. 6 The adverse events were actually fairly 7 uniform across all the compendia and from our 8 reading, they seemed to rely primarily on the package labeling. And finally for this slide, 9 10 again, the number of citations varied widely 11 across the different compendia, and the years that 12 the citations were from also varied across the 13 different compendia. 14 So, this is a summary across the six 15 compendia that we looked at and the six 16 combinations about whether the off-label status 17 was clearly indicated. And this slide, as stated, 18 the NCCN, that it was clearly indicated. So the 19 cells in gray, basically these compendia were 20 silent about these combinations. For the most 21 part, actually, overall there was agreement, at 22 least among the compendia that discussed a 23 combination. There was agreement only for the 24 erlotinib for pancreatic cancer, wherever the 25 combination was discussed, it was not an

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1 indication. 2 Again, across the compendia and the 3 combination, looking at different numbers of 4 citations that were given by the compendia, this 5 column here shows the number of citations that we б found in our search, so you can see that for 7 USP-DI, they for the most part had the largest number of citations, which, it's not indicated 8 9 here, but there was generally fairly good overlap 10 with the citations that we found. NCCN and 11 Clinical Pharmacology tended to study just one or 12 two, occasionally a couple of additional 13 citations. Facts & Comparisons at least across 14 these examples tended not to give any citations. 15 One point of interest with DRUGDEX is that we 16 actually found there were different versions of 17 the electronic compendia, and the version that we 18 were looking at as opposed to the version Duke was 19 looking at, did not include any references. 20 So, here is just the Phase III trials. 21 As I said, for these combinations there were 22 actually very few Phase III trials. There was one 23 gemcitabine in bladder cancer and one prior to

24 2006 for gemcitabine in ovarian cancer. And 25 again, across the compendia, AHFS and Clinical

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1 Pharmacology did discuss this well and fully, and 2 NCCN cited it but there was no specific discussion 3 of the trials. Facts & Comparisons and USP-DI did 4 not discuss or reference this Phase III trial. 5 And actually, we haven't looked to see if the 6 other version of DRUGDEX did include this. This 7 more recent trial from 2005 was not cited in any 8 of the compendia. 9 This reviews the toxicity reporting 10 across the different compendia. Again, NCCN does 11 not, in our reading, did not include toxicity. 12 Otherwise, toxicity was generally reported. The 13 plus signs indicate that there was a cancer-14 specific toxicity reported, and this was a 15 variable across the different compendia. One 16 point is that two of the compendia were actually 17 silent as to the use for the indication, but they 18 did reference the same article regarding toxicity 19 of rituximab as a specific indication for CLL. 20 An item that we were interested in reviewing is how do the different compendia make 21 22 statements or possibly recommendations, but make 23 statements about the combinations. And we came up 24 with pretty much, we came up with this 25 stratification for what kinds of statements might

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be made. First, it's a recommendation and it 1 2 could be a strong recommendation such as a statement like it is recommended or something that 3 4 should be used, or it might be a weak recommendation such as just a suggestion or 5 б indication or advisement. And then another 7 approach would be just stating some observations 8 or findings, and this could be an active process 9 where they actually describe the articles that 10 they cite with some description, or a passive statement such as this is used or not used without 11 12 that much description, or silence, they might not 13 cover the topic. 14 So, some examples of strong 15 recommendations. NCCN has categories of consensus 16 and they made specific recommendations based on 17 these categories. USP-DI also, as discussed 18 earlier, had different categories of accepted, 19 acceptance not established. For statements about 20 observations and findings, some examples, AHFS 21 used some phrases like agent X is used for 22 cancer Y, agent X is an active agent against 23 cancer Y. In Clinical Pharmacology studies were discussed, but there was no specific statement 2.4 25 about that indication. DRUGDEX and Facts &

1 Comparisons categorized agents by whether they 2 were labeled, being used for labeled or unlabeled 3 uses. 4 Some further examples of some wording, 5 just to show the differences across the different 6 compendia, and again, the compendia were designed 7 as was discussed earlier for different purposes, 8 so it is not surprising that there are differences 9 in style. So, some examples. From AHFS, 10 gemcitabine is used, and five references are 11 given, for the treatment of bladder cancer. 12 Objective responses have been observed. And in 13 this example, there was no specific description of 14 any of these five references. Clinical 15 Pharmacology says gemcitabine was evaluated in 16 patients with ovarian cancer, and then there's a 17 description of one of the studies showing complete 18 responses and so forth. DRUGDEX had a simple 19 comment stating non-FDA-labeled indications, 20 neoplasm of bladder. 21 Another example from NCCN, this 22 combination, gemcitabine with cisplatin, is 23 considered a standard first line choice for most 2.4 patients, so it is a specific recommendation that 25 is given category 2A, and a description listed in 00078

the compendium in the section describing what that 1 2 2A means. In another section for salvage therapy, 3 several drugs including gemcitabine is advised 4 depending on patient's current status. 5 USP-DI, under the accepted category, state that gemcitabine is indicated based on б 7 response rates achieved in clinical trials, 8 stating five references. Gemcitabine is indicated 9 alone or in combination as reasonable medical therapy at some point in the management of 10 11 patients. This was given an evidence rating of 12 III-D. However, nowhere in this section anywhere 13 was that described, although the reference given 14 for this was the reviewer's consensus. And 15 actually across all the other compendia, or across 16 all the other combinations that we looked at, this 17 was the only place where there was an explicit 18 rating of any kind for the USP-DI. 19 Under the acceptance not established, 20 again, USP-DI states use of gemcitabine has not 21 been established due to insufficient data 22 regarding response/efficacy, and lack of peer 23 reviewed evidence. For this there were actually 24 20 citations. 25 We'll skip over that and get to some of

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- 1 our findings. In combinations of agents and
- 2 cancers that we looked at, Phase III studies are

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3 rare. References used by compendia are often not 4 up to date with the current medical literature, 5 they tended to include only the older studies, and 6 as was discussed earlier, the date of the update 7 does not necessarily mean citations were updated. 8 One other thing that's not on here that I should 9 add is that the references, the way that the 10 reference is used varies across compendia. 11 Sometimes they were just listed and sometimes they 12 were described. 13 The next point is that there are large 14 variations among the compendia in the citation of 15 evidence. USP-DI generally has a high number of 16 citations compared to others. DRUGDEX is 17 available in two formats, one of which does not 18 include citations. Facts & Comparisons, for the 19 indications we looked at, rarely offered 20 citations. 21 The discussions and the conclusions in 22 the compendia often did not appear to be based 23 directly on the citations. Instead, citations 24 were provided seemingly as simple lists of 25 studies, and it was unclear from our reading of 00080 1 these sections alone whether the citations were 2 lists of all, what were thought to be all the 3 available evidence, or suggested reading for 4 example, or actually as another alternative, kind 5 of a more standard way of using references as б actually backing up the prior statements. 7 There is variation in the types of 8 statements made as discussed, sometimes clouding 9 the interpretation of whether a recommendation or 10 indication was being made, and we actually found it was somewhat subjective from our point of view 11 12 when we found that a recommendation was being 13 made. 14 There is general uniformity of 15 reporting of adverse events, which as I mentioned, 16 tends to be similar to package inserts or 17 labeling. 18 So in summary, the compendia differ 19 across each other by which combinations of agents 20 and cancers are discussed, or on the flip side, 21 which combinations they are silent on, how they 22 state whether an agent is indicated for a specific 23 cancer, the level of detail regarding the agent's 24 use, how the evidence is discussed and referenced. 25 In general, a small percentage of the available

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evidence is explicitly cited. And, citations 1 2 frequently act more as lists of available studies 3 than references to back up the statements made. 4

- Thank you.
- 5 DR. GARBER: Thank you, Ethan. Thank

6 you all three presenters. I just want to make sure, Amy, Doug and Ethan, you will be available 7 8 for the open discussion? Okay, terrific. 9 At this point, what I would like to 10 know is if any panel members have questions of a 11 clarifying nature for the three people who just 12 presented. We will be able to ask them questions 13 relevant to our discussion of voting questions 14 later on in our open session. Cliff. 15 DR. GOODMAN: Early on in the evidence 16 and EPC write-up it says that use of a quorum and 17 frameworks for evaluating the compendia, and you 18 noted those typically used were meta-analyses and 19 practice guidelines. How practical do you think 20 it was to use those two instruments for this 21 purpose, and did it serve our needs in evaluating 22 these compendia? 23 DR. MCCRORY: We didn't use the 24 instruments per se as they were designed, we used

25 them to report the scores and then we used them

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1 more as a framework for how to think about what the compendia were doing in their roles of looking 2 at evidence, evaluating evidence, and interpreting 3 4 the evidence and coming up with a recommendation. 5 So we used them more as a conceptual framework 6 along with the questions that the MCAC committee 7 designed, and we developed almost a questionnaire, 8 if you will, that we used to guide our interviews. 9 Ultimately what we, what the tables show in the 10 report is what we ended up coming up with as a 11 range of domains. We felt they agree and the 12 quorums were pretty good because they were 13 comprehensive. 14 DR. GOODMAN: So relative to your 15 expectations for meta-analysis instead of practice 16 guidelines, given that contest, what is your 17 overall assessment of the quality of these

18 compendia as a group? I know you tried to display 19 it in these tables, but I'm wondering about the 20 potential disconnect between the way you were 21 evaluating these and the purpose of these

- 22 compendia. It seems to be --
- 23 DR. MCCRORY: I agree there is a

24 disconnect, and let me return to the blind man and 25 the elephant analogy. We went in with blinders

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1 on, evaluated them for a purpose for which I don't 2 think they were particularly well suited. In the 3 report we described the staffing levels, we 4 described some financial and some other aspects 5 that go into the compendia. They are not staffed 6 to do a comprehensive literature review, they 7 don't have the numbers of staff to do that. So we 8 weren't really trying to hold them to a standard

9 that they perhaps couldn't achieve, we were only 10 trying to say what would be, you know, if you have 11 a choice between going to a compendia or going to 12 a recently released high quality review or 13 guideline, you know, how do they stack up and 14 compare to them perhaps. 15 DR. GARBER: Thank you. Alex. 16 DR. OMMAYA: I recognize you have 17 specific views of the compendia based on the 18 examples that you chose, but I just wanted to 19 notice that later on when we address the question 20 specifically, I would appreciate your views as to 21 strengths and weaknesses of individual compendia 22 based on the time that you spent analyzing the 23 questions that you did. 24 DR. ABERNETHY: Is that for later or 25 now?

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1 DR. OMMAYA: Later. 2 DR. GARBER: Okay, thank you. Some of 3 you might have noticed that we had a scheduled 4 ten-minute break at 9:35. I have been in a few 5 meetings in this room and I have never seen a 6 ten-minute break. And it's obviously pretty 7 difficult to reconvene in ten minutes. So I want 8 to ask the pleasure of the panel that we not take 9 a break but encourage you to leave individually if 10 you need to, but otherwise we continue with our 11 proceedings. Linda. 12 DR. BERGTHOLD: I'm trying to stay 13 awake, but isn't it a little warm in here? 14 DR. PHURROUGH: We've had a budget cut. 15 (Laughter.) 16 DR. GARBER: So the next is the invited guest speakers, and I think next up is Gerald 17 18 McEvoy, are you here and available? 19 DR. MCEVOY: Yes. DR. GARBER: And just so you're ready 20 21 to go, the next speaker we have is Laura Moore, so 22 as your time is approaching, please come up front 23 so we can resume. Is Laura Moore here? If she's 24 not here, the speaker after her is Jerome 25 Osheroff. 00085 1 SPEAKER: He's here. 2 DR. GARBER: Okay. Just be ready to go

3 up front then. 4 DR. MCEVOY: Unfortunately, I'm going 5 to be talking today without slides. We found that 6 this committee is different from the committees 7 that we've given comments to in the past, usually 8 FDA where you cannot use Power Point, and we found 9 out too late in the process that Power Point was 10 in fact the preferred method, so I apologize in 11 advance, and I hope that people are not upset

12 watching this talking head. 13 My name is Gerald McEvoy. I'm the 14 assistant vice president of drug information at 15 the American Society of Health System Pharmacists. The American Society of Health System Pharmacists 16 17 is pleased to provide comments to the Medicare 18 Coverage Advisory Committee regarding the use of 19 authoritative drug compendia in determining 20 medically accepted indications for anti-cancer or 21 chemotherapy regimens. ASHP is a 30,000-member 22 national professional association that represents 23 pharmacists who practice in inpatient, outpatient, 24 home care and long-term care settings. My 25 presentation has not been paid for by any

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organization or pharmaceutical company. 1 I am 2 currently employed at ASHP, a nonprofit 3 professional practice which is funded by our 4 membership and independent sponsorship. 5 ASHP is the publisher of the American 6 Hospital Formulary Service Drug Information, which 7 is one of the three compendia originally 8 designated for making determinations about 9 medically accepted indications for anti-cancer 10 chemotherapeutic regimens under the Social 11 Security Act, and AHFS is the only remaining 12 federally recognized drug compendium published by 13 a noncommercial professional entity. 14 ASHP believes that the mission of 15 pharmacists is to help people make the best use of 16 medications, and ASHP supports a vision for 17 pharmacy practice in hospitals and health systems 18 in which pharmacists will lead evidence-based 19 medication use programs to implement best practices. Publication of AHFS-DI is an important 20 21 component in achieving this mission and vision, as 22 are the activities of our commission on 23 therapeutics. The mission of AHFS-DI is to provide an 24 25 evidence-based foundation for safe and effective

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1 drug therapy, and that was noted in one of the 2 slides. It is widely trusted for its established 3 record in refuting unfounded efficacy claims, a 4 rigorous science-based editorial process, 5 independence from the influence of pharmaceutical б manufacturers, and we've remained true to our 7 mission for almost 50 years. We have been 8 conducting this type of activity since 1959, which 9 is a period that predates the beef-up or Harris 10 amendment, which for the first time gave the FDA 11 authority to actually make determinations about 12 efficacy programs. Our publication was based on 13 evaluating claims prior to there being a 14 regulatory method for example of doing that, in

15 1959. 16 We're the most widely vetted drug 17 compendium. Requested of the compendial authority 18 of AHFS has extended over four decades, being 19 proposed initially as a resource whose quality and 20 scope met the goals for a proposed federal drug 21 compendium in the 1960s and 1970s. However, the 2.2 government ultimately decided not to pursue that. 23 As a result of our demonstrated expertise in 24 critically evaluating drug information, FDA 25 actually contracted with ASHP to develop a class

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prescription labeling system for 20 major classes
 of drugs in the 1970s.
 HCFA, now CMS, determined in 1989 that
 AFHS-DI met the compendial selection criteria
 established by Congress and adopted it as one

6 standard in carrying out certain aspects of the

7 Social Security Act, and then this precedent 8 established AHFS as a compendial standard in

9 subsequent legislative and regulatory initiatives

10 for both Medicaid and Medicare. HCFA also

11 established the expectation that such designation 12 of any compendium in the future would require

13 similar evaluation by the agency as to whether a

14 compendium met established standards as well as

15 publication in the Federal Register of their

16 selection decision in the form of a proposed rule 17 allowing for public comment.

17 allowing for public comment. 18 AHFS is supported solely by

18 AHFS is supported solely by 19 subscriptions and licensing fees

19 subscriptions and licensing fees and receives no 20 financial support from pharmaceutical

21 manufacturers. ASHP maintains a strong policy

22 regarding the editorial independence of our staff.

23 AHFS had its origins in the formulary

24 system, which established a mechanism for

25 pharmacists to formally communicate with medical

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staff and which serves as a sound therapeutic and 1 2 economic basis for drug policy. Originally, AHFS was designed to assist the pharmacy and 3 4 therapeutics committee of each hospital in 5 preparing its hospital formulary. Although the 6 publication has developed beyond its original 7 purpose, the principal goal of promoting rational 8 drug therapy through objective evaluations has 9 remained. 10 Paramount to providing such information 11 is the critical evidence-based evaluation of 12 pertinent clinical data concerning drugs, focusing 13 on assessing the advantages and disadvantages of 14 various therapies, including interpretation of 15 various claims of efficacy for pharmaceutical 16 products.

17 Information shapes treatment decisions

18 made by clinicians and influences public and 19 private healthcare policies and decisions and as a 20 result, it is important that the information be 21 authoritative, objective, and importantly, free of 22 undue influence from pharmaceutical manufacturers, 23 health insurers, pharmacy benefits managers, and 24 other third parties who may seek to use the 25 compendium to promote their own vested interests. 00090 1 Editorial decisions are evidence-based and made

2 independent of any such third parties, and final 3 decisions are made solely by the AHFS editorial 4 staff, taking into account the advice of expert 5 reviewers. 6 Information in the AHFS is prepared by 7 professional staff, a professional editorial and 8 analytical staff who critically evaluate published 9 evidence. We do not solicit authorship of our 10 material from external sources, nor do we accept 11 submission of information for potential publication. Use of external volunteers in our 12 13 process is limited to expert review, not of content development. The external review process 14 15 utilizes appropriate advice from leading medical 16 experts in the specific field of therapy, 17 including experts in major research and clinical 18 institutions as well as public bodies such as the 19 NIH and the CDC. 20 Using an independent process, AHFS 21 monographs incorporate information from pertinent 22 references in the medical literature and expert therapeutic guidelines. Many factors influence 23

- 24 the selection of an off-label use for
- 25 consideration and possible evaluation by staff.

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1 We apply a systematic approach in identifying and 2 critically evaluating clinical data, aided in 3 recent years by the availability of an expansive 4 array or resources available through the Internet. 5 Decisions about what or what not to include are 6 evidence-based, requiring support in the published 7 medical literature and medical practice. 8 The analysis is an intramural process 9 performed by a professional staff with strong 10 scientific and therapeutic backgrounds. This 11 provides a high level of quality control and 12 consistency in content development. The process 13 involves assessment of scientific merits of 14 available data. 15 The principal influence on these 16 decisions is the weight of the supporting 17 evidence. The process is evidence-based with 18 well-designed studies, specifically randomized 19 clinical trials and systematic reviews of 20 randomized clinical trials being weighted more

21 heavily than observational studies or case 22 reports. The importance and severity of the 23 disease, availability of alternative therapies and 24 their relative toxicities, the number of patients 25 affected by the disease, other patient population 00092 1 characteristics and other factors also are 2 important considerations. 3 The review process for preliminary 4 information involves a multi-step intramural 5 evaluation and review by the editorial and 6 analytical staff and the solicited external expert 7 review. Reviewer participation is solicited but 8 voluntary, and no honorarium or other benefit is provided. Full disclosure of interest, including 9 10 any affiliation or financial involvement with the 11 manufacturer of the drug under consideration is 12 requested. 13 In 2003, AHFS initiated a process for 14 developing a codified method for summarizing its 15 evidence-based analyses. While the principles of 16 the AFHS editorial development process had not changed, moving to a structured, codified format 17 18 that would summarize ongoing staff assessments of 19 new and changing evidence was initiated to aid 20 analysis and evaluation of various drug uses. The development of the AFHS evidence rating system 21 22 applied the principles of Fletcher and Sackett, as 23 reflected in the work of the American College of 24 Chest Physicians. FDA guidance documents for 25 assessing clinical trials, levels of evidence 00093 1 applied by AHRQ, and the ASHP's commission on 2 therapeutics, as well as several dozen other 3 documents and resources --DR. GARBER: I'm sorry, but your time 4

5 is up.6 DR. MCEVOY: Okay, thank you.

7 DR. GARBER: Thank you very much. Our

8 next speaker will be Jerome Osheroff, or Laura 9 Moore.

