FOR PATIENTS, SURVIVORS & THEIR CAREGIVERS

BREAST CANCER

cure®

Cancer Updates, Research & Education®

BREAST CANCER
SPECIAL ISSUE · 10.21

‘RAPID, DRAMATIC’ MEDICAL MENOPAUSE

Some breast cancer therapies and surgeries cause a reduction in estrogen levels, forcing many women immediately into menopause.

ALSO IN THIS ISSUE

TRIPLE-NEGATIVE BREAST CANCER
Therapeutic breakthroughs give patients with the disease new hope.

SPEAKING OUT
One expert discusses the future of treatment options for HER2-positive breast cancer.

YOGA
Get moving with a beginner’s yoga flow for patients with breast cancer.

FINANCIAL TOXICITY
Being upfront with health care teams could ease financial distress.

LISTENING IN
A mother-daughter duo are bullying cancer with humor in a new podcast.

ESSENTIAL ITEMS
Hard candies and memory books are on this patient’s must-have list for what to bring to treatment.

curetoday.com

Metastatic breast cancer is relentless and doesn't take a day off

Verzenio, the first and only treatment of its kind that can be taken every day*

*150 mg orally twice a day, as directed by your doctor.

28.2
MONTHS

Women live longer without their cancer getting worse

In a clinical trial, Verzenio + an aromatase inhibitor (AI) delayed disease progression for over 2 years (a median of 28.2 months) vs 14.8 months with an AI alone†

TUMOR

More than half of women saw their tumors shrink

In a clinical trial, 55.4% of women on Verzenio + an AI saw their tumors shrink vs 40.2% on an AI alone†

†Clinical trials are ongoing to determine if there is an overall survival benefit.

Learn more at verzenio.com

everyday
Verzenio®
abemaciclib
50 | 100 | 150 | 200 mg tablets
twice a day

PURPOSE AND SAFETY SUMMARY

Important Facts About Verzenio® (ver-ZEN-ee-oh). It is also known as abemaciclib.

Verzenio is a prescription medicine used to treat a type of breast cancer. It is a medicine you can take if:

- You have a type of breast cancer called HR+/HER2– (hormone receptor positive/human epidermal growth factor receptor 2 negative) and the cancer has spread to other parts of the body (metastasized)
- Verzenio is given along with an aromatase inhibitor as initial endocrine-based therapy for the treatment of postmenopausal women, along with fulvestrant in women whose disease has progressed after hormonal therapy, or by itself in adults whose disease has progressed after hormone therapy and prior chemotherapy

It is not known if Verzenio is safe and effective in children.

WARNINGS

Verzenio may cause serious side effects, including:

Diarrhea is common with Verzenio, may be severe and may cause dehydration or infection. The most common time to develop diarrhea is during the first month of Verzenio treatment. Your doctor may stop your treatment, lower your dose, or tell you to wait to begin your treatment cycle if you have diarrhea.

At the first sign of loose stools, tell your doctor. You may be advised to start taking an antidiarrheal medicine (such as loperamide) and drink more fluids.

Low white blood cell counts (neutropenia) are common with Verzenio and may cause serious infections that can lead to death. Your doctor should check your white blood cell counts before and during treatment. Tell your doctor right away if you have fever or chills.

Verzenio may cause severe or life-threatening inflammation (swelling) of the lungs during treatment that can lead to death. Tell your healthcare provider right away if you have any new or worsening symptoms, including:

- Trouble breathing or shortness of breath
- Cough with or without mucus
- Chest pain

Verzenio can cause liver problems. Tell your doctor right away if you have any of the following signs or symptoms of liver problems:

- Feeling very tired
- Pain on the upper right side of your stomach area (abdomen)
- Loss of appetite
- Bleeding or bruising more easily than normal

Verzenio may cause blood clots in your veins or lungs. These may be serious and have led to death. Tell your doctor if you have the following signs and symptoms of a blood clot:

- Pain or swelling in your arms or legs
- Shortness of breath
- Chest pain
- Fast breathing
- Fast heart rate

Verzenio can harm your unborn baby. Use effective birth control during treatment and for at least 3 weeks after the last dose of Verzenio and do not breastfeed during treatment with Verzenio and for at least 3 weeks after your last dose. Verzenio may affect the ability of males to father a child.

COMMON SIDE EFFECTS

The most common side effects of Verzenio include:

- Nausea
- Infections
- Low red blood cell counts (anemia)
- Decreased appetite
- Headache
- Hair thinning or hair loss (alopecia)
- Abdominal pain
- Tiredness
- Low white blood cell counts (leukopenia)
- Vomiting
- Low platelet counts (thrombocytopenia)

These are not all of the possible side effects of Verzenio.

Tell your doctor if you have any side effects. ***You can report side effects at 1-800-FDA-1088 or*** **www.fda.gov/medwatch.**

BEFORE USING

Before you use Verzenio, tell your doctor:

- If you have fever, chills, or other signs of infection
- Have liver or kidney problems
- About all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. Especially tell your doctor if you take a medicine that contains ketoconazole. Avoid grapefruit products while taking Verzenio. Grapefruit may increase the amount of Verzenio in your blood

HOW TO TAKE

- Use Verzenio exactly as your doctor tells you
- Take your doses of Verzenio at about the same time every day
- If you vomit or miss a dose take your next dose at your regular time. Do not take 2 doses of Verzenio at the same time to make up for the missed dose
- If you take too much Verzenio, call your doctor or go to the nearest hospital emergency room right away

LEARN MORE

For more information, call 1-800-545-5979 or go to verzenio.com.

This summary provides basic information about Verzenio but does not include all information known about this medicine. Read the information that comes with your prescription each time your prescription is filled. This information does not take the place of talking with your doctor. Be sure to talk to your doctor or other healthcare provider about Verzenio and how to take it. Your doctor is the best person to help you decide if Verzenio is right for you.

