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U.S. FOOD AND DRUG ADMINISTRATION BREAST CANCER PUBLIC MEETING ON PATIENT-FOCUSED DRUG DEVELOPMENT April 2, 2015 12:58 PM - 4:40 PM U.S. Food and Drug Administration White Oak Campus 10903 New Hampshire Avenue Reported by: Michael Farkas Capital Reporting Company

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1	A P P E A R A N C E S	
2	FDA REPRESENTATIVES:	
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4	AMNA IBRAHIM, MD	
5	TERESA MULLIN, PhD	
6	SUPARNA WEDAM, MD	
7	AMY MCKEE, MD	
8	GEOFFREY KIM, MD	
9	ASHLEY SLAGLE	
10	JONCA BULL, MD	
11	GRAHAM THOMPSON	
12	PUJITA VAIDYA	
13	PANELISTS:	
14	KAREN DURHAM	
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17	SANDY FINESTONE	
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19	GINNY KNACKMUHS	
20	ELIZABETH CAPPEL	
21	KIMBERLY WRIGHT	
22	THELMA JONES	

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2	(Continued)	
3	PANELISTS (continued)	
4	SUSAN FARIS	
5	JOANNE BUZAGLO	
6	JAMIE HOLLOWAY	
7	COLLEEN DUFFY	
8	SHIRLEY MERTZ	
9	CINDY GEOGHEGAN	
10	KIMBERLY BEER	
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1	PROCEEDINGS
2	MS. GIAMBONE: All right. So we'll go
3	ahead and get started. So good afternoon,
4	everyone. My name is Soujanya Giambone. I am
5	with the FDA Center for Drug Evaluation and
6	Research Office of Strategic Programs and on
7	behalf of all of my FDA colleagues, I'd like to
8	thank you and welcome you all to the Patient-
9	Focused Drug Development Meeting on Breast Cancer.
10	So it's really nice to meet so many of
11	you and especially for all of you that I've been
12	speaking to on the phone, it's nice to finally get
13	to meet you all in person and we really appreciate
14	that you're all here because we have so much to
15	learn from you today.
16	So I'm the facilitator for today's
17	meeting and I'm going to spend just a few minutes
18	going over the agenda. You all should have a copy
19	of that. If not, we have some copies out on the
20	registration desk. And then I'll go over a few
21	housekeeping items and we'll get started.
22	Okay. So we'll start off today with

1	some presentations from my FDA colleagues. They
2	are going to provide some opening remarks, an
3	overview of the patient-focused drug development
4	initiative, and a background on breast cancer and
5	current treatment options.
6	And then I'll come back and I'll go over
7	the discussion format for the day. So we have two
8	discussion topics. Topic 1 is on the disease
9	symptoms that matter most to you as the patient,
10	and topic two is on your perspectives on current
11	approaches to treating breast cancer. And we'll
12	have a panel discussion followed by a group
13	discussion for each of those topics and that'll
14	take us to pretty much the last half an hour of
15	the day which we reserve for open public comment.
16	And open public comment is it's basically a
17	time that anybody in the audience, not just
18	patients or patient representatives, but if
19	anybody wants to share additional thoughts or
20	perspectives that are outside of the scope of
21	Topic 1 or Topic 2, we encourage you to sign up
22	for open public comment, and you can sign up out

1	on the registration desk. There's a signup sheet
2	there and we'll take signup until break time, and
3	then we'll take a look at how many people signed
4	up and how much time each speaker will have. And
5	then we'll wrap up the day with some closing
6	remarks.
7	So, as you can see, it's a pretty full
8	day of discussion but we're really, really
9	thankful that you're here and we're looking
10	forward to a great day of discussion.
11	Just a few housekeeping items. The
12	bathrooms are back out into the lobby area and if
13	you make a right and go all the way down the
14	hallway, you'll see the bathrooms there. And you
15	will also see that we have a kiosk that sells
16	basic snacks, drinks, sandwiches for you to
17	purchase if you would like, so please feel
18	comfortable to get up and stretch, take a break,
19	get a snack if you need to. We want you to feel
20	as comfortable as you can and, you know, do what
21	you need to do to just be comfortable.
22	And also, I just want to mention this

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meeting is being recorded and transcribed and 1 within a few days after the meeting, the recording 2 and the transcript will be available on the 3 meeting website. 4 So with that, can I just have my FDA 5 colleagues please introduce yourselves. 6 7 DR. KIM: Hello and thank you, everyone, 8 for coming. My name is Geoff Kim. I'm the 9 Division Director for the Division of Oncology 10 Products 1, where many or most of the drugs 11 related to the treatment of breast cancers are 12 regulated. DR. IBRAHIM: Hi. I'm Amna Ibrahim. 13 I'm the Deputy Division Director for DOP1. 14 15 DR. WEDHAM: My name is Suparna Wedam. I am a medical reviewer in the Division of 16 17 Oncology Products in the breast cancer group. 18 DR. McKEE: My name is Amy McKee. I'm 19 the Clinical Team Leader in DOP1 of one of two 20 teams that handles breast cancer products. 21 DR. MULLIN: Hello, I'm Theresa Mullin. I direct the Office of Strategic Programs in the 22

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Center for Drugs and I am the lead for this 1 patient-focused drug development effort for the 2 Center. Thanks. 3 MS. SLAGLE: Hello, I'm Ashley Slagle 4 with the Study Endpoint staff in the Office of New 5 6 Drugs. 7 DR. BULL: Good afternoon. Jonca Bull. 8 I direct the Office of Minority Health in the 9 Office of the Commissioner. 10 MS. GIAMBONE: And could I have colleagues over here introduce yourselves? 11 12 MR. THOMPSON: Graham Thompson, Office 13 of Strategic Programs. MS. VAIDYA: Pujita Vaidya, Office of 14 15 Strategic Programs. 16 MS. GIAMBONE: Great. Thank you so 17 much. And with that, I'm going to turn it over to 18 Amna for her presentation. 19 DR. IBRAHIM: Good afternoon again and 20 welcome to today's meeting on breast cancer patient- focused drug development. AS I introduce 21 myself, I'm Amna Ibrahim. I am the Deputy 22

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treating breast cancer and the challenges they 1 2 face in prolonging life while also maintaining 3 quality of life. When we discuss drug development, we are 4 referring to the process of identifying and 5 evaluating potential therapies that can help 6 7 patients treat their cancer. FDA's mission is to 8 protect and promote public heath by evaluating the 9 safety and effectiveness of new drugs. While we play a critical role in drug development, we are 10 11 just one part in the process. We do not develop 12 drugs or conduct clinical trials. Drug companies, 13 often working with researchers or patient communities, are the ones who conduct the trials 14 15 and submit applications for new drugs to FDA. We 16 work closely with these drug companies throughout 17 their drug development process. We are, therefore, 18 glad to see such representation and interest in 19 today's meeting from industry, academia, and other 20 government partners in the room and on the web. 21 I want to spend a few minutes providing a bit of background on FDA's important role in 22

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1	drug evaluation. For a drug to be approved for	
2	marketing, FDA must determine that it is safe and	
3	effective for its intended use. Our regulating	
4	decisions are based on science, medicine, as well	
5	as legal and regulatory standards. First and	
6	foremost, the drug must demonstrate a minimum	
7	standard of efficacy for its intended use. The	
8	safety of a drug should be such that the benefits	
9	of the drug should outweigh the risks. The FDA	
10	makes determination for the risk- benefit	
11	assessment for the new drug based on the totality	
12	of information provided by a sponsor in the new	
13	drug or biologic application which is a request	
14	for marketing authorization in the U.S. FDA	
15	benefit- risk assessment takes into account many	
16	factors such as the disease setting, the	
17	population of patients treated, presence of	
18	alternative therapies for the indication and the	
19	improvement provided by them, the magnitude of the	
20	demonstrated benefit, and the nature of the risks	
21	associated with the product.	
22	What we hear today can help us	

1	understand how patients view benefits and risks
2	and will strengthen our understanding of what
3	patients want to see in their treatment options.
4	Sometimes we struggle with how to evaluate
5	treatments that might have a small benefit to
6	patients and a very large risk, so hearing what
7	patients think about these issues can really help
8	strengthen our benefit-risk thinking in those
9	situations.
10	Thank you again for your participation
11	and for being here today. We do appreciate it. I
12	now turn it over to Theresa Mullin who will
13	provide some background on FDA's overall patient-
14	focused drug development efforts. Thank you.
15	DR. MULLIN: Thank you, Amna, and good
16	afternoon again and thank you for joining us at
17	this meeting today. This meeting on breast cancer
18	is one of, for us, a series of meetings where
19	we're launching this new effort under this
20	reauthorization of the User Fee program, and I
21	wanted to just spend a minute to put it in that
22	context for you before we get into the specifics

of the questions and the content of the focus of 1 2 our meeting today. 3 As Amna -- as Dr. Ibrahim mentioned, she referred to the risk-benefit or the benefit-risk 4 assessment framework that's used by -- in our 5 review of new drugs and even continuing to look at 6 drugs on the market over time, two of the factors 7 8 in that framework are the severity of the 9 condition, sort of the experience of the patient and the severity of the impact of the disease on 10 11 their life and, in fact, including the treatment 12 on their life and what treatments are available 13 today, and how well do those treatments work, and what is it like to have to use those treatment for 14 15 the patient. And those two components really set 16 the stage -- and this is w hat reviewers have told 17 us over -- as we've developed this framework --18 that sets the stage for their evaluation of the 19 other evidence that they have, the benefit 20 information, what they hear about the safety 21 issues, how you might manage those risks. So 22 those two components are really where we wanted to

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focus and get more information. 1 2 And at the start of this effort in 2012, we realized that we had very limited means for 3 getting that kind of information from patients. 4 5 We have a patient representative program and that's very valuable except that the limitation 6 there is that we have to put the patient 7 8 representative who may or may not have the disease 9 that is of interest and to -- they have to go through conflict of interest screening. We don't 10 11 -- because we're talking about a particular drug, we have to make sure there's no conflict there, 12 13 and so that really limits the input we can get and we know that you can't -- one person really would 14 15 have an impossible job to represent the views of 16 all the diversity of patients who may be 17 experiencing a condition. And so we wanted to 18 have a meeting structured not around a product but 19 around the disease area so we could not have to 20 deal with that screening and really get a much 21 broader and more diverse range of input from people who are suffering from the disease or in 22

1	some cases, people or families who are living with
2	persons and caring for people with a particular
3	disease. So that was the motivation for this.
4	And we realize we you know, patients
5	are the most critical informant, really, for these
6	benefit-risk assessments because the patient is
7	the one who will be using the drug and getting any
8	benefit there is to gain and be suffering any harm
9	there is, that they may be exposed to from the
10	drug. And so how could we get a better richer and
11	broader input from the patient community. And so
12	this is a sort of experiment, if you will. We're
13	doing these 20 meetings. Breast cancer is one of
14	the 20 diseases that we chose and the Review
15	Division identified breast cancer as one of the
16	priorities for them and, you know, you'll hear
17	more from their questions today about what they're
18	hoping to gain and the opportunity there. And so
19	these 20 are really giving us a test bed to figure
20	out where do we go from here in this kind of
21	engaging the patient more and getting more
22	systematic input from patients to inform drug

1	development. And so this is part of the effort.
2	We began it in 2012. We put out an
3	announcement with a set of diseases that we got
4	public comment. We got over 4,000 comments from
5	the public about the list that we published, with
6	other ideas as well. We took that list and the
7	input that we got and identified 16 diseases for
8	the first three years of the program. And in a
9	few months, we'll be able to publish the set of
10	diseases that have identified for the final two
11	years of this five-year program. I say "final
12	years" of this program but this is water heaters
13	at we view as the first phase of this effort. We
14	very much plan to continue and evolve it and
15	actually expand it beyond this five-year period.
16	Here is the list of the diseases that
17	we've included in the first three years and as you
18	can see, today's meeting is focused on breast
19	cancer. We have four more coming up later in this
20	fiscal year so between now and the end of
21	September, we'll have some others. And so and
22	as I said, we'll be covering more later.

1	There are some standard questions
2	related to those two considerations that I
3	mentioned. Severity of the condition and the
4	impact and benefits of the treatments currently
5	available are the focus of every one of these
6	meetings, so there are some standard questions
7	that we will cover related to those in the disease
8	area. And then we'll also be asking other
9	questions. I say "we" but I particularly mean the
10	Review leadership is probably going to be asking
11	other questions as well of things that they may
12	want to probe further taking advantage of the
13	opportunity of having you here in the room land
14	having our participants on the webcast to get
15	firsthand input from you about other things that
16	they may be concerned about or aspects of
17	treatment or development that they think you would
18	be particularly able to help them understand
19	better or inform.
20	We produce a report after these
21	meetings. It's called "The Voice of the Patient
22	Report" and those are available on our website.

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If you "Google" "voice of the patient" -- I mean 1 2 I'm lazy, that's what I would do but I find -that's how I find stuff on our website. I go to 3 Google. 4 5 (Laughter.) 6 DR. MULLIN: And don't share that with our IT people please. But it's a report that 7 8 tries to capture very faithfully not just what 9 people tell us but really what and how they tell it to us because how they describe what they're 10 going through is just very much part of the what 11 12 and so we recognize that. We try to capture that. 13 We both get the information from the room, from the input from our webcast, and we keep an 14 15 electronic docket open for any additional 16 information that you may think of or have you want 17 us to include in what we capture as part of this 18 report effort, and other comments that we get are 19 submitted to the Docket. We give a few more weeks 20 for that to come in and then we take all that to 21 produce these reports. And they provide a very 22 useful way to capture that information for

subsequent reference by the Review Divisions. 1 2 When they maybe get another application for that disease area, they'll go back and that -- and we 3 actually shape up those first two sections. 4 We 5 provided some examples of how -- what they might be thinking about and encapsulate some of it. 6 The reports are short enough that they're readable and 7 8 reviewers and others, we hope -- I've heard from 9 friends who are patients with some of the diseases 10 that we've had that the reports have resonated 11 with them, too, which is very gratifying for us to 12 hear. That's what we hope to do. But it's a first 13 It does provide that context and it's also step. prompting a certain amount of further thinking on 14 15 our part about what we want to do to sort of more 16 systematically capture this information longer 17 term, maybe find ways to capture it and measure it 18 so that it can become evidence of benefit in 19 addition to providing very critical context. 20 And so that's what we're doing with this 21 effort and with t hat, I'll turn it over to 22 Suparna Wedam who is going to give us more

information about the topic of disease and current
 treatment. Thank you.

DR. WEDHAM: Great. 3 Thank you, Theresa. Good afternoon. So as mentioned earlier, my name 4 is Suparna Wedam and I'm a Medical Officer in the 5 Division of Oncology Products here in the breast 6 cancer group. I also continue to see patients 7 8 regularly, breast cancer patients in the clinic 9 each week, actually on Thursday so today is my 10 clinic day but I thought it was very important to 11 come to this meeting here. So I am well-aware of 12 the direct impact of our treatment decisions as 13 far as the benefit that they provide, which is obviously the intended goal of our therapy, but 14 15 also the unfortunate side effects and toxicity 16 that we have to deal with, and this can be wide-17 ranging from very mild such as some dry skin or 18 mild constipation to much more serious or severe 19 such as blood clots or debilitating neuropathy. 20 And as patients are living longer and the 21 treatments are becoming more chronic, this is more 22 important than ever that we really take these all

1	into consideration in our treatment decisions.
2	So again, I'm going to echo the
3	sentiments of my previous speakers that I'm very
4	happy you're here. I think this is a very
5	important forum and it's fantastic that we have
6	this opportunity to hear from you today.
7	So my task today is to give a brief
8	background on breast cancer and the therapeutic
9	options. So as mentioned earlier, breast cancer
10	remains a major public health concern. We've made
11	major strides over the last few decades but we
12	still have a lot of work to do. It is the second
13	leading cause of cancer-related death among women
14	in the United States, second only to lung cancer.
15	And this year, it's estimated that a little over
16	230,000 will be diagnosed with breast cancer and a
17	little over 40,000 will die of the disease in this
18	country.
19	So as with all cancers, breast cancer is
20	very complicated and we don't really know what
21	exactly causes it, but there are many risk factors
22	that have been associated with breast cancer and

1	implicated in its etiology and these are often
2	divided into unmodifiable and modifiable risks
3	which I have listed in two columns here.
4	So on the left-hand column are some of
5	the unmodifiable risks which, as the word implies,
6	are things that we cannot change, we do not have
7	control over yet, they put us at a higher risk
8	such as being of female gender, increasing age,
9	certain genetic risk factors. This actually only
10	makes up about 5 to 10 percent of breast cancers
11	and what we most commonly hear about out in the
12	public and the media is BRCA1 and BRCA2, but there
13	are many other genes that increase a patient's
14	increased risk of breast cancer such as ATM, p53,
15	PALB2. They're just much rarer and we don't
16	understand them that well. These are important
17	not only for screening and for monitoring but they
18	may have therapeutic implications as we understand
19	them better. Also important are personal and
20	family history, dense breast tissue, certain
21	breast conditions such as atypia or hyperplasia
22	and the age of menarche and menopause.

1	In the right-hand column are some
2	modifiable risk factors. So these are things that
3	we have control over and could potentially change:
4	nulliparity which is not having
5	children, certain hormonal birth control methods,
6	hormone replacement in menopause, breast feeding,
7	alcohol use, obesity, and physical activity.
8	There are many other factors that have been
9	mentioned and discussed and it's not really clear,
10	again, what their association is.
11	So when patients present to us with a
12	suspected breast cancer, they're actually often
13	asymptomatic. A patient may have a palpable
14	breast mass that they have felt themselves or that
15	has been palpated by a healthcare provider but in
16	this country, actually, most people present after
17	an abnormality has been seen on a screening
18	mammogram or MRI. In the late stage, patients may
19	have some generalized constitutional symptoms such
20	as fatigue, weight loss or decreased appetite, or
21	localized symptoms such as bone pain or abdominal
22	discomfort depending on where the tumor is. But

1	even then, a portion remain asymptomatic and I
2	think this is important to keep in mind that
3	actually most breast cancer patients, when they're
4	diagnosed, are asymptomatic and feel well but we
5	can make them feel unwell with our treatments. So
6	we want to make sure that that toxicity is really
7	balanced with a clear benefit.
8	So once breast cancer is suspected, we
9	need tissue confirmation as a diagnosis cannot be
10	made on physical exam or imaging alone. The
11	tissue is important not only to confirm breast
12	cancer but to gain other important information in
13	formulating a treatment plan. And then once the
14	diagnosis is confirmed, we stage the patient
15	according to the TNM system. So this looks at the
16	size of the tumor, the extent of nodal status and
17	whether metastases distant metastases are
18	present or not, and the patients are given a stage
19	of one, two, three, or four and this is shown in
20	the schematic here.
21	So stage one breast cancer is where the
22	tumor is confined to the breast. Stage two is

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1	where the tumor might be slightly larger and may
2	have lymph node involvement. Stage three is where
3	the tumor may be yet a little larger, may have
4	more lymph node involvement and may have some
5	chest wall involvement. And stage four is where
6	the tumor has moved out of the breast and local
7	regional area and actually, only a minority of the
8	patients are diagnosed at stage four at the onset.
9	This is really only about 5 to 10 percent of
10	patients.
11	So stage is not only important for
12	prognosis but, again, to formulate a treatment
13	plan and to really know what our goal of therapy
14	is, whether it's for curative intent or for
15	palliation. Along with that, we need to know if
16	the tumor is invasive or non- invasive and
17	actually, this we usually know before we stage the
18	
	patient; tumor histology, the estrogen receptor
19	patient; tumor histology, the estrogen receptor status, progesterone receptor status and HER2
19	status, progesterone receptor status and HER2
19 20	status, progesterone receptor status and HER2 status. And these are important not only for

1	and we want to make sure that we're using it in
2	our treatment plan. We also look at the
3	histologic grade of the tumor and certain genomic
4	testing may be warranted. And finally, we look at
5	the age and associated comorbidities.
6	So our understanding of breast cancer
7	has greatly evolved over the last couple decades,
8	and this is really with the advent of molecular
9	profiling and more genomic tests. So we're not at
10	the point that we really understand breast cancer
11	is not just one disease. It's quite varied and
12	diverse and actually, it's a compilation of
13	several different subsets that behave very
14	differently.
15	In clinical practice, we already subset
16	these to some extent and that's by assessing the
17	hormone receptor status, the HER2 status, and we
18	use certain genomic tests such as Oncotype DX to
19	assess if further adjuvant chemotherapy is needed
20	or not. But there are many other tools that are
21	being used for research purposes in clinical
22	trials. These are not quite ready for routine use

1	yet but, really, it's only a matter of time. As
2	our understanding of the biology in the subsets
3	continue to mature, we are going to use more and
4	more of these tools in the clinic to help identify
5	the right patient for the right treatment.
6	So the way that we make a treatment plan
7	now is really a combination of several different
8	modalities and this includes surgery, radiation
9	therapy, cytotoxic chemotherapy, targeted therapy,
10	and one other box I'm missing which is actually on
11	the next slide is hormonal therapy. Some patients
12	may receive all of these or only a few of these.
13	And again, it goes back to all of those factors I
14	discussed earlier, the stage of the patient and
15	the goal of therapy. It's great that we have a
16	lot of options that we can kind of put together
17	and that we can treat patients but unfortunately,
18	none of them are benign. They all come with side
19	effects. They can be overlapping side effects.
20	They can be different side effects and only some
21	of them are listed here. Obviously, it's not a
22	complete list. And some of the side effects can

1	be quite toxic and so it's very important that
2	we're discussing this with patients as we're
3	making the treatment decisions of how we proceed.
4	So some of the approved therapies that
5	we do have available to usagain, this is not
6	an exhaustive list and, in fact, I'm missing one
7	of our most recently approved drugs, palbociclib,
8	on this list but we do have several hormonal
9	agents and we choose to use those based on
10	menopausal status and kind of the stage of therapy
11	or whether it's in the adjuvant setting or
12	metastatic setting. We have several cytotoxic
13	chemotherapy agents that we can use in combination
14	or as single agents and then targeted therapies.
15	And the four that I have listed here are used
16	solely in HER2-positive tumors. So again, we do
17	have many therapies that are approved at this
18	time.
19	But in approving any of these therapies,
20	it comes back to this balancing act again. In
21	oncology, we are always dealing with a serious
22	disease and unfortunately, our treatments can be

1	toxic and so in approving a drug, we really want
2	to make sure that we are helping make a patient
3	live better or live longer and so in other words,
4	this means that they have some direct clinical
5	benefit, either improving how they feel or
6	function or prolonging their survival. So I think
7	this is my last slide. So one of the ways that we
8	can get direct measurement of this as far as a
9	treatment benefit is, obviously, from the patient.
10	So we can use these patient-reported outcomes or
11	PROs which are direct measures of treatment
12	benefit and allow the patients to be involved
13	because we know that healthcare providers under-
14	report the side effects. So we can get a more
15	accurate assessment.
16	Here at the FDA, we definitely encourage
17	use of these if they're used properly because then
18	they can be very helpful and properly means that
19	they're well-defined, reliable, validated tools
20	that are measuring what they say that they're
21	measuring. So that's all I have. Thank you.
22	MS. GIAMBONE: Thank you to my FDA

1	colleagues for your remarks. So I am going to now
2	go over the discussion format again and as I
3	mentioned, we have two discussion topics for
4	today. The first is on the symptoms that matter
5	most to you. So in this topic, what we're
6	listening for is how do you live with your breast
7	cancer. How do you experience your breast cancer?
8	What are the symptoms that are most important to
9	you, and how do they impact your day-to- day life?
10	So here you can tell us are there activities that
11	you can't do at all or as fully as you would like
12	because of your symptoms.
13	Also, if I can share with us how your
14	symptoms have evolved over time and how they've
15	changed for you since diagnosis; that would also
16	be very helpful.
17	In Topic 2, we're going to discuss
18	current approaches to treating breast cancer. So
19	here what we're listening for is, what is your
20	current treatment regimen? What are the benefits
21	that you see of your current treatment regimen?
22	Is it working for you? And vice versa, what are

the downsides? What are the biggest side effects 1 2 that you experience? Also, what do you look for in an ideal treatment? 3 We're also going to spend a portion of 4 5 Topic 2 talking about the factors that go into the decisions you make regarding treatment options. 6 7 So first we're going to hear from a 8 panel of patients and on that note, could I have 9 my Topic 1 panelists come on up and have a seat? 10 So the purpose of the panel discussion 11 is to really set the stage for the greater group discussion. Our panelists reflect a range of 12 13 experiences with breast cancer, and I have had the privilege of working with them over the last two 14 15 weeks and I know they've spent a lot of time and 16 put in a lot of effort to put their thoughts down, 17 so we really appreciate that you're here doing 18 this. 19 Our panelists will have five minutes to 20 present their remarks and after they finish their 21 remarks, we will open the dialogue, broaden the dialogue to invite more patients and patient 22

1 representatives in the audience.