10 MS. MOORE: My name is Laura Moore.

11 I'm with Thomson Micromedex and the senior 12 director of editorial services there. As far as 13 financial conflicts, I am an employee of Thomson 14 Micromedex and I do own some stock in Thomson 15 Corporation, a provider of compendia. I don't have any other financial conflicts of interest. 16 17 have had some preliminary conversations prior to 18 this meeting with Dr. Whitten as well as 19 (inaudible) that are within the confines of our 20 written testimony that we supplied to you 21 previously. 22 I do have a prepared Power Point

23 presentation for this morning, but at the outset I

24 would like to begin by saying that yesterday we
25 had the opportunity to review the report that was

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1 produced by Duke and Tufts University and we had a 2 chance to walk through that, and as part of our 3 review we identified some inconsistencies in their 4 information. In particular, Dreibach, for 5 example, is always cited, so that particular 6 product is fully referenced in all cases in every 7 electronic format that is available, and in 8 reviewing the 14 indications, all 14 of those 9 indications do appear in DRUGDEX. And my concern 10 is that there is the possibility that in DRUGDEX, 11 the product was not actually used as the source of 12 information but perhaps Drug Point, which is an 13 abbreviated drug information source that's 14 available in the electronic version, might have 15 been used instead. 16 As part of my presentation today, I 17 want to present to you just a quick overview of 18 the Thomson Corporation and Thomson Micromedex, as 19 well as introduce you to our people on the 20 editorial staff responsible for maintaining our 21 drug information content, the processes that we 22 use for maintaining that content, the updates on 23 that information, and what we've accomplished last 24 year in that regard. 25 The Thomson Corporation is a leading

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1 global provider of integrated information 2 solutions for businesses and professionals. We 3 provide must-have information, using technology 4 and applications to help our customers reach better decisions faster in the course of their 5 б workload. Currently we serve over 20 million 7 information users in the field of tax, law, 8 accounting, higher education, corporate training, 9 financial services, scientific research, and of course healthcare. Thomson is organized into 10 different units, Thomson Legal and Regulatory, 11 12 Thomson Financial, and Thomson Healthcare. 13 Thomson Micromedex was founded in 1974 14 by a physician, Dr. Barry Rumack. We were 15 subsequently acquired by Thomson Corporation in 16 1991, and are currently a business unit of 17 Thompson Healthcare. We employ 425 people in the 18 Denver office and we provide electronic 19 subscription-based products with the exception of 20 the print version of the USP-DI currently in the 21 areas of drug information, toxicology, as well as 22 patient education. 23 Now I would like to move on to our 2.4 people. In our Denver office we employ over 100 25 editorial staff members. Physicians, nurses,

1 pharmacists and other allied healthcare 2 professionals comprise the majority of our 3 editorial team. They represent a wide range of 4 specialties, including internal medicine, 5 emergency medicine, toxicology, oncology, clinical 6 research, the list goes on, and I'll just give you 7 a few. In addition to their educational and 8 professional training, they also are trained in 9 literature evaluation and in literature 10 identification techniques, in accordance with 11 accepted practices. And then also of interest to 12 this panel, we do have oncologists, pharmacists 13 who do evaluations in that area. We also have a 14 clinical research design expert who also is an 15 expert in statistical analysis of indications and 16 reviews. And then finally, we have a full medical 17 library on site staffed by a medical librarian and 18 numerous research staff, this number is up to 19 seven right now, in addition to our medical 20 librarian, and this group is responsible for 21 continuing to monitor research studies, enhancing 22 those and making sure that the appropriate 23 information reaches our editorial process in an 2.4 efficient and effective manner. 25 Moving on to our process, we have, our

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senior clinical staff is responsible for 1 2 identifying and prioritizing topics for inclusion 3 in our databases. They select topics based on a 4 number of criteria, primarily based on their 5 ongoing review of medical journals. We do have standardized searches conducted of MEDLINE on a 6 7 weekly basis and the results of those searches are reviewed on a weekly basis by our senior staff as 8 9 well. Based on clinical judgment, we look at 10 national healthcare trends and changes in 11 practices from various professional organizations, 12 regulatory standards and compliance, FDA actions. 13 And lastly, we do accept submissions from external 14 sources, although it's not the primary mechanism 15 by which we identify information for inclusion. 16 We do have very explicit criteria that 17 submitters must follow, and this includes sharing 18 potential financial conflicts, who they are, who 19 they're with. We require that they submit 20 original copies of research, positive and negative 21 findings. And once it reaches us, the fact that 22 it's now in our hands, and we typically don't have 23 communications back and forth with the requester. 24 We take those steps to insure that our process is 25 unbiased. Once we identify the topic for

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1 inclusion, we perform extensive literature

2 searches, identification of relevant and quality

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3 literature for inclusion. We look at breakthrough 4 therapy, and patient safety is prioritized. And 5 we evaluate the literature for methodological 6 rigor, appropriateness of statistical analyses, 7 and clinical relevance. 8 I know that I have ten minutes, but I 9 was on the schedule twice, so could I combine 10 those? 11 DR. GARBER: Is Dr. Osheroff not going 12 to speak then? 13 MS. MOORE: He is available to assist 14 in answering any questions when I'm done. 15 DR. GARBER: Okay, fine. 16 MS. MOORE: And I should point out too 17 that these procedures are used both for USP-DI and 18 for DRUGDEX, there is no variation between those 19 two products as far as quality of information. 20 So following the identification and 21 verification of the product, the literature moves 22 on to our writing staff, it goes to one of our 23 clinical editors. They review that literature, they summarize the information, assign ratings. 24 25 We have actually four ratings that are in use 00099 1 today. In DRUGDEX we use strength of evidence, 2 strength of recommendation, and an efficacy 3 rating. Within USP we use an acceptance rating, 4 so at that point they give it a rating using 5 guidelines and internal policy. б Following creation of the content, the 7 information moves through what we generally call 8 content review, where it is reviewed by senior 9 clinical staff or peer review. In the case of 10 off-label indications for oncology, all of our new oncology indications, off-label oncology 11 12 indication do go out to our oncology board for 13 expert review. They go to a minimum of four 14 members who are responsible for looking at the 15 literature, assessing our ratings associated with 16 those indications, and providing feedback to us. 17 Once it comes back from expert review the senior clinical staff once again reviews it, confers 18 19 final approval, and the information is now 20 available for inclusion in our products. 21 As far as timeliness of the 22 availability of that information to our customers, 23 it really depends on the type of subscription that 24 an individual customer has. Some information is 25 updated daily, we have versions of DRUGDEX that

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1	are	updated	on	а	weekly	basis.	The	Internet	gets

- 2 at least a quarterly update, and this will occur
- 3 in our publications as well.
- 4 The next one, I wanted to walk through
- 5 the old USP process versus what we're currently

using. Until 2004, USP was responsible for 6 7 maintaining the off-label indication information 8 within USP-DI. In April of 2004, we took over 9 that responsibility. At the point that USP had 10 it, off-label indications required unanimous 11 approval by their oncology advisory board, and 12 also there was a requirement for a 90-day public 13 comment period. With those two things combined, 14 occasionally, and in many cases it could lead to a 15 backlog of up to one year. And in fact when we 16 took over in April of 2004, there was a 17 significant backlog and we were definitely hearing 18 about that. 19 In response to that we took a look at 20 our processes, and based on that, the process 21 today is that all off-label oncology indications 22 do go through expert review, and they are required 23 to be reviewed by a minimum of four members and 24 not the entire board. And we don't require 25 unanimous agreement amongst those members; rather,

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1 we have a chair of our oncology board, as well as our chief medical officer, who will try to resolve 2 any conflict. And lastly, we no longer require a 3 4 public comment period. 5 At this point I would also like to note 6 that it was previously stated that we will no 7 longer be publishing under the name USP-DI in the 8 near future. We are developing a successor 9 product and as part of rolling out the successor 10 product, it is possible there may be changes in 11 formatting for that product, although we haven't 12 made any final decisions in that regard. One of 13 the changes might be that we would move from an 14 acceptance rating to the three ratings that we're 15 using today at DRUGDEX, so that the strength of 16 evidence, strength of recommendation is given 17 rather than a single acceptance rating. 18 Where we're at today with off-label indications, again, we have established a board, 19 2.0 we currently have ten board members and we're actively recruiting additional board members. Dr. 21 22 Thomas Marsland, of the Florida Oncology 23 Association, is currently our chairperson. Τn 2.4 2005 we published ten new off-label indications 25 under an accepted rating. Four off-label

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indications were added with an acceptance not
 established rating. And we also added 16
 additional indications based on product labeling
 changes last year.
 Just in closing, I would like to leave
 you with a few key messages. We do have a fairly
 large dedicated staff on site who is responsible

8 for maintaining our content. We have invested

9 significant time and resources in the last few 10 years to improve our processes internally and 11 revising what we do. We believe that our 12 literature retrieval and evaluation processes are 13 unsurpassed in this arena. And we have employed a 14 conflict of interest policy to insure that our 15 content remains unbiased. We have taken all of 16 these things together, so our people, our 17 processes and policies that have been put in place 18 in the last two years really serve to protect our 19 longstanding reputation for providing unbiased 20 drug information. That's all I have. 21 Oh, Barry just reminded me, one of the 22 things that I did want to point out, again, is 23 that the 14 indications that were covered as part 24 of the study are in DRUGDEX, and I can provide a 25 copy of that information to the panel. In

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1 addition, the nine, there are nine indications 2 that were covered in USP-DI; of the five that were 3 not, two of them are actually in the final stages 4 of expert review, and I can share that with the 5 panel as well. Any questions? 6 DR. GARBER: We will have a question 7 period later on. I hope you will be available for 8 that during the afternoon. 9 MS. MOORE: We certainly will be, thank 10 you. 11 DR. GARBER: Thank you very much. 12 Shanti Divvela will be the next speaker from Facts 13 & Comparisons, and following her will be William 14 McGivney, from NCCN. The final scheduled speaker 15 will be MaryAnne Hochadel. 16 MS. DIVVELA: Good morning. My name is Shanti Divvela and I am a clinical actuary at 17 Wolters Kluwer Health. The first thing I would 18 like to say is I do not have any conflicts of 19 20 interest and I am appearing on behalf of Wolters 21 Kluwer Health. 22 Before I get into describing our 23 compendium, I would like to give you some 24 background information on Wolters Kluwer Health. 25 WK Health has over 2,500 employees on four 00104 1 continents. Our major brands include Facts & 2 Comparisons, Lippincott, Williams and Wilkins, Ovid Technologies, Adis International, and 3 4 Medi-Span. WK Health is a provider of information 5 for medical and health professionals and our 6 customers range from hospitals to pharmacies, to 7 healthcare professionals and students. 8 Facts & Comparisons 4.0 is a 9 browser-based electronic version of our most 10 popular products. To provide you with the most comprehensive information, I will give you some

12 portions of Facts & Comparisons that contain 13 unlabeled uses. These include Drug Facts & 14 Comparisons, Off-Label Drug Facts, and Cancer 15 Chemotherapy Manual. 16 These products, Drug Facts & 17 Comparisons, Off-Label Drug Facts, and Cancer 18 Chemotherapy Manual are unbiased and not 19 financially influenced by pharmaceutical 20 manufacturers. Drug Facts & Comparisons has been 21 the standard drug reference for almost 60 years. 22 It provides a wide course of information on 23 prescription and non-prescription products. 24 Each individual full drug monograph 25 includes the sections you see here. The

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1 indications section is where the unlabeled uses 2 are found, along with the FDA-approved 3 indications. Drug Facts & Comparisons also 4 includes drug class monographs in a comparative 5 format. 6 A drug monograph goes through multiple 7 steps before publication. Drug monographs are 8 chosen for review based on changes to the FDA-approved labeling. Each monograph is reviewed 9 10 independently by two clinical editors who are all 11 pharmacists. During these reviews, the clinical 12 editors research and evaluate the literature 13 related to off-label uses that are clinically 14 significant and meet our criteria for inclusion. 15 Various references such as primary 16 biomedical literature and standard medical 17 textbooks are researched in order to identify 18 unlabeled uses. We include those unlabeled uses 19 that are well documented from these references. 20 If an unlabeled use is found in primary 21 literature, then we ensure that the clinical study 22 is of substantial size, using human subjects, and 23 show positive results that are both clinically and 24 statistically significant. We exclude animal data 25 and case reports.

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1 For those off-label uses that do not 2 meet our criteria for inclusion, our policy is to 3 be silent and, therefore, not include the 4 indications in our compendium. However, there may 5 be a few cases in which we include unlabeled uses б that do not meet our criteria because they aren't 7 noteworthy. 8 I would like to mention that for the 9 past year we have started including references to 10 our electronic version and as each monograph gets 11 updated, we are making these references available 12 for viewing. 13 Our second reference that contains 14 information on unlabeled uses is entitled

15 Off-Label Drug Facts. This describes off-label 16 drug use that is not encompassed by FDA-approved 17 labeling, including therapeutic indications, 18 patient populations, dosage, dosage formulation, 19 and route of administration. Each monograph in 20 Off-Label Drug Facts summarizes information from 21 published medical and scientific literature. Also 2.2 included is an evidence-based rating that can be 23 used in a clinical setting for decision-making. 24 These ratings are assigned by an editorial panel 25 that critically evaluates all monographs in order

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1 to provide an authoritative compendium of the 2 clinical relevance of the published information. The rating scale ranges from one to 3 4 five. And evidence-based rating of one signifies 5 that the efficacy, safety risks and optimal dosage 6 are clearly identified in appropriate populations, 7 as evidenced by consistent favorable data from at 8 least one well designed controlled trial, or 9 dramatic results from uncontrolled experiments 10 reported by our expert panel. An evidence-based rating of five signifies that the use is not 11 12 recommended based on data that is considered 13 unsafe or not effective. 14 Unlabeled uses are identified through a 15 monthly review of approximately 250 medical 16 journals, the compilation of data received from a 17 managed care claims database, and inquiries into 18 the University of Kansas School of Pharmacy Drug 19 Information Center. After an unlabeled use has 20 been identified, information is then compiled from 21 human data published in primary literature. This 22 may include controlled clinical trials, 23 non-controlled trials, and case reports since 24 1990. Earlier data may be used in some cases. 25 Monographs are then developed and

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reviewed by an editorial review panel, consulting 1 2 reviewers and editors. The editorial review panel consists of physicians and pharmacists. 3 4 Individual monographs will be updated when 5 significant new studies become available and new 6 monographs will be added with each additional 7 update. The third reference on off-label uses 8 9 is our Cancer Chemotherapy Manual. This product provides a wide variety of information on 10 11 chemotherapy regimens for both healthcare 12 professionals and patients. It is developed in 13 collaboration with the University of Utah 14 Hospitals and Clinics, including the Huntsman 15 Cancer Institute. 16 Each individual drug monograph is

17 included in the sections noted here. The

indications section is where the unlabeled uses 18 19 are found, along with the FDA-approved 20 indications. The drug monographs are developed 21 and reviewed by an editorial review panel, 22 consulting reviewers and technical editors. The 23 editorial review panel consists of practicing 24 clinicians, pharmacists, nurses and pharmacy 25 technicians. The unlabeled uses are identified 00109 1 through the research and evaluation of various 2 sources, including primary biomedical literature, 3 standard drug information and medical references, 4 practicing clinicians, and evidence that a 5 manufacturer is seeking FDA approval for the specific unlabeled use. 6 7 To be included as an off-label use in 8 this compendia, the use must be well documented 9 from these sources and shown clinically and 10 statistically significant results from clinical 11 trials. 12 This concludes our presentation on 13 Wolters Kluwer Health's compendia that provide information on unlabeled uses. Thank you. 14 15 DR. GARBER: Thank you. Our next speaker will be Bill McGivney, NCCN. 16 17 DR. MCGIVNEY: Members of the 18 committee, good morning. I am Bill McGivney, the 19 chief executive officer of the National 20 Comprehensive Cancer Network, better known today as NCCN. NCCN is a not-for-profit alliance of the 21 22 leading cancer centers of the world, and I invite 23 you to take a look at the map specifically, 24 because these centers like M.D. Anderson, Memorial 25 Sloan-Kettering, Johns Hopkins, Stanford, the 00110 1 University of Michigan, et cetera, supply over 700 2 expert clinical professionals who constitute and 3 make up our panels to develop our guidelines and 4 develop our compendium recommendations. 5 Additionally, and relevant today, in a 6 past life I have served as vice president for 7 clinical and coverage policy at Aetna Health Plan, 8 where I ran technology assessments, clinical 9 guidelines, and national coverage policies, 10 including drug policies. And finally regarding me, I am a member of the Medicare Coverage 11 Advisory Committee. 12 In the following comments, the NCCN 13 14 will use the NCCN drugs and biologics compendium 15 as a reference point to discuss and evaluate 16 characteristics of a compendium that can be used 17 to make informed and timely coverage 18 determinations under Medicare, and thus serve to 19 provide appropriate access to effective drug and 20 biologic therapy for Medicare beneficiaries.

So, let's talk about characteristic number one. Recognition and application of standard of care for oncology. The recommendations of the NCCN guidelines, and this is a very very important point, are based directly 00111

1 on the recommendations coming out of the NCCN 2 clinical practice guidelines on oncology, so the 3 drug compendium recommendations are directly based 4 on NCCN guideline recommendation. I think this is 5 important, an important point. This is to say 6 with substantiation that the compendium 7 recommendations, is that they are derived from a 8 disease-based analysis that places the most 9 appropriate therapy in line with the patient with 10 not only consideration of drugs and biologics, but 11 also surgical procedures, radiation therapy, 12 watchful waiting, et cetera. It is a very 13 important point. 14 NCCN guidelines, as I said, are widely 15 recognized and applied as the standard of care for 16 oncology in both the community practice and the academic setting. Our guidelines cover the 17 18 managements of over 97 percent of all cancer 19 patients, all major supportive care areas, and 20 prevention screening and early detection. Our 21 guidelines are widely referred to, as evidenced by 22 the fact that in January of 2006, there were 23 110,000 downloads in one month of complete NCCN 24 guidelines from our web site.

25 The recommendations of the individual

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1 NCCN compendium chapters, as I said, are derived 2 directly from the NCCN guidelines. These 3 recommendations are the result of an overall 4 risk-benefit analysis regarding, again, the 5 continuum of care with all the variety of care and management tools available for treatment of б 7 specific cancers. It is important also to note 8 that the recommendations from the NCCN guidelines 9 and from our compendium are already being used by 10 Medicare regarding, for example, this January 28, 11 2005 decision memo on colorectal agents used as 12 therapeutics, and by private payers, again 13 referencing the many times that health plans have 14 called us for our opinion on specific technology, 15 be it a drug, device or procedure. Characteristic two, that indeed, the 16 17 recommendations must be based upon available 18 scientific evidence. The NCCN compendium 19 recommendations are based on explicit evaluation 20 of scientific evidence, integrated with expert 21 judgment in a consensus-driven approach. The NCCN 22 communicates explicitly, as you've heard in the 23 analyses presented by Duke and by Tufts New

24 England Medical center, specific categories that 25 underlie, categories of evidence and consensus

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1 that underlie our recommendations. And this is an 2 important point: Users of the NCCN compendium can 3 track back to the same recommendations as the NCCN 4 guidelines, to see their supporting references and 5 to review discussions of supporting evidence or 6 issues in management. And indeed, regarding 7 references, NCCN committees purposely and 8 purposefully limit the references used to one, two 9 or three, in order to provide references that 10 really define most definitely the recommendations 11 for care, and secondly, point out and identify the 12 optimal management regimen in terms of 13 combinations to be used, the drug doses and the 14 schedule for administration. 15 Characteristic three, input evaluation 16 and development by multidisciplinary panels of 17 experts. The NCCN compendium provides 18 recommendations about the appropriate and 19 effective use of drugs and biologics from 46 guideline panels that are disease or issue-20 21 specific. Each panel has 15 to 22 experts; they 22 represent a broad variety of subspecialties, 23 including medical oncology, surgery, radiation 24 oncology, gynecologic oncology, et cetera, and 25 other clinical professionals. And as I said at

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1 the outset, these are thought leaders from those 2 20 institutions. 3 The panels meet at least annually, 4 sometimes they meet three or four times a year. The agenda for each meeting is based on new data 5 6 that may have been presented at major oncology 7 meetings or published in major journals, from 8 panel member input and from broader expert input 9 across all our institutions, not limited to just 10 panel members. Additionally, other interested parties including patient advocacy groups, 11 12 academic physicians from outside the NCCN, 13 community physicians, industry, et cetera, may 14 also submit data to NCCN for consideration. 15 Characteristic four, broad 16 participation to diminish bias. The 17 representation of different subspecialties and 18 clinical professionals serve to diminish 19 opportunity for dominance by a single faction. 20 The broad geographic distribution of 21 representation expands the perspective of the 22 panel, the large number of experts provides for an 23 exposition of analyses and interpretations based 24 in evidence, with many clinicians with stature 25 both nationally and internationally.

1 And I just got back from Beijing, and 2 the Chinese are adapting NCCN guidelines for use 3 in China. The expansion of formal input beyond 4 the panel for multidisciplinary experts based in 5 NCCN centers expands the sources and 6 interpretation of evidence and as such, the NCCN 7 has established a process that enhances the 8 expression of divergent views and identification 9 of conclusive evidence and thus, the synthesis of 10 broad-based and authoritative recommendations. 11 Characteristic number five, 12 recommendations must be specific to be useful. 13 Our recommendations are extremely specific. Т 14 would just ask you to take a look, and actually 15 that was an example shown by Duke on one of its 16 slides. 17 Characteristic six, information and 18 recommendations must be up to date. Just very 19 quickly, I think the fact is fairly obviously 20 across all medicine, that we need to be current 21 with our guidelines and to substantiate the most 22 up to date of any analyses and recommendations out 23 there. 2.4 Characteristic number seven, 25 information and recommendations must be widely

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1 available. NCCN guidelines are made widely 2 available free of charge across the United States 3 and globally in a variety of informational and 4 educational formats. The most prevalent, up-to-5 date and accessed format is the one that's on And very importantly, NCCN collaborates 6 line. 7 with the American Cancer Society to translate our 8 guidelines into user-friendly patient guidelines. 9 Also, NCCN quidelines are presently serving as the 10 centerpiece for the 2006 CMS quality demonstration 11 project on oncology, and as mentioned above, CMS 12 characteristically references NCCN guidelines in 13 its national coverage determinations. 14 An important point, that CMS, when it 15 awards the integration of processes for the 16 setting of coverage policies, the establishment of 17 reimbursement levels and the evaluation of the 18 quality of care, it will be critical to insure 19 that the decision-making for all three processes 20 is consistent in terms of recommendations and the 21 sources of such recommendations. So given the 22 existing uses of NCCN by CMS, it's logical that 23 the NCCN compendium be officially recognized as 24 one of the settled references mandated for the 25 establishment of coverage policies regarding drugs

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- 1 and biologics.
- 2 In summary, NCCN supports the efforts

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of CMS and all of us in the room to insure the 3 4 quality, effectiveness and efficiency of care that 5 is made available to its beneficiaries and 6 patients nationwide. And again, we believe that 7 the NCCN compendium provides sound scientific 8 recommendations to support decision-making by CMS 9 and by its intermediaries and carriers, and thus, 10 NCCN officially requests that we receive 11 recognition for our drug and biologics compendium 12 as a mandated reference for national and regional 13 coverage decisions regarding the appropriate use 14 of drugs and biologics in cancer therapy. Thank 15 you very much. 16 DR. GARBER: Thank you. Next, MaryAnne 17 Hochadel. DR. HOCHADEL: Thank you, Dr. Garber 18 19 and the committee. I'm MaryAnne Hochadel. I am 20 the vice president and editor in chief of Clinical 21 Pharmacology. You might want to refer to us as 22 sort of the new kids on the block. Back in 1994 23 when the committee first started to get into this 24 compendia-based system in the cancer arena, we 25 were just getting started as a drug compendium 00118 1 organization and had a fairly good idea of what a 2 drug compendium might be able to do in healthcare, 3 which is very different, perhaps, from the typical 4 referential or encyclopedic type of information 5 that we might be used to from standard б publications. So I think one of the issues, and 7 I'm going to speak not only to our editorial 8 policies -- and I will disclose the fact that I am 9 of course here as a representative of Gold 10 Standard as an employee. I am a shareholder in 11 the company, I do also have an editorial staff, 12 some of whom may be shareholders in the company, 13 but outside of that, we have a very strict 14 financial disclosure policy in which there must be 15 no conflicts of interest in the compilation of 16 drug information and the standards under which we 17 operate. 18 When you talk about editorial policy, 19 our editorial policies are not unlike those of 20 others who have spoken here, very different from 21 NCCN obviously, because of the focus of where 22 their information is coming from, but it's very 23 similar to the drug compendia, and we've been 24 talking about that today.

