

**Medical Breakthroughs from the
San Antonio Breast Cancer Symposium**

National Webinar Transcript

January 6, 2025

Presented by:



This program was made possible with support by:



Jenny Stein:

Thank you guys so much for joining. We're going to go ahead and get started. Sorry for the delay in starting. A couple of us had a different link. So thank you so much for your patience, we really appreciate it. So my name is Jenny Stein. I'm the Director of the Midwest Region for Sharsheret. I wanted to thank everybody for joining us this evening for the latest in our webinar series, Medical Breakthroughs from the San Antonio Breast Cancer Symposium 2024. For those who may not be familiar, the San Antonio Breast Cancer Symposium is an annual international symposium hosted in San Antonio, Texas. It is the largest and most prestigious scientific gathering on breast cancer research. It is designed to provide state-of-the-art information on prevention, diagnosis, and treatment of breast cancer and precancerous breast disease.

This year, over 10,000 clinicians and scientists from all over the world were at the San Antonio Breast Symposium and tonight we are privileged to hear from Dr. Virginia Kaklamani and Dr. Eleonora Teplinsky, who will highlight the latest information coming out of this symposium that was hosted last month. We are grateful to tonight's webinar sponsor Ambry Genetics. Before we begin, a few housekeeping items. Today's webinar is being recorded and will be posted on Sharsheret's website along with a transcript. Participants' faces and names will not be in the recording. If you would like to remain private, you can turn off your video and/or rename yourself or you can call into the webinar. My colleague will be putting that information into the chat now. You guys are all on now though, so likely you already have the call-in information. You may have noticed that you guys were muted upon entry. Please keep yourself on mute throughout the presentation.

If you have any questions, please put them in the chat box either publicly or you can click on Sharsheret, and you can submit a question to us privately. We have received some questions in advance of the webinar tonight and we anticipate receiving more in the chat box. If you are going to submit a question, please make sure to ask general questions as we can't offer specific medical advice and we'll do our very best to answer everyone's questions. As we move into the webinar itself, I also want to remind you that Sharsheret is a national not-for-profit cancer support and education organization and we do not provide any medical advice or perform any medical procedures. The information being shared with us tonight is not a substitute for medical advice or treatment for specific medical condition. You should not use this information to diagnose or treat a health problem.

If you have any questions that are specific to your medical care, the doctors tonight will not be able to advise regarding your specifics and we would recommend that you reach out to your medical provider. Always seek the advice of your physician or qualified health provider with any questions you may have regarding a medical condition. After we hear from Dr. Kaklamani and Dr. Teplinsky, we will open it up for question and answers. A reminder for our Embrace Community, we invite members of our Embrace Community, those facing metastatic breast cancer or advanced ovarian cancer to stay on at the end of the webinar for an intimate breakout session with our expert speakers and Bonnie Beckoff, our Director of Support Services.

And now this evening, we are so honored to be joined by two breast cancer experts. Dr. Virginia Kaklamani is a Professor of Medicine in the Division of Hematology/Oncology at the University of Texas Health Sciences Center in San Antonio, and she's the leader of the Breast Program at the Mays Cancer Center. She's also the Co-Director of the San Antonio Breast Cancer Symposium. Her research interests include designing clinical trials with targeted agents. She has also identified several genetic mutations that link obesity and breast cancer.

Dr. Eleonora Teplinsky is a board certified medical oncologist specializing in breast and gynecological oncology. She's the Head of Breast and Gynecologic Medical Oncology at Valley Health System in Paramus, New Jersey and a Clinical Associate Professor of Medicine at the Icahn School of Medicine at Mount Sinai. Her clinical research and interests focused on young women with breast cancer survivorship and the use of social media in oncology. Dr. Teplinsky serves on the medical advisory board of Living Beyond Breast Cancer. She's a frequent media contributor and the host of INTERLUDE podcast where she shares the stories and experiences of those who have been affected by cancer. I would like to now turn your attention to Dr. Kaklamani.

Dr. Virginia Kaklamani:

Jenny, thank you so much for having me here and thanks everybody for being here today. Hope everybody can see my screen. So we decided to divide what we thought was the important information from SABCS into two talks. So I'll cover two big issues. I'll cover a drug that I assume is going to get approved by the FDA within the next year and the study that led to that. And then something that I know a lot of patients are asking, "What happens after I am diagnosed with breast cancer? How do I know if the cancer's back? What tests are we going to do for that?" And so forth. And I think there was an important study that was presented at San Antonio this year. And then we'll also talk about a really nice study that looked at minimizing the treatment for pre-cancerous condition called ductal carcinoma in situ and whether we should do surgery for all patients or whether some patients may not need to have surgery done.