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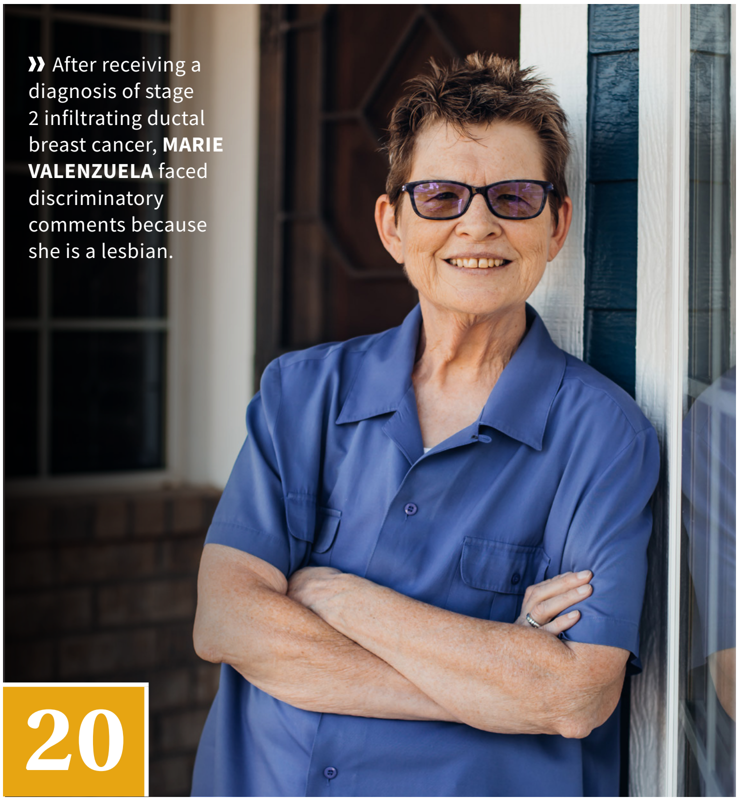

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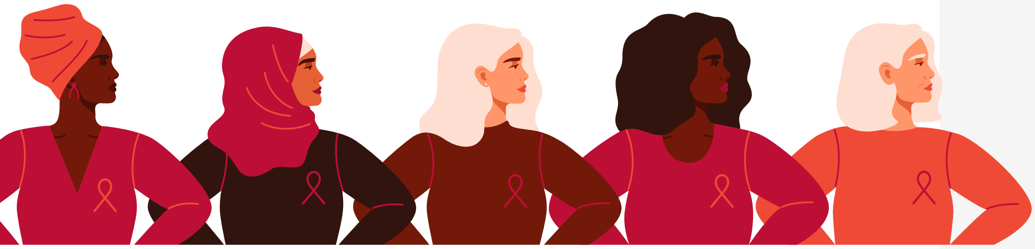

MARY LONG / STOCK.ADOBE.COM

The Whole Picture

BREAST CANCER IS THE most common cancer among American women. On average, the risk of a woman developing breast cancer in the United States is 13%, according to breastcancer.org. Fortunately, there are many advances being made, whether it be those in treatment options or ways to make therapies more effective. For example, in this special issue of CURE we speak to some experts about long-term data associated with the use of Herceptin (trastuzumab) plus chemotherapy for HER2-positive breast cancer and how Herceptin has changed the treatment landscape for this group of patients.

For our features, we've taken a deeper dive into medical menopause, which often occurs in women with breast cancer following surgery or treatment for the disease. We also investigate the disparities that LGBTQIA+ patients face in health care, how it may lead to a later-stage breast cancer diagnosis and what steps can be taken to break down these barriers.

And because a cancer diagnosis is about much more than just the treatment regimen, readers will find a variety of articles on topics such as yoga, which can help patients with breast cancer improve physical functioning, as well as quality of life and sleep. Tamera Anderson-Hanna, a certified yoga instructor, discovered these benefits firsthand after she received a diagnosis of breast cancer. After opting for a double nipple- and areola-sparing mastectomy, she used yoga to build back her range of motion. Today, she teaches classes for patients with cancer to help them do the same.

> "Fortunately, there are many advances being made, whether it be in treatment options or ways to make therapies more effective."

Also in this issue, *CURE*® connects with a photographer who is setting out to make patients and survivors feel beautiful and confident in their bodies, as well as a patient who lets us peek inside her treatment bag.

I hope you enjoy this special issue.

MIKE HENNESSY SR.

Chairman and Founder
MJH LIFE SCIENCES™

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Expanding Options for Patients With TNBC

TRIPLE-NEGATIVE BREAST CANCER (TNBC) makes up approximately 10% to 15% of all breast cancer diagnoses each year. TNBC refers to a specific subtype of breast cancer where the cancer cells don't have estrogen or progesterone receptors and do not make a lot of HER2 protein. That means that therapies targeting hormonal or HER2 receptors may not be effective, leaving chemotherapy as the primary option. TNBC is known to be more aggressive than other types of breast cancers, and there is an overall lower five-year survival rate for those diagnosed with TNBC compared with other subtypes, according to the American Cancer Society.

In the past decade or so, we have learned much more about the biology of TNBC and have discovered that there are actually subdivisions within TNBC based on characteristics such as defects in repairing DNA and a higher degree of immune activation. More recent trials led to the approval of immunotherapy in March 2019 (in combination with chemotherapy), which improves survival.

For patients with BRCA 1 or 2 mutations (the former being more common in TNBC), poly-ADP ribose polymerase inhibitors were given the nod of approval by the Food and Drug Administration (FDA) as an option in January 2018 in the case of Lynparza (olaparib) and Talzenna (talazoparib). A dramatic improvement in outcome — one of the largest seen — was realized with the antibody-drug conjugate Trodelvy (sacituzumab govitecan) in April 2020 with the ASCENT trial showing an improvement of median overall survival of 12.1 months compared with 6.7 months with standard chemotherapy.

Even early-stage TNBC has had recent approvals. The immunotherapy Keytruda (pembrolizumab) was approved in July 2021 on the basis of the randomized phase 3 KEYNOTE-522 trial, which showed fewer recurrences with combining immunotherapy with standard chemotherapy prior to surgery. Similarly, Lynparza given after standard chemotherapy for patients with BRCA mutations showed lower recurrence and mortality risks and is under evaluation by the FDA. In this issue of *CURE*®, you'll read about a patient who was enrolled in the KEYNOTE-522 trial and shares her experience in the groundbreaking study.

It is advances such as these that continue to provide hope in the cancer community, and more solutions are being found for difficult-to-treat cancers. I am excited to see what the future holds for this patient subset, among others, who are seeking better treatment options. We need more innovation in the basic sciences and drug development and more participation in clinical trials to bring the fruits of this success to patients in need. C

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CURE® CONNECT

Staying Positive

CURE® contributors share how they stay mentally strong while living with breast cancer.

By ANTONIA DePACE

“Living with metastatic breast cancer for more than seven years, I have found keeping to a schedule or routine keeps me focused and more in control of my life. There are so many aspects of this disease that are out of my hands. A daily routine helps me to keep going and have purpose and direction in my life. I thrive on consistency, not surprises.”

– MARISSA HOLZER

“During treatment for breast cancer, I kept two journals: one to write in at night to chronicle the day, and one I wrote in as I sat in the infusion chair or waited for radiation. The journal I carried to the cancer center helped not only with memory and perspective but also with processing feelings right there in the moment. ***– FELICIA MITCHELL***”

“To stay mentally strong during breast cancer treatment, pretend your body is on a cancer conveyor belt; you will most likely move from therapy to therapy. I started with chemotherapy, then moved to a double mastectomy, then radiation and finally, 10 years of medication (Tamoxifen). I advise that while you’re on this cancer conveyor belt, keep your mind out of it, i.e., don’t obsess. Don’t think about cancer. Before you know it, you will have survived.”