25 I think what's important are what are

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- 1 some of the considerations of off-label drug use
- 2 in oncology that are important when trying to
- 3 address strength of the evidence and how, why are
- 4 there these differences (inaudible) and drug
- 5 compendia in regards to the listings or what might

6 be taken as being, why is this one different from 7 that one, why is the reference base different, 8 those types of things. And maybe some of these 9 issues are important to a consideration of whether 10 the drug compendium itself is an appropriate one 11 in terms of helping to determine off-label 12 reimbursement policy interpretations. 13 In terms of patient advocacy, we need a 14 reasonable system to use in terms of providing 15 patient care and providing reimbursement and 16 providing access to treatment. One of the things 17 that I think is very important in oncology is that 18 in that drug approval process through the FDA, one 19 of the interesting things about that process is 20 that the accelerated improvement process has 21 helped deliver access to patients who are new and 22 (inaudible). 23 What's interesting about that process, 24 though, is that often the drug receives

25 accelerated approval within a certain stage of

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cancer or a certain indication, that type of 1 thing, and then it awaits confirmatory evidence. 2 And we've seen a lot of examples of this type of 3 4 situation over the last couple of years, 5 (inaudible) targeted treatments in cancer. What's 6 interesting about that process is that it's kind 7 of (inaudible) off-label drug use and fully 8 approved and recognized evidence in oncology, 9 particularly as it relates to taking one drug and 10 then combining it with other drugs. 11 It's very uncommon to find a fully 12 FDA-approved drug regimen used in a cancer patient 13 throughout the United States. Usually they've got at least one drug, either being used in a 14 15 different way, the drug administration, a 16 different dosage regimen, a different stage of the 17 cancer than has already been proven, it's very 18 unusual to find this situation happening. 19 Now that (inaudible) drug compendia, 20 particularly under a database structure that is 21 intended to serve certain functions for the 22 clients and healthcare professionals or patients 23 that are using that data in actual healthcare, and 24 I think in certain respects every drug compendium 25 (inaudible) in that regard, and it may be very

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difficult to define standards by which all drug compendia should make their mark, for issues that are related to the drug approval and investigational use process, as well as the fact

- 5 that there is proprietary issues raised.
- 6 Proprietary rating scales may not have
- 7 so much meaning when you start looking at the
- 8 strength of evidence ratings or particular levels

9 of evidence related to particular types and 10 published data. Garnering that all together and 11 then (inaudible) evidence in our compendia is a 12 fairly difficult process as a result when you look 13 at it overall. 14 Let me give you some examples of volume 15 here. In our drug compendium situation, we have 16 at least on average 500 drug information updates 17 per month. That includes regulatory approvals, 18 disapprovals if you will, or withdrawals from the 19 market, Med-Watch alerts, published literature. 20 Peer reviewed literature such as the ones you 21 mentioned that are part of this off-label 22 identification process for CMS, the peer reviewed 23 is standardly accepted literature in a review. Tt 24 averages 500 a month, and in the entirety of a 25 month you may have 1,200 particular updates that

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1 must be researched, driven down, put into 2 standardized format, and then provided in a timely 3 manner to the patient and healthcare 4 professionals. 5 So when you're looking at an update, to 6 speak to that (inaudible), what does an update 7 even mean? It's not always going to be a full 8 review from top to bottom of the particular 9 information that you find in the (inaudible), and 10 I'm just being very honest here about how the 11 processes work. Even though they are important 12 healthcare policy decisions based on drug 13 compendia, and (inaudible) necessarily to talk 14 specifically about a standard process, which are 15 identified as a standardized developed internal 16 process, but to talk about some of the issues surrounding this data and how it should be 17 18 interpreted, evaluated and put into the system. At Gold Standard, we definitely welcome 19 20 and provide an evidence-based process in drug 21 information in providing the data, but this is an 22 evolving field. When we look at criteria systems, 23 rating systems, once again, they have usually been 24 established and validated within a certain level 25 of evidence. A randomized controlled clinical

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1 trial usually tops that type of evidence rating 2 scale because it meets any criteria. And we find those publications through those committees, from 3 4 us for example, making it very hard to take all 5 that body of evidence, identify that evidence, 6 and then evaluate if it is evidence-based evidence 7 or whether it has been validated using the whole 8 of the information. 9 What's very important too in drug 10 information databases is the goal they serve. We

11 were developed, for example, for a concise

12 actionable point of care level in various types of 13 healthcare settings. That means that you don't 14 necessarily expect to see Phase I and Phase II 15 data in all of our listings. What we are 16 concentrating on is the human clinical use of the 17 drugs in the settings, and with reference to 18 oncology, we may include Phase II trial data in 19 that because of some of the accelerated approval 20 process, so some of that data may be from Phase II 21 and you have to consider it when you look at these 22 entries. 23 So with that being said, we would love 24 the committee to consider some of those unique 25 details, particularly in light of patient

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1 advocacy, and we know that in oncology they 2 frequently use combination drug use for the 3 reasons I mentioned, in trying to establish newer 4 and emerging regimens in the field to provide 5 better tumor response, improved survival rates, 6 and to not be too limiting in defining very rigid 7 criteria for drug information compendia, because I 8 think because of the evolution of this field, 9 we're going to find ourselves in a whole new, 10 maybe four or five years down the line, where we 11 need to consider other factors that are going 12 through this process of evaluating treatments, 13 particularly as we get into more focused and 14 targeted drug therapies. 15 The intended use of a drug is barely 16 evident at the time of its initial approval, but 17 oncologists are smart enough to figure out based 18 on what we know about cellular dynamics, 19 particular growth stages of various types of 20 tumors, where a drug might have promise to start 21 using case studies, which lead to pilot studies, 22 which might lead to those next very large trials. 23 But we have to (inaudible) participant's approval 24 as well as in these processes. We're farming out 25 a lot of information overseas to try to get the

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1 study numbers in order to get the required level 2 of data. Not that that's a bad thing, but it 3 prolongs the process, because if you can't get the 4 right power of numbers in order to approve these 5 sometimes very vague or indistinct endpoints, it б becomes very difficult to move a drug from the 7 off-label process to the labeled process. 8 And so I would ask the committee to 9 consider those things as you consider this issue 10 of drug compendia. A multiplicity of compendia 11 probably helps the issue given the fact that it 12 points to the appropriate citations to document 13 uses which may prove effective for patients. 14 Thank you.

15 DR. GARBER: Thank you very much. I 16 would like to thank all of the speakers who just 17 spoke. In our deliberation, we find it very 18 helpful to have presentations that not only 19 present the point of view of the speakers but are 20 directly germane to the voting questions the panel 21 faces, and I think I can speak for the panel in 2.2 saying these were extremely helpful presentations. 23 So, we have a group -- we have begun, 24 we have a compilation of the votes but I think 25 what we're going to do next, if the next set of

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1 scheduled public speakers, we have four of them, 2 are here now and ready, let's do that next, and then we'll return to voting question number one. 3 4 The first person scheduled to speak is George 5 Silberman. Are you here? 6 MR. SILBERMAN: I am. 7 DR. GARBER: And following him will be 8 Keith Logie. 9 MR. SILBERMAN: Good morning, everyone. My name is George Silberman, I'm a self-employed 10 consultant. I do not own stock in any of the 11 12 companies that have an interest in today's 13 proceedings. For the last eight years I have 14 received almost all my support directly or 15 indirectly from the pharmaceutical industry, 16 largely around therapeutic drugs and oncology 17 agents. No one paid for my transportation today, 18 and a change from the submitted form, I was 19 contacted by representatives of PhRMA two days ago 20 to discuss my presentation, although they did not 21 try in any way to influence that presentation. 22 I put down in a very sort of self-23 aggrandizing way that I am speaking on behalf of 24 the public interests, and I think I'm taking a 25 fairly unpopular position, but let me just give

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you my qualifications. I directed the study that 1 2 GAO did that served as the basis for the 3 legislation for off-label drugs. For the past 4 decade I've advised the industry on submissions 5 for off-label indications, I've also worked with 6 USP on developing their process for submission of 7 off-label drugs. I have published in health 8 technology assessments, developed a number of 9 technology assessments. I worked in and published 10 in JAMA and the New England Journal of Medicine, 11 and I testified as an expert witness before 12 Congress on health policy issues on at least a 13 dozen occasions. I state these qualifications 14 because as I say, I'm going to ask the committee 15 to consider an issue that is not a very popular 16 issue. 17 And for a moment I would ask you to

18 lift your heads away from the figurative trees 19 that are certainly important regarding issues like 20 whether or not it takes three weeks or three 21 months of treatment to publish, or the relative 22 number of citations, and to focus on the literal 23 forest that we are in a healthcare crisis, and 24 that healthcare crisis is likely to get worse. 25 You are here today to define how cancer patients

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1 will be treated for decades to come, and you 2 simply can't escape that reality. 3 This isn't a technical decision that 4 you're making but it is ultimately a societal 5 clinical decision based on our input today, and ignoring the fact that as we have an increasing 6 7 supply of therapeutics, you have increasing demand 8 for these therapeutics and you have limited 9 resources to pay for it, it's both short-sighted 10 and irresponsible on your part. 11 My recommendation is that what serves 12 as the basis for healthcare decision-making in the 13 oncology field as a compendia be encouraged to eventually include information on net value. 14 Βv net value I do not mean the price of the drugs, 15 16 but I do mean looking at the cost effectiveness of 17 those products so that the constant battle that's 18 occurring out there between insurers who are 19 trying to avoid efficacious drugs simply on the 20 basis of a dollar figure, and physicians who are 21 really at a loss in terms of understanding true 22 value, are helping those deliberations by 23 information from objective third-party sources. 24 We are certainly not ready for this 25 Publishing cost effective information in the yet.

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1 compendia today would probably do more harm than 2 good, but I would urge the committee to make a 3 strong recommendation that we move to that 4 position. I advise a lot of companies in how to 5 structure clinical development processes to 6 maximize market strategies, and certainly 7 off-label compendia policy is a critical component 8 of that. And I can tell you that if you make the 9 statement that net value is important, it will 10 influence drug development. If you don't, we're 11 simply going to proceed down that road. Thank you 12 for your time and interest in this issue and good 13 luck with your deliberations. 14 DR. GARBER: Thank you very much. Our 15 next speaker is Keith Logie. Following him will 16 be Sharon Brigner. 17 DR. LOGIE: My name is Keith Logie. I 18 am a practicing oncologist in Indiana. I am also 19 a member of the ACCC, the Association of Community 20 Cancer Centers. ACCC is a membership organization 21 whose members include hospitals, doctors, nurses, 22 social workers, and oncology team members who 23 treat the millions and millions of patients with

24 cancer. ACCC is committed to insuring that

25 Medicare beneficiaries have access to quality

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1 cancer care, including the innovative and cutting 2 edge therapies our patients require to win their 3 battles against this deadly disease. 4 Many of these treatment regimes involve 5 new drugs already approved for other indications 6 by the FDA. This off-label use of cancer drugs is 7 a common medical practice that is critical to the 8 treatment of these patients. I can't tell you how 9 many times I've come across new data from ASCO 10 presentations such as Perceptin for breast cancer 11 chemotherapy, and it's clinical that it be rapidly 12 introduced into clinical practice. It took five 13 to six months before I felt comfortable giving it 14 in my clinical practice in terms of being paid and 15 reimbursed for it. 16 After the demonstration at an ASCO 17 plenary session, three randomized clinical trials 18 with a P value that was like 10 to the minus 12th 19 in significance, 50 percent improvement in early 20 stage breast cancer, that had to be given. It was

a presentation given in May and we should have been able to use that drug in May. It's very critical to get these drugs into the market and to allow us to be able to use them.

25 Because off-label use is so critical in

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1 cancer delivery, ACCC believes it is important to 2 have multiple sources of compendia. In addition, 3 we would like to see the following criteria: 4 First, the compendia must include an 5 extensive breadth of listings that reflect б multiple treatment regimens for each of hundreds 7 of types of cancers. 8 Second, the compendia must demonstrate 9 a flexibility to rapidly integrate literature, and 10 readily accessible updates. The delays of months 11 and sometimes years between the announcement of 12 significant clinical research outcomes and their 13 inclusion in the compendia cannot disrupt 14 Medicare's beneficiaries' access to care. 15 Third, the compendia must use a clearly 16 described and transparent application and review 17 processes for new listings and revisions to 18 listings. Such a process will protect access to 19 new treatments by making it easier for 20 researchers, physicians and patients to request 21 regimens to be included in the compendia. 22 Fourth, the compendia must consider the 23 data from various types of trials. While

24 randomized control trials are recognized as the

25 gold standard for clinical research, they cannot

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1 be performed for rare cancers. Importantly, the 2 compendia must not limit their data to large 3 randomized clinical trials but instead, must 4 consider data from other studies such as Phase II 5 trials as well. 6 Fifth, the compendia provide clearly 7 written entries that describe the evidence for 8 each use. A publication is useful to physicians 9 and carriers only if it presents information on 10 treatment options in clear language and an easily 11 understood format. 12 Finally, the Secretary should continue 13 to recognize at least two publications in Medicare 14 coverage decisions. Medicare's recognition of 15 multiple compendia will provide physicians and 16 carriers with more data regarding current 17 treatment options. 18 The ACCC also believes that several of 19 the characteristics identified in your current committee questions are a little bit 20 21 inappropriate. For example, the compendia should 2.2 not establish explicit recommendations on the 23 sequential use of therapies because different 24 patients require different sequences. There may 25 be individual characteristics of certain sequences 00133 that may elicit NCCN practice guidelines. 1 2 Additionally, the compendia should not 3 provide net benefit analysis based on harm versus 4 potential benefit because this analysis is impossible to perform meaningfully through 5 6 variation among patients' comorbidities. For the 7 same reason, the compendia should not provide any 8 type of stratification of the risk of available 9 therapies. ACCC also believes that the compendia 10 should remain silent when the evidence on a particular drug is equivocal. 11 12 We are certainly not recommending 13 listing (inaudible) deny coverage for that use in 14 all patients, especially if one compendium is 15 slowly updated where the other one gets new 16 updates very rapidly and where one not recommended 17 may disqualify a drug. Instead, carriers should 18 continue to cover its use on a case-by-case basis 19 until more data are available. Thank you very 20 much. 21 DR. GARBER: Thank you. Our next 22 speaker is Sharon Brigner, and she will be 23 followed by Elizabeth Halpern. MS. BRIGNER: Good morning. In way of 24 25 full disclosure, I am a full-time paid employee by 00134 1 PhRMA, the Pharmaceutical Research and 2 Manufacturers of America. My name is Sharon 3 Brigner. I'm pleased to be here today as a 4 representative of America's research 5 pharmaceutical companies, but I'm also here as a 6 registered nurse who cares for patients and who is 7 a granddaughter of a victim of pancreatic cancer. 8 It's out of that concern for cancer 9 patients like my grandmother and a commitment to 10 insure they receive the best possible care that 11 brings me here today. If you have ever been in 12 the situation of having a family member who has 13 been diagnosed with cancer, you want them to have 14 access to any and all possible medicines that have 15 promise that your provider thinks would work in 16 his or her particular case. 17 I was in that exact same position. Т 18 was a first-year nursing student when my 19 grandmother was diagnosed, one of the 32,000 20 patients a year who were diagnosed and died of pancreatic cancer. I remember her clearly telling 21 her doctor, Doctor, there's got to be some type of 22 23 medicine that's available, even if it's 2.4 experimental, that will give me two, three more 25 months with my granddaughters, my sister and I. Т 00135 1 remember her saying that back in 1995, and now I 2 am happy to say that there are five new drugs that are approved for the treatment of pancreatic 3 4 cancer. Even more interesting is the numerous 5 clinical studies that show the possibility and uses of medicines off-label that can give a 6 7 patient more time to be with family. That is ultimately why we're all here 8 9 today, to discuss how we can best assure cancer 10 patients access to cancer care. These are the 11 four items that I will cover briefly. The important role of off-label use of 12 13 medicines is well recognized by (inaudible) and 14 clinicians. The National Cancer Institute said that off label represents the standard of care for 15 16 patients with cancer. ACS said that only 15 17 percent of cancer patients receive off-label 18 drugs, highlighting the critical importance of 19 off-label medicines. ASCO said that off-label use 20 of approved drugs are an important tool for 21 advancing the good of cancer care. In 1991 a GAO 22 report acknowledged widespread use of off-label 23 use of oncology drugs, reporting that more than

24 half of all those patients receive at least one 25 off-label drug.

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- 1 In 2005 a study commissioned by ACCC,
- 2 BIO and PhRMA, they interviewed 25 oncologists and

3 12 profit practice managers to get their insight 4 on the current trends in off-label use of cancer 5 therapies, and they found that the oncologists' 6 uses do compare to the GAO findings. Although 7 there are inherent limitations to this study 8 because of the small sample size, there are 9 several indications that suggest similar findings 10 may be seen in a broader sample. 11 Our survey sought to examine these four questions. One thing that has changed since 1991 12 13 is the role of compendia in Medicare policy. In 14 1993, Congress mandated the use of recognized 15 compendia. This policy has functioned well in 16 general and insured the robust evidence-based 17 compendia system. This is no less important today 18 than it was in 1993. 19 As these findings suggest from the OBS 20 survey, there are two things that I want to bring 21 to your attention. One, recognized compendia play 22 an important role in insuring coverage of and 23 patient access to medically appropriate off-label 24 uses of cancer drugs. Number two, compendia alone 25 does not guide providers' clinical decision-00137 1 making; compendia serve as one of a number of 2 tools in the community as scientific evidence in 3 support of clinical decision-making. 4 The majority of oncologists relied on 5 peer reviewed literature while supplementing with б compendia. In this study, 13 of the 17 7 oncologists used USP-DI. Similar to the GAO, many 8 oncologists felt restricted in their treatment decisions by payer policies. The survey also 9 10 found that payer policy caused them to alter their treatment decisions, similar to GAO findings. 11 12 The most interesting finding on this 13 slide for me was this last one, to avoid potential 14 payment denials, six oncologists state that they 15 avoid other off-label therapies that might be 16 eligible for coverage but lack affirmative policy. 17 Research and science in oncology is 18 moving so rapidly, and you all know this, as a 19 gold standard compendia system was developed in 20 order to reduce the lapse between science and 21 policy. To avoid unnecessary delay, there must be 22 an adequate number of compendia, and these 23 compendia must be updated in a timely manner. 24 So what is it that PhRMA recommends?

25 Number one, we would like continued recognition of

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USP-DI under Thomson, especially given the period
 of transition that we've heard. Number two, NCCN
 is just one of several compendia that merit
 evaluation by CMS for recognition and we welcome

5 the opportunity to continue working with the

6 agency in this area. Number three, identify core 7 characteristics that are important for a 8 compendia. Number five is --9 DR. GARBER: I'm sorry, your time is 10 up. Thank you very much. 11 MS. BRIGNER: Okay. 12 DR. GARBER: Next speaker, Elizabeth 13 Halpern. 14 MS. HALPERN: Mr. Chairman, members of 15 the committee, my name is Beth Halpern. I am an 16 attorney with Hogan & Hartson, speaking today on 17 behalf of the California Healthcare Institute. By 18 way of personal disclosure, I own stock in several 19 biotech firms, pharmaceutical companies, and 20 Hogan & Hartson represents several of those firms. 21 CHI represents the full biomedical 22 sector of the California economy and unites more 23 than 250 of California's leading biomedical firms, 24 universities, and private research institutes, in 25 support of biomedical science, biotechnology, and

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1 pharmaceutical and medical device innovation. As the advocate for California's 2 biomedical industry, CHI is committed to ensuring 3 4 Medicare beneficiaries' access to much needed 5 cancer therapies. We believe that access to 6 quality care is best protected when coverage and 7 treatment decisions are based on valid clinical 8 evidence. For this reason, we support the 9 Medicare statutory requirement to cover 10 anti-cancer drugs and biologicals for indications 11 not initially approved by the Food and Drug 12 Administration when those uses are listed in the 13 AHFS-DI, the USP-DI or its successor publications, or the now-out-of-print AMA-DE. 14 15 In response to the MCAC's list of 16 questions, CHI believes the following criteria would be ideal for any compendia used in 17 18 Medicare's coverage decisions. However, we 19 understand that given the information available 20 and the volumes of information included in each 21 compendium, each publication may meet these 22 standards with varying success for each drug or 23 indication. 24 First, just as our members strive to 25 address the diverse needs of cancer patients, the 00140 1 compendium must also reflect the extensive range

2 of treatment options available for each form and

- 3 stage of cancer.
- 4 Second, the compendium must keep up
- 5 with the constant evolution of the standard of
- 6 care by reviewing and publishing newly accepted
- 7 treatment regimens in a timely manner.
- 8 CHI also recommends that the compendium

9 use a transparent and consistent application and 10 review process for new and revised listings. This 11 process should use pre-specified published 12 criteria for weighing evidence and making 13 recommendations. The compendium also must 14 announce its deadlines for submissions, and 15 publicly identify the members of its advisory, 16 scientific and review committees. 17 Fourth, to help physicians and 18 policy-makers understand the basis for each entry, 19 the compendium should provide a detailed 20 description of the evidence reviewed for each 21 listing. 22 Fifth, we recommend the compendia be 23 flexible about the types of research needed to 24 support an entry, that it include promising 25 treatment options that are being looked at in 00141 1 results of relatively small studies. This is 2 particularly important for protecting access to care for rare cancers, where the treatment for 3 4 those cancers are rarely on the FDA-approved label 5 but often not included in the compendia. 6 We ask that this panel recommend that 7 CMS quickly work to implement this system to 8 improve access to those areas. 9 Moreover, because the statute clearly 10 reflect Congress's intent for Medicare carriers to use at least three compendia, including the 11 12 AHFS-DI and USP-DI or its successor publications, 13 we recommend that Medicare continue to recognize 14 these two compendia and add at least one 15 additional publication to give the decision-makers 16 more choices of evidence to consider in making 17 treatment and coverage decisions.

18 We also believe that several

19 characteristics identified in the MCAC's questions

20 are not desirable. These are explicit

21 recommendations on the sequential use of

22 therapies, net benefit analysis, explicit

23 stratification of the risks of available

24 therapies, and explicit listing of appropriate

25 combination therapies.