2 So the purpose of the group discussion is to really build on what you've heard from the 3 panel, so share with us not only what is similar 4 for you but also how you experience differently 5 the breast cancer. Periodically, I'll look to my 6 FDA panel for some follow-up questions and we 7 8 invite you to continue participating in the 9 conversation. You can raise your hand and we'll have microphone runners around the room and 10 11 they'll come to you. And if you're comfortable to 12 do so, just raise your hand, they'll come to you, 13 and just tell us your first name and you can 14 present your comments. 15 So there are a few other ways that we're 16 going to be learning from you today and one of 17 those is that we're going to be doing thee polling questions and on that note, could I have the 18 19 clickers passed out. Thank you. So the polling 20 questions, they're not a scientific survey. It's 21 entirely voluntary but what it allows us to do is

22 to get more understanding of the perspectives in

1	the room. And we're going to be trying those out
2	in just a bit. So for those of you in the room,
3	you'll use the clickers to answer the polling
4	questions; and for those of you on the web, you
5	can also participate via the webcast. And we do
6	ask that only patients and patient representatives
7	respond to the polling questions, please.
8	So as I just mentioned, we also have a
9	very active webcast. Today we have nearly 100
10	people joining us on the web so for all of you on
11	the web, you're a very important part of today's
12	meeting. You're a very critical part of today's
13	meeting and although we can't see you, you're
14	voice is being heard. We will periodically check
15	in with you and we'll have you you'll also have
16	the opportunity to call in by telephone and share
17	your comments throughout the meeting. And we will
18	make sure that we capture all of the comments that
19	you're providing us via the webcast and they'll be
20	incorporated into our summary report.
21	So another last way that we will be
22	getting more information from you, more of your

1	experiences and perspectives is this very
2	important public docket that we'll keep open for
3	two months after the meeting. So it will be open
4	until June 2nd and you see the website up here.
5	We encourage you to continue to keep visiting this
6	website and continue to share your thoughts, share
7	your comments as they come to mind and they're a
8	very important part of the meeting, so it's an
9	extension of today's meeting to continue to hear
10	from you. All of these comments in the public
11	docket will be we will read through those. We
12	will summarize those and incorporate them into our
13	summary report and anyone is welcome to comment.
14	We also have a few resources here at the
15	FDA that we want to share with you. The first is
16	the FDA's Office of Health and Constituent
17	Affairs, OHCA, and the second is the Professional
18	Affairs and Stakeholder Engagement Group, PASE,
19	and both of these organizations within FDA are
20	they're a liaison. They're your link between the
21	FDA and the public and patient groups so we
22	encourage you to reach out to them if you have any

1 questions at all.

2	So I'm going to go over, last but not
3	least, a few discussion ground rules for the day.
4	First, we encourage patients to contribute to the
5	dialogue and patients and patient representatives
6	also. So we know that there are academia,
7	government agencies, industry we really
8	appreciate that all of you are here today to join
9	us at the meeting. This meeting will be very
10	important to you, too. We just ask that you stay
11	in listening mode. Today is really about
12	listening and learning from the patients and
13	patient representatives.
14	And on that note, the FDA also, we are
15	in listening mode for the day. Periodically, we
16	will have some follow-up questions from the FDA
17	panel so I'll turn to them. And the third is that
18	the discussion will focus on symptoms and
19	treatments. So as I mentioned, we have two topic
20	questions today and we will we're going to
21	you know, these are the topic questions that are
22	most beneficial for us at the FDA to learn from

1	you on. So we will do our best to stay on topic
2	and if there is anything else, as I mentioned,
3	that you'd like to share outside of the scope of
4	Topic 1 or Topic 2, again, we encourage you to
5	sign up for open public comment.
6	The views expressed today are personal
7	opinions and so on that note, respect for one
8	another is paramount.
9	And last but not least, let us know how
10	the meeting went today. So we will have
11	evaluation forms out on the registration desk and
12	we'll also pass them out closer to the end of the
13	meeting. It's really important for us that you
14	fill these out and let us know what worked and
15	didn't work so that we continue to improve these
16	meetings for you.
17	And as I mentioned, I just want to
18	reiterate again that we're just really thankful
19	and grateful that you're here. Again, this is
20	we want you to feel comfortable. We want you to
21	go ahead and get up and stretch if you need to.
22	I'm personally very happy that there's nice

1	weather outside so for those of you that traveled
2	from afar, hopefully, you're experiencing DC
3	beautiful spring weather.
4	Okay. So, first, what we will do is
5	we're going to start with some polling questions.
6	So everybody get your clickers out. Okay. Oh,
7	they don't have clickers. Okay. Sorry.
8	(Laughter.)
9	MS. GIAMBONE: Okay. Everyone have your
10	clicker ready? Great. Okay. So the first one is
11	an easy one. Where do you live? Press "A" or
12	within the DC Metro area, or "B" for outside of
13	the DC Metro area. Press A yep. That's okay.
14	Okay and oh, it looks like we might be having
15	some difficulties with the Let's try it one more
16	time. Can you click again either "A" or "B"? Not
17	working?
18	UNIDENTIFIED SPEAKER: No.
19	MS. GIAMBONE: That's okay. Let's raise
20	hands instead. Okay. So can I just by a show of
21	hands how many of you are from the DC Metro area?

40

1	And so I imagine the rest of you are from outside
2	of the DC Metro area, right? So thank you for
3	coming. I know there's been a lot of travel,
4	California, Texas, Massachusetts. I've met so
5	many of you from different parts of the country so
6	thank you for being here. It means a lot to us.
7	Let's go to the next question. Have you
8	ever been diagnosed as having breast cancer?
9	Shall we give it a try? Okay, let's try this one.
10	Press "A" for "yes" or "B" for "no." No, we're
11	doing hands. We'll do hands again. Thank you all
12	for being such a good sport about this. So can
13	you raise your hand for "A, yes." Okay. And "B,
14	no." Okay. Well, thank you very much for all of
15	you that are here to share your perspectives and
16	experiences with us. You will have we have so
17	much to learn from you so we appreciate that
18	you're here.
19	Okay. So this one, there's going to be
20	a lot of hand raising I guess. Okay. What is
21	your age or your loved one's age: A, younger than
22	30; B, 31 to 40. Okay, we have a few of you. C,

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1	41 to 50. Okay. D, 51 to 60. Okay. E, 61 to 70.
2	Great. And F, 71 or greater. Great. Thank you.
3	And I'm not sure if they webcast polling is
4	working. Are we seeing similar results?
5	MR. THOMPSON: Yeah. We had, for the
6	previous question, about 64 percent diagnosed with
7	breast cancer; for this one, 30 percent of people
8	between 41 and 50; 41 percent between 51 and 60;
9	and 10 percent for the other categories.
10	MS. GIAMBONE: Okay, great. Let's go on
11	to the next one. Are you A, male or B, female? I
12	imagine most of us here are female.
13	
10	(Laughter.)
14	(Laughter.) MS. GIAMBONE: Okay. And I think this
14	MS. GIAMBONE: Okay. And I think this
14 15	MS. GIAMBONE: Okay. And I think this is our last or actually, we may have one more. Okay. So what is the length of time since your
14 15 16	MS. GIAMBONE: Okay. And I think this is our last or actually, we may have one more. Okay. So what is the length of time since your diagnosis? A, less than one year ago. Okay, so no
14 15 16 17	MS. GIAMBONE: Okay. And I think this is our last or actually, we may have one more. Okay. So what is the length of time since your diagnosis? A, less than one year ago. Okay, so no
14 15 16 17 18	MS. GIAMBONE: Okay. And I think this is our last or actually, we may have one more. Okay. So what is the length of time since your diagnosis? A, less than one year ago. Okay, so no responses there. B, one year ago to two years
14 15 16 17 18 19	MS. GIAMBONE: Okay. And I think this is our last or actually, we may have one more. Okay. So what is the length of time since your diagnosis? A, less than one year ago. Okay, so no responses there. B, one year ago to two years ago. Okay. So it looks like we have one newly diagnosed. C, two years ago to five years ago.

1	majority f people responding are in this category,
2	more than five years ago. And E, I'm not sure.
3	Okay. How about on the webcast?
4	MR. THOMPSON: On the web, we have 18
5	percent for less than one year ago; 18 percent
6	again for one to two years ago; 18 percent to two
7	to five years ago, 43 percent for more than five
8	years ago.
9	MS. GIAMBONE: Okay. So similar to what
10	we're seeing in the room. Great. Okay. Which of
11	the following best describes your current
12	condition? A, my cancer is localized and has not
13	spread outside my breast and/or local lymph nodes.
14	Okay. So we have one. Okay. B, my cancer has
15	spread, metastasized to the rest of my body?
16	Okay. So I'm counting about eight or so, eight or
17	nine. Okay. C, I have been treated for my cancer
18	and currently have no evidence of disease. Okay.
19	So I see about six or seven hands raised. And D,
20	I'm not sure. Okay. How about on the web?
21	MR. THOMPSON: Thirteen percent say
22	they're cancer is localized; six percent say it is

43 metastasized; and 80 percent said they have been 1 2 treated and currently have no evidence of disease. 3 MS. GIAMBONE: Okay. Thank you. So that will take us to our discussion topic. Thank 4 you all again for bearing with us as our 5 technology did not work. So let's have our Topic 6 7 1 panelists please introduce yourselves. 8 MS. DURHAM: I'm Karen Durham. 9 MS. GIAMBONE: Okay. Go ahead if you want to just -- yeah, go ahead and introduce 10 11 yourselves. 12 MS. McRAE: I'm Katy McRae. MS. DUNNE: Hi. I'm Debbie Drake Dunne. 13 MS. FINESTONE: Sandy Finestone. 14 15 MS. GIAMBONE: Okay, great. So as I 16 mentioned, our Topic 1 panelists will read off 17 their remarks and I am going to -- I just want to 18 say thank you so much for preparing all of your 19 summary statements and for sharing these stories 20 with us today. So can we start with Karen, if you 21 don't mind? 22 MS. DURHAM: Good afternoon. As I

1	introduced myself, I'm Karen Durham and I'm from
2	Lindale, Texas. I was originally diagnosed with
3	an aggressive invasive stage two breast cancer 25
4	years ago, and you didn't have hardly any
5	treatment options 25 years ago but I went through
6	all of my surgeries. I completed all of my
7	chemotherapy treatments and I did great for 19
8	years. Then in January of 2009, I was diagnosed
9	with stage four metastatic disease. Surgery was
10	not an option. I went on a clinical trial. I
11	took two drugs different drugs a day on the
12	clinical trial. They were pill form. I thought I
13	was doing really well until two months ago, in
14	January 2015, I had disease progression with four
15	new tumors. This was really emotionally
16	challenging because of the length of time between
17	each of the diagnoses was so long. I was lulled
18	into a sense of kind of maybe a security, that
19	that was it, it was not going to go any further.
20	There is no sense of security when you have breast
21	cancer.
22	Right now I'm doing fine for somebody

1	that's being treated for metastatic disease, but I
2	do not make any long-term plans. It's 6 to 12
3	months or less because I never know what the
4	future is going to bring.
5	To put this a little bit in perspective,
6	in the six years and two months since I was
7	diagnosed metastatic, I have had 193 visits with
8	my oncologist. That's not scan time, treatment
9	time, any other doctor time. That's just with my
10	oncologist. That averages out to about 2.6 visits
11	a month. I have a wonderful caregiver in my
12	husband. He has made all but one of these
13	appointments with me.
14	I have many side effects from the 25
15	years, both from the surgery and from the
16	different treatments that I've been on. I have
17	cognitive impairment, hot flashes, dry skin,
18	weight gain, headaches, joint and muscle pain,
19	diarrhea and mouth sores just to mention a few.
20	The list goes on. I have chronic severe
21	lymphedema in my left arm from my surgery which
22	was different 25 years ago. I was prone to

1	current infections which can be life-threatening
2	if they're not treated properly immediately. Now
3	I'm on a daily antibiotic as a preventative for
4	these infections.
5	It's very depressing when I go shopping
6	for clothes. I have to try on clothes that fit my
7	left arm, not the rest of my body. To fit my left
8	arm, it's a woman's size 22 to 24. The rest of my
9	body is a size 12. It's depressing.
10	Fatigue has become a part of my daily
11	life. It's just something I have learned to live
12	with. Some days it's better than other days.
13	For the six years I was on the two
14	different chemotherapy treatments a day in pill
15	form. Now I have five pills that I take. It's
16	two drugs different drugs and I am on a
17	different clinical trial. But, you know, I think
18	back I cannot remember when I did not have a
19	queasy stomach and smells made me very nauseous.
20	It's been that long ago in six years and two
21	months. I have peripheral neuropathy in my feet
22	and legs. Sometimes the bottoms of my feet burn
1	

1	so badly that I cannot stand to have even socks on
2	them. My legs do not feel like they have the
3	strength to hold me up going up or down stairs.
4	Walking on flat surfaces is just fine. So when I
5	go up or down the stairs, it's one stair at a time
6	and I hold onto the handrail with a death grip so
7	I won't fall and risk breaking any bones.
8	The cognitive impairment I have is not
9	forgetting things. It's the word is there but I
10	can't get the word from my brain to come out my
11	mouth. I can look out my window at home and see a
12	red cardinal and I want to say red cardinal but
13	the words won't come. It just there
14	something is blocking that from coming out. It's
15	really embarrassing, especially in an environment
16	like this.
17	The daily activities besides what I Have
18	already mentioned, walking or any type physical
19	exercise, because of the fatigue, working in the
20	garden and doing things like that because of the
21	chance of an infection in my arms is just about
22	impossible.

48 And then there is one other side effect 1 2 that no one wants to talk about and that's sexual dysfunction or sexual activity. I, like nearly 3 every woman that has taken an aromatase inhibitor, 4 finds that the traditional position of sexual 5 intercourse is extremely painful and 6 uncomfortable. 7 8 And with that, I would just like to 9 thank the FDA for the opportunity to appear here 10 today and present my comments. 11 MS. GIAMBONE: Thank you, Karen. Katy? My story really begins in 12 MS. McRAE: 13 2003. I'm going to read it so I don't diverge or whatever. Two years before my breast cancer 14 15 diagnosis, I was living in Germany at the time. I 16 had been having issues with my eyes and had laser 17 and cryotherapy treatment of both retinas. A few 18 months later, on my way to see my mom in Ireland, 19 the retina in my left detached. I went straight 20 from the airport with my sister and had an 21 emergency surgery the following morning. Eight weeks, multiple setbacks and three additional 22

1	surgeries later, I returned to my husband and four
2	children in Germany. The entire situation was a
3	nightmare. The pain, the fear of recurring
4	blindness I had actually gone blind in my left
5	eye at the third detachment the discomfort of
6	lying in a certain position called "posturing" for
7	an entire week, getting up only to use the
8	bathroom and eat, I missed my husband's birthday,
9	my birthday, our 20th wedding anniversary, my
10	daughter's graduation she was salutatory out of
11	300 kids and my son's Eagle Scout ceremony in
12	the time I was in Ireland in the hospital. On my
13	daughter's 18th birthday, July 3rd, the professor
14	released me and I flew back to Germany.
15	While in the hospital, I had annoyingly
16	developed depression. So once back in Germany, I
17	had to see a new team of eye specialists for post
18	op oil removal from my eyes, routine follow-ups,
19	cataract surgery, etcetera. We moved house 50
20	miles away and I got my children started in their
21	new schools. On the day we drove my daughter to
22	the airport to go to university in Ireland, we

		50
1	went directly after dropping her off to the	
2	psychiatric clinic where I was admitted and spent	
3	the following three months as an inpatient. There	
4	aren't words to describe the horror of depression.	
5	Suffice it to say, had it not been for my seven-	
6	year-old post vasectomy child at home who I	
7	believe still needed me, I would not be here	
8	today.	
9	Happily, though, I was one of the lucky	
10	ones and eventually got back to living a normal	
11	unmedicated life. So I had a nice uneventful year	
12	in 2004 but in January of 2005, my mom died and	
13	three months later, I was diagnosed with breast	
14	cancer. So I tell these stories not because I	
15	want a pity party but they give me perspective	
16	when I'm dealing with the when I dealt with my	
17	breast cancer diagnosis. For me, breast cancer	
18	was bad, retinal problems were worse, and	
19	depression was the absolute pit of despair so in a	
20	way, I was luckier than most when I got my breast	
21	cancer diagnosis. I'd handled worse. I could do	
22	this.	

1	Two of my three sisters had already had
2	breast cancer. One a late stage over 50-year-old
3	and my younger sister who was diagnosed in her
4	early 40's. My other sister developed breast
5	cancer subsequent to my diagnosis. We're four
6	sisters in my family and between us, we have a
7	grand total of two breasts. I have been tested
8	and I'm not positive for the BRCA1 or 2 genes,
9	which is nice. So I was the only one of my
10	sisters to take what I call the scenic route to
11	recovery. I chose elective bilateral mastectomy,
12	chemo, radiation, etcetera. I had breast
13	reconstruction some months later and during that
14	surgery, I had my ovaries removed.
15	So we relocated to the United States and
16	all went well for about five years until September
17	of 2009. My oncologist was alerted to my changing
18	status after a routine blood test showed an
19	increase in my cancer marker 2729. So metastatic
20	breast cancer was confirmed after a PET scan and
21	once again, the roller coaster was in motion. My
22	son said that living with metastatic breast cancer

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was the ultimate chaos and I think he truly, truly 1 2 nailed it. 3 For me, personally, the diagnosis of metastatic disease in my bones was very difficult 4 to get my head around. I'm proactive. 5 I face every challenge head on and I'm willing to move 6 heaven and earth to fix my problems but this time, 7 8 the dreaded word "incurable" was part of the 9 equation. For me, personally, it was a lonely time because metastatic breast cancer is not well 10 11 understood in the general community and as a non-12 survivor, I felt somewhat a failure in the primary 13 breast cancer community. So for months, cancer was the first 14 15 thought in my head when I woke and the last before 16 I finally slept. I had mixed results in the 17 beginning of my treatment for what should have 18 been a best case scenario, ER-positive metastatic 19 breast cancer to the bone, the best of the 20 metastatics to have, but I wasn't responding well 21 to the usual anti-estrogen regimen. 22 So my oncologist and I decided that I

1	should have a bone biopsy taken from a lesion in
2	my left iliac crest and that proved to be HER2-
3	positive which my primary cancer had not indicated
4	and, of course, explained the lack of response to
5	my initial treatments. So when I began to take
6	Herceptin, I had immediate and positive results
7	but then I developed LVEF problems in my heart as
8	a side effect of Herceptin. It was horribly
9	discouraging and I had to suspend my treatment on
10	a number of occasions until my heart recovered.
11	But at this time, there was great
12	excitement in the HER2 community about the pending
13	improvement of TDM1. I was worried though that
14	because of my LVEF status that I would not be a
15	candidate for the drug when it became approved, so
16	I called Genentech one day. They did the drug and
17	I spoke to a specialist who reassured me, however,
18	that I might be a candidate for the expanded
19	access trial. So I had been on a weekly regimen
20	of Herceptin but the trial dosage was given at
20 21	of Herceptin but the trial dosage was given at three-week intervals and actually, I had no

1	So I have been on TDM1, which is now
2	known as KADCYLA, for over two years, 2-1/4 years,
3	an amazing virtually totally symptom 2-1/4 years.
4	It's been phenomenal. However, since registering
5	a few weeks ago for today's forum, I've been
6	having some new symptoms and am now resistant to
7	KADCYLA. I will begin radiation treatment on my
8	sacrum tomorrow. I hope to begin a new protocol
9	possibly taking PERJETA within a few weeks.
10	Metastatic breast cancer is a very
11	different animal than primary cancer. My life is
12	hugely dictated by my three-week chemo cycles.
13	The most I could ever be away for was three weeks
14	which, of course, for most U.S. citizens would be
15	very acceptable but I'm an ex-pat and I have
16	siblings all over, you know, Ireland and Europe
17	and time is always a factor in keeping close
18	family ties and it's something that's hugely
19	important to me and to them.
20	MS. GIAMBONE: Katy, any closing
21	remarks?
22	MS. McRAE: Pardon?