– LAURA YEAGER

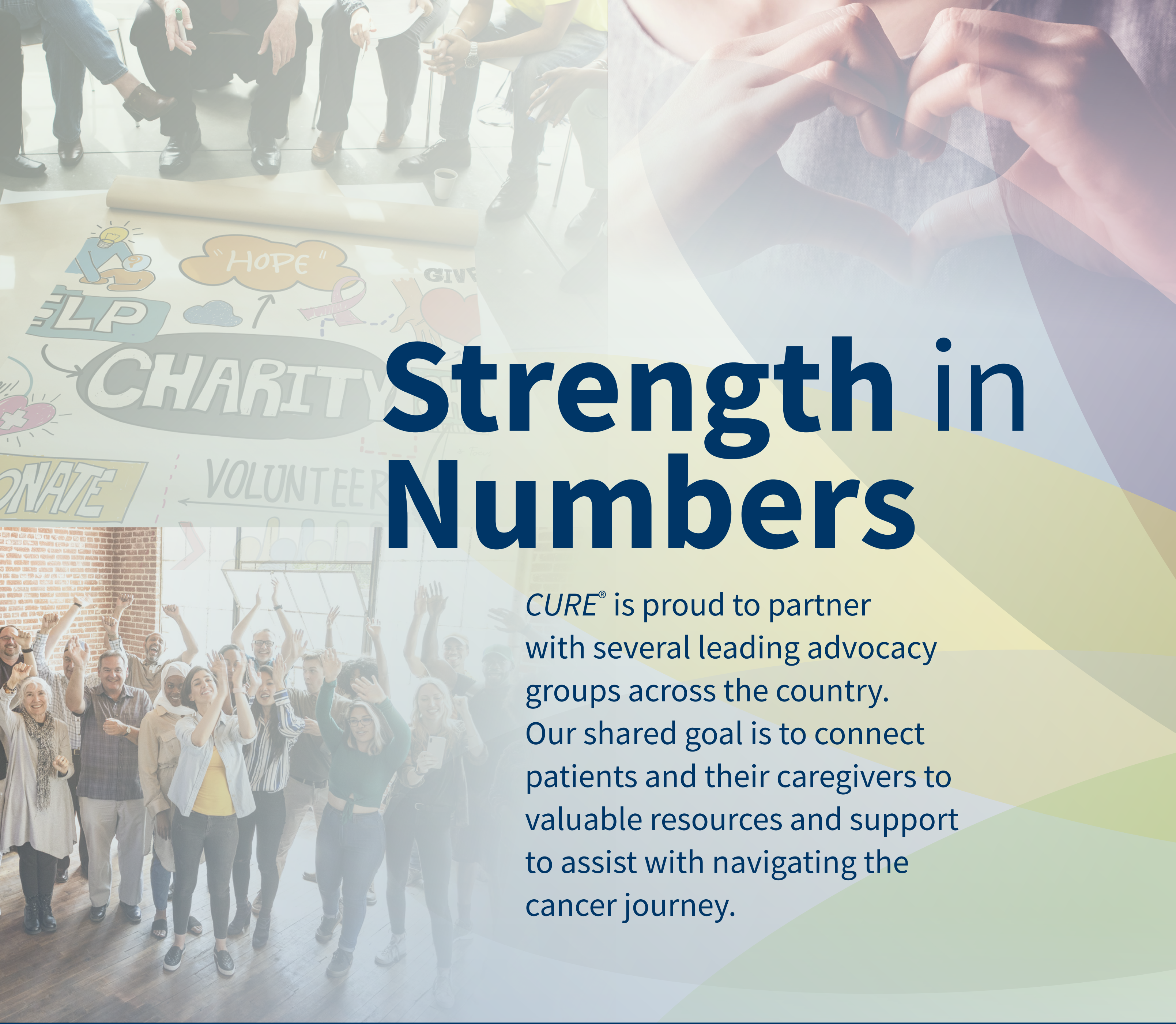
“My mental health was almost as big a danger for me during cancer treatment as the cancer itself. After learning I had inflammatory breast cancer, within a couple of days I realized I had raging, uncontrolled medical post-traumatic stress disorder due to medical treatments I had received when I was very young. I quickly knew that I had to do two things: First, honor and respect how I really felt without forcing myself to put on a fake happy face so that I could play the socially expected role of the brave cancer patient. In other words, I had to be true to myself. Second, I had to get into regular therapy to try to deal with the twin traumas of having cancer and having to engage with the world of medicine again. ***– BRENDA DENZLER***”

“During treatment, I kept thinking, “This too shall pass, it is just a bump in the road of my life.” Fourteen years later, I continue to work hard to not let cancer define me. I am a person who had cancer, cancer is not who I am. My self-care includes exercises to help release stress from my body, practicing my faith, counseling, coffee with friends and some hard-to-find alone time. All these things help me focus on not being defined by the fact that I am a cancer survivor. Being mentally strong takes work, and I think we don’t talk about how to do that enough. ***– DORIS CARDWELL***”

“Part of mental strength and resilience is understanding that sometimes life doesn’t go as planned. I let myself feel the fear and disappointment, but I know that there’s only one way to stay alive, and that is to keep moving forward for as long as I can. I have learned to focus on where I find happiness, to stay connected with the people who love me and to keep my dreams alive. It’s easy to get caught up in cancer, but I am a complete person first, and remembering that helps me find balance and strength. ***– MARTHA CARLSON***”

» *We want to know what you think about* CURE®. *Address your comments to* **editor@curetoday.com**. *If you prefer that your comment not be published, please indicate.*

Cure Magazine **cure_magazine** **CureToday**



Strength in Numbers

CURE® is proud to partner with several leading advocacy groups across the country. Our shared goal is to connect patients and their caregivers to valuable resources and support to assist with navigating the cancer journey.

Scan the QR code with your mobile device to visit curetoday.com and check out our advocacy group partnerships.

STRATEGIC cure® ALLIANCE

essential
items

STEPHANIE JUDGE with her husband and three children, who were ages 7, 5 and 3 at the time of her diagnosis.

PHOTO COURTESY OF JUDGE

What's in My Treatment Bag

A mother of three who received a diagnosis of stage 4 breast cancer right before the pandemic shares what her must-have comfort and entertainment items are in her treatment bag. *By* ANTONIA DEPACE

IN JULY 2019, 35-year-old Stephanie Judge was a married mom of three young children who had just delivered a surrogate baby. One day, after finishing pumping breast milk for the baby, she found a lump in her left breast. After visiting her doctor, Judge received a diagnosis of stage 2 breast cancer in December and scheduled a lumpectomy for one month later. On March 6, 2020, Judge received a diagnosis of metastatic breast cancer.