So the first part pertains to patients that have estrogen receptor positive breast cancer. And as you all know, there's three big types of breast cancer. One is estrogen receptor-positive breast cancer. The other one is the triple negative breast cancer. And the third one is the HER2-positive breast cancer. And these cancers are based on what the cancer expresses as far as proteins. And so the most common type is the estrogen receptor-positive breast cancer where the cancer expresses the estrogen receptor, which means that all of the estrogen that we have in our body is used as food for the cancer. So the way we treat these cancers is by giving anti-estrogens, and I'm sure you've heard of Tamoxifen. Tamoxifen is a drug that we've had out since the 1970s that is one of the anti-estrogens we use. In the late 1990s, we started using aromatase inhibitors that basically get rid of all of the estrogen that we have in our body. And then newer drugs are called selective estrogen receptor degraders (SERD).

And those basically destroy the estrogen receptor. And we've had one out since 2002 called fulvestrant, which is given via an intramuscular injection. So a patient has to come to clinic once a month and we have to inject their buttock, actually both buttocks, with the shot of the drug. And this tends to be a little hard to give, especially if we're giving it for a long period of time. So companies started developing newer drugs that are degraders that are oral. And the benefit of these drugs is the fact that we can give higher doses. And one of the limitations of fulvestrant is that because it's an intramuscular injection, we can't really give a lot of it, but these drugs are oral drugs and so we can give higher doses. So some recent data showed that they could actually be better than the other anti-estrogens that we have.

So the first drug of that class that was approved is called elacestrant. And it was approved exactly two years ago and it's now being used for patients with metastatic breast cancer. So breast cancer that has spread and specifically for patients that have changes in the estrogen receptor. And these changes develop as the cancer learns how to deal with all of these anti-estrogens that we give. So these cancers become resistant to our estrogen therapy. And so giving elacestrant has seemed to be pretty beneficial

for these patients. So a new study that was presented a few weeks ago called the EMBER-3 trial looked at a new oral SERD called imlunestrant and it showed that imlunestrant can actually also improve outcomes and it's better than other standard of care endocrine therapy that we have mostly in tumors that have these changes, these mutations in the estrogen receptor. It also showed that if we combine imlunestrant with CDK4/6 inhibitors, which is a treatment that we have for metastatic breast cancer and early stage breast cancer, it can actually work even better.

So this is one of our big studies. As I mentioned, the FDA is likely going to approve imlunestrant based on these results and so we'll have more options for our patients that have metastatic estrogen-positive breast cancer. So I thought that was a pretty important trial that you guys may hear the approval in probably the next year or so. Now the second big study, it looks at these assays that are now approved by the FDA, patients are coming to clinic and asking about these assays all the time. Now, when somebody is diagnosed with breast cancer, we sometimes do scans to make sure that the cancer hasn't spread, but a lot of times we don't because the chance of the cancer having spread at the beginning when a patient's diagnosed is pretty low. So sometimes we'll give chemotherapy to patients, we'll do surgery radiation, and then we may put them on anti-estrogens or not depending on the type of cancer that they have.

And then they come every three to six months to our office for us to do a checkup. And we usually just do mammograms. Some colleagues might do some tumor markers, but all of our guidelines recommend against them. So the most common question that our patients are going to ask is, "How do I know if my cancer has spread? What's happening? Am I cured?" And this is a tough question to answer because we don't really know. And so patients want to get scans and we always say, "Please, let's not do scans. Scans don't really help because if the scan's negative, it doesn't really mean the cancer's not going to come back. It means we're not seeing anything right now." And if the scan positive, it means the cancer has already spread. And whether we find out with the scan or whether we find out in a few months when we actually have symptoms, all of our studies show that you're going to live as long and as well.

So we don't like doing scans. Well, now there's these assays that are able to detect the DNA of the cancer. So you do a blood test and the assay will look and see if there's any DNA of the cancer in the blood. And so the thought is that this way we can find the cancer before it has spread. So our colleagues that take care of patients with colon cancer are doing these assays all the time because they can help find a patient that has a high risk of their cancer returning. And so they give chemotherapy to that patient. And if the assay is negative, they may not give chemotherapy. But how about breast cancer? Can we do these assays in breast cancer and change our therapy or do something to help prevent the cancer from spreading? There was a large study that looked at that.

It took patients that had had surgery and did the assay, and then most of the patients, all of the assays that were done were negative. But some of the patients, the assays that were done were positive. And so once they found that there was some DNA of the cancer detected, then they went back and they did scans. And unfortunately when they did those scans at the time that that assay was positive, in 50% of those patients, the cancer had already spread. And in the other 50% they said, "Well, let's take half of these patients and give them a drug to kill the cancer to prevent it from spreading. And in the other patients, let's not do that." And it didn't really seem to make a difference. So the trial closed. And so the bottom line from all of that is that we don't have any data that if we do these assays and we find that there is some cancer DNA in the blood and we change therapy that the patients are going to live any longer or any better.