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1 Finally, we recommend that compendia 2 remain silent when an indication is not supported by sufficient evidence. Thank you. 3 4 DR. GARBER: Thank you very much. Now, 5 I need to ask the discretion of the panel again. 6 It is now about 11:30. One option we have is to 7 break for lunch, resume at about noon. I see a 8 lot of heads nodding. Would anybody object to 9 that change in the schedule? Okay. CMS won't 10 like us for going down to the cafeteria this 11 early, but it will work for us. So what we'll do

12 is resume at noon. We are waiting for the slides 13 to be made from the morning, but just in case they 14 aren't ready, could I ask the people who signed up 15 for the open public session to be back here at 16 noon, the speakers who signed up for the open 17 session. Thank you. 18 (Luncheon recess.) DR. GARBER: We're about ready to 19 20 resume our deliberations, if I could ask everybody 21 to take their seats as quickly as possible. The 22 next agenda item will be the open public speakers. 23 We have five open public speakers, who will speak 24 for two minutes each, and then we will move on to 25 the resumed discussions of Question Number 1 and 00143 consideration of the remainder of the agenda, 1 2 panel deliberations and so on. So I would first 3 like to welcome Steve Grossman. 4 MR. GROSSMAN: Thank you. I appreciate

5 your distributing the short statement so I can 6 impart to you very quickly my comments. My 7 personal disclosure, I own drug stocks, both for 8 my client for this and other issues. I do have 9 drug and biotech clients. I have no particular 10 focus on off-label uses of cancer products. 11 Ultimate efforts to promote research 12 and development of drugs are diminished if 13 patients are not going to be able to access the 14 new therapies or if the level of medical evidence 15 supporting its particular use is not well-known. 16 Thus, being listed in the compendium matters. It 17 is a springboard to reimbursement as well as a 18 tool by which new and innovative therapies gain 19 acceptance.

20 We are asking MCAC to provide the

21 following directions to CMS. MCAC recommends that 22 the CMS work with patient groups, professional

association and compendium publishers to assure

24 Medicare beneficiaries with rare cancers have

25 coverage and access to innovative state-of-the-art

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1 care on a comparable basis to beneficiaries with 2 more common cancers. 3 In the statement you will see that our 4 position rests basically on three points. The 5 technology assessment highlighted the lag time and 6 in getting information out and that lag time is 7 magnified to rare cancers and alternative cancer 8 drugs. We're concerned that there is a heavy 9 reliance on random control trials, which we 10 appreciate is appropriate, but we want to make 11 sure that these more rare cases are not ignored 12 because they aren't based on RCTs. And finally, 13 the lack of transparency concerns us because if we 14 can't predict when and where the reviews will

15 occur, what standards we use or whether all evidence is considered, then we really can't 16 17 participate in the process and make sure that all 18 indications were considered. DR. GARBER: Thank you, Steve. 19 We 20 appreciate your comments and we distributed a copy of your handout to the panel members. Next is Ron 21 2.2 Walters. 23 DR. WALTERS: Thank you very much and 24 good afternoon. My name is Ronald Walters, and I 25 am a practicing oncologist in the department of 00145 1 breast (inaudible) at the UNC Cancer Center and 2 medical director for clinical operations. I have no conflicts of interest to disclose other than 3 4 (inaudible) 15 years. 5 I support the addition of the NCCN 6 compendium to the list of approved compendia for 7 off-label coverage for decisions regarding 8 chemotherapy. As you heard from Dr. McGivney this 9 morning, the NCCN compendium is cancer-specific, 10 expert-driven, evidence-based, timely and 11 transparent in both content and process. 12 I would like to specifically address 13 some of the issues I heard this morning about the 14 concerns remaining for type 1 error. I think that 15 is a legitimate concern, I agree that there needs 16 to be proper controls put in place for that. If 17 you've ever been involved in one of these 18 consensus opinion forming processes, believe me, 19 the conscientious nature and the purely 20 self-critical nature of people sets in very 21 quickly and type 1 error is extremely minimized. 22 There is also very little concern with type 2 errors. If I'm sitting in front of a 23 2.4 patient looking at the NCCN compendium and it's 25 not on there, I should be putting that person on a 00146 clinical trial if the NCCN is not proposing that 1 2 therapy. 3 I would also like to address the 4 silence issue brought up this morning. 5 Frequently, again, this is related to type 2 6 business, if the NCCN is silent on it, I probably 7 don't have any business considering it. 8 I'm very tempted by the possibility of 9 formal systematic reviews. Due to the sheer 10 number of diagnoses as well as the rapidly 11 changing environment that we are concerned about, 12 it is important to keep people fully informed. 13 Thank you very much again for the 14 opportunity. I would like to have you seriously 15 consider the addition of the NCCN compendium to 16 the two that are currently recognized. Thank you. 17 DR. GARBER: Thank you very much. Next

- 18 will be Jayson Slotnik.
- DR. SLOTNIK: Thank you very much, 19
- 20 Dr. Garber, members of the MCAC. My name is
- 21 Jayson Slotnik and I am director for Medicare
- reimbursement and economic policy at BIO. BIO 22
- 23 represents more than 1,100 biotech companies,
- 24 academic institutions, state-funded technology
- 25 centers and related organizations in the U.S.

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- 1 For full disclosure, I own no stock in any of the 2 compendia and unfortunately for me, am prohibited 3 from owning any biotechnology stocks.
- 4 (Laughter.)
- 5 As a representative of the industry
- 6 that is involved in the discovery of new
- 7 therapies, innovation and access, BIO understands 8 that the practice of medicine constantly evolves
- 9 through the incorporation of new clinical evidence
- 10 into the standard of care. It is imperative,
- 11 therefore, that CMS and its contractors insure
- 12 that coverage policies keep up with the pace of
- 13 innovation and clinical discoveries to allow
- 14 beneficiaries timely access to the most
- 15 appropriate treatment options in their battles 16 with these deadly diseases.
- 17 Because the statute clearly indicates
- 18
- the congressional intent for three compendia, we 19 urge the MCAC to at least recommend adding NCCN
- 20 and then to focus its efforts on identifying
- 21 additional compendia that Medicare carriers should
- 22 use in determining medically accepted indications.
- 23 BIO believes that existing and future
- 24 use of compendia should continue to represent the
- 25 versatile approaches of clinical information,

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1 accessibility and dissemination. However, each 2 compendium should create a transparent and 3 consistent application and review process for new 4 and revised listings such that stakeholders have a 5 clear understanding of how to submit requests for 6 new or revised listings. 7 Compendia, since they are at the 8 forefront of disseminating critical clinical 9 information, should be continued to allow to 10 employ the full range of validated sources 11 available to inform new listings, including both 12 prospective and observational data, data collected 13 by manufacturers and specialty societies, and data 14 on patient-reported outcomes such as quality of 15 life and patient functionality and patient 16 preferences as informed by patients and 17 physicians. 18 Given that treatment options for rare 19 disorders are very limited, the compendia should 20 consider looking at putting in place a provisional

21 system that addresses such circumstances
 22 surrounding access to the innovative and new
 23 indications for various disorders.
 24 DR. GARBER: Thank you, Jayson. Terri
 25 Deal.

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1 MS. DEAL: Good afternoon. Thank you 2 for this opportunity to speak with you today. For 3 disclosure, I am vice president in the area of 4 policy and compliance at BioMed Pharmaceuticals. 5 BioMed is a small biotechnology company located in 6 the Southern California/San Diego area with about 7 500 employees. BioMed basically does research 8 development and commercializes treatments for rare 9 cancers and many other diseases. We currently 10 have five products on the market dealing 11 specifically with rare cancers. 12 I am here today as an example of an 13 innovative small biotechnical firm in support of 14 the National Organization for Rare Diseases, in 15 support of the Biotechnology Industry 16 Organization, and in support of the California 17 Healthcare Institute's testimony this morning. As 18 a small company, BioMed is trying to balance 19 patient access with the need to fund our research 20 and balance our business. Our limited resources 21 are very similar to many other small companies in 22 Southern California and throughout the country. 23 I researched within our company what people thought about compendia, I went to our 24 25 medical safety liaisons, to our researchers, and

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1 tried to determine what people thought about the 2 compendia that are in use today. And what I 3 learned was that it is a black box, that what goes 4 into it, no one is that familiar with, and what 5 comes out of it, we're not sure. So I think the б need for transparency is extremely important. We 7 have very limited resources in small companies and 8 so the need for a transparent system or 9 transparent process is important. 10 I learned that when working with 11 published medically -- when we first published 12 medically relevant information from clinical 13 trials in rare diseases, including cancer, that 14 the time line between knowledge of medical 15 evidence and appropriate off-label use can be 16 greater than a year. This, you heard about this 17 morning from a number of the speakers about that 18 time line. 19 Well, think of yourself as a patient 20 with a rare disease. That time line is extremely 21 important and so we need to speed up the process a 22 little bit, and make sure when setting criteria 23 that you take a look at the particular situations

- 24 surrounding various disorders.
- 25 DR. GARBER: Thank you very much.

00151 Sorry to cut you off because we have such limited 1 2 time, but the final open public speaker is Jerome 3 Osheroff. DR. OSHEROFF: Greetings. I'm Jerry 4 5 Osheroff, the chief clinical informatics officer 6 at Micromedex, so that's my potential conflict of 7 interest. I just wanted to spend a very brief 8 moment expanding on some of the comments that 9 Laurie made trying to expand on the clarifications 10 of how the USP-DI and DRUGDEX actually fare when 11 compared to some of the things that were presented 12 from the EPCs. 13 First of all, we have an underlying, 14 for all of our content, we have an underlying 15 process, policy, technology and staff that are 16 consistent across all of these products. There's 17 an underlying path whereby we create the knowledge 18 and make recommendations that winds up in these 19 processes. Underpinning that is a very extensive 20 literature review process. We have over half a 21 dozen librarians on staff to develop, maintain and 22 execute a search, and those searches reflect a 23 very robust analysis of the medical literature and 24 include criteria of what pieces of that literature 25 we review and what winds up in the database. It

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isn't that all of a sudden when we look back and 1 when we didn't include them, why we didn't include 2 them. So many of the studies are in USP where we 3 4 did in fact look at them and we have reasons why we didn't include them in the database for one 5 6 reason or another. 7 We also try to organize the results of 8 those studies into what winds up being part of the 9 recommendations, particularly about off-label 10 utilization. So as Laurie mentioned, we look at the literature that has the greatest impact for 11 12 care and for decision-making, and prioritize that 13 for coverage. We actually have policies dealing 14 with the literature that we have and that we have 15 shared pieces of that with you today. 16 And then we take that information, include it in the DRUGDEX database and the other 17 18 databases as well, and as Laurie mentioned, in fact all of the 14 different drug combinations 19 20 that were discussed by the EPC are in fact in the 21 DRUGDEX product and they are also in the USP. So, 22 we do have these policies and we think if we 23 shared the data that is in those databases, you'd 2.4 see better how we decide what is to be published. 25 DR. GARBER: Thank you very much. Now

1 we move back to, if I can find my agenda here, let 2 me just explain to the audience that the panel 3 members have now received copies of the votes on Question 1 which will be guiding our further 4 5 deliberations, and what I thought we would do at 6 this point is finish up our Question Number 1 7 discussion and then we can pose questions to 8 presenters that will help us regarding our votes 9 on the remaining questions. Okay? So all the 10 panelists have copies of the voting sheets, and 11 these will be made available to everyone in the 12 audience, although I don't know if we can make 13 them available in real time for you. We're going 14 to try to find a way to put this up, though. 15 So, let me read off what the panelists 16 have been explained, the weighting scheme that was 17 used here. In the handout that was distributed 18 are three pages regarding Question 1. The first 19 list gives raw counts of how many people -- oh, 20 it's on the easel too -- raw counts on how many people voted desired, equivocal, and undesired for 21 22 each of the A through R characteristics. Now the 23 weight of desirability here is -- this is a 2.4 little -- actually, Steve, do you want to explain? 25 This one weights both the priorities and gives a

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1 numeric scale for desirability, and Steve can 2 explain that. 3 DR. PHURROUGH: For each, the 4 desirability, we provided a weighted score times 5 the priority that was assigned to it in the P score and then just added those together. 6 It's a 7 somewhat complicated formula, but again, for each of the three scores, we used the priority 8 9 weighting for that score, we assigned a weight of 10 two to the desirable, one to the middle one, 11 equivocal, and minus one to the undesirable, so 12 that's how we arrived at these numbers. And then again, we'll make these available in the minutes 13 14 and in the later publication. DR. GARBER: So, I'm sorry. There are 15 16 actually four pages on this handout and what it 17 consists of is scores on Question 1 for all 18 members as just described, then divided by, then 19 just voting members, and the other two are the 20 same things where they are ranked, they are reordered according to the weighted desirability. 21 22 So the last two pages are just different orderings 23 of the same information. 24 Now for the panelists, one of the 25 things that we need to decide is if there is some

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- 1 characteristics that we do not need to consider in
- 2 further deliberations, and there are a few ways

3 that you could go about thinking about this, but 4 if you think it really doesn't matter at all, then 5 probably we shouldn't include it in the further 6 deliberations. Now when it's undesirable, you will 7 8 have to make a decision to weigh the desirability 9 as a large negative number. You might want to 10 include it in peer review areas if the compendium 11 in question has that characteristic. Okay? So 12 one thing you might think about is low positive 13 scores where there is not a lot of people who said 14 it is desirable, but they said it was equivocal 15 desirability and of low priority, that's probably 16 the kind of thing that we really shouldn't be 17 considering further. So one question is, you may 18 just want to look at whether it's desirable and if 19 the distribution unweighted is desirable or 20 unequivocal and undesired. Mark, did you have a 21 question? 22 DR. FENDRICK: No. 23 DR. GARBER: Okay. 24 (Dr. Phurrough and Dr. Garber held discussion off the record.) 25 00156 1 DR. FENDRICK: I was wondering if you 2 wanted a practical suggestion regarding the 3 undesirability as to at least those most 4 undesirable, since that could change the opinion 5 as to a compendium with equivocal results. I б think what that's saying is that the panel, and 7 maybe this will open the discussion, they want a 8 statement of equivocal results stated as equivocal 9 results, and there is no bias in either one 10 direction or the other. You made a point saying, instead of keeping it in the negative, I think at 11 12 least for the two most undesirable characteristics 13 on the grid, you could make that a positive 14 statement. 15 DR. GARBER: That it's freedom from 16 bias? 17 DR. FENDRICK: It's a statement about 18 how the compendia validates the equivocal. 19 DR. GARBER: But, can you just tell me 20 what change in language you're suggesting? We 21 don't need to be wired to this particular order. 22 DR. FENDRICK: Correct. I think that 23 we should add a characteristic that basically says 24 how the compendium deals with validated evidence 25 that is equivocal, so there would be no bias when

- 1 validated evidence is equivocal.
- 2 DR. GARBER: Okay. So, is everybody
- 3 clear with what Mark is saying? Rather than have
- 4 a couple things looking at bias, just making it a
- 5 positive statement that you consider it desirable

6 that a compendium be free of a bias in the 7 situation where the evidence is equivocal. That's 8 the proposal on the table here. 9 DR. OMMAYA: Alan, in other words, eliminate H and I, but keep M; is that correct? 10 11 DR. GARBER: I think that's right, yes, 12 H and I, that's correct. 13 DR. PHURROUGH: Our recommendation was 14 that M is the statement that the other Mark was 15 looking for. 16 DR. GARBER: So eliminate H and I, and 17 keep M in. 18 MS. KUEBLER: I would like to make a 19 comment about H and I, because we need to consider 20 subpopulations where the data might not be 21 significant but important, and also, it may have 22 clinical significance, maybe not research 23 significance. 24 DR. GARBER: Well, I think what you're 25 talking about is how you interpret equivocal and I

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1 think that would be fair. I'm not sure which characteristic that might alter. Yes, Nancy? 2 MS. DAVENPORT-ENNIS: One of my 3 concerns that I think we need to consider is we 4 5 need to define equivocal if we indeed are going to 6 eliminate H and I and we're going to adopt M as a 7 standard. I think from a patient perspective, 8 because we acknowledge that compendia are used as a foundation for making many of the reimbursement 9 10 decisions around off-label, we don't want to adopt 11 M and then have a definition of equivocal that 12 within the construct of the compendia would 13 ultimately result in less reimbursements for those therapies that might be dinged or identified as 14 15 equivocal at a time when for that particular 16 disease or stage of disease, that perhaps would be 17 a better option than any other existing option 18 available for the patient. So there is a concern 19 here. 20 DR. GARBER: Well, I think you raise a 21 very important point. There's just one tactical issue, which is that we've had entire meetings 22 23 devoted to single topics for which there is a 24 lengthy debate about when it's equivocal and when

25 it is not. Though I think it's an important

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1 point, what I would suggest is as panelists vote 2 for what they think is right, I don't think we'll 3 be able to get down to a detailed discussion of 4 the general principle of when evidence is 5 equivocal. However, I do want to also add that 6 CMS's quidance document to MCAC discusses evidence 7 in detail, which gives a lot of discussion into 8 this very point about when is there adequate

9 evidence, when is it equivocal and so on, so I 10 think you might want to keep that document in 11 mind, and that is also available on the web and I 12 hope that you all had a chance to see that. Yes. 13 DR. CUMMINS: I just want to point out 14 that if we're eliminating H and I and keeping M, 15 we have to make a decision about L, because it 16 says silence, when the validated evidence is 17 equivocal. So if we're saying that we want it to 18 be explicit, then we would have to reject the 19 silence. 20 DR. GARBER: Yes, that's absolutely 21 right, and I don't know how people voted, but 22 hopefully that's reflected in your votes before. 23 Now I just want to also point out 24 another procedural thing. What was not 25 distributed to you but I do have in front of me is 00160 1 the scores by category using the priority weights 2 for desired and undesired. Unfortunately we don't have copies distributed for that, but we can give 3 4 you those scores and, you know, the discussion of 5 H and I, and K and L actually fit very well with 6 the course that we've established too, because 7 these were the ones where we had more than ten 8 points in the undesired category for those four items. That's H, I, K and L. So let me just ask 9

10 if we can take a formal vote. I take it, Mark, is 11 that a formal motion, that we strike --12 DR. FENDRICK: If you want it to be,

13 yes.

14 DR. GARBER: So it would be strike H

- 15 and I, and keep M as one of the criteria.
- 16 DR. FENDRICK: And L.
- 17 DR. GARBER: Right, strike, H, I and L, 18 and keep M.
- 19 DR. PHURROUGH: Can I make one other
- 20 addendum to that, because I think Nancy made an
- 21 important point and at least clearly outlined it,
- 22 but I think it would be highly desirable for
- 23 compendia to clearly, in its process or methods
- 24 statement, clearly identify how it, clearly
- 25 describe how it identifies equivocal, so that

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1 there is a clear definition in the compendia as to 2 how we categorize something as equivocal. Wasn't 3 that your point? 4 MS. DAVENPORT-ENNIS: I think that is 5 the real point because with that, we do need to 6 provide to the payers of the country a very clear 7 indication of our process, and I think a broader 8 opportunity for acceptance and reimbursement on 9 behalf of the patients. I would never want to see 10 compendia that from the patient's perspective, I 11 do believe if we could bring them all into this

12 room today, they would all say make it a living 13 document, make it relevant to my disease today and 14 tomorrow, and do not initiate a set of standards 15 that will not allow flexibility moving forward in 16 the reimbursement process. And I do think that 17 the issue of equivocal is a foundational piece of 18 that discussion, and Steve, I do agree with what 19 you recommended. 20 DR. GARBER: Okay. So, there's been a 21 motion and I see a second. All in favor of making 22 the suggested change, striking H, I and L, and 23 definitely keeping M? 24 (Unanimous response.) 25 DR. GARBER: Opposed?