"Being diagnosed right at the beginning of (the COVID-19) pandemic was definitely interesting. You're kind of hit twice," she explained. "I've done almost everything alone. I've had two surgeries because I had a very quick recurrence. … Well,

continued on page 11

IBRANCE is the #1 prescribed FDA-approved oral combination treatment for HR+*, HER2- metastatic breast cancer (MBC)

What Is IBRANCE® (palbociclib)?

IBRANCE is a prescription medicine used in adults to treat hormone receptor-positive (HR+), human epidermal growth factor receptor 2-negative (HER2-) breast cancer that has spread to other parts of the body (metastatic) in combination with an aromatase inhibitor as the first hormonal based therapy in postmenopausal women or in men.

Important Safety Information for Patients

IBRANCE may cause serious side effects, including:

Low white blood cell counts (neutropenia). Low white blood cell counts are very common when taking IBRANCE and may cause serious infections that can lead to death. Your doctor should check your white blood cell counts before and during treatment.

If you develop low white blood cell counts during treatment with IBRANCE, your doctor may stop your treatment, decrease your dose, or may tell you to wait to begin your treatment cycle. Tell your doctor right away if you have signs and symptoms of low white blood cell counts or infections such as fever and chills.

Lung problems (pneumonitis). IBRANCE may cause severe inflammation of the lungs during treatment that can lead to death. Tell your doctor right away if you have any new or worsening symptoms, including chest pain, cough with or without mucus, and trouble breathing or shortness of breath.

Your doctor may interrupt or stop treatment with IBRANCE completely if your symptoms are severe.

Before you take IBRANCE, tell your doctor about all of your medical conditions, including if you:

- have fever, chills, or any other signs or symptoms of infection.
- have liver or kidney problems.
- are pregnant or plan to become pregnant; IBRANCE can harm your unborn baby.
  - Females who are able to become pregnant should use effective birth control during treatment and for at least 3 weeks after the last dose of IBRANCE. Your doctor may ask you to take a pregnancy test before you start treatment with IBRANCE.
  - Males with female partners who can become pregnant should use effective birth control during treatment with IBRANCE for at least 3 months after the last dose of IBRANCE.
- are breastfeeding or plan to breastfeed. It is not known if IBRANCE passes into your breast milk. Do not breastfeed during treatment with IBRANCE and for 3 weeks after the last dose.

The most common side effects of IBRANCE include:

- Low red blood cell counts and low platelet counts. Call your doctor right away if you develop any of these symptoms during treatment:
  - dizziness
  - shortness of breath
  - weakness
  - bleeding or bruising more easily
  - nosebleeds

Other most common side effects include: infections, tiredness, nausea, sore mouth, abnormalities in liver blood tests, diarrhea, hair thinning or hair loss, vomiting, rash, and loss of appetite.

IBRANCE may cause fertility problems in males. This may affect your ability to father a child. Talk to your healthcare provider about family planning options before starting IBRANCE if this is a concern for you.

These are not all of the possible side effects of IBRANCE. For more information, ask your doctor.

Tell your doctor about all of the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. IBRANCE and other medicines may affect each other, causing side effects.

Do not drink grapefruit juice or eat grapefruit products while taking IBRANCE as they may increase the amount of IBRANCE in your blood.

Tell your doctor if you start a new medicine. Take IBRANCE exactly as your doctor tells you.

If you take too much IBRANCE, call your doctor right away or go to the nearest hospital emergency room.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

Please see Important Facts About IBRANCE on the following page.

To learn more, talk to your doctor.

Can't afford your medication? Pfizer may be able to help.
Visit IBRANCE.com.

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*Hormone receptor-positive includes estrogen receptor-positive (ER+) and/or progesterone receptor-positive (PR+)

IBRANCE®
palbociclib | 125 mg tablets

Pfizer April 2021 PP-IBR-USA-3609-02

IBRANCE®
palbociclib | 125 mg tablets

IMPORTANT FACTS
IBRANCE® (EYE-brans)
(palbociclib)

The risk information provided here is not comprehensive. This information does not take the place of talking to your healthcare provider about your condition or treatment. To learn more about IBRANCE talk to your healthcare provider or pharmacist. To obtain the FDA-approved product labeling call 1-800-438-1985 or visit www.IBRANCE.com.

What is IBRANCE?

IBRANCE is a prescription medicine used in adults to treat hormone receptor (HR)-positive, human epidermal growth factor receptor 2 (HER2)-negative breast cancer that has spread to other parts of the body (metastatic) in combination with:

- an aromatase inhibitor as the first hormonal based therapy in postmenopausal women or in men, or
- fulvestrant in people with disease progression following hormonal therapy.

It is not known if IBRANCE is safe and effective in children.

What is the most important safety information I should know about IBRANCE?

IBRANCE may cause serious side effects, including:
Low white blood cell counts (neutropenia). Low white blood cell counts are very common when taking IBRANCE and may cause serious infections that can lead to death. Your healthcare provider should check your white blood cell counts before and during treatment.

If you develop low white blood cell counts during treatment with IBRANCE, your healthcare provider may stop your treatment, decrease your dose, or may tell you to wait to begin your treatment cycle. Tell your healthcare provider right away if you have signs and symptoms of low white blood cell counts or infections such as fever and chills.

Lung problems (pneumonitis). IBRANCE may cause severe or life-threatening inflammation of the lungs during treatment that can lead to death. Tell your healthcare provider right away if you have any new or worsening symptoms, including:

- chest pain
- cough with or without mucus
- trouble breathing or shortness of breath

Your healthcare provider may interrupt or stop treatment with IBRANCE completely if your symptoms are severe. **See "What are the possible side effects of IBRANCE?" for more information about side effects.**

What should I tell my healthcare provider before taking IBRANCE?

Before taking IBRANCE, tell your healthcare provider about all of your medical conditions, including if you:

- have fever, chills, or any other signs or symptoms of infection.
- have liver or kidney problems.
- are pregnant, or plan to become pregnant. IBRANCE can harm your unborn baby.
  - Females who are able to become pregnant should use effective birth control during treatment and for at least 3 weeks after the last dose of IBRANCE. Your healthcare provider may ask you to take a pregnancy test before you start treatment with IBRANCE.
  - Males with female partners who can become pregnant should use effective birth control during treatment with IBRANCE for at least 3 months after the last dose of IBRANCE.
  - Talk to your healthcare provider about birth control methods that may be right for you during this time.
  - If you become pregnant or think you are pregnant, tell your healthcare provider right away.
- are breastfeeding or plan to breastfeed. It is not known if IBRANCE passes into your breast milk. Do not breastfeed during treatment with IBRANCE and for 3 weeks after the last dose.

Tell your healthcare provider about all of the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. IBRANCE and other medicines may affect each other causing side effects.

How should I take IBRANCE tablets?