1	MS. GIAMBONE: Any final remarks?
2	MS. McRAE: No, that's it.
3	MS. GIAMBONE: Thank you, Katy. Debbie?
4	MS. DUNNE: Hi. I'm Debbie Dunne and
5	I'm from San Francisco, California, and I want to
6	thank the FDA for convening this meeting and also
7	for giving me the opportunity to share my story.
8	After finding a lump in my left breast
9	in August 2009, I was diagnosed with breast
10	cancer. While I had two tumors, the cancer had not
11	spread to the lymph nodes or outside my breast. I
12	have been cancer free for the last six years. As
13	the majority of my symptoms and impacts were
14	psychological, I would like to briefly describe my
15	treatment approach as the process of decision-
16	making sent me into a serious state of despair.
17	Despite doctors telling me that my
18	cancer was caught early and that I had a high
19	likelihood of survival, I was convinced that my
20	diagnosis meant certain death. No one or no data
21	could convince me otherwise. Most family and
22	friends I knew who had cancer had succumbed to the
1	

1	disease. My stepfather passed away from cancer
2	three months before my own diagnosis. When I
3	heard the words "you have cancer," my body
4	immediately went into flight or fight mode in an
5	extended period of extreme fear and high stress.
6	Normally a very thoughtful and analytical person,
7	I became focused on short-term survival and was
8	unable to think clearly or understand the long-
9	term consequences of my choices. Even my doctor
10	noted that I went from a calm and thoughtful
11	person in my initial visit to a, quote, complete
12	emotional wreck.
13	I wanted to do whatever I could to
14	reduce my risk. As I began to contemplate my
15	treatment plan, I quickly became confused and
16	overloaded with information. Where I hoped to
17	find black or white answers, there was only gray.
18	I spent hours on the internet searching for the
19	right answer. As I insisted in getting the cancer
20	out of my body as soon as possible, I had a
21	lumpectomy three weeks after my diagnosis.
22	Because there was a history of early

1	onset prostate cancer on my dad's side, I met with
2	a genetic counselor who recommended that I take
3	the genetic test. I tested positive for a
4	mutation of the BRCA2 gene but it was a variant of
5	unknown significance.
6	What was I to do? They then asked that
7	my father be tested and he also had the same
8	variant so the doctors were pretty sure that, in
9	fact, I had the mutation. I had two options:
10	MRIs, constant surveillance, or remove my breasts
11	and my ovaries. This would not necessarily
12	prevent the cancer from returning but it was the
13	choice that I took, to remove my breasts and my
14	ovaries.
15	By this time, the doctors realized that
16	psychologically, I needed to feel confident that I
17	had everything I had done everything I could to
18	reduce all of my risk or as much risk as possible.
19	My other treatment options were to consider
20	chemotherapy and an aromatase inhibitor. One
21	doctor said chemotherapy was unnecessary as I was
22	low risk while another doctor told me I have a

1	young son so I might want to do everything I could
2	to be around for him, so I decided to take the
3	oncotype test. Once again, it was not definitive.
4	Eighteen was low risk. I got a 20. So I took
5	chemotherapy.
6	While I read and was told about all the
7	possible side effects, nothing could prepare me
8	for the emotional and mental upheaval I would
9	experience. I literally felt like I was dying and
10	I questioned my decision to do the chemotherapy.
11	Every day I contemplated quitting.
12	As I have just described, the symptoms
13	
	that had the most significance in my daily life
14	that had the most significance in my daily life were primarily psychological. Fearing for my
14 15	
	were primarily psychological. Fearing for my
15 16	were primarily psychological. Fearing for my life, I was paralyzed and immediately became
15 16	were primarily psychological. Fearing for my life, I was paralyzed and immediately became depressed. I was convinced that I would never see
15 16 17	were primarily psychological. Fearing for my life, I was paralyzed and immediately became depressed. I was convinced that I would never see my seven-year-old son grow up. I remember sitting
15 16 17 18	were primarily psychological. Fearing for my life, I was paralyzed and immediately became depressed. I was convinced that I would never see my seven-year-old son grow up. I remember sitting in church on Christmas Eve in 2009 thinking this
15 16 17 18 19	<pre>were primarily psychological. Fearing for my life, I was paralyzed and immediately became depressed. I was convinced that I would never see my seven-year-old son grow up. I remember sitting in church on Christmas Eve in 2009 thinking this is my last Christmas. I lost interest in being</pre>
15 16 17 18 19 20	were primarily psychological. Fearing for my life, I was paralyzed and immediately became depressed. I was convinced that I would never see my seven-year-old son grow up. I remember sitting in church on Christmas Eve in 2009 thinking this is my last Christmas. I lost interest in being with friends who were living normal happy lives

1	coworkers being supportive, I couldn't bring
2	myself to go to work so I went out on disability
3	for nearly a year. Many days I didn't get out of
4	bed, instead watching hours of TV to distract
5	myself.
6	I also spent hours and hours on the
7	internet reviewing the same statistics over and
8	over hoping that it was possible I could survive.
9	I took anti-anxiety medication to try
10	and stop the feeling that I was jumping out of my
11	skin and to numb the pain that I constantly felt.
12	My world was completely out of control and I
13	really struggled to maintain a sense of calmness.
14	As my mind continually raced night and day, I was
15	unable to sleep for any length of time. I
16	searched for answers wondering why me, how did I
17	get cancer, I'm young, I'm healthy, I was supposed
18	to have a full life ahead.
19	In addition to the psychological
20	symptoms, I did experience physical symptoms as
21	well. All the treatments and the lack of sleep
22	contributed to an extremely high level of fatigue

1	I had never before experienced and to this day,
2	some of that fatigue still exists.
3	Given that my cancer was ERPR-positive,
4	I was prescribed an aromatase inhibitor. The
5	initial bone pain was excruciating so the doctors
6	had me try three different aromatase inhibitors.
7	While some of that bone pain has subsided, I still
8	feel it in my lower back on a regular basis. I
9	have also lost bone density and I now have
10	osteoporosis.
11	As for specific activities that are
12	important to me that I can no longer do as fully
13	as I would like as a result of breast cancer, this
14	is the biggest area of lasting impact for me. The
15	loss of interest and difficulty with sexual
16	activity and intimacy with my husband has been
17	significant. When discussing the decision about a
18	mastectomy with my doctors, I was told I would
19	lose feeling in my breasts. At that time, I felt
20	like I was fighting for my life and I wanted to do
21	everything I could to reduce my risk of recurrence
22	so I was very aggressive; as I mentioned, multiple
1	

1	surgeries, actually partial radiation,
2	chemotherapy and an aromatase inhibitor. I had
3	convinced myself I might not even be alive for
4	that long so I wasn't really thinking about longer
5	term impacts of my treatment decisions. Never did
6	I realize that my decision for a double mastectomy
7	and oophorectomy would have much deeper
8	psychological implications than just the loss of
9	physical feeling.
10	Six years later, I am grateful to be
11	alive. I do not regret any of my treatment
12	decisions but my relationship with my husband has
13	been significantly altered as a result of my
14	decisions.
15	In closing, given that many breast
16	cancer patients are now going on to live long,
17	productive lives, I think it is critical to
18	discuss and consider treatment options in a
19	different manner. I have had the opportunity to
20	talked with a number of breast cancer patients
21	over the years. Many of us are frightened and in
22	a weakened emotional state when first receiving

1	our diagnosis. As I mentioned, it was extremely
2	difficult to understand clearly the implications
3	of my decisions should I be one of the fortunate
4	cancer survivors who could potentially be alive
5	for a long time.
6	As someone who did a lot of research
7	around my various treatment options, I had no way
8	to gauge the validity of the various studies I
9	read. As a result of my experience, I am now
10	focused on helping to improve decision support to
11	cancer patients. I firmly believe we need to
12	strengthen the evidence base for decision making
13	including participation in clinical trials, and
14	better reporting and access to patient-reported
15	outcomes would also provide a huge benefit.
16	Thank you again for allowing me to share
17	my story.
18	MS. GIAMBONE: Thank you, Debbie.
19	Sandy?
20	MS. FINESTONE: My name is Sandy
21	Finestone. I'm from Southern California. I've
22	been fortunate enough not to have to personally

1	face the challenge of metastatic cancer.
2	I was diagnosed over 30 years ago when
3	you were offered no options and only one
4	treatment. When I went for my surgery, I signed
5	an authorization allowing the surgeon to do
6	whatever was necessary without any idea what that
7	decision would be. Today women are given many
8	options and these women are expected to make
9	decisions without very much information, decisions
10	that will impact the rest of their lives. This is
11	particularly difficult for the patient who is
12	metastatic at the time of diagnosis.
13	I woke from my surgery to find that both
14	breasts had been removed and began my journey as
15	an advocate to education women about their disease
16	so when they make a decision, it will be an
17	educated one. I currently facilitate support
18	groups for newly diagnosed patients, those in the
19	middle of treatment, those whose treatment has
20	ended, and those whose treatment will never end.
21	Many concerns are the same for each of these
22	groups but some are very different, very different

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when facing the challenge that never to be able to
 put cancer behind you.

As a therapist, patients share many of 3 their concerns with me during individual therapy 4 5 sessions dealing with the stress and anxiety of the diagnosis. The symptoms that women mention 6 most are pain, fatigue, hot flashes, neuropathy, 7 8 lymphedema, memory loss, weight gain, vaginal dryness, loss of libido, and bone loss. Patients 9 are frustrated because many of these symptoms are 10 brought on by the medications that they are taking 11 to treat their cancers or to attempt to prevent 12 13 them from coming back.

14 Pain comes in many levels. Some pain is 15 minor and annoying while other is severe and 16 debilitating. Some pain can be managed with over-17 the- counter medications; some pain requires very 18 heavy medications that can cause other symptoms 19 such as constipation, sleeplessness or confusion. 20 Bone pain can limit movement which leads to many 21 other issues such as increased fatigue or 22 depression.

1	Fatigue prevents patients from doing
2	many things, both big and small, from going
3	shopping with friends to limiting the type of
4	vacation they can plan due to the inability to be
5	as active as they would like. Sometimes even
6	going to a support group or a doctor's appointment
7	take every ounce of energy they have. One
8	metastatic patient told me that she had to be
9	honest with her family and tell them that she had
10	a limited amount of energy and had to choose,
11	often painfully, which things she had the energy
12	to do and which things she could not do. It's
13	difficult when you've been a member of the family
14	who always plans and prepares the holiday dinners
15	and you can no longer fulfill that role and you
16	begin to see yourself as someone less important in
17	the family.
18	Hot flashes are the butt of many jokes
19	but when you're life is impacted by them, it's no
20	longer a laughing matter. I had a patient who was
21	an attorney. Her hot flashes were so severe that
22	she had to change her clothing several times a

1	day. It was so bad that she seriously considered
2	no longer doing court work because her concern was
3	that the juror would see her begin to perspire and
4	think she was lying and that her client was
5	actually guilty. Some women have fleshing with
6	their hot flashes which also embarrassing and as
7	is the constant taking off and putting on of
8	clothing or the issue it presents in an office
9	when other coworkers are not experiencing the same
10	weather that you are.
11	Neuropathy can be both painful and
12	dangerous. When you cannot feel where you're
13	stepping when you're going down stairs, there's a
13 14	stepping when you're going down stairs, there's a possibility of a fall. When you cannot feel what
14	possibility of a fall. When you cannot feel what
14 15	possibility of a fall. When you cannot feel what you're stepping on, the chances of your injuring yourself become higher. When you are unable to
14 15 16	possibility of a fall. When you cannot feel what you're stepping on, the chances of your injuring yourself become higher. When you are unable to
14 15 16 17	possibility of a fall. When you cannot feel what you're stepping on, the chances of your injuring yourself become higher. When you are unable to button your blouse or undo a zipper, you become
14 15 16 17 18	possibility of a fall. When you cannot feel what you're stepping on, the chances of your injuring yourself become higher. When you are unable to button your blouse or undo a zipper, you become dependent on others. This becomes a bigger issue
14 15 16 17 18 19	possibility of a fall. When you cannot feel what you're stepping on, the chances of your injuring yourself become higher. When you are unable to button your blouse or undo a zipper, you become dependent on others. This becomes a bigger issue when you live alone.

1	sexual into their 70's and 80's and treatment
2	often interferes due to fatigue, pain, or vaginal
3	dryness. Many medications effects one libido
4	which can create relationship problems. It's
5	difficult to want to be intimate when you have
6	pain, fatigue, or nausea.
7	Lymphedema, as we've heard, can both be
8	painful and bothersome. For some women, the pain
9	is constant. Lymphedema intrudes into your life
10	as you must massage your hand and arm several
11	times a day in order to keep the swelling down.
12	It also restricts the type of clothing you can
13	wear as the sleeve opening must be large enough to
14	facilitate the bandaged arm, as we heard from
15	Karen. One of my patients was very distressed as
16	she was unable to wear many of her favorite items
17	of clothing due to the size of her arm. She felt
18	she could no longer wear anything sleeveless so as
19	not to draw attention to the bandaging.
20	The list I gave you was long and I hope
21	you can appreciate what many women suffer when
22	dealing with this disease. Thank you.

1	MS. GIAMBONE: Thank you very much,
2	Sandy. So I'd like to ask everyone to give a
3	panelists a round of applause.
4	(Applause.)
5	MS. GIAMBONE: What you shared with us,
6	the very personal stories and I think I can
7	speak on behalf of all of my colleagues when I say
8	that you are very brave and very courageous to
9	come here and share those personal stories with
10	us, so thank you very much.
11	So I just want to recap some of the
12	points that we heard from our panelists and then
13	I'd like to see from those of you in the audience
14	how it resonates with you. So Karen mentioned
15	that her life is impacted by just so many doctor
16	appointments. She mentioned that she has
17	cognitive impairment. She said that she can't do
18	some of the things that she enjoyed doing such as
19	gardening or walking and she also mentioned that
20	she has sexual intimacy you know, she has
21	experienced the impact on sexual intimacy. So how
22	many people did that resonate with? Okay. So we

have about nine people in the audience that said 1 2 that. 3 Katy, you talked about -- I think you described depression. You described that it's a 4 5 roller coaster rise. How many of you did that resonate with? Okay. 6 7 And Debbie, you talked about -- also, 8 you talked about the psychological issues, the 9 fear and the anxiety and the depression. Again, 10 how many of you in the audience did that resonate 11 with? Okay. So five or six people. 12 And then finally, Sandy, you talked a 13 lot about, again, the stress, the anxiety, pain, fatigue, from all the different patients that 14 15 you've talked with. Okay, great. Okay. So it 16 sounds like a lot of you in the audience, that you 17 share similar perspectives or experiences from 18 what our panelists shared. 19 So in just a moment, we're going to hear 20 more from you on how you experience it but first, 21 I'd like to do a polling question. So do we know -- we're going to do hands? Okay. So I'm going 22

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1	to read this out loud and then we'll just do
2	I'm sorry that we're having these technical
3	problems with the clickers but we'll do another
4	hand raising exercise.
5	So of all the symptoms you have
6	experienced because of breast cancer, which do you
7	consider to have the most significant impact on
8	your daily life? So we'll just go down the list
9	and then you can just raise your hand and then
10	we'll talk more about these in just a moment. So
11	a), pain such as breast pain or bone pain I see
12	about seven hands raised for pain; b) swelling,
13	four hands raised; c) fatigue or lack of energy, I
14	see about 11 to 12 hands raised there; d)
15	depression or anxiety, I see about eight hands
16	raised for that one; e) cognitive dysfunction such
17	as memory loss, about four or so; f) numbness,
18	tingling in the hands or feet, about four hands
19	four or five hands; G, fertility issues, I see
20	about two hands for that one; H, menopausal
21	symptoms, about five-six hands raised for that;
22	and I, other symptoms or side effects of cancer

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treatments not mentioned, I see about 10 to 11 1 hands raised for that one. 2 3 And can we see on the web; did we hear something similar? 4 DR. THOMPSON: Actually, pretty much 5 evenly mentioned, every single thing listed on 6 7 here. 8 MS. GIAMBONE: Okay. So I believe the 9 one that received the most responses was fatigue; is that correct? Okay. And then followed by, I 10 think we saw, pain? Graham or Pujita, did we see 11 12 _ _ 13 (No audible response.) MS. GIAMBONE: Okay. And then can you 14 15 remind me of what the third -- was it --16 MR. THOMPSON: Depression or anxiety. 17 MS. GIAMBONE: Okay, depression or 18 anxiety. Okay, thank you. And I'm sorry I'm 19 having to check back. Normally, we see polling 20 results so I see exactly what came up, what the 21 top three answers were. 22 Okay. So let's talk about -- let's

		7
1	spend some time talking about some of these	
2	symptoms and we'll definitely also spend some time	
3	talking about option I, which was other symptoms	
4	not mentioned.	
5	So I know this might be a difficult	
6	question to ask but, you know, we're going to be	
7	spending Topic 2, you know, talking about the	
8	treatment but if there is a way you can tease out	
9	whether the symptom is due to the underlying	
10	disease or if it's a side effect of treatment,	
11	that would also be really helpful for us to hear	
12	when you're describing. So let's talk about	
13	can we go back to the previous slide so let's	
14	start with the fatigue or lack of energy. Would	
15	somebody share with us how they experience the	
16	fatigue? Would anybody like to start us off?	
17	Yes.	
18	MS. O'BRIEN: Hi. So to clarify, I was	
19	diagnosed with metastatic breast cancer. I was a	
20	de novo presentation at age 43 so I was thrown	
21	I was as a course of my treatments, I was	
22	thrown into premature menopause and the first	

		73
1	treatment that I had was tamoxifen and then after	
2	that failed, two years later, Femara and now	
3	FASLODEX. And I think it would be hard I would	
4	say that my fatigue has grown progressive as I	
5	have been on these drugs. It is true one of	
6	our panelists mentioned almost a compromise. You	
7	decide there might be three things I want to do	
8	but I know I can only do one of them so this is	
9	what I'll do.	
10	The other week, I was babysitting. I	
11	have triplet two nephews and a niece and I was	
12	watching these three children and I felt	
13	frustrated because I enjoy being with the kids but	
14	even only after spending like four-five hours with	
15	them, you know, I was just exhausted. And in	
16	terms of my professional life, one of my	
17	responsibilities was attending trade shows and it	
18	was so frustrating. I would be at Chicago's	
19	McCormack Place and wanting to make my rounds and	
20	having to sit down and, you know, just you	
21	know, the spirit is willing but the flesh is not	
22	and it's just the lack of control and the, you	
1		