So for breast cancer, as things stand in 2024 or 2025 now, we should not be doing these assays as routine care. Now there's a lot of clinical trials and if any of you are interested, please talk to your physicians about the clinical trials that are going on because we still need more trials and more data to be able to understand if these assays will in the future become beneficial. And I think they may. But the first thing is if 50% of the patients at the time of the positive assay already have metastatic disease, then we're not really detecting microscopic disease. So these assays need to get better. And also we need to have effective therapy that can reverse that positive DNA, so make the positive DNA into negative DNA. And we don't have either of those two things right now, which is why these assays should not be used as standard of care until we have more data. But there are trials and so do please participate in the trials because this is the only way we're going to learn and hopefully make these trials beneficial.

And so this is how the trial was done. It might seem a little complicated, but as I mentioned, they took patients that had finished their therapy and then they did the ctDNA (circulating tumor DNA) surveillance. So they kept doing these tests and if a patient had a positive test, then they would either continue whatever treatment they were on or switch to a different treatment. And that treatment is called niraparib, which is a specific drug that targets the DNA. And as I mentioned, 50% of the patients at the time of the ctDNA already had metastatic disease. The drug niraparib didn't really improve outcomes in the patients that it was given to. And so we really need more data to be able to make these assays standard of care.

Now the third study I wanted to talk about is pretty provocative, and this is a study in pre-cancerous lesions and the most common one is called DCIS, ductal carcinoma in situ. And that's actually pretty common, especially now that we're doing a lot of mammograms for screening purposes. If you look at the numbers of breast cancer that are increasing, what's increasing is DCIS because we're detecting breast cancer earlier and earlier and earlier and even before it becomes breast cancer. So the incidence of DCIS is over 50,000 cases in the US per year. And what we typically do when we find DCIS is we do surgery to remove it, and then we typically give radiation. And in most of the patients, we also give endocrine therapy, hormone therapy too. And we always feel like we're doing too much and we're spending a lot of time probably freaking patients out about a lesion that may never become breast cancer, may never bother them.

This was a study that was done by one of our national groups and it took patients that had DCIS, but they had what they called low-risk DCIS because there's less aggressive DCIS and more aggressive DCIS. And the more aggressive DCIS we know will become breast cancer, we know that we need to do surgery for it. But the less aggressive DCIS we've always had the feeling that those patients we can monitor. And we've actually done this in clinic, especially during COVID for the past few years. So they took these patients that have this low-risk DCIS and half of the patients proceeded with surgery and radiation if need be, and endocrine therapy. And the other half they did what they called active monitoring, which meant they just did a mammogram every six months. If there were any changes, they did a biopsy and if patients wanted to have hormone therapy, endocrine therapy, they were allowed to do that.

And they watched these patients for two years and then they looked at the outcomes of these patients. And the bottom line is during those two years, there was no difference between the two groups. Now if you look at these two curves, you'll see the two curves being different. So you're going to say, "Well, why are you saying there's no difference?" And really the difference is because in the group that had the surgery, some of these patients had breast cancer at the time of surgery, and this happens all the time with DCIS. Some patients we do the biopsy, but we find DCIS.

But then when we do surgery, we may find breast cancer. So that's why there's a difference. But if you look at the two curves, they're really parallel after the initial time where some breast cancers are found suggesting that we can wait, we may not need to proceed with surgery in that low-risk DCIS, we can just go ahead and follow these patients and do mammograms, potentially give hormone therapy and then watch them and avoid surgery, avoid radiation, because a lot of these patients are likely not going to get bothered by the DCIS.

So this is only two-year data. So I'd like to see data for five years and 10 years eventually, but it's suggesting what we've all suspected and what many of us have done in clinic. Just take some of these patients that may just not be very good candidates for surgery. Maybe they're older, maybe they just had a heart attack or stroke or just are not in good condition and follow them. And many of these women, they really won't be bothered by the pre-cancerous lesion. It'll never become cancer. So this was a really nice study suggesting that we don't really need to be very aggressive with every single patient that we find these lesions to and we could delay and potentially just avoid surgery altogether. So I'll finish with that. Again, this was a pretty good SABCS as far as I'm concerned. We had some nice data, but look forward to the discussion later on.

Jenny Stein:

Thank you so much, Dr. Kaklamani. We'll get to that. I know there were a lot of questions put in the chat. I wrote them down and we will get to them after we hear from Dr. Teplinsky.

Dr. Eleonora Teplinsky:

Hi everyone. I am going to share my screen one second. All right. Can everyone see this?

Dr. Eleonora Teplinsky:

Yes?

Jenny Stein:

Yes.