- Take IBRANCE exactly as your healthcare provider tells you.
- IBRANCE tablets may be taken with or without food.
- IBRANCE should be taken at about the same time each day.
- Swallow IBRANCE tablets whole. Do not chew, crush or split IBRANCE tablets before swallowing them.
- Do not take any IBRANCE tablets that are broken, cracked, or that look damaged.
- Avoid grapefruit and grapefruit products during treatment with IBRANCE. Grapefruit may increase the amount of IBRANCE in your blood.
- Do not change your dose or stop taking IBRANCE unless your healthcare provider tells you.
- If you miss a dose of IBRANCE or vomit after taking a dose of IBRANCE, do not take another dose on that day. Take your next dose at your regular time.
- If you take too much IBRANCE, call your healthcare provider right away or go to the nearest hospital emergency room.

What are the possible side effects of IBRANCE?

IBRANCE may cause serious side effects. See "What is the most important safety information I should know about IBRANCE?"
The most common side effects of IBRANCE when used with either letrozole or fulvestrant include:

- low red blood cell counts and low platelet counts. Call your healthcare provider right away if you develop any of these symptoms during treatment:
  - dizziness
  - shortness of breath
  - weakness
  - bleeding or bruising more easily
  - nosebleeds
- infections (see "What is the most important safety information I should know about IBRANCE?")
- tiredness
- nausea
- sore mouth
- abnormalities in liver blood tests
- diarrhea
- hair thinning or hair loss
- vomiting
- rash
- loss of appetite

IBRANCE may cause fertility problems in males. This may affect your ability to father a child. Talk to your healthcare provider about family planning options before starting IBRANCE if this is a concern for you.

These are not all of the possible side effects of IBRANCE.

Keep IBRANCE and all medications out of the reach of children.

Call your doctor for medical advice about side effects. You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

To learn more, talk to your doctor.

These IMPORTANT FACTS are based on IBRANCE® (palbociclib) Patient Information LAB-1372-1.0, Rev. 11/2019.

Pfizer Oncology together™

Turn to Pfizer Oncology Together to learn about financial assistance resources and get personalized support from one of our dedicated Care Champions.

CALL **1-844-9-IBRANCE**
(Monday–Friday 8 AM–8 PM ET)
VISIT
PfizerOncologyTogether.com

Pfizer

continued from page 8

I've had three surgeries because I had a port put in. I've done all my scans alone. I've done (the) majority of my appointments alone. I've done every single (chemotherapy) alone. … I don't know any different, but it's also been kind of sh-tty."

Judge now is 18 months into her first line of treatment of intravenous chemotherapy. She noted fatigue is one of her biggest side effects, along with nausea, headaches, bone pain, joint pain, weight gain, hair loss and allergy-like symptoms.

"I decided very quickly that it wasn't worth my time to be angry or focus on what could have been or what could be. I needed to focus on the time that I do have, because no one can tell me when my time will come up," she said.

What Judge Packs in Her Treatment Bag

Hard Candy
"For me … my tolerance for saline is very low because I associate the taste with chemo and it makes me nauseous when I get it. So for me, (I bring) hard candy or Tic Tacs or something that will mask the taste (of) any flushes that I have, which happens a few times every time I go in. I would say that's pretty high on my list because otherwise I don't feel well."

Warm Socks
"I ice my feet with my treatment (to reduce) neuropathy. … If you wear the ice booties, they are very, very, very cold. So having socks with me is always super important."

Notebook and Pens
"Any appointment I have, I will write down all of my questions before I go in because half the time you get there and you forget what you want to ask. … And then I usually write my answers to those questions in my book so that I can discuss them with family later."

Headphones (Wireless or Corded)
"They prefer in the chemo suite that you wear headphones so that you're not disturbing other people. … I usually charge them in the car on the way there."

Memory Journals
"I'm starting to do some legacy work for my kids because of my diagnosis. I know it's not the same for everyone. But I did just pick up these little memory journals that I bring with me now. … They're basically a 'their story' kind of thing. So it's not necessarily a baby book, but it's stuff from when they were infants all the way up to when they're grown. It's just questions that you can fill out for them, which I thought would be cool if I do during chemo, and then, eventually, they can read them when they're older."

Medicine
"I always have Advil with me or Tylenol, and then I also carry my … nausea medication because sometimes I am nauseous during chemo. … So I just like to have it on hand."

Sweater
"My chemo center … is notoriously freezing. I think they keep the chemo suites cool because it's supposed to help with nausea, which makes sense, because if you're warm and you don't feel well, it just makes it worse."

Bag Organizer
"It keeps all my books and stuff separated. A friend of mine gave it to me, and it just kind of keeps things a little more organized."

HOLY GRAIL ITEM:
Cell Phone Charger
"I always have a cell phone and a charger. Always, always. Because half the time I spend on TikTok doing mindless stuff. There's a lot of waiting. There's always waiting."

PRO TIP:
Call the Cancer Center
"I did buy the icing booties and the icing mitts. In the beginning I didn't need them, but someone had recommended having them, and it turns out that I didn't need them until about halfway through before neuropathy. And my cancer center has them. So I didn't have to waste the money on that, and I didn't realize that they would have them and be able to provide them to me. … The ones that I purchased weren't as heavy duty as the ones that the hospital already has. I would definitely check that before you waste your money on something off of Amazon."

RapidReporter®

HER2-POSITIVE BREAST CANCER

Long-Term Data Show The Impact One Drug Has Had On Treating HER2-Positive Breast Cancer

More than 10 years of follow-up data have shown that combining Herceptin with chemotherapy is safer and more effective than chemotherapy alone in this patient population.

By ANTONIA DEPACE

THE COMBINATION TREATMENT OF Herceptin (trastuzumab) and chemotherapy for early-stage, HER2-positive breast cancer may reduce the recurrence of — and mortality from — the disease by a third, according to study results.

"It's really important because when a patient gets a diagnosis of HER2-positive breast cancer, immediately the first thought is, 'This is so bad.' This is one of the more aggressive cancers. I believe this is why it's so important to understand that trastuzumab has changed the way we think about HER2-positive breast cancer. This study showed the significant positive impact trastuzumab has had on outcomes in HER2-positive breast cancer," said Dr. Zahi Mitri, an assistant professor of medicine in the Division of Hematology and Medical Oncology at OHSU Knight Cancer Institute in Portland, Oregon, in an interview with *CURE*®. "Patients can actually be confident that their treatment can help them really beat this cancer because this study follows patients for not one or two years, but up to a 10-year follow-up for most patients."

Of note, HER2-positive breast cancer accounts for 10% to 20% of early-stage breast cancer diagnoses annually.

"One of the biggest takeaways is … the treatment historically had been chemotherapy alone. And with chemotherapy, alone, we had seen a lot of risk of breast cancer coming back. But … this study shows that the addition of one drug, trastuzumab, has reduced the risk of breast cancer coming back, and that actually translated into (fewer) people dying of HER2-positive breast cancer," Mitri said.