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1 (No response.) 2 DR. GARBER: Okay. Now, I'm trying to 3 amend my copy of the questions. So let me quickly 4 go through the ones that got very high scores 5 overall, and there was a huge amount of 6 consistency between the numbers you have in front 7 of you across voting and nonvoting members, and the ones where we assigned priority scores in the 8 9 distribution, and pretty much A through E, or A 10 through F all got very high scores by either 11 measure. Does anybody have a problem with saying we definitely keep those as criteria? 12 13 (Negative response.) 14 DR. GARBER: Okay. Now as you see, 15 there is a drop for G, and there are three people 16 who actually gave G undesired. Let me just tell 17 you about the distribution here in terms of 18 weighted priority scores. So this would be the 19 three if you said it was high priority, two if it 20 was in between priority, and -- I'm sorry. Three 21 high, two if it was not very important, and one if 22 it didn't matter at all. And for G, there were 72 23 points for desired, 14 equivocal, and 8 for 24 undesired, so it appears that the people who gave 25 it undesired also tended not to give it a very

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1 high priority weight. So by votes ranking, this 2 one also comes out as being fairly high. Is there 3 a problem with keeping G in? And the people who 4 said it was undesirable maybe should let us know 5 if they think it's important that it not be used, б or counted as a negative. 7 And let me make sure we are all on the 8 same page as to what this means. I think it means 9 that when there is appropriate evidence and it 10 shows that it doesn't work or is harmful, that 11 there would be an explicit nonrecommended listing. 12 Is that everyone's understanding of this one? 13 Okay. Is there anyone that feels strongly this 14 should not be a criteria by which to judge a

15 compendia? 16 (Negative response.) 17 DR. GARBER: So that will be included 18 as a characteristic. Yes. 19 DR. WHITTEN: When we finished A 20 through E, I know there was consensus on that, but 21 I just wanted to make a comment. First of all, 2.2 the extensive breadth of the listing, we talked as 23 we went through it that that's clearly a good 24 desirable characteristic of a compendium. But 25 just to be sure there's no misunderstanding, if a 00164 1 single compendium met all the criteria and was 2 very narrow in its breadth, let's just say for argument's sake that it dealt only with rare 3 4 diseases, we didn't vote that in the negative. 5 But I wouldn't want to see it conveyed somehow 6 that because the compendium did not have extensive 7 breadth, it might not still be valuable for 8 treatment. It's a positive criteria, but I'm not 9 sure there should be any inference that these 10 would be a negative criteria in the reverse. 11 Thank you. DR. GARBER: I thank you for making 12 13 that point. Let me ask about this. This is one 14 of the tricky things about this, because in the 15 end we're asked to make decisions in Questions 16 Number 7 and 8 that have to do with how many 17 compendia do we need, and presumably your answer 18 to that will depend upon how comprehensive you 19 believe each compendium is. So if we have 20 compendia that focus only on small areas, you 21 might say we need a larger number of those and a 22 relatively small number of comprehensive 23 compendia. So, I'm not exactly sure what's the 2.4 best way to communicate that to CMS, so if people 25 feel that way, I think we should have a more

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extended discussion about that when we deal with 1 2 Questions 7 and 8. So, is there any disagreement, 3 though, with what Dick says, that it would be nice 4 to have more comprehensive compendia, but it's 5 still going to be very useful if it meets all the 6 other criteria we have now? 7 (Negative response.) 8 DR. GARBER: Okay. So now we move into 9 more contentious territory. We are eliminating H 10 and I, and J is explicit listing of appropriate 11 combinations of therapy. Now I want to go back to 12 my other list that has priorities. For all 13 numbers with J, most people thought it was 14 desirable, there were only two people who listed 15 it as undesirable, or, I'm sorry, I don't know if 16 it was two, one person who gave it a priority in 17 the middle, so there's not much objection to using 18 combinations. So, do people feel comfortable 19 keeping that question as a criterion? 20 (Affirmative responses.) 21 DR. GARBER: Any disagreement? Dick. 22 DR. WHITTEN: I suspect where people 23 may be uncomfortable, if the interpretation of 24 explicit listing implies that the drug can only be 25 used in the way that it's listed, then you

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1 probably have a lot more negative opinion. If the 2 explicit listing comes across as several of the 3 presenters gave information, then what they are 4 doing is providing the evidence on an explicit 5 basis, so those who want to use it can look at the explicit issues, and I expect we would get a much 6 7 more positive view of it. So I think a little bit 8 of it, again, is in the interpretation, but my 9 guess is the majority of the panel would be fairly 10 comfortable if it was explicit for what the 11 evidence showed but not explicit in terms of 12 limiting the use of a specific combination. 13 DR. GARBER: Maybe we should interpret 14 the question that way. Is everyone comfortable 15 with that? (Affirmative response.) 16 17 DR. GARBER: Okay. So we'll keep that in mind as we interpret the characteristics. 18 19 Nancy. 20 MS. DAVENPORT-ENNIS: Alan, just a very 21 quick comment as to a couple of the ones before 22 that, we are coming from the perspective that it 23 would have to be a comprehensive concept of how 24 we're going to look at explicit listings, because 25 we don't want to limit the off-label application 00167 1 in that particular area, so I agree with the 2 analysis that it does need to be comprehensive and 3 it does need to be not limiting. 4 DR. GARBER: Thank you. 5 MS. DAVENPORT-ENNIS: You're welcome. DR. GARBER: So, that takes care of J, 6 K, L and M. N, let me read that again, public 7 8 identification of the members of the 9 advisory/scientific review committee, everybody 10 felt that was desirable. It didn't get that -- or not everybody, but nobody thought it was 11 12 undesirable. The weighted score for N was 111 13 desired, 4 equivocal, and no undesired, and it 14 also got fairly high priority scores. So is there 15 any question putting that on? 16 (No response.) 17 DR. GARBER: Okay. 18 DR. KRIST: You skipped K. 19 DR. GARBER: Yeah, thank you. I 20 skipped K, explicit recommendations on sequential

21 use of a therapy or combination in relation to 22 other therapies, and K was divided both by the 23 priorities, 45 desired, 8 equivocal, and 13 24 undesired. And you see that the overall score was 25 20, so here there's some division between people 00168 1 who thought it was desirable and people who 2 thought it was undesirable, so maybe I could ask 3 someone who felt it was undesirable to express 4 themselves. Alex. 5 DR. KRIST: I was going to say, I would 6 be curious to see if we might reach more of a 7 consensus if we reconsidered K in the same context 8 that we considered J. DR. GARBER: We might even consider 9 10 folding those two together, because they have the 11 same reference to the explicit issue. So, is 12 everyone comfortable with that, we keep that 13 interpretation? 14 (Affirmative response.) 15 MS. DAVENPORT-ENNIS: One comment on 16 that, Alan. My concern in reaching the score that I did is the concern that we are now dealing in 17 18 step therapy applications for formularies, and so 19 that's a concern. When I look at explicit 20 recommendations on sequential use of a therapy or a combination in relation to others, you may 21 22 indeed have a patient that has an underlying 23 comorbidity that would preclude their ability to 24 be a logical candidate in this sequential use of a 25 therapy, there may be a piece of that therapy that 00169 1 may not be appropriate for them. I don't want us 2 to be so specific in what we're trying to do here 3 academically that the role of the treating 4 physician and the patient is completely lost as 5 we're trying to determine what the sequence of б therapy is, and therfore I scored that in the low 7 area. 8 DR. GARBER: Deborah. DR. SCHRAG: For related and similar 9 10 reasons, I also scored it low. I think 11 operationally it's just immensely complex and it's 12 not going to be helpful for making coverage 13 decisions to try to figure out what line of 14 therapy, this is approved second line therapy, 15 third line therapy. Simply defining second line 16 therapy is extraordinarily difficult, is it really 17 adjuvant, how do you call it second line, they 18 couldn't get this agent so it's not really second 19 line, et cetera. I think it's really creating an 20 unnecessary mess and that's why I scored it low 21 for CMS. 22 DR. GARBER: Well, a lot of how you 23 interpret this is going to determine how CMS uses

24 it to make coverage decisions. And also, these 25 may not be made at the national level, these may

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1 be local carrier decisions as well. But if this 2 is interpreted that if it's in there, in a 3 compendium that's on the list, it's covered, and 4 it's a little bit hard to imagine a compendium 5 that would say this particular sequence absolutely 6 does not work and should not be used, and treating 7 physicians would want to use it anyway. That's 8 the only way in which I think this would make it 9 hard to get coverage by explicitly discussing the 10 sequence or a combination. 11 DR. PHURROUGH: I think the thinking 12 was sort of the positive side, if you get it into 13 the compendia, the likelihood of coverage is 14 pretty good. So the more you're able to say this 15 particular drug has adjuvant, second line, first 16 line, whatever the particular terminology 17 indications, versus just saying the only, a more 18 narrow or broad discussion, I think the more 19 information that is in there about the ways it can 20 be used is a positive way, because then you get 21 better guidance and direction. DR. SCHRAG: Okay, it's an 22 23 interpretation? 24 DR. PHURROUGH: The goal is, whether 25 this says that or not, the goal is that if there 00171 1 is information on the sequential use, where the 2 drug fits into the time line of the cancer, then it ought to be there, and it's helpful for it to 3 4 be there. MS. DAVENPORT-ENNIS: A point of 5 6 clarity. Is this sequential use currently 7 identified in a number of the compendia that we 8 have evaluated? 9 DR. PHURROUGH: It is not an uncommon 10 finding to see where they talk about it in various 11 stages of use. 12 MS. DAVENPORT-ENNIS: So when you 13 affirm that process and cast it in a positive 14 light, certainly it's a benefit. 15 DR. GARBER: Alex. 16 DR. OMMAYA: I don't want to belabor 17 the point but when I first read the question I was 18 concerned. It might be useful from a clinical 19 information perspective but not so much from a 20 coverage perspective, and that's why I rated it 21 low, but given the clarification, I think it's 22 fine. 23 DR. JANJAN: One other issue. As a 2.4 radiation oncologist, I reference these regularly 25 in terms of, say, preoperative chemoradiation. Do

1 the compendia include that, or are we restricting 2 sequence only to a chemotherapeutic sequence? So 3 I was also very confused about this thinking that 4 the coverage might be limited depending on somehow 5 you define sequencing of therapy. So it was just, 6 it brings confusion and if we clarify it in the 7 broad sense I'm more comfortable with it, but 8 unless that broad umbrella of therapy is 9 considered, then I have some confusion about it. 10 DR. PHURROUGH: Part of the problem I 11 think is that, is your view of the use of the 12 compendium. If a clinician is using a compendia, 13 and I think someone made this comment, they in 14 fact may be more interested in what's the clear 15 evidence for the use in this particular setting of 16 this particular drug but you may want more 17 explicit and more, it may be looked at in a more 18 negative light. In the coverage arena, compendia 19 in almost all instances is a positive guide. It 20 says you don't have to go to a medical literature 21 contractor, just look in this book just like you 22 look at the PDR or FDA labeling and if it's in 23 either one of them, you're going to pay for it. 2.4 There's obviously a bit more discretion than that, 25 but in general, if it's there, we're going to pay

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1 for it. So the compendia from a coverage 2 viewpoint is, should be looked at as a positive 3 thing, and I think that's perhaps not necessarily 4 the view that is always looked at outside the 5 coverage arena. DR. BERGTHOLD: Alan, I read this as, I 6 7 looked at the word appropriate, and I assumed that 8 you would explicitly list these things in J and K 9 when there was pretty definitive evidence that the 10 stuff was appropriate. And there are gold 11 standards out there, there are lots of standards 12 for what do you use for asthma for example, and 13 there are sequential therapies that are pretty 14 well accepted in the medical community. So I looked at it as if it's accepted within the 15 16 medical community, the gold standard, that the 17 evidence is appropriate for these kinds of 18 sequences, therefore it should be explicitly 19 describes. Would it help if we added some kind of 20 language around the quality of evidence that 21 supports these sequences? 22 DR. GARBER: Well, I think, if we go 23 back to criteria D and E about having a published 24 criteria and process, and I'm assuming that 25 applies to sequences and combinations, so that

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- 1 would presumably be the idea, that they would
- 2 apply the same standards across the board. Okay.

3 So as I heard the comments, people are comfortable 4 with the revised language, and we combine those 5 two into one, and when we get into Question 6, 6 then we will be just rating a combined J and K. 7 Everyone okay with that? 8 (Affirmative response.) DR. GARBER: Then we turn to, I think 9 10 we are on O now. O is public notification of 11 revewers' and committee members' conflicts of 12 interest, including institutional funding sources. 13 I actually have a question about this, and I 14 didn't get to vote. O and P are both about 15 disclosure of conflict of interest, and there are 16 a number of aspects about conflict of interest 17 disclosure, and one of them is if it's disclosed 18 in the editorial process, is there a formal 19 requirement for recusal? So for example if you're 20 a stockholder and you're on a committee for any 21 one of these compendia considering the use of a 22 drug that's produced by a company you consult for 23 or hold stock in, are you required to recuse 24 yourself? 25 And that doesn't appear explicitly

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1 here, but we might want to think about just having 2 explicit processes for disclosure and appropriate 3 recusal to insure that the recommendations are 4 perceived as being free of financial bias. Would 5 that sound -- first of all, I want to ask if that 6 is the attempt of these questions and secondly, if 7 that agrees with the direction of the panel. 8 DR. PHURROUGH: That is part of the 9 intent, yes. The intent in general was to insure 10 that the public, the users of the compendia were aware of any potential biases that may be present 11 12 in the compendia at large and in the specific 13 reviewers, and that there was a process in place to insure that only the least biased people 14 15 possible were being used. 16 MS. GLENNON: Does that mean that if it's only an internal review and not an external 17 18 consultant review, that those staff members make 19 public their conflicts for an internal report? DR. GARBER: Yeah, I think that would 20 21 be the intent. 22 MS. GLENNON: For all, internal and 23 external? 24 DR. GARBER: Right. If they are going 25 to have some influence on the recommenation that a 00176

particular therapy is indicated, that their 1

- 2 financial conflicts should not have influenced the
- 3 decision, it doesn't necessarily mean that you
- 4 can't participate in the process at all if you
- 5 have a direct interest in the product being

6 discussed, but you are not involved in making the 7 recommendations, and that's the intent I think, of 8 virtually all conflict of interest regulations and 9 disclosure requirements. Norm. 10 DR. KATO: One thing I just thought of 11 is, there may be some difficulty with this idea of 12 disclosure of parent and sibling organizations, 13 particularly when one organization may have a 14 parent organization that's a multinational 15 corporation here, or let's say the NCCN which has 16 20 different academic institutions as part of 17 that, would that those academic institutions be 18 required to disclose their funding sources. 19 DR. GARBER: That's one of the reasons 20 I suggested rephrasing the question. I should 21 have known this, and I probably knew it, but I 22 didn't realize until NCCN's presentation, and 23 Stanford University is a member. Obviously there 24 are some limits. I don't think most of us as 25 individuals directly in oncology or something have

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a financial interest in NCCN, so it has to be some 1 kind of reasonable standard, and there are plenty 2 of precedence for this. I personally believe that 3 4 knowing all your institution's conflicts, if 5 you're in a large institution, is not even feasible, but I think the intent here is if you 6 7 have a direct financial conflict. Alex. 8 DR. OMMAYA: Alan, you're talking about 9 adding, that there are policies and procedures in 10 place to manage identifiable conflicts of 11 interest; is that correct? 12 DR. GARBER: Right, and that they use 13 some standards that are broadly accepted. DR. CUMMINS: Are we combining those 14 15 into one? 16 DR. GARBER: Yes, with this rephrased 17 language. 18 (Inaudible colloquy.) 19 DR. GARBER: My original comments were 20 only as to O and P, but it could be, if you want to eliminate N to, I believe that that's going to 21 22 be the major hurdle that any compendium needs to 23 get over. 2.4 DR. PHURROUGH: That's not a good 25 reason to eliminate it.

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1 DR. FENDRICK: So concerning O and P, 2 talking about revising it, so I'm just crystal 3 clear and concrete, are we saying that on each 4 topic that the compendium reviews, that we want 5 them to list the biases of everyone involved on 6 that topic, or what I saw more in the technology 7 assessment was a compendium listing what their 8 process is for recusing people so that they limit

9 and prevent bias? 10 DR. GARBER: If the process is well 11 described and explicit in detail, there is no 12 necessity to individually reach the valuation. Ιf 13 it's vague, then there is a real problem, because 14 then you should say it doesn't meet this 15 criterion. 16 MS. DAVENPORT-ENNIS: Just for further 17 clarification, as I look at N, O and P, currently 18 we're calling for public identification and public 19 notification. Your recommendation is that there 20 be another step to the process that would 21 essentially identify an appropriate action to be 22 initiated or taken once the disclosure is made and 23 there could be bias from the institution after the 24 disclosure based on the disclosure; is that 25 correct? Because my concern is, it feels like

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we're leaning a bit towards some form of formal 1 2 regulation so that we can't just notify and inform 3 what those potential conflicts of interest may be, 4 but now we're going to recommend as an MCAC that 5 there is an additional step to that. 6 DR. GARBER: For many processes, and it 7 is consistent among organizations that if your are 8 making the recommendations, some of the 9 evaluations about a drug, for instance, if you 10 have a direct financial stake, you are considered 11 to have a bias and therefore the recommendation 12 will not be taken with the same weight. And this 13 is true, even if disclosed, that may not be 14 adequate, especially if it's blanket for this 15 whole compendium. So normally that would require 16 recusal. And if the compendium specifies the conditions under which recusal is required, that 17 18 would meet the criterion. But to say for example 19 in this compendium that these people have all 20 these conflicts with these companies without some 21 sort of recusal process, for someone concerned 22 about having unbiased recommendations, that won't 23 be adequate. I wouldn't call it regulatory, that's fairly standard for this kind of activity 24 25 for dealing with conflicts.

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1 MS. DAVENPORT-ENNIS: Thank you for the 2 clarification. 3 DR. GARBER: Sure thing. So, are 4 people comfortable with leaving in N, O and P, but 5 in a combined way as described? 6 (Affirmative responses.) 7 DR. GARBER: Now Q and R had weighted 8 overall scores of 50 and 45. One person, two 9 people thought Q was undesired, and Q is net 10 benefit analysis based on potential harm and 11 potential benefit, in other words, describing

12 whether overall this therapy is considered 13 beneficial. Yes, Deborah. DR. SCHRAG: I just have a small motion 14 15 which is, this is with respect to clinical issues, 16 not economic issues; is that correct? 17 DR. GARBER: That's correct. 18 DR. SCHRAG: So my small suggestion 19 would be to add the word net clinical benefit, 20 because this is focused on reimbursement issues, 21 and one of the speakers was addressing 22 specifically the cost issues. 23 DR. GARBER: Okay. Any objection to 24 that? Dick. 25 DR. WHITTEN: Mr. Chairman, not an

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objection, I agree with the principle. 1 2 Mr. Silberman spoke to the issue, and it seems to 3 me that you're in a position to make a 4 recommendation to the agency at several different 5 levels, one of which is the specific criteria for 6 a compendium, and that may well be for the 7 clinical benefit. What I heard Mr. Silberman 8 speaking to was maybe asking CMS also to think at 9 this time about trying to begin to initiate the 10 process of facilitating and encouraging financial 11 data that will enable these issues to be looked at 12 over time, not from the point of view of the 13 compendium itself, but from the point of view of 14 allowing researchers over time to raise some of 15 these cost-benefit issues. I think they are two 16 different issues and I think it might be very 17 appropriate for the committee to look at the 18 recommendation of CMS, what it might do to 19 facilitate the collection, preparation, use of, and long-term analysis of cost data on these 20 21 things that Mr. Silberman addressed. 22 DR. GARBER: Well, I think that the 23 purpose of today's meeting is really about using 24 the compendia for off-label uses of cancer drugs, 25 and knowing that it will be used in a particular

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1 way as specified by statute. As I understand 2 Mr. Silberman's point, not that we're trying to 3 reinterpret the law here, but that it might be 4 good to send a message that it would be good for 5 the compendia to provide this information, б independent of dealing with this task at hand 7 which relates to coverage. So I think it would be 8 perfectly appropriate for the panel to say it 9 would be a nice thing for the compendia to 10 include, and I think the compendia have probably 11 given that some thought on their own anyway and 12 maybe they have decided to do it, maybe they 13 decided not to, maybe they decided the time is not 14 right. But to answer our set of questions today,

15 we really, I believe, we're not, in coming to our 16 answers on those questions, bringing in cost 17 issues in those contexts, because they aren't 18 relevant. Would that, is that what you need from 19 us? 20 DR. PHURROUGH: That's fine. 21 DR. GARBER: Okay. Just for the 2.2 record, Steve said that's fine. 23 So, are people comfortable with this 24 notion of adding the adjective clinical before 25 benefits? 00183 1 DR. SCHRAG: Just for purposes of 2 clarification, it's for purposes of clarifying 3 that. DR. GARBER: Okay, so it's for the 4 5 purpose of understanding. Okay. So, are people 6 in favor of keeping Q in, that it is desirable to 7 have some description of that benefit? 8 (Affirmative response.) 9 DR. GARBER: Okay. R is explicit stratification of the risk of available therapies. 10 Now this one, let me describe the weighting as 11 12 being tepidly in favor on this one. The weighted 13 number was 27 desired, 28 equivocal, and 1 14 undesired, so the person who thought it was not 15 desired also didn't think it was high priority. Ι 16 think this statement means comparison of what's 17 known here and what's less typical. 18 MS. GLENNON: I have a question. Does 19 that mean in like some of the examples that we had 20 on toxicity, or does this mean just a general 21 summary? 22 DR. KRIST: I was going to add to that, 23 because I had a tepid response for sort of the same reason, because if I'm thinking of putting it 2.4 25 into the context of the risk and benefits, it 00184 seems similar to Ouestion O to me, and so I was 1 envisioning something different, I was thinking of 2 3 listing of the side effects. And quite honestly, 4 I don't think the compendia has to list the 5 packing insert of all the side effects. I would 6 be more in favor of wrapping R into Q, because 7 it's the same concept and that to me is what's 8 more important for a compendium. 9 DR. GARBER: Alex. 10 DR. OMMAYA: In the EU, you are 11 required to weight essentially a level of risk for 12 harm, including the label, and that was seen as a 13 potential improvement for labeling, but it's not 14 yet here in the U.S. I think you're absolutely 15 right that we're covering this topic in another 16 area, but I think that was the focus of this 17 question.

DR. GARBER: While ever mindful of the 18 19 mechanics of getting through so many, I have to 20 say that I am favorably disposed to rolling R into 21 Q so if the panel is amenable to that, that's what 22 we will do. 23 (Affirmative response.) 24 DR. GARBER: Okay, great. We have 25 finished the beginning of the agenda, Question 1. 00185 1 DR. BERGTHOLD: Are you going to 2 summarize or are we going to renumber these 3 things? 4 DR. GARBER: Well, when we do Number 6, 5 Number 6 has a rating for R scores for each compendium. The characteristics that we decided 6 7 to eliminate, you won't have to rate when we get 8 there, okay? So this might be a good time to make 9 sure that I have these down correctly, or that 10 Michelle and I are in agreement. We eliminated H 11 and I. We eliminated L, kept M. And we kept N, 12 we replaced O and P with having a formal and 13 rigorous process for dealing with conflicts of 14 interest, and we folded R into Q, so we basically 15 eliminated R. 16 DR. CUMMINS: And we combined J and K. 17 DR. GARBER: Right, so what I think we should do is cross off K. Mark? 18 19 DR. FENDRICK: You may want to kill me 20 now, but I think it's worth mentioning here with 21 all this talk about equivocal evidence, it brought 22 me back to some discussions at the task force, 23 which is, we really don't have, as the NCCN presentation mentioned, one is specifically 24 25 conflicting, not equivocal data but actual data 00186 1 where one trial says yes and one trial says no, 2 and then the task force has to say where the data 3 is. So if we don't conclude they are equivocal, but there's also when they are conflicting and 4 5 there is also a statement you might be able to 6 make when you're just not sure, which is different 7 in my opinion than equivocal. 8 DR. GARBER: What I would suggest is 9 that when, even though technically you're correct, 10 I think people should understand that when they 11 evaluate equivocal. 12 DR. FENDRICK: You made the point about 13 defining equivocal, and I just want to make sure 14 we put on the record that we want to at least have 15 an open discussion of what equivocal means, that 16 it's not the narrow academic view, that it's the 17 broader view. 18 DR. GARBER: Okay. Do you want a 19 discussion or just make the statement? DR. FENDRICK: Nancy, I think, stated 20

21 that it's prone to misinterpretation, that this is 22 one of these terms depending on which context, 23 equivocal may be used too narrowly, and I think if 24 we use that statement about equivocal, we should 25 basically say explicitly equivocal, conflicting or 00187 1 not sure, and that might be an easier way around 2 this. 3 DR. GARBER: Or nonexistent. 4 DR. FENDRICK: Whatever the term. 5 DR. GARBER: Okay. I want to make sure 6 that the panel agrees with interpretation as well. 7 (Affirmative response.) 8 DR. GARBER: Thank you. Now what we move into is, actually we are right on schedule 9 10 now, questions to presenters. So at this point, 11 now, before we start asking them questions, it 12 might be good to refresh your memories about what 13 the remaining questions are, so that your 14 questions to presenters are a target for these. 15 We're going to be asking about how 16 confident are you that AHFS and USP-DI compendia 17 have adequately stated evidence-based criteria and 18 processes. The third question is also, do they 19 adhere to those processes. And the fourth 20 question is, how confident are you about, the fourth and fifth questions are basically identical 21 22 but pertain to the other compendia. And then the 23 sixth question is going to be where we rate each 24 compendium for each of the characteristics that 25 remain in the fold. Okay?