Dr. Eleonora Teplinsky:

Okay, wonderful. Well, thank you so much for having me. I'm going to highlight three studies today and again, I'm really excited for the Q&A part of this. But the three studies that I'm going to talk about are the PATINA trial, which looks at triple positive metastatic breast cancer, the BRCA BCY trial, which is going to look at risk reducing surgeries for younger patients who've been diagnosed with breast cancer at age 40 or younger and carry a BRCA mutation, and an update on the OlympiA trial, which looks at olaparib which is a PARP inhibitor similar to niraparib, which we just heard with the other trial for high risk, early stage HER2 negative breast cancer.

So the background for the PATINA trial is, and I have all this information here just for your reference for the future, but the idea is that when someone is diagnosed with triple positive or let's say hormone receptor positive, HER2 positive breast cancer, metastatic breast cancer, meaning that cancer is spread outside of the breast and lymph nodes to other parts of the body, the current standard of care at this

time is they get chemotherapy typically with taxane drug combined with anti-HER2 therapy, typically Herceptin and Perjeta.

And they do anywhere around four to eight cycles of that. And if their disease is stable or improved, then we can drop the chemo and we add a hormone blocker to that, typically an aromatase inhibitor or sometimes tamoxifen. But for patients who are HER2 negative, we have this class of medications called CDK4/6 inhibitors. So these are abemaciclib, ribociclib or palbociclib. And historically we've really limited those to the HER2 negative hormone receptor positive group. But there's data coming out that the CDK inhibitors may actually be beneficial in HER2 positive disease as well. So what the PATINA study attempted to do was to say, "Hey, if we add a CDK4/6 inhibitor, specifically palbociclib, and these are drugs that really interfere with the cell cycle, if we add the palbociclib once we've dropped the chemo, so now they're on the HER2 therapies, in this case, Herceptin and Perjeta, they're on endocrine therapy, and we're going to add the palbociclib, will these patients do better compared to just anti-HER2 therapy and endocrine therapy alone?"

And they had about 518 patients and they split them into two groups, one to one, and they followed them. And so let's see what they showed. And this study was really, really impressive and it showed that addition of palbociclib and the same brands, if you know brand names and the addition of palbociclib improved progression-free survival, meaning the amount of time that patients are alive without their disease progressing by 15 months. So a little bit over a year, and that translates it to about a 26% reduction in the risk of progression or death. Now, 15 months may not seem like a lot, and I agree that it really isn't a lot, but that's actually a big improvement as we're comparing, right? This is adding an extra year plus without someone having to switch treatment regimens. And really this may represent a new standard of care for this population. So this was really exciting to see because we have been putting patients on this trial for several years and it's really wonderful when we see a study that shows such a fantastic benefit.

Let's move on to the next study. So this is the BRCA BCY study. And so the idea with this study was to take our patients who are diagnosed with breast cancer, 40 years old or younger, who have a BRCA1 or BRCA2 mutation. Now patients with a BRCA mutation, especially for younger patients, we recommend risk-reducing mastectomies, removal of the breast, and risk-reducing salpingo-oophorectomy, removal of the ovaries in the fallopian tubes, because these patients are at higher risk of a second breast cancer or they're at higher risk of ovarian cancer. And fallopian tube cancer is really part of that. But we don't have data in this young population of what is the impact of that surgery? Are patients actually living longer? And this is really important because having risk-reducing surgery to remove your ovaries and fallopian tubes put someone abruptly into menopause. And that comes with a whole lot of side effects.

And so the study is really important because it looks at this question of do patients actually live longer? So they had a large group, they had nearly 5,300 patients that were included in the analysis. And I'll tell you first the results of the patients who had a risk-reducing mastectomy. The ones who had risk-reducing mastectomy had a 35% lower risk of death, and they followed these patients for an average of about five years. This also improved disease-free survival. So being alive without active cancer and breast cancer-free interval being alive without active breast cancer. So 35% lower risk of death was very, very important. Now when we look at the impact of the risk-reducing salpingo-oophorectomy, you can see the average age of about 40. They followed these patients for about five years also, and having the salpingo-oophorectomy resulted in a 42% lower risk of death, really impressive, impressive. And they found that the benefit of the salpingo-oophorectomy was greater in BRCA1 carriers compared to BRCA2,

and that's because there is a lower risk of ovarian cancer in BRCA2, and the benefit was greater also in the triple negative population.

Similarly, we saw the improvement in disease-free survival and breast cancer-free interval. So in conclusion, this study was really, really important. It shows you have the data here, but it shows an improvement in survival. So patients who are living longer by having these risk-reducing surgeries. But what I think is really, really important is that we've seen studies on this, there is some hesitancy to have these risk-reducing surgeries, especially salpingo-oophorectomy because of menopause. And we really need to be having conversations about hormone replacement therapy and management of premature menopause in this population so that patients are not hesitant to have these surgeries. Now, not everyone is a candidate for hormone replacement therapy and those are very individual discussions with a little bit more comfort in the triple negative population compared to the hormone receptor positive population. But regardless of HRT, there's so much that we can do about managing premature menopause for our patients.