Seven trials that assessed chemotherapy plus Herceptin versus chemotherapy alone were included in the study, which had 13,864 participants. The mean scheduled treatment duration was 14.4 months with a median follow-up of 10.7 years. Researchers reported that the risks of breast cancer recurrence, as well as death from breast cancer, were lower with the group treated with Herceptin plus chemotherapy. At 10 years, recurrence risk was reduced by 9%, and mortality rate was reduced by 6.4%.

"It is as clear as it can be that adding the anti-HER2 treatment trastuzumab to chemotherapy and other strategies definitely improved survival for patients with early-stage

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breast cancer," said Dr. Edith Perez, a professor of medicine at Mayo Clinic in Jacksonville, Florida, and chief medical officer at Bolt Biotherapeutics, a biotechnology company that focuses on cancer immunotherapy.

Perez, whose trial was one of the seven in the study, said that prior to these results patients didn't have options for a targeted therapy against HER2 in the early-stage setting. "And I think it exemplifies what can be accomplished with good science and good research and good patient participation in trials," she said.

In comparison with chemotherapy, Herceptin also had very manageable side effects. "The biggest side effect that we could see — that we monitor for — is an impact on the heart muscle, (which) is rare, meaning single digit. (Fewer) than 10% of (patients) will have an impact on the heart muscle function. And more importantly, it is reversible. ... With interrupting the treatment, it can recover," Mitri explained, noting that the treatment also doesn't lead to high risks of infection, nor does it require what he calls "premedication" such as steroids or nausea medication. "I think patients have tolerated this beautifully."

Mitri added, however, that many of the studies included in the trial used anthracycline-based chemotherapy — also known as the red devil for side effects such as increased risk for heart damage — which generally has been removed from treatment for this patient subset due to novel effective non-anthracycline regimens.

Herceptin can be given with other chemotherapy agents, or even after chemotherapy as a single agent.

"Since we demonstrated the trastuzumab added to the benefit of chemotherapy, further advances have continued in terms of adding a second type of anti-HER2 therapy," Perez said. "I think the message is that finding cures for cancer … it's really a journey. But as we go through the journey, significant progress is being made. And many patients today are cured of HER2-positive breast cancer who would not otherwise have been cured if trastuzumab had not become available."

SCAN THE QR CODE
to read more about advances in breast cancer.

‘RAPID, DRAMATIC’ MEDICAL MENOPAUSE

Some breast cancer therapies and surgeries cause a reduction in estrogen levels, forcing many women immediately into menopause.

By KATIE KOSKO

In October 2011, Kristen Wiley found a pea-sized lump in her breast. Having had a clear mammogram just seven months earlier, she thought it would go away.

When the lumps were still there in December, Wiley decided to go to her doctor at Mayo Clinic in Jacksonville, Florida. “She said, ‘I’m sure it’s nothing, but let’s be safe and do another mammogram,’” Wiley recalls her doctor telling her. The doctor also performed an ultrasound and biopsy. In January 2012, Wiley, then 41 years old, received a diagnosis of triple-positive breast cancer, which meant her tumors were human epidermal growth factor receptor 2 HER2-positive, estrogen receptor (ER)-positive and progesterone receptor (PR)-positive. This means the treatment like hormonal or HER2 antibody therapies would not be effective, and that the tumor was likely to be more dangerous. »

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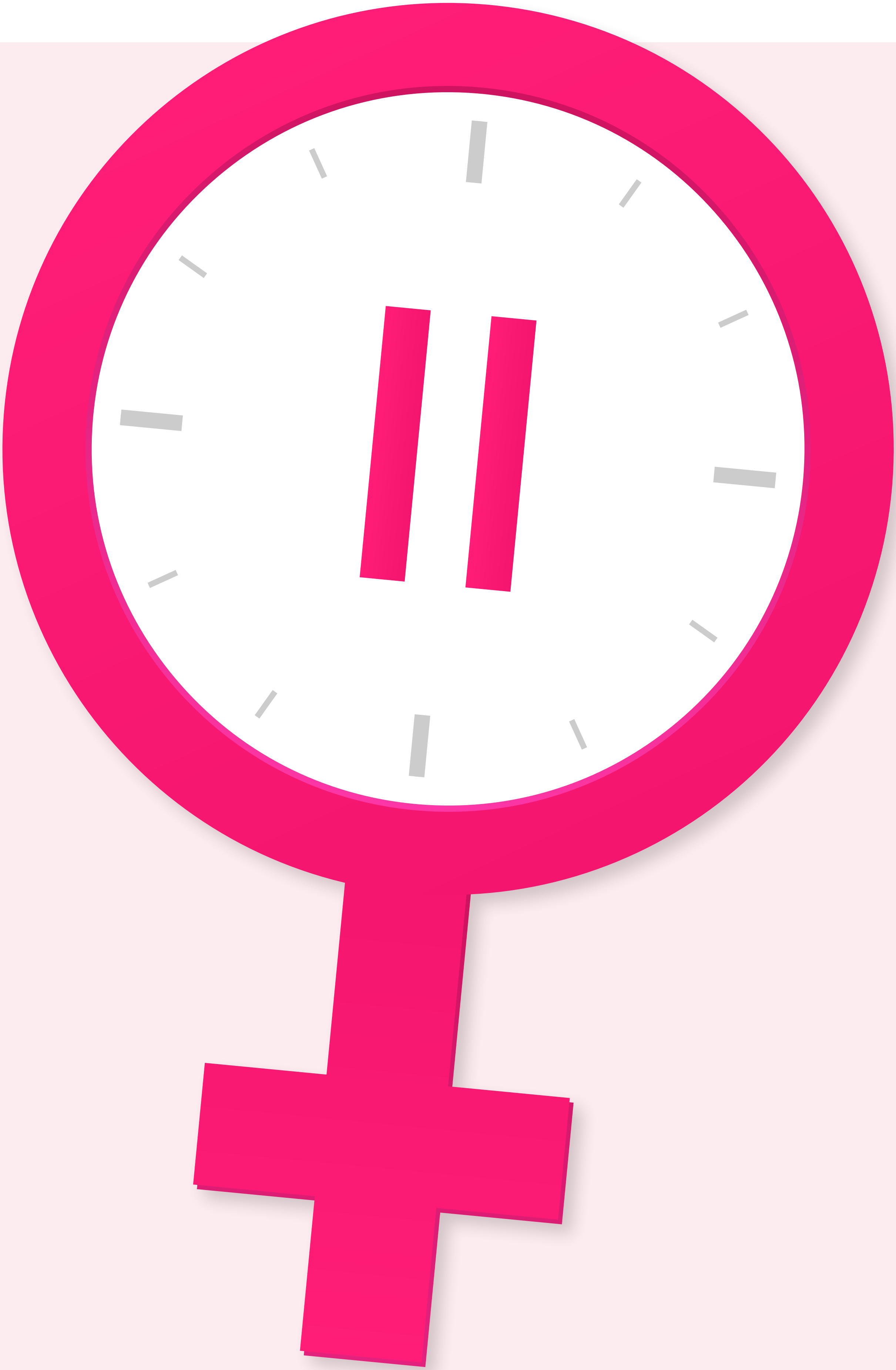


SHELBY CHANTE PHOTOGRAPHY

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When **KRISTEN WILEY** was 41 years old, her menstrual cycles stopped immediately following her mastectomy. They had been regular up to that point.