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1 So now I would like to open the panel to ask questions of the presenters. I see that 2 3 the Duke and New England Medical Center presenters 4 are in the second row, available here, so any 5 questions for them? Alex? And by the way, other б presenters this morning are for the most part 7 available and you should feel free to call on them if you have questions for them. 8 DR. OMMAYA: I want to go back to the 9 10 question I raised earlier, which is if you could 11 give us your perspective on essentially good 12 points and bad points of various compendia that 13 you reviewed. DR. BALK: I'm Ethan Balk from Tufts. 14 15 I want to reiterate that because of the process 16 that we went through, that we did not review the 17 DRUGDEX, the full version of DRUGDEX, so my 18 comments are going to be limited to the other 19 compendia. The major differences, I think all of 20 these have been brought up by us and by the 21 different presenters. 22 I think the most obvious, the unique of 23 the compendia is NCCN, which was the only one that

24 was set up as a guideline with recommendations, it 25 was the only one set up, organized by cancer, by

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1 disease, as opposed to by agent, which all the 2 other ones were. It was the only one, at least 3 among the combinations that we looked at, that 4 consistently graded the level of their 5 recommendations. 6 However, it like all the compendia, did 7 not clearly meet any individual write-up, 8 individual sections, did not base their 9 recommendation or clarify how their 10 recommendations were based on the evidence. NCCD 11 did that indirectly with a statement about the 12 strength of the evidence, but there was nothing 13 that you could look to and say oh, I see there are 14 three studies that said this, two studies that 15 said that, there was no way to compare their 16 statements directly to the studies; even when 17 there were references made, it was an indirect 18 comparison. 19 USP-DI was the most complete in giving 2.0 citations, although again, the same issue, that for the most part at least in the combinations we 21 22 looked at, it was not clear exactly how those 23 citations really had an impact on the recommendation's statements. 24 25 Let me see what else I have here. And 00190 also, I think one of the important questions in 1 2 theory is how accurate each of the compendium are in terms of accuracy in any sense you want, but 3

4 unfortunately one of the limitations of our review 5 is we were not able to compare our systematic

6 reviews of the evidence directly to the compendia,

7 so I really can't make a comment as to which of

8 the compendia did better or made more accurate9 statements about whether a drug relation should be

- 10 indicated or not.
- 11 DR. GARBER: Amy, did you want to make 12 a comment.

13 DR. ABERNETHY: I just wanted to follow

14 up on that with several points. I need to make it

15 clear that I'm a medical oncologist so I am

16 offering a medical oncologist's thinking about

17 this. I also need to clarify for the committee

18 that while I don't have any financial

19 relationships except for the fact that Duke is an

20 NCCN center, and I do sit on a Duke panel, but

21 that panel does not have any reference to the NCCN 22 panel.

23 The important statement about the

24 differences between the various compendia and the

25 distinction between NCCN and USP-DI is very clear,

1 and our colleagues have already stated this 2 multiple times. It is important when talking 3 about NCCN and thinking about the different 4 compendia that you recognize the advantages of 5 NCCN and the evidence-based guidelines, and so 6 supposably NCCN does develop their guidelines in 7 an evidence-based format and do not always have 8 the ability to transfer that evidence base to 9 their compendia. They do review that, but they do 10 distinguish their evidence and do document their 11 guidelines, and that is directly related to their 12 compendium. 13 As we look through the other compendia, 14 because I think importantly when you look through 15 your decision making, you actually have , NCCN, 16 AHFS, USP-DI and the other ones currently 17 recommended listed in front of you, and you need 18 to look through all six as you think about it. 19 The AHFS is the one that was the most difficult 20 for us to find the combinations that we were 21 looking at. As a matter of fact, for those that 22 Duke looked at, we were not able to find those at 23 all listed within that compendium. So as a 2.4 compendium to help us in decision making, we were not able to use that compendium for that role. 25

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1 Similarly in Facts & Comparisons, when

2 looking at the referencing for that compendium, we
3 were unable to clearly document their use of

4 evidence and an evidence base that we would

5 normally consider for the EPC.

6 So we looked at USP-DI and that

7 compendium had the most citations. However, you will see within our evidence review report that 8 9 sometimes that was inconsistent, they may have had 10 the most number of citations, however, there was 11 an inconsistency both in timeliness of citations 12 as well as the appropriateness of citations such 13 that, for example, when we looked at Taxotere for 14 gastric versus esophageal, many of the esophageal 15 references were actually the gastric references, 16 and they weren't specified clearly that we were 17 looking at a different disease, particularly 18 within this drug disease combination, and so we 19 tried to clarify that within the report. 20 So as you walk through each compendium, 21 and I tried to do this very briefly, to come back and say that Amy Abernethy thinks A, B and C. I 22 23 think you can see that NCCN is different from the 24 other five, you can see that there are different 25 uses of citations and different numbers of

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1 citations and different use of the literature

2 across those five. And in addition, those six

have different volumes of evidence and indications 3 4 and indication combinations, so it goes back to 5 that issue of sometimes there are ones where they 6 are very narrow, such as AHFS, but it may be 7 important to have a distinction, and then there 8 are ones that are broader such as DRUGDEX where we 9 saw that for the most part, most of the 10 combinations we were looking at were represented. 11 So I think those are some of the differences 12 across the group, and I'm happy to answer any 13 questions as you think about that. 14 DR. GARBER: Dick ? 15 DR. WHITTEN: Just to follow up, let me 16 put it in a different way. One of the problems in 17 being able to access things is the currency, and neither of you addressed the currency issue or 18 19 availability, and since this is web based, I think 20 that availability and currency would be nice 21 issues to be addressed. 22 DR. ABERNETHY: At least within the 23 group that Duke looked at, NCCN tended to be the 24 most current, although it did have a fairly 25 restricted number of publications with NCCN as far

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1 as what was publicly available as far as their 2 guidelines on the web, and that was a very 3 important consideration. As we looked across the 4 drug combinations at issue, the currency tended to 5 change, both in terms of drugs and disease б combination, and we were not necessarily always 7 able to figure out why, and I wish we had some 8 insight as to why, but unfortunately I can't bring 9 that to you today. 10 DR. BALK: My only addition to that, it goes back a little bit to the difficulties we had 11 12 trying to assess how the recommendations really 13 connected with the evidence that was provided in 14 terms of the references. There was great 15 variation across compendia and also within 16 compendia across combinations of how current the 17 most recent citation was, but there was no clear 18 consistent pattern we could find that really made 19 clear to us that the recommendation is necessarily 20 based on older evidence versus more recent 21 evidence, so there was difficulty assessing that. 22 DR. GARBER: Cliff. 23 DR. GOODMAN: This question about the 24 inclusion threshold by strength of evidence across 25 the compendia, in other words, across the several

- compendia, which ones had the highest and lowest 1 2 thresholds for entry of a study or a claim? And
- the example I would give is which ones are more or 3
- 4 less likely to allow in their compendia, for
- 5
- example, a single abstract of a disease treatment,

6 which are less likely to include that, more or 7 less likely, so which among the compendia, which 8 have the highest and lowest thresholds for entry 9 by strength of evidence. 10 DR. GARBER: And Cliff's question is 11 predicated on the knowledge that we already heard 12 that you can't make an overall statement, but just 13 based on your sample, did you have an impression 14 about that? 15 DR. MCCRORY: Let me try to answer 16 that. (Inaudible) correlate what we actually 17 observed. One of the things that severely limited 18 us was the fact that AHFS-DI had so few 19 indications that (inaudible) threshold is fairly 20 high. We wanted to look at the quality of 21 evidence and they listed very few off-label 22 indications so we were unable to really analyze 23 it. We couldn't figure out whether they didn't 24 include it because they thought the evidence 25 didn't rise to the level that they needed or 00196 1 simply because they didn't have any evidence available and so they didn't look at it, and that 2 was the purpose of doing our empirical 3 4 investigation. 5 The Thomson Micromedex publications, 6 they identified a lot more indications in both 7 DRUGDEX and USP-DI, they tended to describe more 8 off-label indications. The evidence (inaudible) 9 somewhere in the middle, it was difficult to tell 10 precisely. DRUGDEX regularly allowed case reports 11 in certain situation, they listed case reports and 12 other lower levels of evidence that were cited 13 were Phase I, II, and some Phase III studies. DR. GOODMAN: So the phenomenon of 14 15 entry into compendia based on having been reported 16 at some meeting one time is an uncommon or common 17 occurrence? DR. MCCRORY: Well, the ASCO meetings 18 19 are very, I think a lot of generally very good 20 quality studies reported there. 21 DR. GOODMAN: They might be. 22 DR. MCCRORY: They might be, they might 23 not be, but I mean, they're not talking about a 2.4 lot of the prospective clinical trials, Phase I, 25 Phase II, and sometimes Phase III. 00197 1 DR. GARBER: Alex. 2 DR. KRIST: I actually have a question, 3 but I can mention one thing. I was just kind of 4 tabulating everything with the different compendia 5 and if you look at the number out of these 14 that

- 6 they recommend for inclusion, AHFS is two,
- 7 Clinical Pharmacology is eight, DRUGDEX is seven,
- 8 Facts & Comparisons is seven, and NCCN is nine but

9 four have kind of an unclear rating, and USP-DI is 10 eight. 11 And if you're looking at policy and 12 which ones you would combine, and the way the 13 current law goes, only at best, it would be two of 14 these 14 that are covered. If you go back to the 15 way it was before with AHFS and USP-DI covering, 16 there are eight. If you said that all of these 17 were covered, then 12 out of these 14 medications 18 would be covered. So it's straightforward there, 19 but very limited, because we only looked at 14 20 agents, for whatever that's worth. 21 I had a question because it seems, and 22 I don't quite understand the law exactly, but I 23 see in the assessment and the introduction 24 material, if I'm reading it right, that USP-DI, 25 the name of that is going to disappear and as 00198 written into the law, the next publication after 1 2 that from Thomson Micromedex would also be a 3 covered compendium. 4 And so I was curious, I had some questions for Miss Moore or Dr. Osheroff about 5 Thompson Micromedex. And one of the first ones I 6 7 had was, if you could give any insight as to what 8 the plan is going to be, is it going to be a completely new compendium under a new name or are 9 10 you going to be merging whatever you have in 11 USP-DI, or is it DRUGDEX and DRUGDEX will be the 12 compendium. That's sort of the first one. 13 And with two different compendia, I 14 would imagine if there are two different 15 publications, it's still going to based on the 16 same information that the two compendia would make 17 their conclusions, and maybe you can comment 18 whether that's true or not. 19 And then just as a final point, I just 20 want to make sure I understand things clearly. 21 What I heard Miss Moore mention was that the 22 DRUGDEX, that for the tech review they were 23 looking at Drug Points and not DRUGDEX, and so the 24 assessment can't necessarily say whether the 25 references are correct for DRUGDEX and in some 00199 1 cases the recommendations may not be the same.

want to clarify that's true, and then maybe Ethan

about the number of drugs that are listed in each

(inaudible) literature about efficacy, assign a

level of recommendation to that, and also grade

or Amy can clarify that after they do, maybe you

DR. OSHEROFF: I'll try to take those sequentially. A comment was made a second ago

compendium. When DRUGDEX lists a drug, we

the evidence. That doesn't mean that we're

can rebut what they say.

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12 recommending it for off-label use, but we're 13 accepting it and then through those three 14 parameters we are providing information that can 15 be used to decide if it's appropriate for patient 16 use, or coverage or whatever. So that's an 17 important clarification. 18 And as I said before and Laurie 19 mentioned, DRUGDEX in fact discusses all 14 of 20 those things and provides different levels of 21 recommendations and evidence ratings and efficacy. 22 DR. KRIST: Well, when I said the 23 number seven, it was based on you listed it and 24 said it wasn't indicated, or at least based on the 25 tech assessment, just looking through and counting 00200 up what it said. 1 2 DR. OSHEROFF: I think the tech 3 assessment was describing if they found it at all 4 in the compendia, and I think they said seven were 5 found in DRUGDEX, whereas in fact all 14 are found 6 in DRUGDEX. 7 DR. ABERNETHY: And gave some level of 8

8 indication information, inconclusive or whatever,9 and when I speak, I'll talk about that.

10 DR. OSHEROFF: So in the broad sense

11 about the issue of whether it's USP-DI information 12 or DRUGDEX, you're sort of talking about two 13 separate things, and I'll let Laurie go into more 14 of the details of where things are and where 15 they're going, but to reemphasize the point that I 16 made earlier in my comments, there is an 17 underlying knowledge management infrastructure 18 that Thomson Micromedex has that oversees all 19 development processes. So as of today the ongoing literature review and search, the policies that we 20 21 use to decide how we're going to survey data, 22 which data wind up in our repository, how that 23 information gets translated into the different 24 products, all of those policies, technologies, processes, the staff are the same across all of 25

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1 the Thomson Micromedex offers. Now today, there's 2 two slightly different drug products that result 3 from that, one is USP-DI and one is DRUGDEX. And 4 going forward, I'll let Laurie speak to the 5 specifics. б MS. MOORE: First of all, we are 7 working on a successor product for DRUGDEX, I 8 can't tell you its name yet because that's up to 9 the marketing people. As far as the process, it 10 will be similar to DRUGDEX because as Jerry 11 indicated, the same people will be writing that 12 content. The discussion of products will be more 13 abbreviated, similar to what you see in USP today 14 versus what you might see in DRUGDEX. We actually

15 survey information and we may sort of abstract out 16 some of the details from the studies that supports 17 that summary. On the USP side, more than likely 18 it will be more of a summary approach, the rating 19 system. 20 And in getting to the point about 21 including information, DRUGDEX is really meant to 2.2 be pretty inclusive, so the presence of an 23 observation or indication in DRUGDEX alone should 24 not be used to determine reimbursement, you need 25 to look at the context of that listing, the data 00202 1 associated with it, so that we may have case 2 reports in DRUGDEX just for informational purposes to meet the needs of our customer base for that 3 4 product. 5 For USP, we may elect to exclude some 6 of those case reports and esoteric stuff that 7 really isn't enough to support reimbursement of 8 the drug concerned. 9 DR. OSHEROFF: You had raised the 10 question about seven points and what was that exactly. Because of the nature of DRUGDEX and by 11 12 design, it is intended to be a very encyclopedic 13 formulary compendium, but it is also something 14 that is used by pharmacists and physicians at the 15 point of care. Drug Points is basically a 16 clinically oriented point of care extract of the 17 DRUGDEX, and that's what the folks at the Tufts 18 EPC had looked at. 19 So because of its point of care use, it 20 does not have the references there, it has only a 21 very synoptic statement about whether it's an 22 FDA-approved indication or off-label, so that's 23 why there were no citations there and why there 2.4 was no evidence or recommendation or efficacy 25 rating, all that stuff is in the linked 00203 information in the full DRUGDEX product. 1 MS. MOORE: It is just a subset of the 2 data that would be included in the others, it is 3 4 an entry point really into that product or 5 indication. 6 DR. GARBER: Thanks. We're running a 7 little bit short of time, so try to focus your 8 questions and responses. Deborah. 9 DR. SCHRAG: I wanted to pursue 10 Dr. Goodman's point about abstracts, and I know a 11 few folks struggled to answer that question, but 12 since you guys are up here, do you explicitly 13 consider meeting abstracts as part of your 14 definition? You said you rely on peer reviewed 15 published medical literature. Is that somehow, 16 and if it's in abstracts, is there an explicit

¹⁷ process for doubling back and taking a look at

18 whether the full publications appear within a 19 specified time frame and have there been any 20 changes. You know, something may appear at first 21 off-label and then it's pulled. 22 MS. MOORE: Part of our literature 23 evaluation or identification process, we do rely 2.4 heavily on MEDLINE searches and usual typical 25 sources. We also have our database and restricted 00204 1 information which includes abstract information 2 from meetings, you know, ASCO, AMO, other groups 3 that we do track. The way our process works, we 4 don't go back and update it like every year 5 looking at specific topics. Rather, we just follow the primary literature so if we see 6 7 something come out on a given indication, then 8 we're going to take a look at that and update our 9 database. 10 DR. OSHEROFF: The searches are 11 incredible. As I mentioned, we have an army of 12 librarians that run them, they're ISI evaluated 13 for inclusion into the databases, so it's not just a hit or miss procedure, so presumably if somebody 14 15 gets published in the peer reviewed literature, 16 they will pick that up as part of the day-to-day 17 surveillance. 18 MS. MOORE: Our numbers in this survey 19 are incredible. We actually reviewed the 20 citations and abstracts if they are available for 21 almost 98,000 citations last year. We ended up 22 ordering about 22 or 25,000 of those articles, of 23 which 95 percent ended up in our databases. So we look at a lot and pare it down. 24 25 DR. GARBER: Thank you. Deborah. 00205 1 DR. CUMMINS: I have a question 2 regarding access to your products, is it by 3 subscription? Can you tell me how that works and 4 how many people subscribe and how readily it's 5 available? DR. OSHEROFF: Well, most of the 6 7 customers for the products are health systems, 8 hospitals, organizations like that in North 9 America and actually around the world, but in 10 North America there are three or 400 health 11 systems, so it's a very high percentage, most of 12 the top hospitals, so there is a very deep 13 penetration into health systems. 14 DR. CUMMINS: I guess what I'm getting 15 at is, is the subscription cost burdensome to a 16 small practice, or would it take a large number of 17 people who might not have the resources? 18 MS. MOORE: It depends on the product 19 that you're talking about. DRUGDEX is more of the 20 premium priced product and you know, it may not be

21 affordable to a physician practice, versus USP-DI 22 is a more affordable option. 23 DR. CUMMINS: And I just want to react 24 to your 98,000. That's, we did 2,000 in the last year at ADA, so that's a monumental number. 25 00206 1 MS. MOORE: It is, and we're not 2 reading all of those, I want to make that clear, 3 but we're scanning that many. 4 DR. JANJAN: I have a question with 5 regard to that. Am I correct that you have ten 6 advisory board members and at any one time you 7 have four making a decision, with the chair being 8 the fifth, tie breaker I assume. MS. MOORE: Yes. 9 10 DR. JANJAN: So if you look at 25 11 percent of those 98,000, are you telling me that 12 your advisory board members look at those? 13 MS. MOORE: No, no, no. And out of 14 those that we scan, we pare it down to 22 to 15 25,000 of those total. Our internal staff reads those and analyzes them, and what goes out to our 16 board members is essentially a book. It contains 17 our detailed analyses, statistical design 18 19 analyses, our summary information, our sort of 20 abstract if you will of the data, as well as a copy of the primary literature and a number of 21 22 articles that they would review, which may range 23 from three or four to maybe eight or ten, 24 depending on what's available. Information that 25 we've gotten back from our board members is that 00207 1 it's pretty easy for them to look through all that 2 information and make a determination. Our 3 turnaround times are pretty fast from the board, 4 so once we do our analysis and get the information 5 out, they typically get it back to us within a б month or two. 7 DR. JANJAN: What are your criteria for 8 recusal? 9 MS. MOORE: Our conflict of interest 10 policy is three-tiered, we have looked at the 11 policy in the industry to develop this. For 12 involvement less than \$25,000, it's nondisclosure; 13 25 to \$100,000 will require disclosure; anything 14 over a hundred, regardless of the source, the 15 individual can't be on our boards. And for 16 assigning topics to board members, we do look at 17 those, every single time we look at those 18 potential conflicts and we do not assign a drug to 19 an individual who may have some type of stock or 20 financial interest in the company, and each of the 21 members are required to do periodic updates. 22 DR. GARBER: So let's say you have a 23 \$30,000 speakers bureau deal with some drug

24 company. Would you or would you not be a member 25 of the group that's deciding on a drug sponsored 00208 1 by that company, or indication, would you be 2 automatically excluded because you have this 3 conflict? 4 MS. MOORE: We would typically exclude, 5 but we leave the window open in case, there are 6 going to be situations where you have an 7 individual who possesses an identifiable skill set 8 that would be difficult to find, so we leave that 9 door open, but we have not taken advantage of 10 that. 11 DR. GARBER: Is there a way for a 12 reader of USP-DI or DRUGDEX to know on a 13 particular recommendation whether this situation 14 had arisen, that is that a person had a conflict 15 but because they had this specific expertise, they 16 were included in a decision process about whether 17 this off-label indication was appropriate? 18 MS. MOORE: We are not disclosing at the individual indication legal, so what we do 19 disclose with the board members on the web site is 20 their potential financial conflicts. However, an 21 22 individual who may have an interest in knowing who 23 reviewed a particular indication, we will provide that to them if they request it. 24 25 DR. GARBER: Dick.

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1 DR. WHITTEN: One of the questions the 2 panelists will be asked is, how confident are you that USP-DI adheres to evidence-based processes? 3 4 As I understand when you put up your slide on the 5 old versus the new process, you went from a 6 situation where you had a requirement for unanimous consent to, if I understand correctly, 7 8 what is now a panel of four, and basically you 9 need three of those four, or two plus the medical 10 officer, something of that nature, to make a decision. That seems like a fairly radical change 11 12 in the process, which I gather took place fairly 13 recently. And then if I understood correctly, you 14 said this process is going to move again to that 15 of DRUGDEX. So just from the point of view of 16 consistency of the process, what's the assurance 17 of closer to unanimous agreement that you used to 18 have, what kind of assurance can you provide? 19 MS. MOORE: The process that we have in 20 place now is the process that we intend to take 21 going forward for both DRUGDEX and for the USP-DI. 22 The requirement of four, we just felt that was a 23 reasonable number to take a look, and really we're 24 trying to let the literature drive what we 25 present. We truly are. As far as the true

1 evidence-based question, we're not doing a full 2 meta-analysis for each indication, it's just not 3 feasible for us to do so, and it is very time 4 consuming in doing that. 5 DR. OWEN: If we make a recommendation 6 whether or not something should be covered or 7 recommended for use, there's two pillars that 8 underpin it. One is the human expert and the 9 other is the weight of the evidence, and often 10 times neither are appropriate. So the USP-DI was 11 looking at the literature and then a whole bunch 12 of experts had to agree that it was something that 13 should be used. 14 What's happening in the processes now 15 and going forward is there's a much more stable 16 foundation of evidence analyses, so the grading of 17 these three things, the strength of the 18 recommendation, the use of the agent, the analysis 19 of the evidence according to a multilevel 20 hierarchy, yields a much stronger evidence 21 foundation. So, we were able to pull back some of 22 that whole bunch of people to read every proposed 23 indication, so hopefully that explains some of the evolution in the making of clinical 2.4 25 recommendations.