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know, feeling much older than your years is quite
 1
 2
    frustrating.
 3
              MS. GIAMBONE: Thank you, Katherine.
   And I think, Katherine, you bring up a point that
 4
   we also heard from the panelists which was the
 5
    impact of these symptoms on your ability to work.
 6
    I remember -- I think it was Karen, you mentioned
 7
 8
   that -- or Debbie, you mentioned that you had to
 9
   make the decision to stop working because of
10
    living with the disease, so thank you for sharing
11
    that.
12
              Anybody else, would you like to comment?
    Yes. And if you could state your name?
13
              MS. KNACKMUHS: Hi. My name is Ginny
14
   Knackmuhs and I've had metastatic breast cancer
15
16
    for six years. I thought I'd make my comment now
17
   because we're coming up on my nap time.
18
               (Laughter.)
19
              MS. KNACKMUHS: I've had a particular
20
   problem with fatigue in the last couple of months.
    I'm a bit of an outlier and I've been somewhat
21
22
    fortunate in that I was on the same treatment for
```

1	5- 1/2 years. I was on Xeloda and I have triple
2	negative breast cancer, androgen receptor, bone
3	only mets. But 5-1/2 years on one treatment,
4	anybody that's got metastatic disease knows that's
5	a pretty good record.
6	But I had progression in November and
7	one of my problems sometimes people get fatigue
8	and it's not really related necessarily to blood
9	counts but in my case, I am chronically anemic
10	now. Once I went off of the chemo, they thought,
11	well, maybe your red blood cells will come back.
12	I'm actually on a hormonal drug now that's used in
13	prostate cancer but it's been four months and it
14	hasn't really my numbers haven't come back.
15	And the thing that's so frustrating to
16	me, not only that it effects how much I'm able to
17	do, I kind of go back to when my mother was in her
18	80's, her rule was one thing a day and that's what
19	I kind of feel like. You can only plan on one big
20	thing a day, you know. But what's particularly
21	frustrating for me is there doesn't seem to be any
22	treatment. I've been on PROCRIT injections to try

1	to bring up the red blood cells and, you know,
2	that, I don't think really does work. It seems to
3	have had mixed results and now I'm the
4	insurance doesn't cover it anyways. And so, you
5	know, I'm left with doing blood transfusions
6	which, you know, my oncologist is really not happy
7	about because I guess they view it more now as
8	almost a transplant so problems with that.
9	So it's very frustrating to me because,
10	you know, you don't seem to have an option and
11	this is just something that you're going to have
12	to live with and, you know, it is difficult
13	because I'm you know, I'm not young, I'm 65 but
14	I don't think I should go by the "one thing a day"
15	rule that the 89-year-olds used.
16	MS. GIAMBONE: Thank you, Ginny. So can
17	I ask a follow-up question? Does it it sounds
18	like the fatigue is coming as a side effect of the
19	treatment that you're taking? Is that accurate?
20	MS. KNACKMUHS: Well, in my case,
21	initially they thought it might be the treatment
22	but now it's been too long, so now it's a question

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of well, is the cancer actually attacking the bone 1 2 marrow --3 MS. GIAMBONE: Okay. MS. KNACKMUHS: -- you know, so they 4 5 don't really know. But a lot of times, fatigue, you just get fatigued for no -- that's why I say 6 mine's a little different. I mean I do actually 7 8 have low blood counts. A lot of times people have 9 fatigue with breast cancer and you really can't point to anything so it's sort of the same 10 11 situation. There's -- you know, that's why 12 fatigue is so difficult because there really is 13 nothing to treat it. MS. GIAMBONE: Okay. How many of you --14 15 yes, Sandy. 16 MS. FINESTONE: I'd just like to make a 17 comment. Words are very powerful to me and I 18 think fatigue is not the right word. When we as a 19 general audience think about fatigue, it means we 20 stayed out too late or we gardened too much and 21 we're tired and we rest and the fatigue resolves. 22 I think it's important to note that the type of

1	fatigue that patients experience is not like that
2	at all. They can rest and rest and rest and the
3	fatigue doesn't go away. So when I talk to my
4	patients, I use the word "weakness" and that
5	resonates with them a lot more and they seem to
6	say yes, that's what it is. It's not that I'm
7	tired. It's that I'm weak. I just can't do these
8	kinds of things. So I sort of make it my
9	challenge not to use the fatigue word and I'd like
10	to hear comments from some of the other patients,
11	because I think it's misunderstood.
12	MS. GIAMBONE: Thank you very much for
13	presenting that perspective. I actually saw
14	several heads nodding as you were speaking so
15	maybe we can do a show of hands here. Does that
16	sound does that resonate with you that it's the
17	weakness, this persistent weakness versus a more,
18	I guess, temporary type fatigue? So could you
19	raise your hands and does that resonate with you?
20	Okay, great. Thank you, Sandy. Thank you for
21	clarifying that.
22	Okay. Any other yes. Oh, no, she'll

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bring over the microphone to you. 1 2 MS. CAPPEL: My voice can be big. Hi. My name is Elizabeth Cappel. I also have 3 metastatic disease. I think the weakness is more 4 5 when you're going through treatment and when you're not in treatment, the leftover side effects 6 7 can be fatigue, to clarify that. I think it's two 8 different situations. If you're not in treatment, 9 sometimes the treatment, the long-lasting effects can be fatigue. For me, taking iron supplements 10 11 helps with that. I have iron deficient blood so 12 my hemoglobin can be fine yet I can still have 13 some types of fatigue left over but the iron does take care of that. 14 15 MS. GIAMBONE: Okay, very good to know. 16 Thank you very much. Okay. So let's try to move 17 on to another symptom unless -- does anybody have 18 anything else? Yes, Jonca. 19 DR. BULL: Another -- a clarifying 20 question on the fatigue and weakness. Are people 21 able to sleep? Where does insomnia fit into this 22 or lack of being able to get good quality rest?

1	MS. GIAMBONE: Okay. So I'm seeing a
2	lot of nos here. Would anybody like to share
3	their perspective? How about right here, Sarah.
4	Thank you, Jonca, for your question.
5	MS. WRIGHT: First, I don't have
6	metastatic breast cancer so I'm fortunate but I
7	was diagnosed with breast cancer back in '95, so
8	whatever treatment I had worked. But I would like
9	to say with regard to this fatigue issue, the type
10	of fatigue we're talking about I heard some
11	people say they do have trouble sleeping,
12	sometimes you're so fatigued that you can't sleep
13	but even when you do get a good sleep, you are
14	still fatigued. So it's not a tiredness or a
15	fatigue that goes away with rest and that's the
16	difference between someone who has not had cancer
17	and has not had treatment, that when they've
18	overdone it or they've stayed out late and you're
19	healthy and you have always been healthy, you get
20	a good rest and you're rearing to go again.
21	This is not a type of tiredness that
22	will go away after a few nights of good sleep and

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1	good eating. This is something that is always	
2	present and you might have a good day or two but	
3	it's always there. It's here right now. I mean	
4	you just can't get rid of that. It's hard to	
5	explain if you haven't experienced it and I don't	
6	know if there is a word to describe it. It just	
7	doesn't go away with a good sleep and if you	
8	haven't experienced it, you just it's hard to	
9	understand.	
10	MS. GIAMBONE: Pervasive exhaustion?	
11	MS. WRIGHT: Oh, I'm sorry. I'm told I	
12	didn't say my name. My name is Kim Wright (ph).	
13	MS. GIAMBONE: Kimberly. Thank you so	
14	much, Kim. I appreciate it. So I'm going to	
15	oh, yes. Let's take one more comment.	
16	MS. HOLLOWAY: Hi. My name is Jamie	
17	Holloway. I was diagnosed in 2012 with triple-	
18	negative breast cancer and had a complete response	
19	to neoadjuvant chemotherapy. And I will say the	
20	fatigue is definitely a lot stronger when you are	
21	undergoing treatment and we've heard from a lot of	
22	women who have metastatic disease so they're still	

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1 undergoing treatment.

2	I was not thrilled to find that I still
3	have fatigue now two years later and it's not
4	nearly as bad and it's not the one a day thing
5	like when I was in treatment. I have young
6	children so I likened it to when you have a
7	newborn baby. You can do what you want in the
8	morning but you must be home at noon because you
9	have to sleep or you can't function. And it's not
10	as bad as that but it's there are a lot of
11	times in the evening where I feel like it's just
12	too much energy to open up my computer and like
13	get something off of Amazon. That's just too much
14	energy and I don't want to do it.
15	And so and there are definitely
16	afternoons where I'm just so sleepy and it feels
17	like sleepy but it doesn't go away just because I
18	sleep and I think that's something that we've kind
19	of talked about. And I'm guessing it's still
20	lasting effects from treatment. You know, I'm not
21	on any hormonal therapy now or anything but, you
22	know, it's been a good two years and it still

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1 lingers.

2	MS. GIAMBONE: Okay. Thank you very
3	much, Jamie. Okay. So to recap, we're hearing
4	you summarize that it's a pervasive exhaustion.
5	We heard that it can be worse during treatments
6	but that it's still lingering post treatments. In
7	some cases, it sounds like it's sort of worsened
8	over time, as you mentioned earlier, that, you
9	know, you had treatment several years ago but
10	you've kind of you feel as though it's getting
11	worse now. And you mentioned that it is something
12	that with the tiredness and sleepiness, that it's
13	not something that's it's not just you sleep it
14	off or anything, it kind of lingers and continues
15	to be there. So thank you for sharing those
16	thoughts with us.
17	Any follow-up questions regarding the
18	fatigue? Yes, Geoff.
19	DR. KIM: I'm just curious. Actually,
20	for Katy, while you were on KADCYLA and you had
21	you said that it seemed to be a very positive
22	experience, did you have that lingering fatigue

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during the treatment, too, or was it put away for 1 2 a little bit? 3 MS. McRAE: No, not on KADCYLA. It was an absolutely amazing drug for me and -- but I 4 also feel I'm sorry of very positive and I walk. 5 I love to walk and so sometimes I would choose to 6 7 just push myself a little bit --8 DR. KIM: Yeah. 9 MS. McRAE: -- and go out and do that walk. I think a lot of this has sort of a 10 psychological component as well and that was my 11 way of dealing with it. Right now I'm --12 13 MR. THOMPSON: Right. MS. McRAE: -- fatigued since I've been 14 15 off KADCYLA and going through some more stuff but 16 -- so no, KADCYLA was an amazing drug. 17 DR. KIM: Right. And I wonder if you 18 have a shared experience with the Xeloda, too, for 19 5-1/2 years. Did you have the same type of 20 fatigue, too, as well or did that somehow abate a 21 little bit during the treatment while you're 22 having a prolonged response and then it came back

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after the treatment didn't work as well or upon 1 2 progression? 3 MS. GIAMBONE: Ginny. MS. KNACKMUHS: Yeah. I didn't 4 experience a lot of fatigue when I was on Xeloda. 5 It's really only been in the last year-and-a-half 6 when my blood counts really took a hit and, you 7 8 know, that is a side effect of being on chemo for 9 a long time. 10 DR. KIM: Right, right. 11 MS. KNACKMUHS: And now I just can't seem to get beyond it even though I'm off the drug 12 and it, you know, points to maybe, you know, 13 something a little more serious than just the 14 15 effect of the -- of being on the drug so 16 DR. KIM: Thank you for sharing that. 17 MS. GIAMBONE: Thank you, Ginny. Thank 18 you, Geoff. Are we hearing anything on the web 19 specifically regarding the fatigue? 20 MR. THOMPSON: Yes. We heard very 21 similar perspectives. One person saying that in her experience, the most common thing she's heard 22

1	patients talk about is fatigue, second being
2	sleep. One person saying that fatigue can vary
3	very much among patients depending on what
4	treatment they are on, and another person echoing
5	something we heard about sleeping saying that she
6	feels sleepy all the time and it doesn't go away
7	when she does sleep.
8	MS. GIAMBONE: Thank you. Okay. Let's
9	move on to some of the other symptoms that you've
10	all identified. So I believe pain was also
11	identified by several of you. So would anybody
12	like to talk about how their pain manifests and
13	how do you experience it? Yes.
14	MS. JONES: Hi. I'm Thelma and I was
15	diagnosed in July of 2007. The pain that I
16	experience can be sometimes almost from head to
17	toe. In the beginning, I had very mild arthritis
18	or either carpal tunnel syndrome and then over
19	time, it's gotten worse so there my fingers are
20	sort of now lumping up and on some days, it's
21	excruciating with the pain or there are days that
22	my hand is in so much pain that I literally have

1	to pry my fingers open. And so that affects my
2	daily activity because I'm a very active person.
3	And there are times that I get the pain in my
4	breasts and when it happens often, I mean,
5	naturally, I think, oh, has the cancer returned,
6	so I return to my doctor and they may say that it
7	could be, it's probably the side effects of the
8	radiation.
9	And then on a daily basis I think one
10	of the panelists mentioned about the lower back
11	pain and you have these pains so much that it's
12	either you do some type of medication or drug,
13	which I'm trying to stay away from except the ones
14	that I'm on, exemestane, the hormonal therapy.
15	But I'm really trying to focus more on
16	complementary therapies because I keep thinking
17	about the toxicity of the drugs. I'm HER2-
18	positive with an unknown primary so I underwent a
19	lot of drugs in the beginning and I'm just always
20	concerned about the long range implications of
21	those drugs.
22	MS. GIAMBONE: Okay. Thank you very

1	much for sharing that. So head to toe pain, pain
2	in the hands. You mentioned pain in your breasts.
3	Okay. Anybody else? Yes, Karen, let's hear from
4	you.
5	MS. DURHAM: Well, mine is bone,
6	particularly joints and also muscles and it's not
7	just one place. It moves around. One day my left
8	knee may just hurt really, really bad for two-
9	three days and then all of a sudden it's gone and
10	then it's something in my right arm. It's it
11	just moves all over.
12	MS. GIAMBONE: Okay. Thank you for
13	sharing that. Anybody experience that sort of
14	pain that moves throughout the body? Katy, yes.
15	MS. McRAE: I it's kind of
16	interesting because for the first I've only had
17	pain for two weeks. It started two weeks ago it
18	was and after six years of metastatic and it was
19	just excruciating. I couldn't believe it but the
20	types like even in the one episode, it's
21	
	there's a sharp skewer type pain. There's a dull

1	of I mean the intensity and the sudden onset
2	has just shocked me, you know, in the last two
3	weeks. And I thought when you said, Karen,
4	about the muscle pain, I thought I'd pulled a
5	muscle or whatever because, you know, I walk four
6	miles a day and I thought, okay, I've pulled a
7	muscle or whatever. Well, now it turns out that
8	it's all because of, you know, the nerve damage
9	across my the sacral ileac and into the sacrum,
10	but it's just the intensity. I look at my body.
11	I'm saying, who are you, where's this stuff coming
12	from in two weeks?
13	MS. GIAMBONE: Right.
14	MS. McRAE: I can actually almost
15	physically feel the cancer just you know, just
16	pinging me. It's going to do with it wants to do
17	and you're just along for the ride.
18	MS. GIAMBONE: Okay. Thank you for
19	sharing that perspective. Is there anything that
20	leads to the worsening of the pain, any is
21	there an activity or is there something about a
22	particular day, is there an average day of pain

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versus a more severe day of pain, or is it sort of 1 always there? Would anybody like to -- yes, 2 3 Debbie. MS. DUNNE: I was just going to say it's 4 always there, it just kind of moves around. But 5 again, to your point about not really wanting to 6 take the drugs, I've done a lot of holistic things 7 8 myself and doing exercise and hands-on healing, 9 acupuncture and all of those really do help. 10 MS. GIAMBONE: Okay, great. Yeah. So let's take one more comment. 11 12 MS. JONES: And I also detect when I'm extremely tired, the pain is greater as well so 13 the two sort of are intertwined. 14 15 MS. GIAMBONE: Okay. So you see a correlation between the pain and the tiredness or 16 17 the fatigue or weakness? 18 MS. JONES: Exactly. 19 MS. GIAMBONE: Okay, very good to know. 20 Yes, we'll take -- Sandy. 21 MS. FINESTONE: I think it's very confusing to women is the pain they're 22

1	experiencing due to treatment, due to aging, due
2	to hormonal manipulation, so it's very confusing.
3	Should they act on this pain and go to see their
4	physician because possibly it's a recurrence of
5	their cancer or progression of their cancer, or is
6	it just a natural sort of aging kind of thing
7	because the lack of estrogen and the
8	manipulations? It's very confusing and as well as
9	hurting.
10	MS. GIAMBONE: Okay. So I think that's
11	a good place to do a show of hands. So it sounds
12	like it is difficult then to tease apart whether
13	it's due to the disease or whether it's due to the
14	treatments? I see a lot of heads nodding. Can you
15	could you all raise your hand and say is
16	that a fair statement, that it's difficult to
17	tease that apart? Okay, great. Okay. Thank you
18	for sharing that with us.
19	Okay. And then what we'll do is I
20	know you've all mentioned you identified
21	several of these symptoms. I do want to ask is
22	there a particular symptom that you didn't know to
1	

1	expect or something that has really sort of
2	surprised you that, you know, it sounds like
3	you've all done lots of research and you've talked
4	to all your doctors, but did something come up
5	that you just didn't know to expect? Yes.
6	MS. JONES: One of the challenges I had
7	very early was dental. I've had I mean bought
8	everybody's dental four or five times over and in
9	the beginning, in 2007 when I presented this to my
10	doctor, my dentist, he wasn't very receptive to
11	the idea that that's what was causing it. And
12	that was very important for me to for him to
13	understand that because the copayment on my
14	insurance would have been less and so was the out-
15	of-pocket expense. But when I asked him to
16	document that, he couldn't seem to agree with me.
17	So as a result, I ended up paying thousands of
18	dollars out-of-pocket and now because I'm a
19	patient navigator and talk to a lot of people, one
20	of the things that I strongly encourage is that if
21	you have dental challenges now, you want to make
22	sure that you've corrected that before you go into

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serious treatment because it does have an 1 2 implication. 3 MS. GIAMBONE: Okay. Thank you. Dental effects. Yes. 4 MS. CAPPEL: Living with metastatic 5 disease and doing it for a while now -- I'm going 6 7 on 9 years, 12 years all together and 9 years 8 metastatic -- they're finding that there are more 9 side effects that they were not aware of because people weren't living as long as this. So what's 10 recently happened in the last year was that I have 11 12 a hole in my septum in my nose, and they said that that is from prolonged use of chemotherapy and the 13 blood vessels aren't receiving enough blood in my 14 15 septum and it actually caused it to erode. So 16 there's nothing they can do for it. It doesn't 17 really bother me. It feels a little weird but it 18 doesn't bother me. But that's one thing that I definitely did not anticipate was that my nose was 19 20 going to fall apart but the rest of it's still okay, so it's hanging in there. 21 22 MS. GIAMBONE: Okay.

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MS. CAPPEL: So just finding more and 1 2 more things since you're living long-term with 3 breast disease. MS. GIAMBONE: Right, okay. So nasal 4 issues. 5 6 DR. IBRAHIM: Can I ask a follow-up 7 question? 8 DR. IBRAHIM: Oh, sorry, go ahead. 9 MS. DURHAM: I was just going to say that I think anybody that goes through treatment 10 understands that they're going to have some degree 11 of nausea, diarrhea, constipation, and a few of 12 those things. And if you read what side effects 13 are, even on over- the-counter medications, there 14 15 are so many of them there, and I don't think any 16 of us that have been treated or are being treated 17 for breast cancer know the magnitude that we're 18 going to have the majority of those side effects 19 and how much we're going to have them. 20 MS. GIAMBONE: Okay. I saw a lot of heads nodding to what you just said, Karen, so 21 22 that sounds like it's a shared perspective. Yes.

1	MS. FARIS: Hi. My name is Susan Faris
2	and I just want to echo. You know, I recently
3	read a study that talked about how the doctors
4	will underestimate what kind of how severe the
5	side effects are going to be for a medication, and
6	I hear that repeated by nurses and oncology units
7	all the time, that the doctors do underreport
8	them. They for me, it was the severity of I
9	mean I looked at the list and I did not realize
10	how bad it was going to be so that's really what
11	the surprise to me was, like, you know, it was
12	sort of like I thought I was going to go on a
13	roller coaster ride but instead I did the straight
14	drop down and it was not fun so, you know, that
15	kind of thing.
16	MS. GIAMBONE: Okay, thank you. So the
17	severity or the intensity of what you are
18	experiencing, there's nothing to prepare you for
19	that. Yes, Amna.
20	DR. IBRAHIM: So I'd like to tag a
21	question onto that. Some patients say that if
22	they knew that they are going to have hair loss,

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	1	they would have wanted a different kind of	
	2	treatment whereas others are willing to take much	
	3	more toxicity. So I'm wondering are there any	
	4	is there any toxicity that you can identify which	
	5	you think would have changed the treatment that	
	6	you were seeking, that if you knew that that	
	7	toxicity was going to occur, you would have	
	8	actually gone for another treatment?	
	9	MS. GIAMBONE: Yes, let's go ahead and	
	10	hear from Katherine.	
	11	MS. O'BRIEN: My answer will be slightly	
	12	maybe outside of what you asked but when I was	
	13	given the anti-estrogen treatment, tamoxifen, I	
	14	was told, you know, I would be in and also had	
	15	ovarian suppression so early premature	
	16	menopause. And my doctor said almost certainly I	
	17	would have hot flashes and so on. And so I did	
	18	have some symptoms but I waited you know, I	
	19	waited in dread for these hot flashes and I am on	
	20	the minority in that but thankfully, it didn't	
	21	happen. But overall, it shows you how difficult	
	22	it is to evaluate treatment because you can now	
1			

1	that these are side effects. What you don't know
2	is how is it going to happen to you specifically
3	and what is your tolerance for what the treatment
4	may be.
5	So I think it is extremely difficult to
6	quantify because even I have not had a
7	treatment that causes hair loss but I know it's a
8	very important issue for, I would say, all
9	patients but even some patients have found
10	they were told they were going to lose their hair,
11	maybe they had thinning and if they had and
12	they had good results with the drug, so if they
13	went strictly by "I will lose my hair," they would
14	not they would have missed out on a drug that
15	proved to be well for them.
16	So I think what I am saying is the other
17	side effects is the this ties into the anxiety.
18	You don't know what is going you don't there
19	is you don't know what the treatment will mean
20	for you specifically.
21	MS. GIAMBONE: Thank you, Katherine.
22	And I'd like to just make a call-out. For those

1	of you who are on the web, if you'd like to dial
2	in to share any phone comments, please go ahead
3	and do so now. And we'll take just another comment
4	and then we'll check in with the web. Yes,
5	Debbie.
6	MS. DUNNE: So despite all the research
7	I was doing, I really wasn't considering toxicity
8	because again, my mindset was I'm fighting for my
9	life so if I lose my hair and I feel pain and I
10	don't even know if I'm going to be alive in a
11	year, so I'm not going to worry about toxicity.
12	So that's where I was coming from.
13	MS. GIAMBONE: Thank you, Debbie.
14	MS. FINESTONE: I would just like to add
15	as well. Women when you're diagnosed, you
16	think you're going to die. Now is there concern
17	about losing your hair? Absolutely. And will
18	some women make the decision not to treat? They
19	will but those women are few and far between.
20	Most women will actually do more at least
21	that's been my experience the maximum in order
22	to save their lives. But everyone starts from a

1	very naive position. When you say "nausea," well
2	there's nausea and there's nausea and each of us
3	are our own little, you know, clinical trials, how
4	we respond and how we don't. I don't think that -
5	- we're not informed enough. You know, it's like
6	being dropped into a foreign country and I'm not
7	pointing a finger at anyone, but physicians,
8	clinicians use language we as patients don't
9	understand, and you're asked to make decisions
10	without the information you need to make that
11	decision, and you don't have time, you don't have
12	time to educate yourself about the language of
13	cancer, the effects of cancer or how, as someone
14	mentioned, how am I going to respond.
15	Now I didn't have chemotherapy or
16	radiation therapy or any therapy but I have hot
17	sweats hot sweats what are they hot
18	flashes that are
19	UNIDENTIFIED SPEAKER: And sweats.
20	MS. FINESTONE: they are sweats
21	that are horrible. I have joint pain and that all
22	comes with aging but I would have done whatever it

		100
1	took to save my life. I was diagnosed young and	
2	had two small children. That's what was foremost	
3	in my mind. Losing my hair, no one wants that to	
4	happen but I don't think a very, very, very	
5	small majority of women will opt not for treatment	
6	for something like that. That's my experience.	
7	MS. GIAMBONE: Thank you, Sandy. Thank	
8	you. So Sandy yes, it looks let's hear from	
9	I don't think we've heard from you.	
10	JOANNE: Yes. I'm listening to	
11	everybody and I'm relating to what everyone's	
12	saying and I'm a survivor of two years now. And	
13	the thing that I would you know, if I my	
14	wish my wish is that we could know what to	
15	expect, you know, onset, duration and intensity of	
16	any of these side effects, whether they happen.	
17	You know, you hear oh, it's going to you know,	
18	you're fatigue's going to get worse with each	
19	cycle, right? Well, I wasn't quite prepared for	
20	how fatigued I would be by my sixth cycle, just	
21	wasn't. I fell flat on my face. I literally did	
22	and have recovered well. I'm doing well, wasn't	
1		