And so I think that this study really highlights the benefit and now we have to support our patients through this transition. And then lastly, let's talk about the update on the OlympiA trial. So the OlympiA trial was published and presented several years ago, and it looks at patients who have a BRCA mutation who are either triple negative or hormone receptor positive, HER2 negative, and they were considered to be high risk. And the high risk was defined by several criteria, which are all listed here. Not having a pathologic complete response to neoadjuvant chemotherapy is one of the factors, but there are others and they had to be stage two or stage three breast cancer or again, lack of pathologic complete response. So you can see everything here. And what they did was once patients had completed their chemo, they had completed surgery, they had completed radiation, if they were getting any of these treatments, then they were randomized and they had about 1,800 patients to either get placebo or a PARP inhibitor - olaparib.

And the reason that they did this was there's olaparib or these PARP inhibitors are very effective in patients with a BRCA mutation. We use olaparib very often in our ovarian cancer patients and they look to see what were the outcomes, were patients having a lower risk of recurrence by taking olaparib compared to not taking olaparib? So now they've presented the outcomes several times. This is the third analysis of the study, but now we have this average of six years of follow-up, which is really because especially we know with triple negative breast cancers, they tend to come back early if they're going to come back. And what they found was if you look here at the six-year invasive disease-free survival, so again, being alive without disease, there was a 9.4% improvement favoring olaparib, which translated into a 35% reduction in the risk of progression or recurrence or death.

So really, really significant. 9.4 is quite the number. They saw the same thing with distant disease-free survival about an 8% benefit. So that's talking about alive without metastatic recurrence. And similarly, they looked also at overall survival, so just if someone is alive or not. And they found a 4.4% benefit. So more patients were alive at this follow-up who took olaparib compared to placebo. You can see here in the olaparib arm there was about 107 deaths compared to 143 deaths in the placebo. So quite, quite meaningful.

This has some side effects, the big side effects of PARP inhibitors that are kind of the rare things, but the scary things are either a myelodysplastic syndrome or acute leukemia. It's very rare, but it happens. And here they show there's actually a 0.4% incidence in olaparib and 0.7% in placebo because sometimes chemotherapy can result in these side effects as well. There was a lower risk of second cancers in the

olaparib arm, notably a lower risk of ovarian or fallopian tube cancers. Pregnancy data were similar in both arms, and this is really important because we even had a lot of guidance about pregnancy after olaparib.

And so this was really, really important and patients were on olaparib for a year, as I mentioned. So this has already been the standard of care, but this longer follow-up really continues to support it as the standard of care for this patient population. And it really highlights to me the importance of genetic testing. Anyone who's diagnosed with breast cancer 65 years or younger, also patients with triple negative male breast cancer and there's some other criteria as well, all should be having genetic testing. And it's so important because it allows us to give patients drugs like olaparib. If we don't do genetic testing, we don't know that they would be eligible. And that is all that I have. I'm going to stop sharing and thank you so much.

Jenny Stein:

Thank you so much, Dr. Kaklamani and Dr. Teplinsky, for sharing these updates with us. A lot of great information. I know we have a ton of questions in the chat and some that came ahead of time, but before we get to the questions, I just wanted to remind everyone that the information provided tonight is not a substitute for medical advice or treatment for a specific medical condition. You should not use this information to diagnose or treat a health problem. If you have any questions that are specific to your medical care, the doctor's tonight might not be able to advise regarding your specifics and therefore we would recommend that you reach out to your medical provider.

A couple questions about aromatase inhibitors and side effects. So just going to throw it out for either Dr. Kaklamani or Dr. Teplinsky to answer. So regarding the aromatase inhibitors and the CDK4/6 inhibitors, does the body heal slower from surgery or chemo and/or radiation when you're on these medications?

Dr. Virginia Kaklamani:

So for aromatase inhibitors, the answer is no. But for CDK4/6 inhibitors, we know that they decrease the blood counts or decrease the white cell count, the platelet count, the red cell count. So I guess there might be a little bit of a delay, but we don't really think of it that much. We've done some studies with these drugs in patients before they've had surgery and then they've had surgery without complications and so forth. So we typically are not too concerned about that, but there might be a theoretical effect with the CDK4/6 inhibitor.

Jenny Stein:

Okay, great, thank you. Another question regarding just estrogen supplementation, especially for people with hormone receptor positive breast cancer, is there any safe low dose of hormone replacement therapy that people with hormone receptor positive breast cancer can be on to help manage whether it's natural menopause or if they're pushed into menopause early due to surgery or treatment that they can take to help with side effects?