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DR. GARBER: I just want to point out 1 that we have, in addition to the two compendia 2 representatives, there are four additional 3 4 entities we will be voting on, and if you have 5 questions that you want to put to the people representing the other compendia, that's fine. 6 7 Nancy, do you have a question? MS. DAVENPORT-ENNIS: I have a question 8 for Dr. McGivney from the NCCN. We heard a fair 9 10 amount of discussion this afternoon concerning the 11 process of how evidence is being evaluated, and 12 earlier in your comments from the podium you 13 referenced your 46 guideline panels and the 14 disease-based analysis that you followed. Can you 15 talk with us just a bit about the evidentiary 16 process used by NCCN. 17 DR. MCGIVNEY: I would like to 18 reemphasize, one of the points is that we, our 19 expert panels number 15 and 22, and are mostly 20 interdisciplinary, and they are looking at the 21 continuum of care so they are looking at the vast 22 management options such as therapeutics, 23 et cetera. And you know, basically for each 24 decision, there really is a risk-benefit analysis, 25 and evaluation of net health benefit.

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1 Specifically with respect to evidence,

2 what happens is we typically schedule a formal

3 in-person panel meeting after ASCO, so that all 4 the latest data is available. Our staff collects 5 that data and additionally, the panel is asked to 6 submit specific articles for consideration. 7 Additionally beyond that, each institution 8 circulates the quideline, the existing quideline, 9 and asks for input beyond the experts that are 10 already on the panel. 11 So again, you know, you get input from 12 a radiation oncologist, a clinical oncologist, a 13 medical oncologist who don't sit on, say a breast 14 cancer panel, they feed it in. And all that 15 serves as a basis for the opening agenda, with 16 specific recommended changes attached, 17 specifically with evidence of new articles or new 18 abstracts that might suggest that the guidelines 19 be updated with regard to a specific 20 recommendation, something needs to be changed, 21 something needs to be highlighted, et cetera, so 22 it's a fairly continual literative process that 23 goes on. 24 One other point clearly that might be 25 considered an advantage for us is not all the 00213 1 time, but very often when our panels are sitting 2 there discussing, you know, the latest results of 3 what's coming out, very often we have principal 4 investigators on the national and international 5 scene sitting on our panels. So even before these б have been even submitted in abstract form, they 7 are aware of the results and it is certainly a 8 confidential forum that they have. 9 The other point too, our process is 10 open to provision of data and results and comments by outside groups, be they any of the 11 12 constituencies that should be interested in what 13 the recommendations of the NCCN guidelines or NCCN 14 compendium are. So as I indicated before, the 15 data and comments are submitted to the community 16 physicians, academic physicians outside of NCCN, 17 patient advocacy groups, industry, et cetera. So 18 it really is a broad-based process, an open 19 process in terms of reception, evaluation and 20 analysis of available data. 21 And then I think quite frankly, I do 22 think that the process that they came up with for 23 the exclusive exhibition of the underlying 24 evidence and the expert judgment and uniform 25 consensus that underlies each recommendation and

- 1 guideline is indeed a simple yet eloquent
- 2 communication of what the panel has done.
- 3 DR. CUMMINS: Your network of cancer
- 4 institutions is certainly a strength in this case
- 5 and this area, but could you say something about

6 your process of potential conflict of interests 7 and how you deal with that issue? 8 DR. MCGIVNEY: Specifically right now 9 for example, we publish it, so if you went on-line 10 for the 2006 version of NCCN guidelines, at the 11 end of the guidelines there is an explicit 12 exposition of the potential conflicts of interest, 13 the traditional ones we all talked about today, 14 the pharmaceutical or biotech companies, and Blue 15 Cross Blue Shield is one I just looked at. 16 Additionally when we publish them in our journal 17 as well, we do list aggregated companies and 18 others, and relationships that might represent a 19 conflict of interest, and these are published. 20 Before each meeting, just as you did 21 here today, the guideline panel sits there and 22 they go around and they communicate again and 23 update each other on what their potential 24 conflicts of interest are in terms of their 25 relationships are with pharmaceutical or biotech

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1 companies. These are all recorded and published 2 later, and it's just a communication as to whether he should recuse himself entirely from the meeting 3 4 or for discussions of particular issues. 5 And I would say that recusal is 6 extremely rare. Again, when you have a panel of 7 15 to 22 world leading authorities, they cannot be 8 shrinking violets, who tend to, again, represent 9 subspecialties very strongly, who tend to know the 10 data cold and they tend to argue extremely 11 vociferously about important points, eliminating 12 any bias is impossible, but certainly I think this 13 serves to diminish it to a great extent. But again, I think that any 14 15 organization involved in this, and we're looking 16 at it on an ongoing basis, we just had a 17 discussion about it at our last board meeting, and 18 we will submit this to our governance committee 19 for further review, as to what NCCN is presently 20 doing to communicate to any user of our 21 information products the potential for bias based 22 on the relationships our experts have with 23 companies out there. 2.4 DR. KRIST: How do you feel about the 25 bias of having the investigators involved in the 00216

- 1 study on your panel? I agree with that, but
- 2 having done some studies myself, investigators
- 3 tend to be wedded to their ideas. How do you deal 4 with that?
- 5 DR. MCGIVNEY: Yeah. Well, again, I
- think it's diminished by the, first of all, I 6
- 7 mean, evidence rules. Second of all, they are
- 8 diminished by the discussions these individuals

9 participate in. Believe me, as I say, individuals 10 who are familiar with specific studies are not shy 11 about criticizing either the methodology, the 12 power of the study, communication of results, 13 whatever. So it is an advantage that I think 14 outweighs the disadvantages, but I see your point. 15 DR. KRIST: You also said that for a 16 lot of these studies, the data is not out, so 17 there is only one person who has the information. 18 DR. MCGIVNEY: One or two, yeah, but 19 many of these studies do emanate from cooperative 20 groups, so there has been broader participation, 21 for example, in the design of the study, in the 22 prioritization of the study, et cetera, et cetera, 23 et cetera. 24 DR. KRIST: And how about the data? 25 DR. MCGIVNEY: They may or may not have

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the data, no, but that is certainly a valid point. 1 2 DR. GARBER: Bill, if I could just make 3 a comment, your answer is excellent and I think 4 that both you and the Thomson people have made 5 admirable efforts to insure the proceedings are 6 free of conflicts. But I do have to point out 7 that neither of you have developed your products, 8 or in your case quidelines, specifically to quide 9 coverage. And the standards that are typically 10 applied in coverage situations are a little bit 11 different from, say, guidelines situations where 12 for example, I was sitting on a Blue Cross Blue 13 Shield panel, and if I had some financial interest 14 in companies that were being discussed, disclosure 15 in that case is not sufficient, I have to recuse 16 myself from the entire scene. And similarly here, this particular 17 18 assessment that we're dealing with today is very 19 unusual for MCAC, this is not really about a 20 specific product, so the conflicts application 21 turns out to be a little trickier. So, do you 22 have any comment on how NCCN based on the compendium, how you would handle a conflict? 23 DR. MCGIVNEY: I think it would be at 24 25 the level they participate, but I think

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1 specifically we, as I just indicated, we are 2 looking at this issue. You know, in terms of 3 oncology, there is a very explicit individual 4 investigator-based disclosure at the end of every 5 article that we just talked about, in terms of 6 actual level of dollars received by the companies. 7 We are looking at how close to that we should get 8 right now and that's actually irregardless of 9 whether or not it will be taken to the compendium, 10 because obviously having run a national coverage 11 policy program, it's important to that, but I also 12 think every physician that's making a treatment 13 choice for his patient, I think it's extremely 14 important as well. 15 The other point I would like to make 16 too is interestingly, the guidelines clearly 17 direct the clinical professional disease based, 18 they cover the continuum of care specifically. So 19 actually, our drugs and biologics compendium was 20 developed specifically and directly to take those 21 guidelines and put them into a format that payers 22 used, be it the federal mandate or the mandate for 23 the 39 state laws. So actually that's why it's so 24 critical that there is this understanding. 25 And what we did was we went to the

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payers, and the feedback we got was, we used 1 2 guidelines, but if you could specifically 3 delineate appropriate uses so the evidentiary 4 standard right next to it with the recommended 5 uses, this would be a very useful and important 6 format for payers, and so that's why we did it and 7 that's why it's so important. And we always tie 8 that back to the guidelines and the discussion of 9 risk profiles and the discussions as I say, I 10 would call it therapeutic index, but you know, net 11 health benefits, et cetera, et cetera. 12 MS. KUEBLER: One comment. Is my 13 understanding correct that the NCCN does not 14 differentiate between the FDA and off-label? 15 DR. MCGIVNEY: Well, basically I guess 16 the answer to that is yes. Basically we 17 specifically list what the FDA-approved indication 18 is in the compendium right next to the NCCN 19 recommended uses, so someone could compare 20 directly what the FDA label is with what our 21 specific recommended uses are for a very specific 22 subpopulation of patients. The other comment I 23 would make as an editorial, because I'm writing 24 one right now, the issue to me is not off-label, 25 it's off evidence, on evidence or off evidence.

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1 But anyway, the answer to your specific question, 2 the FDA labeled indication word for word is listed 3 right next to the NCCN recommended use, so it can 4 be compared directly to each other. 5 DR. GARBER: Okay. This is the last б question, and then let me make a suggestion. I'11 7 let you ask your question, Alex, but we've kind of 8 gone over into the time that we need for the 9 voting questions. I want to ask if the presenters 10 will be available, because I think it may be 11 useful to ask them questions as we consider each 12 individual voting question, so, can the people who 13 are here representing the different compendia stay 14 longer? Okay, great. So Alex, your question, and 15 then we will move on to the voting questions. DR. OMMAYA: I just want to say I very 16 17 much appreciate the presentations by the various 18 compendia and find this very helpful, but just out 19 of fairness, if we could maybe get from the other 20 two compendia, Facts & Comparisons and Clinical 21 Pharmacology, what do you think are the unique 2.2 strengths of your publications? 23 DR. HOCHADEL: MaryAnne Hochadel. Т 24 think our unique attribute in a healthcare system 25 is actually the way we positioned our data around

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1 some fairly unique indexing and also in our 2 editorial process in terms of efficiency of the 3 updating process, and that has occurred just 4 really recently within the new system within the 5 last couple of years and in particular since I 6 have been editor-in-chief. 7 And what I mean by that is at any given 8 moment, a physician could come into our system, 9 for example, look for a disease state that they're 10 interested in treatment, get a list of drugs, they could see very clearly by our citations whether 11 12 that drug is used on label or off label. They 13 could seek more specific information, or they can 14 go into some advanced reporting features around 15 the standardized formatting and indexing to say 16 I've got an elderly patient with breast cancer who 17 has this attribute in terms of his disease or her 18 disease, what are some of the treatment options 19 considering those conditions and some of the 20 unique features of that patient that he may want 21 more information for. 22 So I think in the context of that

23 information, the way our database is set up, we 24 are really speaking to the fact of how do you want

25 your data to be used in the compendia and where

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would it be most useful in the healthcare setting. 1 I think that's one of our unique attributes. And 2 the other thing is our real-time editorial process 3 4 which allows us to benchmark content on the 5 backside in terms of date time stamping, which 6 piece of information was actually touched, how 7 long was it from point A, discovery of the need 8 for update, to actually available for our users in 9 the public. I think those are two very important 10 features. 11 DR. OMMAYA: Thank you. 12 MS. DIVVELA: Our strengths are that we 13 have been a standard in the drug information 14 industry since 1945. We have been the primary 15 reference for pharmacists. Our biggest strength 16 is our comparative information, individual drug 17 information that includes the off-label use along

18 with all other information you need regarding drug 19 information, but also class information. So you 20 can look at one drug in a class compared to 21 another drug in that class. 22 Also, our timeliness. We have always 23 updated monthly in our loose-leaf publication and 24 our on-line version we are moving to a continual 25 update. Our electronic Facts & Comparisons 4.0, 00223 1 you not only get the Drug Facts and Comparisons, 2 but access to our Off-Label Drug Facts and our 3 Cancer Chemotherapy Manual, so with one search you 4 can go to whatever resource best meets your needs. 5 DR. JANJAN: Do you correlate those 6 data among the three different products? How do 7 you make sure that a new piece of information goes 8 into all three products? 9 MS. DIVVELA: For Off-Label Drug Facts 10 and Drug Facts & Comparisons, what stimulates an 11 update in Drug Facts & Comparisons right now is a 12 change to labeling information and FDA action, 13 major warnings that come out, et cetera. And at that time the entire monograph is reviewed, 14 15 including the off-label use information, and 16 that's when our clinical editors do evaluate the 17 primary literature not only for labeled uses, but 18 they're also looking at how that information is 19 presented in off-label indications, which is the 20 one that has the rating scale of one to five, 21 that's how off-label drug information is rated. 22 And the fours and fives need more information or 23 aren't safe, and those aren't included in Drug 24 Facts & Comparisons, but the ones, twos and threes 25 typically are included in Drug Facts &

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1 Comparisons. 2 DR. JANJAN: Do I understand that it's 3 only an FDA change? 4 MS. DIVVELA: No, that's a main source 5 for updates to Drug Facts & Comparisons. We also, if changes, the Off-Label Drug Facts is updated on 6 7 a quarterly basis and when one, two or three get 8 added to that, our general policy is that the 9 off-label use will be added to Drug Facts & 10 Comparisons at that time as well. 11 DR. GARBER: Thank you. Let's move on 12 to the next agenda item. These are the voting 13 questions. Number 2. How confident are you that 14 the AHFS and USP-DI compendia have adequately 15 stated evidence-based criteria and processes? 16 Let me add that you should feel free to 17 call representatives of the compendia for questions, but also please be mindful of the time. 18 19 We could go into tomorrow if you want to get the 20 complete explanation for these compendia and

21 unfortunately that's not going to be feasible. So 22 please be very direct and pointed in your 23 questions and we'll try to move through these. 24 Cliff. 25 DR. GOODMAN: A question about how to 00225 1 interpret Number 2. You refer to adequately 2 stated evidence-based criteria and processes. Do 3 you mean that whether they are good evidence or 4 bad evidence or processes, they've explained them 5 very well, or does it mean they are solid 6 evidence-based criteria and processes? 7 DR. GARBER: Well, let me get my notes 8 that I had with staff. 9 (Inaudible colloquy.) 10 DR. GARBER: If you find that they 11 clearly talk about what they did, but you didn't 12 find that it was evidence-based, then you would 13 give it the low rating on Question 3, but Number 2 14 is only about, can you determine what process they 15 used based on the materials that are available. 16 DR. GOODMAN: So two is transparency, and three is the quality? 17 18 DR. PHURROUGH: But two is not a 19 transparent bad process. If they have a process 20 that is evidence based and a process that is used properly to arrive at a correct answer, so it's 21 22 not just that it's a transparent process but a 23 transparent good process. 24 DR. KRIST: And isn't three whether 25 they stick to their process to do what they say? 00226 1 DR. GARBER: Based on Steve's 2 interpretation, that's the only way it can work. 3 So Cliff, I quess Steve is telling us we shouldn't 4 interpret it the way I said. The second one is, 5 are they high quality and also explicit, and then 6 the third one is do they adhere. 7 DR. FENDRICK: And for two and three, are we going to be voting separately like in four 8 9 and five? I think the cards suggest that we're 10 going to be voting on each compendium separately. 11 DR. PHURROUGH: Yes. How confident are 12 you that independently each compendia have, not 13 combined. 14 DR. FENDRICK: Because they were both 15 under the original statute, it could have been 16 interpreted that they remained, but we're 17 evaluating each of them separately, okay. 18 DR. GARBER: So, are you ready to vote 19 or did you have further discussion or questions 20 concerning AHFS or USP-DI? Okay, so after you 21 give these ratings, one, two, three, four, five, 22 display them in the holder. 23 (Panelists displayed votes which were

24 recorded by staff.)
25 DR. GARBER: Just for clarification,

00227 1 but when you looked at USP-DI, you should answer 2 in terms of its current formulation, not your 3 guess about what the future will be but the 4 current USP-DI, what was the date of the report? DR. ABERNETHY: The date of the report, 5 6 the last evidence review was the end of January. 7 DR. GARBER: Okay. You can pass them 8 to the right. So Question 3 is again, just to 9 reiterate this one, it's about how confident are 10 you that they adhere to the stated process, and 11 that means good or bad, right, that's your 12 interpretation. 13 (Panelists displayed votes which were 14 recorded by staff.) 15 DR. GARBER: Okay, and pass them to the 16 right. Question 4 is four compendia -- I 17 apologize to the audience, you think you had 18 trouble reading the last one, this is really going to strain your eyes. Four is the confidence that 19 20 compendia other than AHFS and USP-DI have 21 adequately stated evidence-based criteria, with 22 separate ratings each for DRUGDEX, Facts & 23 Comparisons, NCCN and Clinical Pharmacology. And 24 I just want to add that you should feel free to 25 ask any of the speakers if you have questions 00228 1 before you vote. I'm not trying to rush this 2 through without you having adequate information. 3 (Panelists displayed votes which were 4 recorded by staff.) 5 DR. GARBER: Okay, you may pass them to the right. Now Question 5: Again, considering 6 7 each separately, this is analogous to Question 8 Number 3, how confident are you that they adhere 9 to the stated process in making their 10 recommendations? (Panelists displayed votes which were 11 12 recorded by staff.) 13 DR. GARBER: Has everyone displayed 14 their card? Okay. Please pass them to the right. 15 Now, I believe that copies of the 16 revised voting Question 6 have been distributed to 17 the audience, excluding the characteristics that 18 were not important enough to include in our 19 evaluation of the compendia. And for six now, 20 we're going to give a different score, well done, 21 uncertain, or not well done, for each 22 characteristic for each of the compendia. 23 DR. OMMAYA: Alan, could we go through 2.4 seven, eight and nine first? 25 DR. GARBER: How do the other panel

00229 1 members feel about Alex's suggestion? 2 (Affirmative response.) 3 DR. GARBER: I see some nods, so we 4 will do seven, eight and nine, and give the 5 panelists a chance to rest. Okay. Seven, do you 6 believe that the interests of the Medicare program 7 and its beneficiaries are best served by having a 8 particular number or type of available published 9 compendia on the off-label use of anti-cancer 10 drugs and biologicals for cancer treatment? 11 (Panelists displayed votes which were 12 recorded by staff.) 13 DR. OMMAYA: Can you define particular. 14 DR. GARBER: We will, but you should 15 have asked that before you voted. 16 DR. FENDRICK: I'm still okay. 17 DR. GARBER: So, do people want to 18 revote and have a discussion first about what this 19 means? If you have serious doubts what it means 20 you should discuss it rather than just vote. 21 Well, let's -- yes. MS. GLENNON: I would like you to 22 23 define type, because I would assume type has been 2.4 discussed, but I was thinking more numbers, that 25 we would have a minimum number and a maximum 00230 1 number, if that were the question. So we're 2 looking at number and whether they include all the criteria that we have deemed important already? 3 4 DR. GARBER: Well, Steve, eight clearly 5 is intended to follow on seven. Seven is intended to say if you answer yes, then there needs to be a 6 7 specific number. Now as we discussed before, if your issue is you think in aggregate that the 8 9 compendia need to be comprehensive and the number 10 is not so important, then probably you should 11 answer no to this one. If there is no specific 12 type, but there is a specific aim that needs to be 13 achieved, i.e., comprehensiveness, because if the 14 answer is yes to seven, then you need to answer 15 some numbers in eight. 16 DR. FENDRICK: What if one's allowable, then that statement doesn't hold, if there's a 17 18 singular comprehensive compendium, you could still 19 answer yes to that question. 20 DR. GARBER: It's not very helpful to 21 CMS to say that we need at least one. 22 DR. FENDRICK: The way the question is 23 written, a singular comprehensive compendium, you 24 would vote yes, the way the question is written. 25 DR. GARBER: So you could answer yes,

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1 and one on eight, that's true.

2 DR. FENDRICK: I would interpret a no

3 vote to Question 7 if you do not believe in any 4 compendium. That's what I read that question to 5 say, and if there are in any lawyers here, you 6 might help me out, but if you believe in one 7 compendium, then you should answer yes. 8 DR. PHURROUGH: Okay. Let me tell you what we thought we were saying, regardless of 9 10 what's written here in words. Should we 11 aggressively attempt to insure that the compendia 12 that are used to assess the use of anti-cancer 13 drugs are sufficient in scope, type and numbers so 14 that all of the characteristics that we are 15 concerned about are met? For instance, if there 16 is a rare orphan drug compendium that covers drugs 17 that aren't covered in the other compendia, is 18 that important? Or should we not go to that 19 extent in our attempt to be aggressive about 20 identifying a broad range of the compendia to 21 identify the separate classes. That was the goal 22 of that question. 23 DR. FENDRICK: So with all due respect, 24 if there were a singular perfect compendium, you 25 would vote yes to Question 7. So listening to 00232 1 what you said, so the chairman and I are 2 disagreeing then. What you said if you find one 3 you would vote yes, even if it's singular. 4 DR. PHURROUGH: We would then be 5 investigating to see, does this single compendium б answer all the questions. 7 DR. FENDRICK: And then we would vote 8 five for all the attributes that we just voted on, 9 or we will vote on for Question 6. 10 DR. PHURROUGH: Yes and one is an acceptable combination, I think, not a preferred 11 12 combination, but it's acceptable. 13 DR. KRIST: In addition to the cards 14 here, will we still have an opportunity to say 15 what we think? 16 DR. GARBER: I think that will be 17 helpful, very briefly, and we're going to role up 18 seven and eight. So give your reasons and state 19 both whether you think there needs to be a 20 specific minimum or maximum number, state what 21 they are. 22 DR. WHITTEN: It is exactly this 23 confusion that some of us have. I think the way 24 CMC should ask the question for what we're trying 25 to achieve, the number should be flexible to be 00233 able to obtain certain criteria. CMS should set 1

2 the criteria it wants to obtain, which is exactly 3 what Steve mentioned, to be able to cover the 4 breadth and the depth that's necessary. But if

5 one of them all of a sudden doesn't have an

6 ethical statement or something else, then the 7 number should be able to be flexible. So the idea 8 was, I think what needs to be done is to set the 9 criteria CMS wants to obtain over a period of 10 time, because what's happened in just the last 11 couple of years, this market is flexible, so 12 rather than set a set number, I was just wanting 13 certain criteria, and that's why I said no to the 14 specific type or number. 15 DR. BERGTHOLD: That's exactly, 16 independently of him, that's why I voted no, 17 because I think CMS should have the flexibility. 18 And I also think that the reason we have certain 19 compendia in the law, I think that makes it very 20 inflexible for CMS, and it's a product of industry 21 lobbying, so I would encourage the flexibility of 22 CMS. 23 MS. KUEBLER: I voted yes, that we 24 should have a particular number and type with a 25 minimum of two and a maximum of three.