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1	quite prepared for, hmm, I still am very active	
2	with lots of energy and yet I have less energy	
3	than I had before I was treated. So no one would	
4	really notice that I may be more fatigued than I	
5	was before.	
6	And so, you know, I'm thinking about,	
7	boy, I would love some research out there that	
8	looks at for whom, under what circumstances, under	
9	what conditions can we expect, you know, that	
10	someone would be feeling, you know, tired,	
11	exhausted, or fatigue, pain, because I think more	
12	than anything, I want to be able to plan. If I	
13	know when I'm going to be experiencing that, then	
14	I can work around that, I'll feel less out of	
15	control. And that's one of the other themes I'm	
16	hearing, too, just feeling that's part of the	
17	anxiety, what you know, when I'm going to feel	
18	what.	
19	MS. GIAMBONE: Okay. Thank you. And	
20	you're name?	
21	JOANNE: I'm Joanne.	
22	MS. GIAMBONE: Joanne. Thank you,	

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Joanne. So correlating the lack of -- or the -- or 1 2 not understanding right away what to expect or the intensity or severity of what to expect, 3 correlating that to the anxiety that you feel. 4 5 Okay. 6 MS. JONES: And can I just share because I think that's an interesting question but a 7 8 paradigm shift on the way we are addressing it, 9 because the women here, I get the impression we're 10 all fairly well read but then there is that segment of the population that a, you have 11 12 challenges in just getting them to a mammogram 13 because of fear. So then if you start telling them after they've gotten a diagnosis from that 14 15 fearful mammogram that has taken them years to 16 get, if you start telling them about the 17 challenges that they are going to experience, then 18 I can assure that that's going to delay their 19 treatment even greater. 20 MS. GIAMBONE: Okay. 21 MS. JONES: So we have to find a way to 22 not only mitigate their fears but to help them to

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understand their treatment choices in a way that 1 2 they will reach out to -- and that's very difficult when the fear factor is very pervasive, 3 because they've heard everybody in their 4 neighborhood say all of the horrible things about 5 They rarely hear the benefits of undergoing 6 it. 7 any type of cancer treatment. 8 MS. GIAMBONE: Thank you very much. And 9 we'll take another comment. 10 MR. THOMPSON: Just want to point out we're going to be going to a break pretty soon but 11 we will talk much more about treatments and 12 treatment considerations in the afternoon, so 13 MS. GIAMBONE: So we'll take one more 14 15 comment and then we'll check in with the phone and 16 we'll go to break. Yes. 17 MS. KNACKMUHS: Ginny Knackmuhs again. 18 I was just thinking when Sandy made her comment, 19 and I thought it was a very good one, that in 20 early stage cancer, you know, you're trying to 21 save your life so losing your hair in the, you 22 know, long-term is not that big a deal. And I

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1	think that's a great point to illustrate the	
2	difference between early stage and metastatic. I	
3	mean, you know, early stage, yes, you're trying to	
4	save your life and, you know, you'll put up with	
5	just about anything, you know, because what is it	
6	going to be, six months a year, you can get	
7	through it.	
8	When it comes to considering symptoms	
9	and side effects for metastatic, it's quite a	
10	different decision. You know, you're going to go	
11	on this drug. You're going to lose your hair.	
12	Well, for how long? Will I ever get it back? So,	
13	you know, it's a different obviously, it's a	
14	different perspective but I'm a patient but I'm	
15	also a patient advocate for a metastatic breast	
16	cancer network. We're a patient group and what	
17	I've noticed is that and I just want to say	
18	this for all the young women out there,	
19	particularly those that are raising families that	
20	are metastatic they are willing to put up with	
21	so much more toxicity just for the sake of being	
22	there as long as they possibly can for their	

105 children. 1 2 MS. GIAMBONE: Thank you, Ginny. So let's go to the phones and do we have any callers 3 on the line? Operator, do we have anyone lined up 4 for a phone? 5 6 THE OPERATOR: Jennifer, your line is open. 7 8 JENNIFER: Hi. This is Jennifer. Can 9 you hear me? 10 MS. GIAMBONE: Yes, we can hear you. 11 Hello. 12 JENNIFER: Hi. So, yes, I was diagnosed 13 about two years ago at the age of 34, very active person. I am triple-positive. I had double 14 15 mastectomy, 13 lymph nodes removed and there was 16 cancer found in the lymph nodes. Had no problems 17 with chemotherapy, didn't need any kind of 18 radiation or anything like that -- I was actually 19 a stage three -- but have severe problems with 20 tamoxifen including very bad hot flashes, 21 depression for the first time in my life, bloating, abdominal pain that just -- that would 22

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1	have me sometimes double over, so I have chosen to	
2	stop taking tamoxifen. And I have also chosen to	
3	not go in an AI because my quality of life is more	
4	important to me than living with something that	
5	makes me feel less like a woman. And being young,	
6	the other thing, too, is I lost the ability to	
7	want to be intimate or sexual with anyone, and	
8	that's something that's very important to me and	
9	if I can't have that, I would rather go through	
10	chemotherapy and other treatments again if the	
11	cancer comes back versus go through something	
12	that's going to take away my quality of life.	
13	MS. GIAMBONE: Thank you so much for	
14	sharing that. Thank you.	
15	JENNIFER: Thank you.	
16	MS. GIAMBONE: And no more okay, so	
17	there's no more okay. And can we just get a	
18	summary of anything else we've heard on the web	
19	for Topic 1?	
20	MR. THOMPSON: Just two small points	
21	from an earlier conversation, so one person was	
22	talking about pain and tingling where their lymph	

		ΤU
1	nodes were removed and also just getting pain over	
2	random body parts after the surgery. And somebody	
3	else was talking about suffering from cataracts	
4	and thrombophlebitis after tamoxifen treatment and	
5	wasn't sure if it was a side effect or something	
6	related to the cancer.	
7	MS. GIAMBONE: Okay. Thank you. I know	
8	there is so much more that we could discuss for	
9	Topic 1, but we'll take a short break now, let's	
10	say 10 minutes. We'll take a 10-minute break and	
11	then we'll come back and talk about Topic 2.	
12	Thank you, again.	
13	(Whereupon, off the record at 2:45	
14	p.m., and back on the record at 2:55	
15	p.m.)	
16	MS. GIAMBONE: So we're going to get	
17	started and how about I just have our Topic 2	
18	panelists come on up and have a seat. Okay. So	
19	we will go ahead and get started again.	
20	We had such a great discussion for Topic	
21	1, for the first half of the meeting, and I think	
22	that the one theme that just kept coming up	

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1	again, I think my FDA colleagues would agree is
2	that biggest part of your life or the biggest
3	impact of living with breast cancer is the
4	treatments and the management of your breast
5	cancer, the doctors' appointments, the decision-
6	making as it has to do with treatments, so thank
7	you for bringing up this very, very important part
8	of your life and sharing that with us. And we're
9	going to go into much further detail with this
10	topic which focuses on treatment and I know we
11	already we started bringing that up. You know,
12	you shared so much of that in Topic 1 and it's
13	very understandable. So we're looking forward to
14	exploring that even more in this discussion.
15	And certainly, if there are other
16	aspects, you know, or downsides or side effects
17	that you are experiencing with your treatment that
18	you mentioned in Topic 1 that we didn't get to
19	explore too much, I encourage you to continue to
20	bring those up now and share those with us.
21	Okay. So just to reiterate again how
22	our topic will look so for Topic 2, we're going

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1	to be discussing treatments: So, what are you
2	doing to manage your breast cancer, to treat your
3	breast cancer and how do you experience the
4	treatments; what are the benefits that you see;
5	what are the downsides that you're experiencing?
6	And we're also as I mentioned, we're going to
7	spend a portion of this discussion talking about -
8	- and we already brought this up a bit is the
9	decision-making, the factors that you consider in
10	deciding what treatments you will be taking.
11	So with that, let me turn it over to our
12	panelists and, Colleen, if you could just get
13	started. And we'll have each one of you introduce
14	yourselves and then you can start your
15	presentation.
16	
	MS. DUFFEY: So Good afternoon. I'm
17	MS. DUFFEY: So Good afternoon. I'm Colleen Duffy. I'm a 34-year-old wife, mother,
17	Colleen Duffy. I'm a 34-year-old wife, mother,
17 18	Colleen Duffy. I'm a 34-year-old wife, mother, and engineer. I was diagnosed with stage four
17 18 19	Colleen Duffy. I'm a 34-year-old wife, mother, and engineer. I was diagnosed with stage four breast cancer which is HER2-positive in December

completed a variety of treatments and am very 1 2 grateful for the opportunity to share my perspective on the current approaches with you 3 all. 4 5 My cancer has recently progressed and I started a new drug, KADCYLA, on Monday. I will 6 continue infusions of that drug every three weeks 7 8 until the cancer progresses again. It's just been a few days since I started this new drug so I'm 9 going to focus on the treatments that I have had 10 11 up to this point. So my first treatment after 12 diagnosis was a traditional chemo and a targeted 13 therapy. So I started on Taxotere, Herceptin, and I completed six cycles with the Taxotere 14 PERJETA. 15 and stopped it but continued the Herceptin and 16 PERJETA until about two weeks ago. I have an 17 infusion of ZOMETA every six weeks and I've also 18 taken an oral chemo pill, Xeloda, had a 19 mastectomy, undergone whole brain radiation and 20 heat therapy, and a targeted radiation. 21 The most significant downsides of all of 22 these treatments are that they stop working. The

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1	tumors outsmart them and grow. Then there becomes	
2	the need to switch. I would be happy to tolerate	
3	the side effects and inconveniences caused by any	
4	of the treatments if they worked forever. This	
5	issue affects my life by not allowing me to make	
6	long-term plans, interrupting my routine, my work	
7	schedule, and my family's routine.	
8	I do many supportive care treatments to	
9	manage my side effects. I currently attend a	
10	support group, participate in therapy, take a	
11	prescribed antidepressant, Lexapro, to manage my	
12	mental health. I have also attended many seminars,	
13	end-of-life preparation, healthy eating, coping	
14	strategies, future research and therapies.	
15	As far as my physical side effects, I	
16	take Imodium A-D and/or Lomotil to control my	
17	diarrhea. For pain management, I have taken	
18	OxyContin, Percocet, and Fentanyl patches but I	
19	try to stick to the ibuprofen and getting	
20	massages. I had to take steroids for the swelling	
21	in my brain. I had hyperbaric oxygen treatments	
22	for the wounds I had following the heat and	

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1	radiation therapies. I have also done acupuncture	
2	but following the mastectomy, my oncologist does	
3	not recommend it due to the risk of lymphedema.	
4	So my mental health has been very well	
5	managed thanks to the support networks in my	
6	community. The diarrhea is mostly manageable by	
7	the medication but depending on my chemotherapy,	
8	it has become extreme. At that point, I go to the	
9	oncologist's office and get fluids. Pain	
10	management is a challenge because there is a fear	
11	of becoming addicted to the pain pills. I am also	
12	adversely impacted by impairment when I take	
13	Percocet, OxyContin, and Fentanyl patches. The	
14	steroids greatly negatively impacted my emotions	
15	and my self-control. The hyperbaric oxygen	
16	treatment worked very well but it was a daily	
17	therapy that required driving.	
18	The only side effect that hasn't been	
19	addressed through drugs or alternative therapy is	
20	fatigue. I am always so tired.	
21	I weigh the importance of prolonging my	
22	life much higher than improving the symptoms I	

		113
1	experience due to breast cancer. Staying alive is	
2	my main goal in treatment. I have found that most	
3	of the side effects I have experienced will pass	
4	in time. Since my diagnosis, the good days, days	
5	when the side effects don't consume me, have	
6	outnumbered my bad days, and there are many	
7	reasons why staying alive is so important to me.	
8	One is that I'm a mother to young children. My	
9	will to live for my children is worth suffering to	
10	me. I will take on many more side effects if I	
11	get to stay on a particular drug longer. This is	
12	one more month I get to participate in the raising	
13	of my children, one more day I get to see their	
14	smiles, hear their laugh, and show them my love. I	
15	am also young and I still have a good immune	
16	system. I try to prolong each drug I am on for as	
17	long as possible. I have yet to encounter a side	
18	effect that would be bad enough for me to ask to	
19	stop taking the drug or to end a treatment earlier	
20	than recommended.	
21	There are many factors I use when making	
22	treatment decisions. My overall strategy is to	

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1	stay on each chemo drug for as long as I can. I	
2	try to stretch the use by including other	
3	treatments. When I was diagnosed with a brain	
4	metastases, it was determined that my current	
5	systemic treatment was still controlling the	
6	cancer in the rest of my body. Instead of	
7	abandoning Herceptin and PERJETA, I underwent	
8	whole brain radiation, added Xeloda to the drug	
9	regimen. Instead of switching targeted therapy	
10	drugs for the skin metastases, I added heat	
11	therapy and targeted radiation. Instead of	
12	switching targeted therapy for the lymph node	
13	progression, I added a local radiation. So far	
14	this has given me an additional year on the same	
15	targeted therapy drugs.	
16	My overall goal is to prolong my life	
17	and I am doing this by carefully considering other	
18	approaches with my oncologist before abandoning	
19	systemic treatments I take that may still be	
20	somewhat effective. Common and uncommon side	
21	effects from these drugs do not play a major role	
22	in my treatment decisions. Their effectiveness in	

1	prolonging my life is the most important criteria
2	that I consider when choosing a treatment plan.
3	As long as I stay on my targeted therapy, I can
4	endure the side effects of the other treatments.
5	As a stage four breast cancer patient
6	with major progression, I am much more likely to
7	die from the breast cancer than a side effect of
8	the treatment. I'll take my chances in regards to
9	the serious risks. I would much rather try a
10	treatment in the hopes of prolonging my life long
11	enough to see a cure.
12	Thank you so much for allowing me the
13	opportunity to share my experience.
14	MS. GIAMBONE: Thank you, Colleen.
15	Susan?
16	MS. FARIS: My name is Susan Faris and
17	good afternoon, ladies and gentlemen, and thank
18	you so much for letting me speak today. I really
19	appreciate it.
20	I 30 percent of women who are
21	diagnosed with early breast cancer will move on to
22	metastatic status. I am the six percent who was

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1	diagnosed right out the door as metastatic. I am	
2	HER2-positive and I was diagnosed on January 2012	
3	at age 47. The cancer had not only formed in my	
4	breast but it had encumbered my entire liver. I	
5	was immediately put onto weekly Taxol and	
6	Herceptin treatments that lasted for 24 weeks.	
7	The side effects of this were severe and got worse	
8	over time. I experienced extreme neuropathy of my	
9	hands and feet so bad that I would often fall over	
10	and I could not button my own shirt or pick up	
11	small items or put on jewelry. I had extreme	
12	pervasive fatigue. I had steroid-induced bouts of	
13	mania and acne covered my body due to steroids. I	
14	had acid reflux, constipation, edema in my legs,	
15	muscle aches, renewed sciatica, insomnia, loss of	
16	taste, hair loss, and nails that lifted, infected,	
17	and fell off. These are typical side effects of	
18	systemic chemos.	
19	The result was that I was disabled. I	
20	was barely able to leave my house or care for	
21	myself and I was increasingly isolated. I became	
22	hopelessly depressed in spite of counseling and	
1		

1	antidepressants. The chemo that I was on was
2	extended several times from 15 weeks to 20 to 24
3	weeks and finally, I demanded that it be stopped
4	because it was killing me.
5	After this, I was considered stable. I
6	had scar tissue on my liver and I was maintained
7	on Herceptin, and I could go back to working full-
8	time and the neuropathy went away. The side
9	effects of Herceptin are minor. I had some sinus
10	issues. I had some fatigue. That was about it.
11	But then in November 2013, I had what I
12	call a "flare-up." I refuse to use the word
13	"progression." Anyway, when I was told that I had
14	a five-centimeter mass on the dome of my liver at
15	the appointment with my oncologist, I began to ask
16	questions. I had a list of questions but instead,
17	I broke down into sobs and I told her repeatedly I
18	did not want to go onto a systemic chemo again.
19	The treatment that she put me onto was KADCYLA,
20	which is a targeted chemo. The negative impacts
21	of this chemo are mostly limited to the cancer
22	itself although it does have some systemic

1	effects. There is no such thing as no side
2	effects. It is a question of severity. So I
3	experienced minor fatigue, mild neuropathy, acid
4	reflux, minor constipation, elevated liver
5	enzymes, and lowered platelets. My oncologist has
6	reduced the dosage a few times to minimize the
7	neuropathy and the elevated liver enzymes and the
8	lowered platelets but the treatment, knock on
9	wood, is continuing to work.
10	These side effects are easily treated
11	with Prilosac for the acid reflux, constipation is
12	treated with a stool soften, and I use supplements
13	such as alpha lipoic acid and vitamin B6 for the
14	neuropathy.
15	As long as I can live my life and
16	continue to work full-time, that is my goal. My
17	focus is on quality of life when I am choosing a
18	new treatment. The average survival time for a
19	metastatic breast cancer patient is 2.5 years.
20	I've exceeded that. So, I, in the time that I
21	have left, would like to live a quality life, not
22	one where I'm suffering.

1	I judge potential treatments based on
2	high potential benefit but also significant
3	immediate negative side effects. If a treatment
4	has higher immediate negative impacts that would
5	severely limit my life, I will not choose that
6	treatment, even if the treatment would prolong my
7	life. Neuropathy is one of my greatest fears.
8	Medicines or supplements can do little to treat
9	neuropathy at this point and since I am very prone
10	to this side effect, if the treatment has that as
11	a side effect, I will experience it. I would
12	rather my oncologist reduce the dosage on a
13	treatment and risk the cancer growing than to
14	continue on a higher dosage and risk permanent
15	neuropathy.
16	The factors I consider when choosing a
17	treatment are the possible long-term impact
18	against the severity of immediate side effects,
19	the likely length of my life, and the percentage
20	of patients who may suffer that long-term side
21	effect. Acceptable risk for me, for instance, is
22	the heart toxicity of Herceptin. Thirty-four

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1	percent of patients treated with Herceptin, you	
2	know, have that experience but it has a	
3	significant progression free survival time, plus	
4	the heart toxicity fits into my goal of dying of a	
5	heart attack instead of cancer.	
6	I've announced this goal to my	
7	oncologist and when I first met my cardiologist, I	
8	told him this was my plan. His response was to	
9	ask to was for him to ask me to let him know	
10	when I would like to schedule that.	
11	(Laughter.)	
12	MS. FARIS: I knew I'd met my man. And	
13	if a side effect is manageable with medicines that	
14	do not themselves have significant side effects,	
15	then that is acceptable as well. I balance	
16	between staying alive and living with quality of	
17	life. I focus on targeted treatments because of	
18	the minimal side effects and high benefit of	
19	targeted therapies such as Herceptin, pertuzumab,	
20	TYKERB, and KADCYLA, these are my focus. My hope	
21	is that they are these type of treatments are	
22	moved quickly into market so that I can continue	

1	to live. I regularly search clinicaltrials.gov,
2	PubMed and scan Twitter looking for the current
3	research on these therapies, things that have not
4	even made it to PubMed yet.
5	My goal is to stay away from systemic
6	chemos. That's just my preference due to their
7	extreme side effects for me and their disabling
8	qualities. When I've exhausted targeted
9	treatments and only have systemic chemotherapy as
10	a choice, I will try one or two of these treatment
11	types. But if my quality of life is greatly
12	minimized by these treatments, I will turn these
13	systemic chemos down and I will choose the right
14	to die.
15	MS. GIAMBONE: Thank you, Susan. Any
16	final remarks?
17	MS. FARIS: Nope.
18	MS. GIAMBONE: Thank you very much.
19	Elizabeth?
20	MS. CAPPEL: Good afternoon. My name is
21	Elizabeth Cappel. I was diagnosed with early
22	stage two invasive ductal carcinoma. I have no

		122
1	family history of breast cancer or of any type of	
2	cancer whatsoever. Like Susan, I was supposed to	
3	die of heart disease but instead I have breast	
4	cancer. I was checked for the BRCA1 and 2 gene	
5	and I am negative for that. I was diagnosed in	
6	March of 2003. I have four children. I had four	
7	young children at that point and my youngest was	
8	three months old. She's now 12. And I am triple-	
9	positive for HER2.	
10	I had a lumpectomy and radiation in the	
11	beginning with the stage two invasive ductal	
12	carcinoma. I had no lymph node involvement and I	
13	had clean borders so I was looking pretty good.	
14	I was fine for about $3-1/2$ years. When	
15	I first was diagnosed, I had Adriamycin and	
16	Cytoxan AC which is the normal thing, four rounds.	
17	The reactions were hair loss I have actually	
18	lost my hair three times from chemo mouth	
19	sores, nausea, vomiting, fatigue, low blood	
20	counts, the usual, radiation fatigue and skin	
21	blistering.	
22	I was on Tamoxifen for 3-1/2 years and	

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1	then I had a recurrence. When I had a routine	
2	mammogram, they found DCIS of my right breast. It	
3	was in my right breast to begin with and I asked	
4	for a PET scan, which they didn't think was	
5	important but I demanded a PET scan and it showed	
6	a benign hemangioma on my liver. So we went ahead	
7	with a bilateral mastectomy with reconstruction.	
8	A week later, I had a deep vein thrombosis of my	
9	right leg. Three days later, I passed out in the	
10	doctor's office with a bilateral pulmonary	
11	embolism. I needed a Greenfield filter which I	
12	was very young for since I was early 40's.	
13	A few months later, my blood work showed	
14	that I had increased liver enzymes and, in fact, I	
15	did have liver metastasis, so the mastectomies	
16	were not actually need. I had an MRI of the	
17	liver. It showed that about three-quarters of my	
18	liver was involved with only a few liver cells	
19	that were actually viable. I was told at that	
20	point that I would have, at best, two years to	
21	live that was from Fox Chase and my primary	
22	doctors oncologists two years, at best, to	

1	live; during that time, I would be on chemo
2	continuously and quality of living would be really
3	bad and that I would no longer ever have hair
4	again. As you can see, I have a really nice head
5	of hair right now.
6	So that was almost nine years ago which
7	is pretty incredible. What I had for treatment
8	would be Nevelbine and Herceptin right after that.
9	I had extreme reactions to that, loss of finger
10	and toenails also, which my toenails are still not
11	normal, very bad reaction, shaking on infusion
12	they all it shake and bake increased blood
13	pressure, red face and neck they slowed the
14	infusion, added Benadryl and Decadron mouth
15	sores, vomiting, fatigue, body pain, neuropathy.
16	I went onto TYKERB, Xeloda, also loss of
17	nails, bad, bad joint pain, and then we just went
18	on Doxal and Herceptin. Doxal actually was one of
19	the more gentle drugs for me. I had hair loss,
20	nausea, fatigue, infusion reactions; we used
21	Zofran a lot. But then we continued on with
22	Herceptin.

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1	With Doxal, we got to a point about 2-	
2	1/2-3 well, no, three years ago where the	
3	everything was progressing and the liver mets were	
4	still growing and we couldn't get them under	
5	control, so we used Doxal and we threw in	
6	something unusual. We threw in CyberKnife. Now	
7	with metastatic breast disease, you don't	
8	typically do CyberKnife or radiation to the site	
9	of the problem with the liver, but we decided that	
10	why not try it. So we did the CyberKnife.	
11	Problem with the CyberKnife was I was	
12	coming off of Doxal so there was a lot of fatigue	
13	but also that I had three to four ribs that were	
14	broken. Now that plays into would you have chosen	
15	a different alternative to treatment. They	
16	weren't aware that this could happen so I now have	
17	three definitely three ribs that are broken	
18	permanently, which means that they disintegrated.	
19	So I need to have things for pain management. So	
20	I have nerve ablations done every three to four	
21	months to manage that pain because my ribs flail.	
22	I stayed on Herceptin after that but I	

1	became very toxic to Herceptin which is unusual
2	and I couldn't stay on it any longer. And that is
3	the plan, that you stay on the Herceptin but I had
4	one of the worst reactions they've ever seen and I
5	went to Sloan and saw Larry Norton, who is one of
6	the people who did, you know, work on Herceptin
7	from the beginning and he said it's one of the
8	worst reactions he's ever seen. I completely dump
9	all of my histamine and get terrible body pain
10	where I can't move. So we decided to stop it and
11	that was over two years ago.
12	So I am on no treatment whatsoever right
12 13	So I am on no treatment whatsoever right now. I get checked every four weeks for my cancer
13	now. I get checked every four weeks for my cancer
13 14	now. I get checked every four weeks for my cancer markers, my 2729s. I get scans every three
13 14 15 16	now. I get checked every four weeks for my cancer markers, my 2729s. I get scans every three months. Right now I have zero to one circulating
13 14 15 16	now. I get checked every four weeks for my cancer markers, my 2729s. I get scans every three months. Right now I have zero to one circulating tumor markers which means there's no sign of
13 14 15 16 17	now. I get checked every four weeks for my cancer markers, my 2729s. I get scans every three months. Right now I have zero to one circulating tumor markers which means there's no sign of cancer in my body. My liver mets are completely