Dr. Eleonora Teplinsky:

So I think this is such an important topic and something that everyone wants to know about it. And the challenge with this is that the data for hormone replacement therapy or menopausal hormonal therapy is really old. A lot of this big study that we talk about, the HABITS (hormonal replacement therapy after breast cancer) studies 20 years old and unfortunately it did show a higher risk of recurrence for patients on hormone replacement therapy. Now the big challenge is, well, we do things so differently now 20 years later, we also use different formulations of hormone replacement therapy. And so it's hard to extrapolate that data. But with that said, we still don't have any data showing safety in this population. There are some studies ongoing with a hormone therapy formulation called Duavee in DCIS, so that'll be that the Duavee works as an anti-estrogen in the breast and an anti-estrogen in the uterus.

So it'll be interesting to see what happens, but we're not there yet where we feel comfortable recommending hormone replacement therapy to hormone receptor positive patients. With that said, there are really excellent ways to manage menopausal side effects, and we do feel comfortable using vaginal estrogen for management of atrophic vaginitis or vaginal dryness, genitourinary syndrome of menopause. But these are really questions to discuss with your doctor, working with your gynecologist as well about managing side effects like hot flashes and joint pain, mood changes, and the other menopausal side effects.

Jenny Stein:

Perfect. And then just a quick, this just came in about hormone replacement therapy. Do you guys feel comfortable or what is the thought behind using hormone replacement therapy in people who have triple negative breast cancer?

Dr. Eleonora Teplinsky:

You want to answer? Yeah.

Dr. Virginia Kaklamani:

Yeah. It's probably okay. I think we're allergic to estrogen or the word estrogen, but with triple negative, there doesn't seem to be a rationale behind us saying no.

Jenny Stein:

Okay, great. So a question came in earlier this evening about breast cancer stem cells. So I wonder if either you guys can address this. I didn't hear anything about stem cells. You talked about it. I don't know if anything was spoken about at San Antonio about it, but there's some theories that they're not theories, but there's knowledge that sometimes the stem cells can survive radiation and chemotherapy. Is there a way to eliminate breast cancer stem cells?

Dr. Virginia Kaklamani:

I'll take it. So stem cells are really where the breast cancer arises from. So I don't want you guys thinking that this is something separate from the actual cancer. So when we're giving chemotherapy and anti-hormone therapy and doing surgery, we're trying to eradicate those, we're trying to get those out of the body. So when patients are cured of breast cancer, it means that we've eradicated all the breast

cancer cells or the majority because sometimes there might still be some dormant cells that are just never really waking up.

And if the cancer returns, it means that we really haven't done a good job in eradicating all of these cells, but it doesn't just mean that we haven't eradicated the stem cells because what happens with cancer is it starts from one little conglomerate of cells and then once it spreads, all of these cells have their own identity and they change and they become more complicated. Then we give one therapy and you may work for one clone of cancer cells, but it may not work for another one. That's kind of why a lot of times, or most of the time when patients cancer spreads to other parts of the body, we just don't have the ability to cure it.

Jenny Stein:

Okay, great. Thank you. So taking a little bit different question about hormone receptor positive breast cancer, are there any antibody drugs for patients with hormone receptor-positive cancer that's not metastatic, especially if you weren't able to use the estrogen inhibitors?

Dr. Eleonora Teplinsky:

I'm not sure what you mean by antibody drugs. I mean, we have a class of medications called antibody drug conjugates, but I'm not sure that that's what maybe for patients who are not candidates or couldn't tolerate anti-estrogen, is that what that question is asking?

Jenny Stein:

I don't know, but yeah, I mean there has been... I'm not quite sure. That's a great question. Not quite sure. But maybe if you could speak to if people are hormone receptor positive, they're not able to tolerate the aromatase inhibitors, the tamoxifen, are there other medications that they can take to help reduce their risk of recurrence?

Dr. Eleonora Teplinsky:

Well, I think, Virginia, you spoke about the oral SERDs that are really in development right now and there's a number of studies looking at oral SERDs in the early stage breast cancer, and it'll be interesting to see if those medications are more effective than aromatase inhibitors, but also if they are going to less side effects. I think we're a couple of years at least away from that, but there is research going into that which is going to be really exciting if it offers additional options for our patients.

Jenny Stein:

I know a lot of questions have been put in about genetic testing and I know, Dr. Teplinsky, you spoke to this at the end of your presentation talking about the importance of having genetic testing and just some questions about if somebody has had genetic testing, maybe they haven't had it for a few years, when should they be retested or is it one and done, that type of stuff.

Dr. Eleonora Teplinsky:

You want to answer?

Dr. Virginia Kaklamani:

Go ahead. Because you talked about that.