"I was a picture of health," she says. "No family history of breast cancer. I was very active and fit. It completely took us by surprise." Wiley, who had a 3-year-old daughter, decided she would go "full throttle" with her treatment after learning how aggressive her disease was. Her cancer was stage 2, and three lymph nodes were affected by the disease. Wiley had a double mastectomy with reconstruction, and over a 14-month period she underwent 29 rounds of chemotherapy, 27 radiation treatments and five surgeries.

Immediately after her mastectomy, her menstrual cycles — which Wiley describes as regular until that point — stopped. She began to have hot flashes hourly, seven days a week. "I would go from fine to bright, cherry red and pouring sweat within five minutes," Wiley, now 50, says. Throughout treatment, she continued to work full time as a senior managing director for a global financial technology company, but the menopause-induced hot flashes and mood swings were difficult to hide because they would spring up without warning.

JOLTED INTO MENOPAUSE

For most women in the United States, the average age of menopause is 51. But, like Wiley, many women with breast cancer can be propelled into medical menopause following treatment for the disease. All women who have an oophorectomy, a surgery to remove both ovaries, will go into immediate and permanent menopause if they weren't menopausal before the surgery because the ovaries are no longer there to produce estrogen. In addition, up to 40% of women under age 40 and anywhere from 70% to 90% of women over age 40 go into permanent menopause because of chemotherapy, according to breastcancer.org. For other women, the loss of ovarian function is temporary.

For patients who are premenopausal, "some of the chemotherapies are toxic to the ovaries, and the older women are, the more likely these agents will cause ovarian failure," says Dr. Stephanie Faubion, director of Mayo Clinic Women's Health and medical director for The North American Menopause Society (NAMS). "Early menopause caused by surgery is rapid and results in a sudden and dramatic decline in estrogen levels. Women are often very symptomatic with hot flashes, night sweats, joint aches, mood disturbances and sleep disturbances."

Other symptoms of menopause include anxiety, depression, fatigue, brain fog and weight gain. Women may also experience bone loss and vaginal dryness, which can lead to painful intercourse. Vaginal dryness usually occurs in the

> I was a picture of health. No family history of breast cancer. I was very active and fit. It completely took us by surprise.
>
> —*KRISTEN WILEY*

SHELBY CHANTE PHOTOGRAPHY

months after menopause onset, according to Faubion.

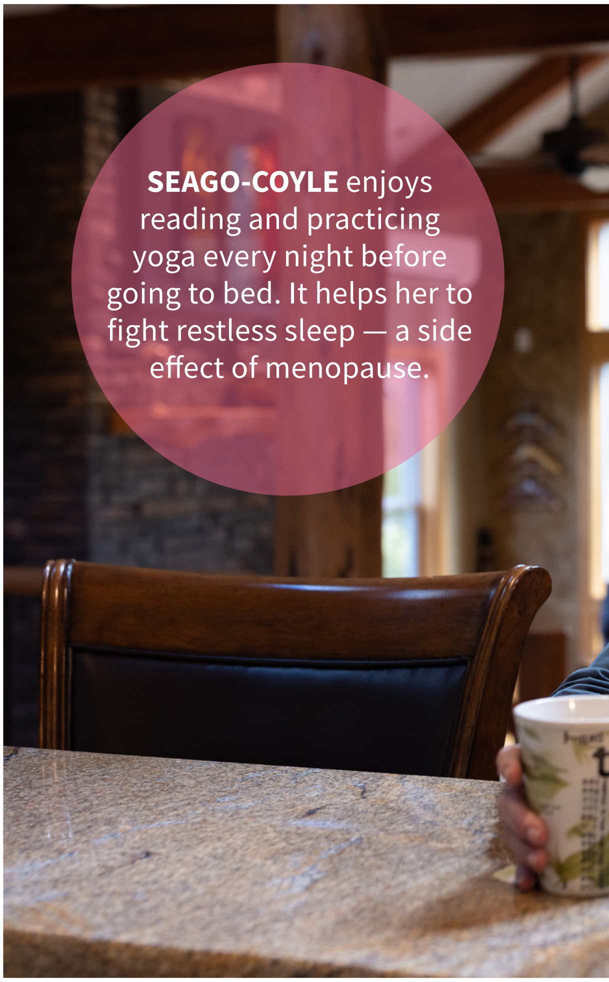
Rebecca Seago-Coyle says she felt isolated after experiencing a lack of desire and vaginal dryness, which she says took a toll on her relationship with her husband. “I was in my 30s and wanted an active sex life,” says Seago-Coyle, who received a stage 1 ER-positive/HER2-positive breast cancer diagnosis in 2010 when she was 35. At the same time, she learned she was BRCA2-positive — a gene mutation she inherited from her father. Women who have BRCA mutations are at an increased risk of certain cancers — most notably, breast and ovarian cancer — and for developing them at a younger age, while men with BRCA2 mutations are at increased risk for breast cancer.

Seago-Coyle’s cancer was labeled aggressive because of the grade and tumor size. She was treated with 12 weeks of Taxol (paclitaxel) and a year of Herceptin (trastuzumab). She also underwent bilateral mastectomy with reconstruction and had her ovaries removed to decrease changes of recurrence. “I don’t think anyone prepares you for menopause,” Seago-Coyle says. “Medically induced menopause in your 30s is different (from what) the average person goes through gradually. When it happens medically, it’s a jolt.”

THE PHYSICAL AND EMOTIONAL BURDEN

All of these symptoms can be stressful, as they are constant reminders not only of what is happening to the body at that moment but also the cancer itself. They can reduce day-to-day quality of life, which can be difficult for someone to navigate.

“Hot flashes, mood changes, body image, self-esteem — all of these things that may naturally happen with menopause later in life are happening for some women much earlier, so »



SEAGO-COYLE enjoys reading and practicing yoga every night before going to bed. It helps her to fight restless sleep — a side effect of menopause.

this could be at a time when they're thinking about having families, or have young children, or being in the workforce more, and the day-to-day can take a toll on people emotionally, mentally and physically," says Lauren Chatalian, a licensed clinical social worker and women and children's program manager for Cancer*Care*.