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1 MS. DAVENPORT-ENNIS: I voted yes, and I certainly think that the minimum needs to be 2 what the statute of 1993 calls for. We currently 3 4 have two, I think our nation needs to have three 5 to satisfy the statutory recommendation. Are we 6 answering eight at the same time? 7 DR. GARBER: Yes. 8 MS. DAVENPORT-ENNIS: And I do think 9 that the word type for me, as an English major 10 reading that question, Mark, was a very important 11 element in the question, because I think your 12 point that we do need to lend the agency the 13 flexibility so that when new ideas are presented or concerns about the population, we need to have 14 15 a vehicle available for them to be included. 16 DR. FENDRICK: It's nice to sit next to 17 someone who speaks English. 18 (Laughter.) 19 DR. FENDRICK: I agree with what you said in that all the compendia have to be good, 20 21 and I would like at least two because one makes me 22 uncomfortable. 23 MS. GLENNON: I answered no because I 2.4 don't think there should be a set number, minimum 25 or maximum.

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1 DR. JANJAN: I answered yes, but in the 2 sense that we think, I think CMS needs to have a 3 certain number of criteria to compendia or for 4 compendia to evaluate. I'm not opposed to a 5 single compendium and as we look at homogeneity of 6 care to insure quality, it is very confusing to 7 physicians who have so many different choices. If 8 we're going to go for a single quality measure,

9 then it might be worthwhile to also have single criterion set up for use of these medications, 10 11 albeit by a very respected group that looks at 12 these in a very critical way. So I wouldn't be 13 opposed to one but I would prefer to have more 14 than one, and I think you need to have three for a 15 tie breaker. DR. OMMAYA: I answered yes, with two 16 17 as a minimum and four as a maximum. You also have 18 to have the ability to present published evidence 19 so that it allows use and flexibility. But you 20 need some quantification on them to get some 21 clarity among the processes and also agreement 22 among the payers. 23 DR. KATO: I voted yes because I 24 believe that there have to be some guidelines 25 someplace that identify which drugs can be used in 00236 1 what situations. I'm in favor of the market

2 allowing these compendia to compete. Therefore, I 3 like the idea of having three as a minimum, just 4 as a tie breaker, and I put down a maximum of five 5 plus, because I don't think we can identify and 6 regulate how many compendia there may be, and as 7 said before, there may be a need for orphan 8 compendia at some point for a small number of 9 drugs, but with data given in depth. So I would 10 say minimum of three and let the market handle the 11 rest. 12 DR. FOLEY: I voted yes also, and I 13 stipulate a minimum of three. Somewhat similar to 14 what Norman said, the max should be based on the 15 criteria that is set, and if there are other 16 quality compendia that will meet those criteria, then they will benefit. 17 18 DR. GOODMAN: Today and in the near 19 future, no single compendium captures all of this 20 desirable criteria but as a small group they may. 21 Therefore, for now, I vote yes for at least three, 22 no more than four or five, but eventually, if the 23 market adjusts, one or two would do. DR. MCDONOUGH: I think there should be 24 25 a specified type and number of compendia. I 00237

1 believe in terms of type, we need to evaluate the 2 quality of the compendia. And certainly in terms 3 of the quality from a practical standpoint, it 4 would be unwieldy to have numerous compendia, 5 competing compendia, so you might say an upper 6 limit of six is somewhat arbitrary, but we need to 7 have some upper limit. 8 DR. SCHRAG: Again, in view of what's 9 already been said, I think three is reasonable as 10 a minimum and I think an upper maximum should be 11 set with practicality, but to foster and encourage 12 competition among the various compendia to improve 13 and upgrade their quality. And I think the key 14 thing is a specific indication of the criteria is 15 very clear and then you know, consistent 16 evaluation of how the compendia are meeting those 17 criteria. Add to that that each of them we heard 18 from today have a slightly different rating scale 19 or set of adjectives, or one, two, three meant to 20 say acceptable, recommended, not recommended. We 21 should see consistency across compendia, and it 22 would make it much easier to compare them. 23 DR. CUMMINS: I voted yes and I specify 24 one to any number of maximum. I think as long as 25 they meet the criteria, that's what is important,

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and as long as CMS specifies what the criteria is, 1 2 so that it can be inclusive of the rare disease 3 types as people have spoken to today. 4 DR. KRIST: I'll echo the thoughts of 5 everyone around me, I think peoples comments were 6 very good. I voted yes, but my basic 7 philosophical grounding was that I thought that if a compendium met the criteria that was specified, 8 9 that should be the basis for deciding whether it's 10 included or not. I think there are also practical 11 realities in the way compendia currently are, it 12 has to be more than one just the way they 13 currently are. But I have a little concern that 14 I'll just raise with the maximum number that 15 people mentioned, because also looking at the 16 practical reality of the way compendia currently 17 are, you know, if you have these five, 12 of these 18 14 agents are covered. And so you'll hit a ceiling where you might as well say everything is 19 20 covered for off-label use and just forget this 21 whole process, but that's my thought. 22 DR. GARBER: Thank you, everyone. Let 23 me just make a suggestion. Question 9, I think 24 really very logically follows after you have gone 25 through Question 6. That is, how confident are

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1 you that prescribers can rely on currently 2 available published compendia to determine 3 appropriate off-label uses of drugs and 4 biologicals for anti-cancer chemotherapy? 5 We don't want the panel to consider any б compendia that we haven't discussed today, so it's 7 only the ones we've discussed today. So we will 8 be going through these compendia characteristic by 9 characteristic as you do Number 6, so, is there 10 any objection to holding Number 9 until after you 11 have done Number 6? 12 (No response.) 13 DR. GARBER: Take a deep breath. Would 14 people be comfortable in doing them all row by

15 row? I mean, you're going to, you've got a 16 separate card for each row. Do you want to just 17 sit down and do them all and pass the whole stack 18 to the right, or would you rather pause and 19 discuss for example individual questions? Is 20 there going to be any discussion, by the way? Do 21 people have questions or points that they want to 2.2 make before we proceed to voting on Number 6? DR. GOODMAN: Maybe you could ask that 23 24 question for each of the characteristics, A 25 through K. 00240 1 DR. GARBER: That's fine. So let's do 2 A first of all. If everyone's done it, please display your card. 3 4 (Panelists displayed votes which were 5 recorded by staff.) 6 DR. GARBER: Actually, I don't believe 7 anybody will be able to read these anyway, so you 8 might as well pass it to the right when you're 9 done. 10 DR. PHURROUGH: We will publish a 11 summary of these either later this evening or 12 first thing tomorrow on our MCAC web site. 13 DR. GARBER: Then after you're done, we 14 move on to question B. Are there any questions 15 on B? 16 (Negative response.) 17 DR. GARBER: Please put your scores 18 down for B and pass them to the right. 19 (Panelists marked votes and passed them 20 to staff.) 21 DR. GARBER: C, detailed description of 22 the evidence reviewed for every individual listing. Any discussion? 23 24 (Negative response.) 25 (Panelists marked votes and passed them 00241 to staff.) 1 DR. GARBER: Move to D, use of 2 prespecified published criteria for use of 3 4 weighing evidence. 5 (Panelists marked votes and passed them 6 to staff.) 7 DR. GARBER: E, use of prespecified 8 published process for making recommendations. 9 Please pass your Es to the right. 10 (Panelists marked votes and passed them 11 to staff.) 12 DR. GARBER: F, publicly transparent 13 process for evaluating therapies. 14 DR. GOODMAN: I'm sorry, I have a 15 question on this one, the process described in a 16 transparent way or the process is conducted 17 transparently so people can participate, watch,

18 listen. I'm not sure. 19 DR. GARBER: Is the process described 20 in a --21 DR. GOODMAN: Publicly transparent 22 means you can look up it up and it's described 23 very nicely, or people can actually participate, 2.4 sit in the room. The former? DR. GARBER: Yes, I think -- yes, Steve 25 00242 1 says it's the former. 2 DR. GOODMAN: Okay. 3 DR. GARBER: If you're done with your 4 Fs, please pass them to the right. 5 (Panelists marked votes and passed them 6 to staff.) 7 DR. GARBER: G, explicit "not 8 recommended" listings when validated evidence is 9 appropriate. Pass your Gs to the right. 10 (Panelists marked votes and passed them 11 to staff.) 12 DR. GARBER: H, and this is one of the 13 characteristics that we combined. H is explicit 14 listing and recommendations regarding therapies, 15 including sequential use or combination in 16 relation to other therapies. And pass your Hs to 17 the right when you're done. 18 (Panelists marked votes and passed them 19 to staff.) 20 DR. GARBER: I, explicit "equivocal" 21 listing when validated evidence is equivocal. And 22 you'll recall from our earlier discussions that 23 this includes equivocal evidence as well, so it's 24 sort of a class category. 25 (Panelists marked votes and passed them 00243 1 to staff.) 2 DR. GARBER: J, this is the conflict of 3 interest one. It's phrased here, process for public identification and notification of 4 5 potential conflicts of interest of the compendia's 6 parent and sibling organizations, reviewers, and 7 committee members, with an established procedure 8 to manage recognized conflicts. 9 And I would insert rigorous between 10 established and procedure. 11 (Panelists marked votes and passed them 12 to staff.) 13 DR. GARBER: Okay. K, net clinical 14 benefit analysis based on potential harm and 15 potential benefit. 16 (Panelists marked votes and passed them 17 to staff.) 18 DR. GARBER: Well, we have time for a 19 very serious discussion now of Question Number 9. 20 This is, again, the question about the overall

21 compendia as a group, not about any single compendium. That is, how confident are you that 22 23 prescribers can rely on currently available 24 published compendia to determine appropriate 25 off-label use of drugs and biologicals for 00244 1 anti-cancer chemotherapy? And again, this 2 pertains to the compendia we have heard about 3 today, not ones that we haven't heard anything 4 about. So please put a score from one to five 5 here and display your card in the card holder, 6 with five being very confident and one is very 7 unconfident. 8 Do you want some discussion first? We do, we will ask you to justify your votes as we go 9 10 through, okay, but is there anything that you want 11 to discuss or ask questions about before voting? 12 (Negative response.) 13 (Votes displayed and recorded by 14 staff.) 15 DR. GARBER: Okay. Dick, do you want 16 to go ahead an explain your vote? 17 DR. WHITTEN: We're explaining just on 18 Number 9; is that correct? 19 DR. GARBER: Yes. 20 DR. WHITTEN: This question asks how 21 confident are we that prescribers can rely on 22 this, and I think the net process is such that 23 they can't really rely on these very well at all 24 because of timeliness, because (inaudible) so I 25 view this more as a statement that there really is 00245 1 a problem but it's an opportunity to address, 2 which we are attempting to do, and this process 3 should go through. 4 DR. BERGTHOLD: I voted unsure, was 5 that the middle answer? I don't know enough about б how they receive these reports, and similarly, 7 it's completely baffling and confusing to figure 8 out which one of these compendia are the best from 9 any perspective, and I think it would be very had 10 to figure out. 11 MS. KUEBLER: I voted four. I believe 12 the current compendia offers appropriate 13 evidence-based resources and an opportunity for 14 clinicians to go from different available 15 compendia. 16 MS. DAVENPORT-ENNIS: I tried to look 17 at this question through the eyes of professional 18 case managers who are constantly having to make 19 these decisions and can't find a compendium 20 available or can't get reimbursed. And I also 21 looked at the question and was reminded of 22 discussions earlier today that indeed, many 23 prescribers really do not rely on compendia to

24 make judgments about what type of treatment

25 decisions they are going to be making, but they

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1 would refer to a larger body of evidence. So the 2 compendia have become almost a prisoner rather 3 than a facilitating reference for them. 4 Considering all those factors, and reading into 5 the question that published would include any of 6 the compendia presented today and all compendia 7 presented today, I answered that indeed I do think 8 prescribers can rely on those current compendia 9 and therefore, scored this answer a four. 10 DR. FENDRICK: I'm somewhat confident 11 for similar and also additional reasons. One, the 12 tech assessment report gave no confidence that the 13 compendia could be used to decrease the amount of 14 inappropriate off-label use, which hasn't been 15 discussed very much, and people are looking for 16 anti-cancer interventions that given the 17 particular aspects of the disease, and often use 18 them without other choices. MS. GLENNON: I voted a four. 19 I think that I'm somewhat confident that oncologists in 20 practice rely on their clinical knowledge and 21 22 their expertise in their practice, and they may 23 refer to this as a mere resource or reference, so 24 I'm confident, somewhat confident that they have 25 the resources.

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DR. JANJAN: I voted four, but I think 1 2 the thing that concerns me is the wide variation 3 among the compendia and as a clinician, if you 4 looked at the numbers that were shown earlier today with the yeses and nos, that concerns me, 5 6 because which compendium do I trust, and that I 7 think is a major problem that I noticed today. 8 DR. OMMAYA: I think the technology 9 assessment pointed out areas of improvement that 10 need to be taken, but I think the compendia taken as a whole and in view of the variety of 11 compendia, you can get the information you need. 12 13 The question is how efficient is it given the 14 amount of information that you have to go through 15 to reach a conclusion, and I think that's a 16 challenge. 17 DR. KATO: I voted a three, being 18 unsure, primarily because of the wide variety in 19 the reports of the current compendia. I think in 20 perhaps one or two more iterations of the 21 compendia certainly there will be a breakout, at 22 least I anticipate there will be a breakout of one 23 or two that will be able to satisfy many of the 24 criteria discussed today. But until we can 25 improve that process, I'm keeping my vote as

1 unsure. 2 DR. FOLEY: I also voted three. As a 3 hospital medical director with a lot of 4 physicians, I talked with a number of our 5 oncologists before this meeting about what sources 6 do they utilize. Obviously they do look at the 7 compendium but they also have a network of other 8 oncologists around the country either where they 9 trained or who they are related to, and those 10 private networks are usually saturated with 11 off-label kinds of indications and directions that 12 many of them are looking for. So my three is 13 related to uncertainty specific to current 14 compendia, but I have much more certainty and 15 trust in the clinical judgment in the sort of 16 private network of information that develops 17 between the oncologists. 18 DR. GOODMAN: I voted a less sanguine 19 two, somewhat unconfident, because I looked at 20 that term appropriate in the context of trying to 21 strive towards evidence-based medicine, and when I 22 considered off-label uses of drugs and biologicals for cancer compared to the standard evidence-based 23 2.4 medicine we're trying to promote for healthcare, I 25 don't have a lot of confidence in that body of 00249 1 evidence as a whole. So it's not just in cancer, 2 but how we try to provide healthcare today. So I don't have a lot of confidence. 3 4 And I also took the question literally 5 as far as can rely on. If there are three compendia that have the diversity of evidence and 6 7 processes and findings that we have today, and if a clinician tried to rely on that set of three, he 8 9 or she couldn't reach a common denominator, so the 10 end result is a highly inappropriate 11 non-evidence-based application of care for cancer, 12 and that's why I was somewhat unconfident. 13 DR. MCDONOUGH: I'm a bit more optimistic. I rated this a four. Obviously there 14 are differences in one's ability to rely on 15 16 different compendia. And I think the evidence 17 report showed us, it identified some problems in 18 terms of timeliness, in terms of identifying the 19 strongest evidence, in terms of gleaning the 20 evidence for the specific recommendations. But 21 overall, I see that there is with all of these, an 22 intent to identify appropriate evidence and use an 23 evidence-based process, some better than not, but 24 overall I feel somewhat confident in being able to 25 rely on these compendia.

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1 DR. SCHRAG: Also four, similar

2 comments. I think based on the TA, specific areas

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3 that would be most helpful would be a common set 4 of criteria, some commonality in terms of the 5 terms across the different compendia. I gave that 6 a four as a member of the panel, but in my 7 day-to-day practice as a medical oncologist, it 8 often feels like a two. And I say that because I 9 think typically a week doesn't go by where I get 10 five or six letters of exception. I get the sense 11 that if these compendia really worked terrifically 12 well, I wouldn't need to write to my patients' 13 payers various letters trying to justify what I 14 was giving them as being legitimate, because it 15 should just be crystal clear from the compendia. 16 See maybe some of these discussions pointed out by 17 the technology assessment will help get you there. 18 DR. CUMMINS: I voted three, not sure, 19 based on the technology assessment because of the 20 wide variety among compendia. 21 DR. KRIST: I voted three, and same 22 reason we've heard here before, the wide 23 variation. A transparent evidence-based process 24 should produce some consistency, more than we saw 25 here, and that's a little bit concerning, although 00251 1 as Cliff was saying, this is a difficult topic and 2 so maybe it just requires a more clear explanation between the compendia as to why there is some of 3 4 those variations. 5 The other thing I would like to see is 6 more references, quite frankly. A lot of the 7 references were older references and maybe it 8 helps a clinician, maybe it doesn't, but if 9 somebody reads this and they're going to change 10 the way they do things, in many cases it might be helpful to have a reference that they could really 11 12 further explore, is this really valid that I 13 change what I do. DR. GARBER: Thank you everyone. Nora. 14 15 DR. JANJAN: I would just like to say that this is concerning to me as a clinician. I 16 17 mean, not one of us gave this a five, and as a 18 physician, I don't have the room to be this 19 inaccurate in what I do every day. And I really 20 think that, I realize it's a big volume, but I've 21 got to be responsible for that big volume every 22 day in my clinical decision-making, and I just 23 think it's got to be done in a much better way, 24 there's got to be much more consistency among 25 these documents for them to be clinically

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1	reliable. And I have to say, I never look at a
2	compendium, because I don't think they're
3	reliable, and I think that's a charge to all of
4	you who are creating these documents.
5	DR. FOLEY: One of the things I am

6 seeing is much more use of multidisciplinary 7 prospectively designed tumor conferences where 8 before therapy, from surgeons, radiation 9 oncologists and oncologists, they use all of their 10 minds and literature and discussion to actually 11 design a particular therapy. That gives me a 12 little better sense that people are taking a lot 13 of this uncertainty more seriously, bringing more 14 heads and more ideas together before they start 15 doing things to people with cancer. 16 DR. GARBER: Well, thank you. I want 17 to congratulate the panel and thank the panel for 18 your very thoughtful deliberations. And I 19 especially want to thank the speakers who have 20 really helped us in our deliberations. Most of 21 you have come and spent the day with us, it was 22 less exciting than usual, we didn't prolong many 23 votes, and unfortunately I don't have the results 24 of Number 6 in real time here, so we'll wait for 25 Steve has some comments. it.

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DR. PHURROUGH: Yes, and looking at the 1 2 agenda, I have an hour and a half. 3 (Laughter.) 4 DR. PHURROUGH: First of all, 5 particular thanks to the panel. This is arduous 6 work and we appreciate your willingness to take 7 part in it. For those of you who have not been 8 part of MCACs before, over the last year we have 9 very diligently moved MCAC from not just being an 10 advisory committee as to what does the evidence 11 demonstrate around a specific coverage 12 determination that we're involved in, but more to 13 an entity that helps us develop that evidence or helps us determine the different courses we may 14 15 take or provides some quidance on what's the state 16 of the evidence at the current time around broad 17 topics that then may in the future result in our 18 opening specific formal decision-making processes, 19 and thus far we think that's worked well, we think 2.0 that's a helpful move for this committee. 21 For those of you who have not been at 22 an MCAC, this running around and changing 23 questions and figuring out how to vote hasn't 2.4 changed, it is pretty common in that we bring 25 together a group of very bright, intelligent and

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energetic people who have spent a fair amount of time individually looking at an issue and who have collectively decided that we sort of screwed up some of the questions. And we understand that and recognize that, and wish that wouldn't happen, but it always will, so we don't expect that part to change.

8 So let me get to sort of the crux,

9 where do we go from here with compendia? Well, I 10 think we've heard today both from you and from the 11 panel that perhaps there are some positive things 12 that can occur from this. I think first of all, 13 the panel spent a fair amount of time attempting 14 to define what should make a good compendium. I 15 think those of you who are responsible for that 16 should listen closely. I think that is some 17 advice that may serve you well. 18 Our current position is we have on the 19 Part B side regarding cancer chemotherapy some 20 legislative guidance, and two of the three 21 compendia left. One of those two is undergoing 22 some changes. Some congressional direction that 23 says the successor of the one undergoing change 24 should be covered, but in fact some comments have 25 been made to us that the successor may not be the

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1 same entity. So what do we do in that case? 2 So I think perhaps you could expect 3 from us in the next several weeks to months some 4 continuation of this discussion around what should 5 our next steps be, and perhaps there should be a discussion around criteria and perhaps more 6 7 formalization of those criteria and then some 8 discussion as to whether we should open a formal process to more clearly define those criteria and 9 10 define a process, a potential process for allowing 11 a greater breadth of compendia to be involved if 12 there is criteria to be met. We would love to 13 hear your opinions on that as we move forward in 14 the next several weeks. 15 The process that we should use in 16 general when you're using secretarial discretion and conversation before you get to rule making, 17 though we have done that in the coverage process 18 19 also. Congress has given us some latitude to do 20 that, but this probably fits more closely into the 21 public comment process. So we would be interested 22 in your input into that. And based upon what we 23 have heard today, I think there is the potential 24 for us to more clearly define what a good 25 compendium ought to be and, two, a process for

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1 including various compendia to meet those criteria 2 as part of the Part B process. As I mentioned earlier, we will try to 3 have the results of all the voting on line either 4 5 later today or first thing tomorrow. If you're 6 not familiar with our web site, we do have a web 7 site at cms.gov/center/coverage, I think, and on 8 that web site is a link to the MCAC page and 9 that's where we will post those. 10 Thank you very much, and again, a 11 special thanks to the panel, and we'll see you

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12 back at our MCAC in May.
13 (Whereupon, the meeting adjourned at
14 3:03 p.m.)
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