13 14 15 16 17 18	now. I get checked every four weeks for my cancer markers, my 2729s. I get scans every three months. Right now I have zero to one circulating tumor markers which means there's no sign of cancer in my body. My liver mets are completely gone. It comes back no sign of metastatic
13 14 15 16 17 18 19	now. I get checked every four weeks for my cancer markers, my 2729s. I get scans every three months. Right now I have zero to one circulating tumor markers which means there's no sign of cancer in my body. My liver mets are completely gone. It comes back no sign of metastatic disease, and my bone scans have been clean for

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	1	information out there, because it's scary as	
	2	anything to have metastatic disease and to have	
	3	four young children and to just want to live. So	
	4	there's absolutely a chance for everyone to have	
	5	survival and you just have to keep plugging away,	
	6	and research and development is key to this and I	
	7	thank you for that.	
	8	MS. GIAMBONE: Thank you very much,	
	9	Elizabeth. Shirley?	
	10	MS. MERTZ: Hello, everyone. My name is	
	11	Shirley Mertz. Before I begin, I want to pay	
	12	tribute to the 108 women and men who will die	
	13	today of metastatic breast cancer.	
	14	My journey with breast cancer began 24	
	15	years ago when I was diagnosed with early stage in	
	16	1991. Because I wanted to survive, I decided to	
	17	have a bilateral mastectomy and 12 years later, my	
	18	metastatic disease appeared in 2003 and I received	
	19	treatment then consisting of capecitabine as the	
	20	chemotherapy, targeted therapy, Herceptin and	
	21	palliative radiation. My metastatic disease	
	22	presented in my spine and quickly spread	
1			

1	throughout my skeleton and into my liver. After
2	about a year of treatment, I went into complete
3	remission and remained so for $7-1/2$ years.
4	Approximately a year ago, I had a
5	progression of my disease into a lymph node and
6	after biopsy, it was discovered that my cancer had
7	mutated and I started I added a different
8	treatment. Because of having only one lesion in my
9	body, I decided to undergo stereotactic radiation
10	therapy which removed the lymph node, and so I now
11	have a treatment regimen that includes the
12	Herceptin or I should say trastuzumab,
13	bisphosphonate for bones that I've been on for
14	quite some time, and a anti-estrogen agent called
15	Exemestane.
16	To me, the most significant downsides of
17	an anti-hormonal agent are what we've heard so
18	far, bone and joint pain, difficulty sleeping, and
19	as I've learned recently, a negative impact on
20	one's immune system. Trastuzumab has had some
21	issues on my heart but I am able to continue
22	receiving that treatment. Of course, my kidneys

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1	have to be watched because of the zoledronic acid	
2	and for radiation, stereotactic radiation, I did	
3	experience three weeks of intense fatigue which	
4	we've all tried to explore today of what that	
5	means. For me, it was difficulty doing household	
6	chores, taking care of my elderly mother whom I'm	
7	responsible for, and going anywhere outside the	
8	house.	
9	So while treatments have certainly	
10	lengthened my life I have lived now $11-1/2$	
11	years with metastatic breast cancer and I truly	
12	feel blessed at the same time, I know that they	
13	can have a significant impact on my internal	
14	organs, my vital organs and my daily system. Of	
15	course, I still feel that I am glad to be here as	
16	opposed to not and as a side effect, of course, I	
17	guess an inconvenient side effect, one's life, as	
18	we've heard today for metastatic patients, has to	
19	be arranged around weekly visits to the hospital	
20	for infusions, medical tests and visits with	
21	doctors. I chose to be treated at a comprehensive	
22	cancer center which is an hour from my home and	
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I've visited that place every three weeks for the 1 2 last -- since 2004. 3 Because treatment as well as the mental challenges of metastatic disease have had an 4 5 impact on my ability to fall asleep, I take prescription medication each night to fall asleep. 6 I do take a daily vitamin D to strengthen my 7 8 bones. I can -- I try to walk each day to support 9 my bone care as well as to help with fatigue, 10 though that was counterintuitive to me when 11 someone told me that. 12 I also participate in cognitive therapy with a social worker to try to cope with the fact 13 that I worry about progression and I also have to 14 15 deal with the fact that I -- my life will be 16 shortened by this disease. I practice daily 17 meditation and visualization and prayer. Those I 18 consider all a part of my supportive integrative 19 medicine to my clinical treatments. 20 While I consider -- I consider my goals 21 in treatment to live as long as possible with the 22 best quality of life. However, I must say that my

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1	in making treatment decisions, when I reflected	
2	on preparing for today, when I first heard I had	
3	metastatic disease, I was so angry, so shocked	
4	because I thought what more could I have done with	
5	my initial diagnosis in '91 was ductal	
6	carcinoma in situ. And I thought, okay, how could	
7	this be that it came back. So when I met with my	
8	first oncologist and he suggested a treatment, I	
9	was ready to go; sure, whatever you say; you know,	
10	I want to take action and now.	
11	I've since discovered well, I had	
12	really no information about metastatic breast	
13	cancer at the time. I relied on my doctor to make	
14	the first decision and then I started going on the	
15	internet, finding sources of information which are	
16	not always available back then for metastatic	
17	patients. Things are somewhat better today but	
18	still most oncologists do not hand anything to a	
19	patient about their disease. And so now I approach	
20	decision-making a little different. For example,	
21	with my lymph node, even though it was biopsied	
22	and I could have entered a clinical trial, because	

1	of the mutation, I decided not to because of the
2	severe toxicity that I read about. So I chose to
3	go in another direction with the radiation,
4	CyberKnife, or whatever you would like to call it.
5	I think it's important for patients to
6	consider what the doctor is suggesting, why is he
7	or she suggesting a treatment, is there an option,
8	what toxicities can I expect, can those toxicities
9	be addressed by over-the-counter medication or in
10	many cases, the dosage can be reduced or a
11	treatment stopped for a while. If there are
12	really serious in the questions, it was asked
13	what would you do about very serious potential
14	toxicities like liver or kidney failure, blood
15	clots or heart attacks, those would be deal-
16	breakers for me because I, for example, have heart
17	disease in my family and you can't live without a
18	working liver or kidney.
19	MS. GIAMBONE: Thank you, Shirley.
20	MS. MERTZ: I just have one more
21	comment.
22	MS. GIAMBONE: Okay, sure.

1	MS. MERTZ: And I understand the time.
2	I think for each of us, metastatic disease is
3	unique. I just want to say to the panel
4	metastatic patients are used as the participants
5	in clinical trials to find out if the drugs that
6	pharmaceuticals are exploring will reduce the size
7	of a tumor. For us, you asked what would be your
8	ideal treatment in the future. We would like to
9	see treatments that prevent the outgrowth of our
10	metastatic spread and that is different than the
11	reduction of a tumor, because we feel that if
12	until a treatment can be found a cure can be
13	found, we are willing to live with this disease if
14	it doesn't spread any further than where it is
15	when we find it, when it's found. And so long as
16	we can keep it from attacking organs, that's the
17	type of drug that metastatic patients would like.
18	And we would like the FDA to support clinical
19	trials for that.
20	And final point, when I've asked
21	pharmaceuticals why don't you develop drugs like
22	this, we have I have been told that clinical

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trials do not permit that type of endpoint. So I 1 want to use this platform to please ask you to 2 reconsider endpoints that prevent metastatic 3 outgrowth. And I thank you the opportunity today 4 to comment. 5 6 MS. GIAMBONE: Thank you, Shirley. 7 (Applause.) 8 MS. GIAMBONE: Thank you again to all of 9 our Topic 2 panelists for sharing these stories again and as I said with the Topic 1 panelists, 10 you are all just very, very strong and brave 11 people for coming here and sharing such personal 12 stories with us so thank you. So could we give 13 everyone -- could we give our panelists a round of 14 15 applause? 16 (Applause.) 17 MS. GIAMBONE: And similar to what we 18 did in the first half of the day, can we see by a 19 show of hands how many of you felt as if your 20 experiences are -- that you shared similar experiences to those shared by the panelists? 21 22 Okay. So we see a few hands raised here. Thank

135 1 you. 2 Okay. So what we'll do now is we'll do another polling question. Are the clickers 3 working? 4 5 (No audible response.) MS. GIAMBONE: Okay. So we're going to 6 give the clickers a try. Okay. Have you ever 7 8 used any of the following cancer treatments to 9 help reduce or control the spread of your breast cancer -- and we definitely have touched upon many 10 of these so let's just get a count for what we're 11 seeing -- a) chemotherapy; b) radiation therapy; 12 13 c) surgery to remove the tumor or tumors or any part of the breast; d) targeted drug therapy; e) 14 15 hormone therapy; f) other; g) I have not undergone 16 any cancer treatments; or h) I'm not sure. 17 So I think they can choose multiple --18 okay, so you can choose multiple responses here. 19 Thanks, Theresa. 20 Okay. So here's what we're seeing for 21 the perspectives in the room. Looks like the majority of you, over 90 percent of you have 22

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1	undergone chemotherapy and surgery followed by	
2	radiation therapy. And then we're seeing about	
3	over half of the people in the room that responded	
4	also used targeted drug therapy or hormone	
5	therapy. And then we also have some "other	
6	treatments" listed here.	
7	Is that similar to what we're seeing on	
8	the web?	
9	MR. THOMPSON: About 66 percent,	
10	chemotherapy; 90 percent surgery; 45 percent	
11	radiation therapy; 22 percent targeted drug	
12	therapy; and 55 percent hormone therapy.	
13	MS. GIAMBONE: Okay, great. Thank you.	
14	So as I mentioned, you all have brought up many of	
15	your experiences using these range of therapies.	
16	So what I'd like to ask is instead of focusing on	
17	instead of me asking a question focusing on	
18	just one of these particular treatments, could one	
19	of you begin to share with us how you have how	
20	this particular treatment, whatever treatment it	
21	is that you have used that you'd like to comment	
22	on, how is that managing your breast cancer? Yes,	

1 Katherine.

2	MS. O'BRIEN: I was diagnosed with
3	metastatic breast cancer. I was a de novo
4	presentation. As we learned, that's unusual.
5	Only about 10 percent of patients have this.
6	Surgery is not standard of care for metastatic
7	breast cancer. At the time that I was diagnosed
8	in 2009, it was thought that there was some
9	benefit, so after I had been stable on my
10	treatments for, I think it was like, six months, I
11	was given the option of having a unilateral
12	mastectomy. It was stressed this would not was
13	not curative, it was not known if it would be
14	beneficial for me. So I did research. Another
15	patient with a similar diagnosis really did the
16	research. She had collected all of the scholarly
17	papers. I read the papers. I felt confident in
18	my decision.
19	One thing that was hard to quantify was
20	psychologically, I wanted the surgery. I think
21	that's hard to understand even though logically no
22	benefit potentially, no promises, I wanted this

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1	cancer out of me. So I did have the surgery;	
2	close margins so I also had radiation.	
3	Reconstruction was not an option. The reason	
4	and as far as I know, I don't you know, I don't	
5	think it particularly harmed me. I don't know if	
6	it helped me.	
7	Meanwhile, last year, I believe, at the	
8	San Antonio Breast Cancer Symposium at the time	
9	of my surgery, there was no prospective data on	
10	mastectomy in the metastatic setting. At the San	
11	Antonio conference, they presented the results of	
12	the first prospective study and basically, they	
13	found there really wasn't much benefit or it	
14	wasn't sufficient benefit. So I look back on that	
15	and I try to think, well, you know, first of all,	
16	it shows you how things change, even in such a	
17	short time period. But also, I look back on that	
18	and I think it illustrates the difficulty of	
19	making a decision but also, I think I have no	
20	regrets about the decision. I believe it was the	
21	correct one for me.	
22	I think one of the hardest things to	

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1	quantify is patient preference and I was grateful	
2	that that was given to me. But, you know, I do	
3	I can't prove that it helped me. I hope that it	
4	did but again, when we are talking about the	
5	decision-making process, I think my experience	
6	illustrates some of the challenges.	
7	MS. GIAMBONE: Thank you, Katherine.	
8	Would anybody else like to share their experiences	
9	on the treatment that they've undergone?	
10	CINDY: Hi. I'm Cindy and I'm very	
11	fortunate to be a 20-year breast cancer survivor.	
12	I was diagnosed with an early but very aggressive	
13	cancer 20 years ago that was treated very	
14	aggressively. Respectfully, I really think we need	
15	to look at the differences between metastatic	
16	patients and early breast cancer patients because	
17	it's one disease but there are many forms of it.	
18	I likely had triple- negative disease which still	
19	has not targeted therapy but it wasn't	
20	consistently tested for back then.	
21	Twenty years later, I have all of the	
22	symptoms that were listed on the chart before.	

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1	Would I have made decisions differently? I don't	
2	know because nobody told me what those outcomes	
3	might be and I don't know that it would have	
4	mattered when I had two young children. But now	
5	that I am who I am, I might make a different	
6	decision.	
7	So I just want to say we need to think	
8	about all the different types of breast cancer.	
9	We need to think about the context, so metastatic	
10	patients make different decisions than early stage	
11	patients. And we also need to think about the	
12	diversity and age, ethnicity. So these questions	
13	are important and I really appreciate the	
14	opportunity to talk about them, but we I mean	
15	these were the most amazing stories I've heard and	
16	I've been doing this for a long time. I think we	
17	need to keep that in context.	
18	MS. GIAMBONE: Thank you so much, Cindy.	
19	And in fact, to your point, in just a short while,	
20	we'll do exactly that, we'll explore more of the	
21	decision-making and we'll ask we have some	
22	questions for you on how you make those decisions	

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1	based on, you know, various aspects of your life,	
2	your age, your family, whatever it may be.	
3	Okay. So let me ask you this question.	
4	I know that in Topic 1 or in the first part of the	
5	day, you brought up a range of, you know, side	
6	effects or downsides that you experienced because	
7	of the treatment that you're on or that you have	
8	taken. And I want to see if you'd like to	
9	elaborate on those further and can you tie them to	
10	specifically one of these treatments? For	
11	example, you mentioned the loss of sexual	
12	interest. You talked about acne. I mean there is	
13	a full range. You talked about pain. I know that	
14	one of our panelists mentioned blisters on the	
15	feet. So can you explore these further and maybe	
16	tell us after you tried one of the or, you	
17	know, you underwent one of these treatments, what	
18	was that experience like and explore those	
19	symptoms or explore that downside a little bit	
20	further? Would anyone like to comment or comment	
21	on any one of these treatments and how you	
22	experienced it?	

1	MS. HOLLOWAY: I'm Jamie. I had stage
2	two breast cancer and currently no evidence of
3	disease. You know, I had chemo and it ended a
4	couple of two years ago, a little more than
5	that, and I still have some fatigue that I think
6	has to be related. All of my symptoms are so
7	minor that in the one of them is I can't always
8	think of the word that I'm trying to think of and
9	this is one of those times in light of what
10	everyone else is saying here, it's a lot more
11	minor, but I think it is important to see that
12	there's a whole range and it's not all terrible
13	all the time. I do have some cognitive problems
14	where I can think of the letter that the word
15	starts with but I can't think of the word, like
16	it's just so close but it's not there.
17	And I still sometimes have neuropathy in
18	my feet. It's not like I'm going to trip and fall
19	neuropathy but it's just like my toes reminding me
20	that I had breast cancer. It's just one more
21	thing. It doesn't happen all the time but it's
22	that same like weird feeling that I had when I was

1 on Taxol.

2	And surgery, I opted to have a bilateral
3	mastectomy. I would echo what Katherine said so
4	much. There's so much personal choice and just how
5	you feel about it. It has I was very aware
6	there was a lot of talk I think it was maybe at
7	San Antonio last year that women were not
8	informed enough and that's why they were choosing
9	bilateral mastectomy even though there's no
10	survival benefit, and that kind of hurt my
11	feelings because I didn't make that decision
12	because I was not smart enough to know what effect
13	my decision was going to have on me. It's because
14	I knew that I would be worried about that
15	mammogram every six months, and I have little
16	kids, and I didn't want it to be one more thing
17	that I worried about. And I knew cosmetically, it
18	would look better if I had the reconstructive done
19	bilaterally at the same time. You know, I've got
20	some aging left to do and it wouldn't turn out the
21	same if one breast was aging and one was not. And
22	I was really thankful that my doctor could realize

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that even though I knew it wasn't a survival 1 2 thing, it was a quality of life thing that was 3 important to me. That being said, the side effects that I 4 noticed the most are because of the surgery. 5 I wouldn't change anything. I think maybe Debbie 6 made the comment that she went through a lot and 7 8 she wouldn't change it but she didn't love it. 9 You know, I still have nerve sensation issues. I 10 don't like the seatbelt to touch me so I have 11 actually worn a grove in the car where I pull it 12 out and the seatbelt has like cut through the 13 plastic of the seatbelt thing because I just always pull it out because it just bugs me. And 14 15 so there are a lot of things like that. None of 16 them are deal-breakers by any means but there are a lot of long-term things that you don't think 17 18 about when you're first diagnosed because you just 19 want it to be gone. And it wouldn't have changed 20 my mind at all but it's definitely things to 21 consider. 22 MS. GIAMBONE: Thank you, Jamie. Thank

you. Yes. Let's see, why don't we go to Sandy. 1 2 MS. FINESTONE: I just want to make a comment about decision-making in that my 3 experience has been for most women, they think 4 this is a one-time issue. They're diagnosed and 5 they're willing to do almost anything for -- to 6 get through it. But the majority of women don't -7 8 - they think it's going to be over, that once the 9 surgery is done, the treatment is done, then my 10 life is going to go back the way it was. They're not prepared for the long-time -- long-term 11 12 inconveniences or after effects. They're just not 13 prepared for that and I think that we need to 14 educate women more about it that, yes, for many 15 women it is, it's over, their life just goes back 16 but for many, many other women, it does not. 17 Reconstruction is an issue that's really 18 not talked about a lot. I'm 30 years and I'm 19 still dealing with issues of reconstruction. I 20 have pain from that surgery from 30 years ago. 21 That shouldn't be and no one ever told me that was 22 going to happen.

146 MS. GIAMBONE: Thank you, Sandy. FDA 1 2 panel, any follow-up questions? Jonca, go ahead. DR. BULL: Okay. It might be a quick 3 4 one. MS. GIAMBONE: Okay. 5 6 DR. BULL: I was just wondering if we could get some elaboration on the supportive care 7 8 treatments. I was particularly intrigued, Ms. 9 Cappel, as -- if you're not on anything, are there 10 other supportive things that you're doing even 11 though you're not on chemotherapy now? 12 MS. GIAMBONE: So let me actually 13 interject here and say we're going to go onto that. We're going to actually do a polling 14 15 question so I'll make sure I get to Elizabeth to 16 answer that question for you and also others in 17 the audience. 18 DR. BULL: Okay. 19 MS. GIAMBONE: -- but let's -- great 20 question. We'll definitely address that one. 21 Suparna, did you have one that you wanted to ask? 22 DR. WEDHAM: No. I mean one of the

	-	L 4
1	questions was supportive meds. It was regarding -	
2	- I think I talked to one of the panelists during	
3	the break that I was very interested in the	
4	patients' decisions regarding holistic and	
5	complementary meds and how many have chosen that	
6	and if that's something that you actually discuss	
7	with your oncologist or things that people are	
8	doing independently just out of curiosity.	
9	The other question that I just did want	
10	to ask is, you know, we hear about the side	
11	effects a lot which we know that all of these	
12	treatments have and we're kind of hearing both	
13	camps of people willing to take anything, quality	
14	of life versus the side effects. Bt I was just	
15	curious by maybe even a show of hands how many	
16	people have actually changed therapy I know	
17	there are a couple of patients up here at the	
18	panel but how many have actually changed	
19	therapy because of the side effects or is it	
20	something that you kind of just push yourself	
21	through knowing that it kind of sucks, you don't	
22	like it, it's there and you but, you know, how	

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many actually changed the therapy because of the 1 side effects? 2 3 MS. GIAMBONE: Let's do a show of hands. How many have changed therapies because of the 4 side effects? 5 6 UNIDENTIFIED SPEAKER: Sometimes you can change therapies because you're forced (inaudible) 7 8 choosing (inaudible). 9 DR. WEDHAM: Exactly, not because of, you know, progression of disease or, you know, 10 11 something but, you know, simply because of the 12 side effects. I'm just, you know, curious. UNIDENTIFIED SPEAKER: (Inaudible) --13 14 MS. GIAMBONE: Okay. 15 DR. WEDHAM: Right. No -- right. 16 UNIDENTIFIED SPEAKER: -- (inaudible) 17 because of toxicity. 18 DR. WEDHAM: Yes, because of toxicity. 19 MS. GIAMBONE: Okay, great. And we saw 20 about five hands raised there. So I think with 21 the questions that have been raised, it's actually 22 a good segue to our next polling question. So

1	let's get our clickers out again.
2	Besides your cancer treatments, what
3	therapies have you taken to help manage your
4	symptoms you have experienced because of your
5	breast cancer or your breast cancer medication?
6	And here again, you can select multiple responses:
7	a) pain medications; b) dietary supplements or
8	diet changes; c) complementary or alternative
9	therapies such as massage or acupuncture; d)
10	herbal remedies such as soy supplements; e) other
11	therapies; or f) I am not doing or taking any
12	therapies to treat symptoms. Okay.
13	Okay. So it looks like c, complementary
14	alternative therapies such as massage or
15	acupuncture is what we see the most of in this
16	room followed by pain medications and dietary
17	supplements or diet changes. And then there's
18	also some "other therapies," so let's make sure we
19	definitely touch on some of those also, followed
20	by herbal remedies. What are we seeing on the
21	web?
22	MR. THOMPSON: One hundred percent say

1	they take pain medications and then about two-
2	thirds, dietary supplements or complementary
3	alternative therapies, and about one-third say
4	herbal remedies or other therapies.
5	MS. GIAMBONE: Okay. Thank you very
6	much. So let's come back to Jonca's question and
7	Suparna's question and Elizabeth, why don't we
8	start with you and can you talk to us a little bit
9	more about some of these supportive care
10	therapies?
11	MS. CAPPEL: Okay. The pain medications
1.0	
12	I take for the ribs but I'm not on any of them now
12	I take for the ribs but I'm not on any of them now that we found that we can do the nerve ablation so
13	that we found that we can do the nerve ablation so
13 14	that we found that we can do the nerve ablation so then I don't need the pain medication so I'm not
13 14 15	that we found that we can do the nerve ablation so then I don't need the pain medication so I'm not on that anymore. There are no dietary supplements
13 14 15 16	that we found that we can do the nerve ablation so then I don't need the pain medication so I'm not on that anymore. There are no dietary supplements other than iron because my iron stores are low.
13 14 15 16 17	that we found that we can do the nerve ablation so then I don't need the pain medication so I'm not on that anymore. There are no dietary supplements other than iron because my iron stores are low. I've done massage but because of the broken ribs,
13 14 15 16 17 18	that we found that we can do the nerve ablation so then I don't need the pain medication so I'm not on that anymore. There are no dietary supplements other than iron because my iron stores are low. I've done massage but because of the broken ribs, I can't do massage anymore. They have me on
13 14 15 16 17 18 19	that we found that we can do the nerve ablation so then I don't need the pain medication so I'm not on that anymore. There are no dietary supplements other than iron because my iron stores are low. I've done massage but because of the broken ribs, I can't do massage anymore. They have me on Lupron to keep me in medically induced menopause

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1	MS. GIAMBONE: Would anybody else	
2	thank you, Elizabeth. Would anybody else like to	
3	share? Yes.	
4	MS. DUNNE: So actually, as a result of	
5	my breast cancer, one of the positive impacts was	
6	all the changes that I made to my lifestyle. So I	
7	significantly changed my diet, stopped drinking	
8	alcohol, and did a lot of complementary therapies:	
9	acupuncture, hands-on healing. The pain	
10	medication or anti I don't remember exactly	
11	which pill it was but I want to touch on this	
12	because I was very concerned about becoming	
13	addicted and so I just stopped taking it and after	
14	two or three days, I thought I was hallucinating	
15	and I actually happened to go to my acupuncturist	
16	who said, "Well, the drug you're taking is	
17	actually withdrawals are as bad as heroin." And	
18	so I think in taking some of these medications, it	
19	would be helpful to have a better understanding of	