Dr. Eleonora Teplinsky:

Okay. So I would say a lot of that depends on when you were tested and whether you had the panel testing which looks at a whole bunch of different genes or years ago people were just getting tested for BRCA1 and 2 and they were only getting tested for a few mutations within the BRCA genes. So a lot of that depends on what you've had done in the past and when. I think that if you're not sure, you would start with talking to your oncologist or maybe your genetic counselor and asking, "Should I get testing repeated?" What I see often is patients who may have gotten tested when a family member was diagnosed 10, 15 years ago and now they're coming in with a diagnosis. And so in those cases sometimes we do retest, but it really depends on what you had and when.

Jenny Stein:

Yeah, perfect. And one of my colleagues, Bonnie, had put into the chat that at Sharsheret, we do have genetic counselors on staff that you can contact. Thank you for putting it in the chat again, Bonnie, their email to ask your specific questions. And I know that they pretty much say the same thing, talk with your doctor. Obviously it's important to know which genetic tests or which genes you had already been tested for because new stuff like Dr. Teplinsky said is constantly coming out and there's new technology there, so you can definitely contact us to get more specifics about your specific situation. Just a question, if there was anything coming out of San Antonio about latest research on how to prevent breast cancer?

Dr. Virginia Kaklamani:

So we had a few sessions that looked at prevention, early detection, just because it's so important and we just don't talk about it enough. Unfortunately, the research in prevention and early detection is not progressing as much as we wanted for many reasons. The large prevention studies that we did included 20,000 women and years and years of follow up. So those are just unrealistic to be doing all the time. And then the drug that came out of all of these prevention trials is being very underused. And so when the groups went back to the NCI, the National Cancer Institute, said, "We want funding for a new study," the NCI said, "Well, we're not giving you money because these are just very expensive studies and patients are really not doing what they should be doing to help prevent their breast cancer." There's some new formulations on tamoxifen and similar drugs to tamoxifen actually gel that people can apply on their breasts.

And so there's some research looking at that and it actually seems that it may work, but it's hard because how much gel do you put and where exactly do you put it on your breast and how often do you put it and so forth. So those are all questions that we haven't answered yet. And then there's these drugs called the PARP inhibitors, which I mentioned one of them niraparib when I spoke, but those are drugs that we use to treat breast cancer and there's some prevention studies that are being done in patients that have a high risk of developing breast cancer because of mutations in two genes, BRCA1 and BRCA2. So we're waiting for results from those trials, but those seem to be very promising. So a lot of work is being done. Not a lot of new things right now, but stay tuned.

Jenny Stein:

Thank you. And can you speak a little bit about the role of Evista or Evista? If I pronounced it correctly.

Dr. Virginia Kaklamani:

Evista is one of the drugs that was looked at in prevention and found to help prevent breast cancer, but all of these drugs have side effects and many of them are menopausal symptoms. So patients or women are not really eager to take a drug that's going to give them hot flashes and mood swings and just going to decrease their sexual desire and so forth. So it becomes a little complicated. The other thing is how do we define high risk and who really is at high risk of developing breast cancer? And third, it seems that these drugs, including Evista, prevent estrogen positive breast cancer, which in many cases we can cure. What we lack is treatment or prevention for triple negative breast cancer, which is really the one that tends to be aggressive and we don't have great treatments for.

Jenny Stein:

Great. Thanks. A question just came in through the chat about the role of alcohol and the contribution it may have towards breast cancer. There's a recent report that said alcohol, unfortunately, there's a direct link to cancer. I just didn't know if there's anything specific about breast cancer.

Dr. Eleonora Teplinsky:

So I think that the data on alcohol and cancer is not new. Alcohol is a proven class one carcinogen. It is in the same category as tobacco, as asbestos. And we've known for a long time that alcohol increases the risk of many cancers, not just breast cancer, but in breast cancer, one drink a day, so about seven drinks a week, increases your breast cancer risk by about 10%. Now if we think about it, sometimes people will pour and they're pouring more than one drink or, "Oh, let's have a second drink," and that risk continues to increase. Now what happened on Friday was the Surgeon General said, "Hey, there should be a warning label on alcohol, just like there is a warning label on cigarettes that they are carcinogenic." And I think that it's caused a lot of angst and strife and fear and anxiety, but it's not new information.

But I think it highlights the fact that the studies show that less than half of Americans are actually aware of the link between alcohol and cancer. And I think it really is important to educate people on that. And what I tell patients is ultimately it's a personal choice. Some people may say, "I'm going to completely cut out alcohol." Some people will have one or two drinks a week. We tend to say, "Look, if you're going to limit to about three drinks per week or less on average. But it's a personal choice." But I feel strongly that patients should be aware of that information and I think the warning label is one way to do that, but it's not new information.

Jenny Stein:

Okay, great. Thank you so much. So thank you guys so much. I know there's a couple more questions left in the chat. We will go ahead and talk with Dr. Kaklamani and Dr. Teplinsky about that when we go ahead and send our follow-up email. We will try to address all of your guys' questions. You guys definitely had a lot of great questions and hopefully we got a lot of them answered. So I want to once again thank Dr.