20	the full life cycle of those drugs and once you	
21	take them what you need to do to come off of them	
22	and some of the other effects. So I am big	
i		

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proponent of these complementary and alternative 1 2 therapies. 3 MS. GIAMBONE: Thank you very much. I can talk if you want to --4 MS. FARIS: 5 MS. GIAMBONE: Yes, Susan. 6 MS. FARIS: Susan Faris. I don't know if you can hear me. So during my chemotherapy, I 7 8 mainly sought out complementary therapies by 9 myself. I had acupuncture to deal with the sciatica. I would say, "stab me in the ass," and 10 11 I would feel better. It worked. Anyway, so I also took up yoga which makes a huge difference 12 13 and I use -- and I now work with a supportive care-palliative care doctor -- I prefer supportive 14 15 care and when she brought the priest in the room, 16 that freaked me out. But anyway -- but -- so she 17 knows that I really don't want the side effects of 18 further medication so for my neuropathy, she told 19 me to put capsaicin on the bottoms of my feet for 20 two weeks and that really helped a lot. And we 21 use, you know, the combo of the vitamin B6 and the 22 alpha lipoic acid to deal with, you know, that

1	sort of thing. So I try to sue as many
2	complementary therapies as I can just because they
3	have a lower side effect. And if I do ever get to
4	the point of needing pain meds, God help me,
5	because of all the side effects of the opioids,
6	the constipation, the fact that it just knocks you
7	out I luckily live in DC which has now legal
8	marijuana and I hope it stays that way, but we
9	also have medicinal marijuana and I would want to
10	try that first before anything else.
11	MS. GIAMBONE: Thank you, Susan. So I
12	think we had one other comment here.
13	MS. JONES: Thank you. So I've tried a
14	number of complementary therapies having gone
15	through chemotherapy, radiation and now on
16	hormonal therapy. So I've done yoga quite a bit.
17	As a matter of fact, I was just with a group at
18	Smith Center and we were doing a whole yoga
19	filming. And so not only have I tried through a
20	support group, which is in many ways a type of
21	therapy for some people, that I host a support
22	group monthly and I share these things to try and
1	

1	encourage others to try them because when you look
2	at it from an ethnicity standpoint, African
3	Americans still are reticent about many
4	complementary therapies and it's, in part, the way
5	it's presented. If you think of yoga, 9 times out
6	of 10, when you see a display or advertisement on
7	yoga, it's not a person who looks like me.
8	And it brings up the point, not
9	criticizing, but I am a little curious as to how
10	the panel on this side as well as the women who
11	spoke were chosen because, again, when I look
12	around and if I don't see many people that look
13	like me, it makes me wonder then are my concerns,
14	issues really being addressed, because we all know
15	that breast cancer or cancer in general is not
16	monolithic. If affects everyone differently and
17	so when we have these type of forums, I really
18	feel it's important that it's representative of
19	the population that we're serving and particularly
20	since we're here in the Nation's Capitol where the
21	numbers and the statistics on breast cancer are
22	off the chart.

1	And then the other kinds of cams (ph) or
2	complementary therapies I've tried, of course, is
3	exercising, massaging, acupuncture. Because I
4	have lymphedema decided not to wear my sleeve
5	today I have to do a lot of lymphedema therapy.
6	As a matter of fact, when I was undergoing
7	radiation treatment daily, I had to do lymphedema
8	therapy weekly. And I've done water aerobics and
9	the other ones, some so this is chemo brain now
10	that I can't think of the other ones but I am
11	really interested and big on pushing complementary
12	therapies because of the amount of toxicity that's
13	not involved with them.
14	MS. GIAMBONE: Thank you so much for
15	sharing those comments. Thank you. So let's take
16	a few more comments and I'll also check in with
17	the web before we move on to our next discussion.
18	I know several of you chose "other therapies."
19	You chose "other" not only for these, you know,
20	supportive care therapies but you also chose
21	"other" for the first polling question that we had
22	on treatments that you're undergoing. Would
1	

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1	anybody like to share some of these "other"	
2	therapies that you are tying or that you're using	
3	that are or are not working for you?"	
4	MS. McRAE: Was that included in the	
5	"other," the bisphosphonates, because they're	
6	quite commonly used now but I didn't see it here?	
7	Is that would that be in this polling question	
8	or would that be in the one previous to this one	
9	like with the bone strengthening and stuff because	
10	I mean that's I mean I've been taking that and	
11	I think it's probably	
12	MS. GIAMBONE: It can actually go under	
13	probably both, you know.	
14	MS. McRAE: Okay.	
15	MS. GIAMBONE: Yeah, it's going to be	
16	both because it's helping strengthen the bones and	
17	treating the disease, you know, from the	
18	metastatic disease but it's also helping with the	
19	symptoms	
20	MS. McRAE: Exactly.	
21	MS. GIAMBONE: so the pain and	
22	everything so I think you're absolutely right, it	

157 could be in both. Yeah. 1 2 MS. McRAE: So I take that. I would consider it, you know, one of the other therapies 3 and it has been, I think, quite -- you know, I 4 feel it's helped me. 5 Thank for 6 MS. GIAMBONE: Okay. bringing that up and I'm sorry, I didn't catch the 7 8 name of what you just said. What was the name of 9 the --10 MS. McRAE: Bisphosphonates. MS. GIAMBONE: Oh, okay. Does anybody 11 else in the audience -- by a show of hands, is 12 13 anybody else taking that therapy? Three. Okay. So we have about three people in the audience 14 15 doing that. Okay. Anything else before we move on to any other therapies? Yes, Jamie. 16 17 MS. HOLLOWAY: When I was undergoing 18 chemotherapy treatment, I did go into early 19 menopause because of the chemotherapy and had hot 20 And, you know, since I didn't have a lot flashes. 21 of the other symptoms really bad, I just kind of 22 thought it was not a big deal and am thankful that

1	my oncologist really prodded me and instead of
2	trying to sort of underreport the side effects
3	wanted to be sure that I mentioned anything that
4	was manageable, and so I did take gabapentin at
5	night for the hot flashes and then eventually took
6	an antidepressant in the morning because
7	apparently, the antidepressant wouldn't let me
8	sleep well so I take that in the morning and then
9	take gabapentin that would knock you out at night,
10	and that made it a lot more manageable. And so,
11	you know, it was not a complementary therapy but
12	it really made some of the side effects so much
13	more manageable for me that I think that was
14	important.
15	And in the support group that I attend,
16	there are a lot of it's for women who have
17	young children and there are several women there
18	who take antidepressants just to manage the
19	anxiety of the diagnosis with especially the
20	women who have very, very little children. That's
21	a lot of energy expended and it's very tough for
22	them. And I think being very proactive about the

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1	use of antidepressants and, you know, keeping in	
2	mind that a lot of times, it's a short-term thing	
3	but it's an important thing for quality of life.	
4	For one of my friends, it made a huge difference	
5	SO	
6	MS. GIAMBONE: Thank you, Jamie. So	
7	let's actually move on to our next what we're	
8	going to do here because many of you have brought	
9	up this we've talked about decision-making and	
10	the factors that you consider and what's important	
11	to you in choosing a particular treatment. So	
12	what we would like to do is pose a scenario	
13	question for you, and we've already sort of	
14	touched on you've already sort of touched on	
15	some of these aspects but let's spend some time	
16	exploring it further.	
17	So let's go to this one. And I'm going	
18	to read this to you and let you know beforehand	
19	that we're not providing you with a whole lot of	
20	information here, but we want to hear the first	
21	things that come to mind after we finish reading	
22	this.	

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1	So drug x is a chemotherapy drug being	
2	developed for patients with breast cancer and it	
3	was studied in a clinical trial comparing standard	
4	of care chemotherapy plus drug x versus standard	
5	of care alone. The clinical trial's result showed	
6	that the addition of this drug x prolonged	
7	survival on average two months longer. In	
8	addition to toxicities related to standard of care	
9	chemotherapy, patients treated with drug x had	
10	more diarrhea and rash and had more rare but	
11	serious toxicity such as liver injury and lung	
12	inflammation. So again, we know there's not a lot	
13	of information here but can you tell us what are	
14	the first things that come to mind, even if that	
15	first that comes to mind is a question?	
16	UNIDENTIFIED SPEAKER: (Inaudible).	
17	MS. GIAMBONE: Okay, sure. So let's go	
18	through this again. Drug x is a chemotherapy drug	
19	being developed for patients with breast cancer.	
20	It was studied in a clinical trial comparing	
21	standard of care chemotherapy plus drug x versus	
22	standard of care alone. In the clinical trials,	
1		

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1	it showed that the addition of drug x prolonged	
2	survival on average two months longer, so the	
3	median survival was 12 months on drug x plus	
4	standard of care versus 10 months for standard of	
5	care alone. However, in addition to toxicities	
6	related to standard of care chemotherapy, patients	
7	treated with drug x had more diarrhea and rash and	
8	had more rare but serious toxicity such as liver	
9	injury and lung inflammation. Okay., so	
10	UNIDENTIFIED SPEAKER: Okay. I was	
11	thinking we were talking about metastatic. I'm	
12	curious if	
13	MR. THOMPSON: Please use the microphone	
14	so that people on the webcast can hear you.	
15	MS. GIAMBONE: Let's use the microphone.	
16	UNIDENTIFIED SPEAKER: I'd like to know	
17	how this is being used. Is it a first line	
18	treatment or is it something for metastatic	
19	patients who've undergone prior treatments? I	
20	think that makes a difference.	
21	MS. GIAMBONE: Okay. So, okay. Let's	
22	see, Shirley?	

I		
	1	MS. MERTZ: Well, you're not going to do
	2	it first? You don't mind if we have comments?
	3	MS. GIAMBONE: Oh, go ahead.
	4	Absolutely, please share your comments.
	5	MS. MERTZ: Okay. Well, I mean I think
	6	it shouldn't matter whether it's early stage or
	7	advanced stage. Only two months more, that's, to
	8	me, not enough to warrant the added cost. And I
	9	have yet to meet a cancer drug that doesn't cost
	10	much, so
	11	MS. GIAMBONE: Okay.
	12	MS. MERTZ: And secondly, I think a
	13	significant point here is the added toxicity, more
	14	diarrhea. How much, it doesn't tell us. Rash and
	15	serious toxicities are possible so I mean if I was
	16	presented with this option even though I want to
	17	live a longer time, I would say this is not an
	18	option for me, what else do you have.
	19	MS. GIAMBONE: Okay. Thank you,
	20	Shirley. Yes, Elizabeth.
	21	MS. CAPPEL: Well, I'd like to know
	22	it's saying two months longer. However, I think
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1	that that could very much be wrong because in my	
2	situation, they said in certain drugs, I would get	
3	six months longer and I'm $8-1/2$ years out. So if	
4	you're saying the average person; what if you're	
5	not the average person? What if you're the	
6	outlying person? Then you're not going to take	
7	that chance of two months where maybe you would	
8	end up being me and not being two months. So I	
9	think that it's skewed, the numbers are skewed.	
10	You're saying that there's maybe an 80 percent	
11	chance that you won't go longer but what if you're	
12	in that 20 percent chance that you can live	
13	longer? Then it's worth that. So the two months	
14	may necessarily not be you. You may be the 20	
15	months and in that case, it is worth it. So I	
16	think that's very skewed.	
17	MS. GIAMBONE: Okay, very good to know.	
18	Yes, Shirley.	
19	MS. MERTZ: Can I just I have to add	
20	this	
21	MS. GIAMBONE: Yes.	
22	MS. MERTZ: because this is what I	

dream about, sitting in front of the FDA panel and 1 2 being able to say this. I kid you not, okay; I 3 kid you not. (Laughter.) 4 MS. MERTZ: What I want you to think 5 about -- we have genomic sequencing now. 6 Why 7 can't clinical trials, within the context of a 8 clinical trial, a pharmaceutical be required to 9 follow its patients who do well and know something 10 about their genetic makeup that distinguishes 11 between good responders -- I know I shouldn't say 12 good -- efficacious responders and those that are 13 not so that in the case of like an Elizabeth, maybe there are 10 more Elizabeths out there who 14 15 would respond and when my doctor and I looked at this -- the results of this clinical trial that 16 17 ultimately the drug was approved by the FDA but 18 now as a patient, knowing my genetic sequence or 19 my makeup of my tumor, I then can make a more 20 intelligent decision of whether would I be 21 benefitted, would I be an outlier, or would I 22 really not gain much other than two months? And I

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1	mean that's the promise of the future. It will	
2	require more but the cost of genetic sequencing	
3	has come down so it is doable. It would mean that	
4	clinical trials would be more I think could	
5	have fewer people in them, less costly, and be	
6	more informative to both the doctor, the	
7	physician, and the patient. So thank you, one of	
8	my bucket list has been fulfilled.	
9	(Laughter.)	
10	MS. GIAMBONE: Oh, thank you, Shirley.	
11	MS. CAPPEL: I need to respond to	
12	Shirley also.	
13	MS. GIAMBONE: Yes.	
14	MS. CAPPEL: She's absolutely right	
15	because I've just had genetic testing and they	
16	said that they would like to do some studies on me	
17	to find out if there is something different in me	
18	that is actually working, and so that's what we're	
19	looking into. And I said I would more than be	
20	happy to be a test subject, you know, because if I	
21	can help with that, that's extremely important.	
22	So I am willing to take all my blood and figure it	

		166
1	out.	
2	MS. GIAMBONE: Okay. Thank you,	
3	Elizabeth. We have several more hands here so,	
4	let's just go in order.	
5	MS. DUNNE: I just want to reinforce	
6	what both Shirley and Elizabeth said because my	
7	first question would be who's in the clinical	
8	trial and how do they compare to me. And to some	
9	of the earlier points, for folks of different	
10	ethnicities and races, they are so	
11	underrepresented in clinical trials, so I just	
12	want to highlight that. I mean I've actually been	
13	doing some research on that for a class I'm taking	
14	and I was actually shocked to see the numbers, and	
15	I actually got my data by going on	
16	clincialtrials.gov. So again, who is in the	
17	clinical trial and how do I know if I'm the high	
18	or low end of the average or not affected at all?	
19	MS. GIAMBONE: Okay. We'll have Katy	
20	and then we'll come this way. Okay.	
21	MS. McRAE: Ladies, I have been in	
22	contact actually with a woman who is in Harvard, I	

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1	think associated with Harvard. They are doing	
2	they're trying to do a huge database at the	
3	moment. I'll give you some information here where	
4	you can contact her. And they're actually using	
5	the breast cancer cohort of patients because I	
6	guess, you know, we're easy to contact and	
7	whatever. And they will take your information	
8	from you and use it for that very purpose, and	
9	this thing is being sort of spearheaded as we	
10	speak, so it is out there. It's being done.	
11	MS. GIAMBONE: Thank you, Katy. Yes,	
12	Ginny.	
13	MS. KNACKMUHS: Hi. I absolutely agree	
14	with what Shirley and Elizabeth said but I just	
15	have like a general statement I wanted to make	
16	that, you know, I think for too long we're	
17	accepting these drugs that, you know, show two or	
18	three months of progression-free survival, maybe	
19	not even overall survival and, you know, they're	
20	more expensive. You know, they're not you	
21	know, I don't care if you happen to be an outlier,	
22	you know, it's just not acceptable. You know,	
1		

168 there really -- for the cost of drugs and for what 1 patients have to go through, we can't be happy 2 with a couple of months and think that this is 3 really progress. You know --4 5 MS. GIAMBONE: Thank you, Ginny. 6 MS. KNACKMUHS: -- I mean I think that's 7 got to end. MS. GIAMBONE: So I'm seeing a lot of 8 9 heads nodding to that. Okay. And we'll take 10 another comment here. Yep. 11 MS. JONES: Hi. Thanks. And when we're talking about a dream of getting before FDA, not 12 just before FDA but NCI, CDC and all of them, I'd 13 really to see more people of color in clinical 14 15 trials. The data is significantly skewed and when 16 we think about how long we've been dealing with 17 breast cancer or cancer in general, and in 2015, 18 the percentage of African American or people of 19 color is less than two percent, there's something 20 wrong with that and we are all intelligent people 21 so we don't have to wonder why but we need to look 22 at the methodology, the way we are approaching

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1	people, and really think about how serious are we	
2	in eradicating the disease period. And if we have	
3	to do that, we have to look across the board. We	
4	have to look at more evidence-based information as	
5	to why people of color are not involved and then	
6	we have to actually take those steps based on what	
7	has been said to ensure that they're involved.	
8	I have never I'm a community	
9	navigator I have never been asked by any of my	
10	doctors "would you like to be in a clinical	
11	trial," so I've had to explore that on my own. So	
12	no one has asked me and I'm articulate and	
13	educated. What about little Miss Mary in public	
14	housing or Rosetta who has a language challenge or	
15	a Japanese or other nationality who have all of	
16	their cultural barriers? There's something wrong	
17	with that and the FDA want to spend more time and	
18	money looking at that so that we can have better	
19	representation in this if we want to really get	
20	rid of the disease. Thank you.	
21	MS. GIAMBONE: Thank you very much. So	
22	we've heard some really, really great comments	

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1	about diversity in clinical trials, perhaps	
2	genomic testing to understand how people that are	
3	in the clinical trials relate to you as a patient	
4	and how it would impact you specifically if you	
5	took this particular drug. Any other comments	
6	before yes, let's do Karen and then we'll move	
7	on to a polling question.	
8	MS. DUNNE: Mine goes back to the	
9	genetic testing, the genomic testing on that.	
10	When I was in my first clinical trial, the average	
11	time to disease progression was about eight	
12	months. They had one person go 24 months. I went	
13	six years on it and the drug manufacturer was not	
14	interested in genomic testing to see why I was the	
15	one that responded for six years out of 240	
16	people.	
17	MS. GIAMBONE: Thank you, Karen.	
18	MS. DUNNE: Probably because of the	
19	expense of the drug.	
20	MS. GIAMBONE: So Geoff, I believe you	
21	had a question?	
22	DR. KIM: Right. I think it ties into	

1	this perfectly because I think we are at the
2	genomic age certainly, but it's also interfacing
3	with the immunology age and along with the
4	proteomic age along with every other "omic" and
5	we're finally getting the sense of check the tumor
6	out. And I think we kind of take it for granted
7	but breast cancer actually is leading personalized
8	medicine, all HER2 is one of the key innovative
9	discoveries in cancer development in over in
10	the last decade and really has changed the poorest
11	prognosis subgroup to one of the better prognosis
12	because of accurate drug development and accurate
13	selection of the patients.
14	But it also comes at a cost, too,
15	because a lot of the genomic material that we want
16	is from the tumor and so in order to do that, you
17	know, across the standard of care in clinical
18	practice, when someone is diagnosed with
19	metastatic disease in the setting of previously
20	diagnosed, clinical practice says go get a biopsy
21	to make sure that the markers are the same as it
22	was in the (inaudible). And then each subsequent

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progression or flare, as you eloquently put it --1 2 UNIDENTIFIED SPEAKER: (Inaudible). DR. KIM: -- yes, exactly -- you want to 3 check to see whether resistance mutations are some 4 5 type of character mutations but I was wondering if we could get like the patient experience with all 6 these biopsies and undergoing multiple biopsies 7 8 and the uncertainty and the risk and anxiety that 9 comes along with that, especially has there been any negative aspects to undergoing biopsies just 10 11 for the sake of determining mutation status or 12 biomarker status? 13 MS. GIAMBONE: Thank you, Geoff, for your question. Shirley. 14 15 MS. MERTZ: I do considerable advocacy 16 work with the Translational Breast Cancer Researchers Consortium and it has like 19 17 comprehensive centers, etcetera, and the patient 18 19 advocates -- and I happen to be metastatic but 20 most of them are not metastatic -- there's one per 21 center -- we have all said to oncologists, If you explain to your patients the value of a biopsy and 22

1	the fact that treatment is impacted by the
2	information you get with a biopsy, that patients
3	will willingly undergo it assuming it's not, the
4	biopsy itself is not a dangerous place where you
5	can't get to it or it could have some really bad
6	affect.
7	I mean you've heard in the room here
8	today how strong women are to survive not only for
9	themselves but for their families, their partners,
10	their spouses, and I mean we're strong enough that
11	once we hear that there is a possibility that your
12	progression could be different than your previous
13	cancer or even in early stage without an accurate
14	diagnosis, you don't get the personalized or
15	precision type of treatment. So I don't think
16	biopsy requiring biopsies in clinical trials,
17	that is a must, too.
18	And so you can tell I'm very passionate
19	about it. I happen to be one person who's mutated
20	twice now, different in my presented
21	differently in my metastatic setting and the last
22	progression I've talked about, I'm different

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So -- and I know I'm in the minority but again. 1 2 it does happen. Thank you. 3 DR. KIM: And your experiences with the biopsies, were things carefully explained to you; 4 were they carefully laid out for you; were there 5 any areas of confusion that should have been 6 better delineated in your experience? 7 8 MS. MERTZ: Well, I happen to be treated 9 in a comprehensive cancer center where the oncologist did explain the value of a biopsy. In 10 fact, the -- she said to me initially, I will not 11 -- I came to her as a second opinion -- she said, 12 13 "I will not recommend any treatment until I know more about your tumor." And so I think that is 14 15 helpful and it doesn't always happen in community 16 settings and so there's really a need for 17 educating the oncologists about what they can do 18 better so they just don't throw a treatment at the 19 patient but rather really select carefully. Thank 20 you. 21 MS. GIAMBONE: Thank you, Shirley. Yes, 22 Jonca.

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1	DR. BULL: Hi. Just wanted to share	
2	with our audience that FDA does take the issue of	
3	diversifying clinical trials very seriously. We	
4	have an action plan that was announced last August	
5	that has three priority areas, the first being to	
6	improve data quality, get people in the trials;	
7	second, to look at what the barriers to	
8	participation are and work with regulated industry	
9	to advance this; and the third is greater	
10	transparency of data. And I just want to	
11	highlight an initiative that CDER has in place,	
12	the drug snapshots site that does bring greater	
13	transparency to inclusion. We're not going to fix	
14	the is problem overnight. The Agency will not fix	
15	this alone but working with stakeholders, with	
16	regulated industry, with advocates, I think we can	
17	really, looking ahead, make a big difference. So	
18	I just want to make sure that everyone's aware	
19	that the Agency is actively engaged in this and	
20	looking for solutions.	
21	MS. GIAMBONE: Thank you, Jonca. Okay.	
22	We'll take one more comment and then we'll move on	

1 to our next question.

2 MS. McRAE: For me, having the bon biopsy was transformational. I mean I had been on 3 the anti- hormone treatments because of my 4 5 previous ER-positive -- PR-positive cancer as a primary. But, you know, I think about that year's 6 7 time, you know, where I was on those treatments 8 and it was kind of -- you know, I was never really 9 satisfied that treatments were going well, but I was the one who had to talk to my oncologist. 10 She 11 was fantastic. She listened to me. You know, we 12 made an informed decision. I actually went to Dr. 13 Lisa Carey in North Carolina who did the research. The biopsy itself, I had absolutely no problems 14 15 with it but I think it's so important and I think 16 it's still being left too much to the oncologist. 17 I think patients are not informed enough and I 18 don't know what the insurance status is for 19 people. I was able to get it paid by my insurance 20 but, you know, it's this constant battle between 21 what we can do, what we can afford to do and 22 patients are kind of, a lot of the time, left in

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1	the dark. I think we need to be more informed.	
2	MS. GIAMBONE: Thank you, Katy. So I've	
3	been the okay that we have 10 more minutes so	
4	within those 10 minutes, what I'd like to do is we	
5	have two more questions for you, polling questions	
6	for you and then we'll check in with the web and	
7	see if anybody would like to dial in. So on that	
8	note, for those of you on the web, if you'd like	
9	to call in, please go ahead and do so.	
10	So again, we've touched on some of these	
11	already but we'll explore this just a little bit	
12	more.	
13	So here's the question for you and	
14	please have your clickers out. Of the following	
15	factors, which two would you rank as most	
16	important to your decision about using treatments	
17	to help reduce or control the spread of your	
18	breast cancer; please select up to two options	
19	responses: a) whether the treatment is expected	
20	to help relieve the symptoms I experience because	
21	of my cancer; b) the small but significant risk of	
22	serious side effects associated with treatment	

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1	such as blood clots or kidney failure; c) how long	
2	the treatment would probably prolong my life; d)	
3	how long the treatment could possibly prolong my	
4	life for longer than expected; e) the expected	
5	side effects of the treatment such as nausea, loss	
6	of appetite or other; or f) how the treatment is	
7	administered such as how long the treatment takes,	
8	whether it requires hospitalization, requires	
9	doctor visits and so on?	
10	Okay. Did everyone have a chance to	
11	enter their responses? Okay. So it looks two-	
12	thirds of those of you responding selected c) how	
13	long the treatment would probably prolong my life	
14	followed by d) how long the treatment could	
15	possibly prolong my life, and e) the expected side	
16	effects of treatment such as nausea or loss of	
17	appetite. How about on the web? What do we see	
18	there?	
19	MR. THOMPSON: Three-quarters of	
20	participants chose how long the treatment would	
21	probably prolong my life and the expected side	
22	effects of the treatment such as nausea, and then	

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one-quarter chose how long it could possibly 1 prolong my life and how the treatment is 2 administered. 3 MS. GIAMBONE: Okay. Thank you very 4 much. So let's just spend -- let's have a few 5 comments on why you made -- why you selected what 6 you did. So what is it based on? What does this 7 8 weighing depend on, for example, your age or your 9 prognosis? Would anybody like to share a comment? 10 Yes. 11 UNIDENTIFIED SPEAKER: Every patient wants to survive and I kind of had struggled with 12 the difference between c and d, like what's the 13 different data between those two. 14 15 MS. GIAMBONE: Okay. 16 UNIDENTIFIED SPEAKER: So I think if you 17 added those, you'd have 100 percent. 18 MS. GIAMBONE: Okay, okay. And 19 Elizabeth, I think I heard you ask what was the 20 question that I asked which is why did you choose 21 what you did; what factors weigh into that decision. So would you like to respond? 22

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	1	MS. CAPPEL: I think I speak for most of	
	2	us here is we want to live so we base our	
	3	treatment on what is the best probability of	
	4	living and c and d are kind of they work	
	5	together in my mind. So I think that's pretty	
	6	much, if we put those together, again, 100 percent	
	7	of us would like to live longer.	
	8	MS. GIAMBONE: Okay. Yes, let's we	
	9	have two comments on this side.	
	10	MS. O'BRIEN: So I guess I had two	
	11	things. As one of the as part of my treatment,	
	12	I get a bisphosphonate because I have bone mets	
	13	and originally, the bisphosphonate that I got was	
	14	a 20- minute infusion but it requires a blood test	
	15	and it will be a, you know, hour or two hours at	
	16	the hospital. And then there was research that	
	17	came out that found that you could it was	
	18	quarterly rather than the monthly that I had been	
	19	getting it. So I then switched oh, I'm sorry -	
	20	- when it was monthly, a new bisphosphonate came	
	21	out that was a shot, a shot that you got after	
	22	you had your monthly oncologist visit, you get the	
1			

shot. It was a considerably more expensive but I
felt my time was worth it so I opted for the shot.
Then when the dosing guidance changed that you
could have this drug quarterly, I think switched
to I switched back to the more time- consuming
yet cheaper infusion because I only had to do that
quarterly I could deal with. Monthly, it was a
pain.
But the other thing I would also say
that is not perhaps widely understood is that a
patient often perceives a drug's effectiveness on
how harsh the side effects are and that is not
always true, but patients are not doctors.
Patients perceive, you know, I lost my hair, I
feel nauseous, I have diarrhea, this is one
fantastic drug and that's not the case.
And I know many times I'm asked to speak
to newly diagnosed stage four women and with stage
four, it's the least toxic option first. And I
recall even in my own experience having to tell my
insurance company I wasn't going to first, I
wasn't going to have surgery and the

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1	administrator, you know, no surgery. "You're not	
2	going to have chemotherapy? "No, you know, I	
3	won't. I'll take t his daily pill." And she just	
4	goes, "Well, they don't seem to be doing very much	
5	for you, are they?" And it has it's not	
6	understood that a non-chemotherapy and anti-	
7	estrogen can be equally effective as a	
8	chemotherapy, but sometimes doesn't have that	
9	choice. If they have an aggressive disease, if	
10	they have a disease like triple-negative where	
11	there is no receptor to act upon, then	
12	chemotherapy is essentially their only option.	
13	But if it's six of one, half dozen of another,	
14	oftentimes, again, the patient goes through a	
15	motion of, you know, this drug you know,	
16	they're not looking at the little printout that	
17	came with the drug. They're going, "Well, you	
18	know, I look terrible, I feel terrible, this drug	
19	is really doing the trick."	
20	MS. GIAMBONE: Thank you.	
21	MS. O'BRIEN: And I think that	
22	clinicians struggle perhaps to communicate that.	

1	MS. GIAMBONE: Thank you, Katherine.
2	Let's do let's go on to our next polling
3	question and then we'll be sure to hear you
4	comment. Okay. So the purpose of this question,
5	it's to hear the other side now. So we're going
6	to ask the contrary question here.
7	Of the following factors, which one
8	would you rank as least important to your
9	decisions about using treatments to help reduce or
10	control the spread of your breast cancer: a)
11	whether the treatment is expected to relieve the
12	symptoms I experience because of my cancer; b) the
13	small but significant risk of serious side effects
14	such as blood clots or kidney failure; c) how long
15	the treatment would probably prolong my life; d)
16	how long the treatment could possibly prolong my
17	life; e) the expected side effects of the
18	treatment such as nausea or loss of appetite; or
19	f) how the treatment is administered such as how
20	long the treatment takes, whether it requires
21	hospitalization or required doctor visits? So
22	here you're going to select one that you would

rank as the least important. 1 2 Okay. So, the least important to your decision was "f," how the treatment is 3 administered. And again, we acknowledge and 4 appreciate that there are many, many factors into 5 your decision-making so we appreciate that you're, 6 you know, choosing with one of the options here. 7 8 So, okay, let's make sure we hear your 9 perspective. 10 MS. JONES: Thank you. I really think that's interesting because on the previous ones, 11 in addition to what others have said about "c" and 12 "d," "f," how the treatment is administered was a 13 great concern of mine because it was so how long 14 15 is this going to take. If I have long-term, 16 temporary employment, is this going to impact that 17 or maybe my insurance; am I going to lose that or 18 is this going to be a free clinical trial kind of 19 thing; whether it requires hospitalization; where 20 will I be hospitalized, and about the doctors; 21 will I lose the relationship that I have with my 22 current doctors that I'm still kind of struggling

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1	with and developing a trust, so when this comes	
2	in, do I have to get used to all new doctors	
3	again. So those are and just the	
4	transportation issue. Let's say, live in	
5	Southwest. I may have to go Bethesda or NIH.	
6	That's a huge stretch so those are the kind of	
7	concerns I have.	
8	MS. GIAMBONE: Thank you very much. So	
9	let me turn to the web and if you could what	
10	polling results do you see there and perhaps you	
11	could summarize what you're hearing on the web and	
12	then we'll take some phone calls.	
13	MR. THOMPSON: Similar to what we had in	
14	person. We had three-quarters saying "f" as the	
15	most answered thing. Nobody currently on the	
16	phone, so I'm going to summarize some of the	
17	comments I'm getting.	
18	Going back to something we've been	
19	talking about earlier about what do you keep in	
20	mind when you're thinking about treatments, in	
21	several comments, we had one person saying it	
22	would be nice to be informed ahead of time about	

1	side effects, but you're never going to be able to
2	know how your body is going to respond to them.
3	Another person said it would be nice to
4	know which side effects would not go away after
5	you're done with the treatment.
6	There was one person who said her main
7	concern was her fertility because she was
8	diagnosed when she was 31, but there was no
9	information, no studies that were going to talk
10	about how this would impact her fertility.
11	There was one person who was talking
12	about the difference between metastatic and non-
13	metastatic patients, when they're considering
14	treatment.
15	In terms of other therapies are taking,
16	people also talked about exercise and yoga and
17	about support and the importance of peer sharing
18	things with other patients to help them overcome
19	isolation and depression.
20	And in response to the question about
21	biopsies, one person said it's different between
22	diagnostic and investigational purposes. So if

1	you're getting a biopsy, if it's investigational,
2	he would probably consider where the metastatic
3	lesion was located, for example, skin and bone
4	would be a lot easier than a liver biopsy and then
5	one person talking about genomic medicine said
6	that while they're promising, they're still early
7	so it's people need to keep in mind that some
8	of these treatments some of these approaches
9	are very limited right now.
10	MS. GIAMBONE: Okay. Thank you very
11	much. So we're going to wrap up this portion of
12	the meeting today and we're going to be moving on
13	to open public comment. But I would just like to,
14	on behalf of all of my FDA colleagues, just thank
15	you all so much for sharing these stories with us
16	and really teaching us so much today. I think
17	yes, Geoff yes.
18	DR. KIM: I had a quick question. Just
19	a really quick show of hands. Has anybody ever
20	ready the little thing that comes with the
21	medicine also called the drug label? If you have,
22	can you and any feedback? I know we're

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probably going to get a lot but was it helpful in 1 2 describing the side effects and expectations or --I think we're going to get a lot of comments but 3 just kind of get a -- it helps us a lot to --4 5 MS. FARIS: Can I address that real quickly? 6 7 MS. GIAMBONE: Let's do a show of hands. 8 Can we do a show of -- okay, yes, Susan. 9 MS. FARIS: Just real quickly. I definitely read the side effects on it and I, you 10 know, try not to freak out but the thing is, for 11 instance, when I started KADCYLA, it is so new, it 12 13 was so -- I like to pronounce it "KOD-ZILLA," like, you know, Godzilla. Anyway, but I definitely 14 15 read what the drug company was putting out but the 16 fact is that with any of these drugs, they do not 17 talk about everything that is really going to 18 There is stuff that I think either they happen. don't want to admit, you know, and a prime example 19 20 would be Paxil which is still not admitting how 21 hard the withdrawal off of Paxil is. And so a lot 22 of times, I have to look not only at what the drug

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1	company provides but then go off into the forums,	
2	to trusted forums and hear what other people are	
3	talking about to find out the real story. You	
4	know, I mean there are books that are written on	
5	how to withdraw from Paxil and that's still like	
6	not that's a secret. Anyway, so	
7	MS. GIAMBONE: Great. And so okay,	
8	let's we'll take one more comment.	
9	MS. JONES: We discussed that just sort	
10	of over the break and with my last label, I	
11	thought, "oh my God, this looks different than the	
12	last one," but I didn't have the last one to	
13	compare. I think the information is it's quite	
14	technical, it is a lot to consume and most people,	
15	I don't think well, let me retract that the	
16	population that I serve, I can assure you a lot of	
17	them do not read that and if they do, their health	
18	literacy is not at a level that they can totally	
19	comprehend it so it could be to their advantage.	
20	MS. GIAMBONE: Thank you. Thank you,	
21	Geoff, for your question. So thank you all again	
22	so much for being part of today's meeting.	

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1	(Applause.)	
2	MS. GIAMBONE: Pujita, I'll turn it over	
3	to you.	
4	MS. VAIDYA: Hello, everyone. I'd like	
5	to thank you all for coming here today. We are	
6	now moving into the open public comment session	
7	and for those of you who are not aware, the	
8	purpose of this session is to allow an opportunity	
9	for those who have not had a chance to speak on	
10	issues that are not related to the topic	
11	discussion questions today. This is an	
12	opportunity for folks who are not a patient or a	
13	patient representative to comment. Please keep in	
14	mind that we will not be responding to your	
15	comments but they will be transcribed and be a	
16	part of the public record.	
17	Since we would like to like this	
18	process to be transparent, we encourage you to	
19	note any financial interest that you have that are	
20	related to your comment. If you do not have any	
21	such interest, you may state that for the record.	
22	And if you prefer not to provide this information,	

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you can still provide your comments. 1 2 So we have collected signup before the 3 meeting and during break. We have four people signed up and about 15 -- 10 minutes for this 4 5 session, so please be respectful of your other 6 colleagues here and other patients and stick to 7 the two-minute limit. We won't have a timer but I 8 will be using my phone here to keep track just so 9 that you don't go over. And if you do approach 10 the two-minute mark, I will have to ask you to 11 wrap up. 12 So I'll run through the order of 13 speakers and I apologize if I mispronounce your name. So the order will be first, Joanne Buzaglo, 14 15 Katherine Crawford-Gray, Kimberly Beer, and then 16 Katherine O'Brien. So first, may I have Joanne 17 Buzaglo to the mic? 18 MS. BUZAGLO: Hello. Thank you. I do not have any financial disclosures to present. 19 20 I applaud you for hosting this meeting Okay. 21 today and I'm very grateful and applaud all the 22 people who spoke up. It is not easy to do so.

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1	I bring the voice of over 3500 patients	
2	who have shared their voice in the cancer	
3	experience registry. I bring that with me. I	
4	would encourage you to strongly consider the	
5	comments the cancer support community has	
6	submitted to you about integrating distress	
7	screening and follow-up into the clinical trial	
8	design to ensure that the types of patient-	
9	reported outcomes that we've been discussing are	
10	collected in real time and over time and over the	
11	course of disease and treatment so that it can	
12	inform your ultimate decisions about medical	
13	solutions.	
14	One question I would like to	
15	specifically respond to is the question about	
16	toxicity and risk- benefit tradeoff decisions. It	
17	is clear from our data that patients, especially	
18	with metastatic disease, have unique needs in	
19	their cancer journey and each is willing to	
20	tolerate a benefit-risk profile based on very	
21	personal considerations. We do know from our	
22	cancer experience registry that over 50 percent of	

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1	women living with metastatic breast cancer are	
2	unable to work due to their cancer. Meanwhile,	
3	they are balancing other very real life	
4	commitments, child care, elder care, etcetera.	
5	Additionally, we know that they have different	
6	definitions of value depending on their	
7	experience.	
8	As you consider your definition of an	
9	appropriate risk-benefit scenario, I encourage you	
10	to ensure that it is based on the data emerging	
11	from the voice of the patient and move further to	
12	collect it in real time and allow it to inform	
13	your thinking in ways it may not have been done in	
14	the past. So we look forward to partnering with	
15	you on this. Thank you.	
16	MS. VAIDYA: Thank you, Joanne. Next we	
17	have Katherine Crawford-Gray.	
18	MS. CRAWFORD-GRAY: Thank you. Thank	
19	you so much. On behalf of the Metastatic Breast	
20	Cancer Alliance, I appreciate this opportunity to	
21	make a short statement and thank you particularly	
22	to all the women who have spoken here today.	

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1	The Metastatic Breast Cancer Alliance is	
2	comprised of more than 30 member organizations,	
3	many who are in this room or are online today, and	
4	these include the three largest private funders of	
5	breast cancer research in the U.S., 16 leading	
6	advocate non- profits providing information and	
7	support services for breast cancer patients and	
8	caregivers, 6 pharmaceutical corporations invested	
9	in treatments for metastatic breast cancer as well	
10	as individuals who advocate for and work with	
11	patients on a daily basis. And the Alliance	
12	applauds the FDA's work today and its commitment	
13	to expanding treatment options for people living	
14	with metastatic breast cancer, and we also commend	
15	the FDA's dedication to continuous education of	
16	its reviewers so that they can focus on the	
17	different needs of opts that arise from the	
18	various types and stages of breast cancer and	
19	particularly, the differences between early stage	
20	and metastatic breast cancer.	
21	Last year the Alliance undertook	
22	research which was published in October in their	
1		

1	report, "changing the landscape for people living
2	with metastatic breast cancer," and based on this
3	research, we are advocating that in order to
4	accelerate research and treatment benefitting
5	metastatic breast cancer patients, the following
6	aspects of clinical trials be a priority for the
7	FDA. The first aspect is updating clinical trials
8	for metastatic breast cancer including new trial
9	designs with meaningful endpoints. For example,
10	tumor shrinkage may be but one endpoint relevant
11	to tumor spread or metastasis. Additional
12	endpoints such as time to next metastasis need to
13	be introduced. Qualify of life measures that are
14	valued by patients living with the disease and
15	inform their treatment decisions need to be
16	additionally standardized and required in all
17	phase three trial designs.
18	The second aspect is that there is also
19	a need for multi-center collaborative phase two
20	trials. By helping to incentivize multi-
21	institution, multi- investigator trials,
22	metastatic breast cancer research will be

1	accelerated. Barriers to clinical trial design
2	include there being too many "me too" trials in
3	industry and reward systems for single
4	investigators conducting single institution phase
5	two trials. These, along with other barriers, need
6	to be removed for research benefitting metastatic
7	breast cancer patients and for the research to be
8	conducted at a faster pace.
9	Accelerating the speed of research and
10	the development of new treatment that extend the
11	lifespan of, while maintaining a high quality of
12	life for people living with metastatic breast
13	cancer, is a primary goal of the Alliance. And we
14	appreciate the opportunity to have had input to
15	this process today as well as the pubic docket
16	coming up and trust our views are helpful for FDA
17	staff and reviewers and the progress of research
18	for patients. Thank you.
19	MS. VAIDYA: Thank you, Katherine.
20	Next, I have Kimberly Beer.
21	MS. BEER: Thank you. I'm Kimberly
22	Beer. I'm the Director of Public Policy at Susan

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1	G. Komen, and I want to thank the FDA for giving	
2	us this opportunity to invite patients to come and	
3	share their stories. And we have had the pleasure	
4	of working with the FDA to ensure proper	
5	representation; however, I am significantly	
6	disappointed that the breadth of the diversity in	
7	the breast cancer community is not represented	
8	here. And so Komen is committed to ensuring that	
9	during the pubic docket period that we really,	
10	really emphasize outreach to those folks who are	
11	not women, only women breast cancer impacts	
12	men, diversity in ethnicity, diversity in health	
13	literacy, diversity in stage and type of disease.	
14	This meeting is critically important and	
15	so we look forward to working with you in ensuring	
16	that we have patients comment on the docket as	
17	well as we look forward to hearing what those	
18	folks on the web also submit. Thank you.	
19	MS. VAIDYA: Thanks, Kimberly. And	
20	lastly, we have Katherine O'Brien.	
21	MS. O'BRIEN: Thank you. When Shirley	
22	started here remarks, she mentioned that today 108	

		198
1	U.S. people will die from metastatic breast	
2	cancer. That is 40,000 per year. One thing that	
3	we don't know is how many people are currently	
4	living with metastatic breast cancer. We say that	
5	there are 150,000 U.S. people living with	
6	metastatic breast cancer but that is an estimate	
7	only because our U.S.	
8	cancer registry does not count	
9	metastatic recurrence. Women are counted when they	
10	die or when they are de novo presentation such as	
11	myself. But we know that only 10 percent are	
12	people like me, people who are metastatic from	
13	their first diagnosis. Most people join the	
14	metastatic breast cancer ranks having been treated	
15	for early stage cancer but we do not track that,	
16	and what we do not count, the pole we do not	
17	count, we do not provide for.	
18	Finally, I'm reminded of an advocate, a	
19	late advocate whom I had much respect and	
20	admiration for, Susan Davis. Susan had many, many	
21	chemotherapy regimens and she always said she	
22	could handle the worse side effects, the harshest	

		19
1	drug, and Susan said, "I live in hopeful dread. I	
2	hope that my next set of scans that I have every	
3	three months will be good but I dread that they	
4	will be not, they won't, that they will not." And	
5	that is the reality for the estimated 150,000 U.S.	
6	people living with metastatic breast cancer. They	
7	live in uncertainty.	
8	Oftentimes in popular parlance, when we	
9	talk about breast cancer treatment, we talk about	
10	slash, burn, poison. For the metastatic	
11	community, another way to put it would be scan,	
12	treat, repeat because every three months for most	
13	people, you have a set of scans which determines	
14	whether your treatment is working. If it is not	
15	working, you have to try and find another drug.	
16	We've talked today about what the implications of	
17	those drugs might be.	
18	So I thank you very much for this	
19	opportunity. Thank you.	
20	MS. VAIDYA: Thank you, Katherine. And	
21	so before we get started with our last agenda	
22	item, I'd like to ask Sarah and Kathy to please	

1	pick up the clickers from the tables. And then
2	I'd also like to remind you that we do have
3	evaluation forms outside and we would really
4	appreciate your feedback. So please leave if
5	you could fill it out and please leave them at the
6	table, that would be great.
7	Now lastly, I'd like to call Dr. Amy
8	McKee to the stand for our closing.
9	DR. McKEE: So I think I'm going to
10	summarize with there are two things I've heard
11	today consistently. One, every patient is an
12	individual; every patient is going to have their
13	own story about how their disease responds to
14	treatment and how they handle the toxicities of
15	that treatment. And I'll go back into that a
16	little bit more. And the second thing is that we
17	have a lot of work to do. There is a lot of work
18	to be done.
19	So I want to thank you all for sharing
20	your stories because it's really important for us
21	to hear, as regulators, how these treatment affect
22	you both in terms of how they work and how you
1	

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1	think about it when you choose them and how you	
2	have to handle all the toxicities and the doctors'	
3	appointments that go along with those treatments.	
4	I think one of the things that we were	
5	really interested in hearing from you because it's	
6	something that we deal with with every drug that	
7	comes before us where we have to make a decision	
8	is how do we describe whether or not you should	
9	pick this treatment for yourself. And so we use	
10	clinical trials to do this and we use statistics	
11	to try to summarize it and you sort of saw a	
12	little bit of that with that question, "If you had	
13	an average two-month improvement in survival but	
14	lots of toxicity, would you choose that for	
15	yourself?" And this is what we have to do every	
16	day. We have to think about for this population,	
17	for these specific patients, do we think that	
18	there's enough benefit that the risks are worth	
19	it, and we use statistics to try to decide that	
20	but that could never answer the question for an	
21	individual patient, and that's where you all have	
22	to come in with your oncologist and your family	

1 and yourselves to make that decision.

2 And then the second thing is there is a 3 lot of work to be done. We want to continue this dialogue with you. We encourage all of you to 4 5 engage with the FDA and with clinical trials and with advocacy groups as much as you can. 6 I'm actually a little bit bleary- eyed because I've 7 8 been trying to stay up for the last three nights 9 to watch PBS's series, "Emperor of All Maladies." 10 And last night I think the most hopeful thing 11 about it was there is a lot of work to be done but 12 we're such an exciting time right now. We know we've talked about genomic sequencing; we're 13 talking about immunotherapies. There are so many 14 15 more options than some of the women who are in 16 this room who were diagnosed at a time when there 17 were almost no options beyond extremely toxic therapy and surgery and you might not even know 18 19 what surgery you were going to get when you went 20 under anesthesia. And so it's an exciting time 21 and a hopeful time and I really thank you all for sharing your perspective because it is very 22

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1	important when we make decisions and we evaluate	
2	the data about not how it's going to affect the	
3	population but how it's going to affect each	
4	individual patient. So I thank you and please	
5	fill out your evaluations because it's really	
6	important for us to read them because we take it	
7	all into account. Thank you very much.	
8	(Applause)	
9	(Whereupon, at 4:40 p.m., the meeting	
10	was adjourned.)	
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1	CERTIFICATE OF NOTARY PUBLIC
2	I, MICHAEL FARKAS, the officer before whom the
3	foregoing hearing was taken, do hereby certify
4	that the testimony appearing in the foregoing
5	hearing was taken by me in audio recording and
6	thereafter reduced to typewriting under my
7	supervision; that said transcription is a true
8	record of the proceedings; that I am neither
9	counsel for, related to, nor employed by any of
10	the parties to the action in which this deposition
11	was taken; and, further, that I am not a relative
12	or employee of any counsel or attorney employed by
13	the parties hereto, nor financially or otherwise
14	interested in the outcome of this action.
15	
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20	Jun on The
21	man ave
22	MICHAEL FARKAS Notary Public in and for the
	DISTRICT OF COLUMBIA

1	CERTIFICATE OF TRANSCRIPTION	205
2	I, LUCY T. TURNBULL, hereby certify that I am not	
3	the Court Reporter who reported the following	
4	proceeding and that I have typed the transcript of	
5	this proceeding using the Court Reporter's notes	
6	and recordings. The foregoing/attached transcript	
7	is a true, correct, and complete transcription of	
8	said proceeding.	
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