Kaklamani and Dr. Teplinsky immensely for educating us this evening on really the most up-to-date information on what is coming out with breast cancer research. And like I said, we will try to follow up with them. I know there are a couple of questions about triple negative breast cancer, so stay tuned and look in your email for a follow-up email with some more information. We do ask that if you guys can to please take a few minutes to fill out an evaluation survey about tonight's program.

We really do value your feedback. It helps us to plan subsequent programming. So if you wouldn't mind doing that, my colleague will put the link to the chat or link to the survey in the chat now, as well as information on how to contact us if you need anything. I know Bonnie earlier put in information on how to reach our genetic counselors and our team, but we are here to help support you no matter where you are on your cancer journey or if a friend or family member is going through breast cancer or ovarian cancer. We are here to help support you and we'd love to stay connected with you through social media. We post a lot of information about events such like this, our webinars and other programs that we run. I also want to thank once more our sponsor for tonight's webinar, Ambry Genetics.

And please never forget Sharsheret is here for you and your loved ones. We provide emotional support, mental health counseling and other programs designed to help you navigate through your cancer experience and really meet you where you're at and where you're looking for support. All of the services we provide are free, they're private and confidential, and we do provide them one-on-one. You can reach out to us at 866-474-2774 and then you can also email us. I know it's been in the chat a few times - clinicalstaff@sharsheret.org. Like I mentioned earlier, we have genetic counselors on staff, we have social workers on staff who are available for each and every one of you. You guys are our priority, so please do not hesitate to reach out. And I ask that members of our Embrace Community, anyone who's been diagnosed with metastatic breast cancer or advanced ovarian cancer, to stay on for an intimate session with Bonnie Beckoff, along with Dr. Kaklamani and Dr. Teplinsky. Thank you guys so much. We appreciate your time this evening.

About Sharsheret

Sharsheret, Hebrew for "chain", is an international non-profit organization that improves the lives of Jewish women and families living with, or at increased genetic risk for, breast or ovarian cancer through personalized support and saves lives through educational outreach.

With regional offices in the Midwest, Northeast, Southeast, West, and Israel, Sharsheret serves 275,000 women, families, health care professionals, community leaders, and students. Sharsheret creates a safe community for women facing breast cancer and ovarian cancer and their families at every stage of life and at every stage of cancer - from before diagnosis, during treatment and into the survivorship years. While our expertise is focused on young women and Jewish families, approximately 25% of those we serve are not Jewish. All Sharsheret programs serve all women and men.

As a premier organization for psychosocial support, Sharsheret works closely with the Centers for Disease Control and Prevention (CDC) and participates in psychosocial research studies and evaluations with major cancer centers, including Georgetown University Lombardi Comprehensive Cancer Center. Sharsheret is accredited by the Better Business Bureau and has earned a 4-star rating from Charity Navigator for four consecutive years. Sharsheret offers the following national programs:

The Link Program

Peer Support Network, connecting women newly diagnosed or at high risk of developing breast cancer one-on-one with others who share similar diagnoses and experiences

- Embrace™, supporting women living with advanced breast cancer
- Genetics for Life®, addressing hereditary breast and ovarian cancer
- Thriving Again®, providing individualized support, education, and survivorship plans for young breast cancer survivors
- Busy Box®, for young parents facing breast cancer
- Best Face Forward®, addressing the cosmetic side effects of treatment
- Family Focus®, providing resources and support for caregivers and family members
- Ovarian Cancer Program, tailored resources and support for young Jewish women and families facing ovarian cancer
- Sharsheret Supports™, developing local support groups and programs

Education and Outreach Programs

- Health Care Symposia, on issues unique to younger women facing breast cancer
- Sharsheret on Campus, outreach and education to students on campus
- Sharsheret Educational Resource Booklet Series, culturally-relevant publications for Jewish women and their families and healthcare Professionals

Disclaimer

The information contained in this document is presented in summary form only and is intended to provide broad understanding and knowledge of the topics. The information should not be considered complete and should not be used in place of a visit, call, consultation, or advice of your physician or other health care Professional. The document does not recommend the self-management of health problems. Should you have any health care related questions, please call or see your physician or other health care provider promptly. You should never disregard medical advice or delay in seeking it because of something you have read here.

The information contained in this document is compiled from a variety of sources ("Information Providers"). Neither Sharsheret, nor any Information Providers, shall be responsible for information provided herein under any theory of liability or indemnity. Sharsheret and Information Providers make no warranty as to the reliability, accuracy, timeliness, usefulness, or completeness of the information.

Sharsheret and Information Providers cannot and do not warrant against human and machine errors, omissions, delays, interruptions or losses, including loss of data.