Hormonal therapies that suppress estrogen levels can also cause side effects of menopause. When Wiley began taking aromatase inhibitors (AIs), more of the symptoms kicked in. She was first put on Arimidex (anastrozole), but it caused weight gain, so she switched medications to Femara (letrozole). However, she then began to have severe bone pain. "It was like someone took a hammer to my toes and fingers and crushed all my bones overnight," Wiley remembers. "You would feel like you were (being hit with) a meat tenderizer. I can take a lot of pain, but not this much."

Her oncologist switched her AI a third time to Aromasin (exemestane), but that also caused bone pain. Wiley went back on Arimidex, which she says caused her to gain 30 to 40 pounds. But the extra pounds were a trade-off for less pain.

"When we think of menopause, we think about middle adulthood. You're diagnosed and experiencing mixed emotions, prepping for treatment, surgery — and it goes fast, it's hard to slow down," Chatalian says.

In facilitating support groups for Cancer*Care*, Chatalian advises women with breast cancer who experience menopause related to cancer treatments to have a conversation with their medical team and their loved ones about the life-disrupting symptoms and let them help.

Seago-Coyle ended up needing additional support. "My medical team had the best intentions, but it's also feeling comfortable enough to share," she says. "It's hard to explain to other people because they interpret it in different ways. When I was going through chemotherapy, I went to a support group and learned how to talk more openly. These women shared tips and tricks."

In addition to support groups, Chatalian encourages self-care, such as focusing on stress relief, using relaxation techniques, reading or journaling.

To fight restless sleep, which Seago-Coyle attributes to menopause, she created a routine that involves reading and doing yoga every night before bed. She also takes a natural supplement with magnesium and an Advil PM, and she is in bed by 8 p.m.

MICHELLE BAUER

MICHELLE BAUER

Wiley turned to an informal support group — two friends who received breast cancer diagnoses after she received hers. In addition, she became active with The DONNA Foundation, which supports families who are trying to make ends meet financially following breast cancer, thanks to a friend who introduced her to the group. She runs in the foundation's annual marathon to help raise money and awareness for the cause.

On the home front, Wiley switched to cooling pillows and mattresses, and she doesn't leave the house without a handheld fan. "I carry two in my purse at all times," she says.

HOW TO TREAT SYMPTOMS

Pharmacologic options can help reduce menopause symptoms. For instance, results of several studies have shown that medications such as Effexor (venlafaxine), Neurontin (gabapentin) and Oxytrol (oxybutynin) may reduce the frequency and intensity of hot flashes. The only drug approved by the Food and Drug Administration to treat hot flashes associated with menopause is Brisdelle (paroxetine), which is an antidepressant. "Many of the antidepressants have been studied for hot flash management, and none of them have much more than a 40% to 50% reduction in symptoms," Faubion says. "These are not magic cures. They take the edge off hot flashes."

Researchers in phase 3 clinical trials are investigating NK3 inhibitors, which are a promising new class of drugs that target neurons in the brain's hypothalamus responsible for hot flashes. Specifically, they take aim at the neuron complex kisspeptin/neurokinin B/dynorphin, known as KNDy neurons. Study results have shown an approximate 90% reduction in hot flashes in a couple of days compared with placebo at 25% to 30%.

Alternative therapies such as hypnosis and cognitive behavioral therapy have evidence to support their use for hot flash management. And in some cases, acupuncture has been more effective than medication, according to Dr. Amy Tiersten, a professor and clinical director of breast medical oncology at Mount Sinai in New York City.

Nonhormonal lubricants and moisturizers are initially offered to women who have vaginal dryness. But if those don't work, low-dose vaginal estrogen can sometimes be considered after breast cancer survivors consult with their oncologists. Vaginal dilator therapy, which gently stretches vaginal tissue, and pelvic floor exercises to stretch and relax pelvic muscles may boost pelvic blood circulation and help relieve discomfort with sexual activity.

In women who experience joint pain following treatment with AIs, Cymbalta (duloxetine) may be prescribed. Bone-strengthening medications, such as Zometa (zoledronic acid), are often suggested for women taking AIs. "Not only do these bone-strengthening agents protect your bones from the negative effect on bone density from the aromatase inhibitors, but some studies show they also reduce the risk of the breast cancer coming back," Tiersten says.

Typically, most patients are on anti-estrogen therapy for at least five years, but it could be as long as 10 years. The decision is made by looking at risk of recurrence and how well the drug is tolerated, according to Tiersten.

FIND A SUPPORT SYSTEM

Perhaps the most beneficial thing a patient can do is to find a physician who specializes in helping women through menopause. NAMS has an easy-to-navigate menopause practitioner finder on its website.

If patients want to address symptoms without medication, they can lean on resources available at their cancer center in addition to finding nonprofit organizations that offer support. For instance, Cancer*Care* offers in-person and virtual support groups.

"This is going to be disruptive, and I don't wish it on anyone. But your mental outlook is key to your success," Wiley emphasizes.

And when those feelings of isolation creep in, Chatalian wants patients to remember they're not alone.

"Take it one step at a time," Chatalian says. "You are your best advocate. For any symptoms that arise, have a discussion with your medical team. Have questions prepared. And know there is support available for all the mixed emotions."

KALEN JESSE PHOTOGRAPHY

‘COMING OUT’ *to Cancer*

Fear of facing discriminatory behavior within the health care system, along with other factors, may keep members of the LGBTQIA+ community from receiving cancer diagnoses.

By STEPHANIE LODER

Marie Valenzuela still recalls life around the time she received a diagnosis of stage 2B infiltrating ductal breast cancer. She was 40 years old, in a committed relationship with her girlfriend, employed at a job that she loved and diligent about her yearly health checkups. Yet she still feels the sting from a comment she believes was derived from her being a lesbian.

At the time, she had been in remission for a year after finishing treatment for breast cancer — which included a lumpectomy with axillary dissection followed by two rounds of aggressive chemotherapy, six weeks of radiation and two more rounds of chemo. After completing treatment, Valenzuela received Tamoxifen to help prevent a recurrence. Because the drug can cause abnormal growths, and rarely, cancer in the uterus, her oncologist ordered routine hysteroscopy — the insertion of a thin tube to view the lining of the uterus and take biopsies if needed — to make sure there weren’t any problems. The treatment is not often recommended in the absence of any symptoms like abnormal bleeding or changes noted on ultrasounds, which are also of low incidence in patients receiving Tamoxifen.

“I had to have a scoping procedure, and first thing (the doctor) did was complain about not being able to get the scope inside my uterus because I never had children. And it kind of went downhill from there,” she remembers. »

MARIE VALENZUELA with her wife **DEBRA GRAY**.

> «
>
> After the doctor's discriminatory comments, **VALENZUELA** reported him to her health care provider.

While this comment could be made toward any woman who does not have children, regardless of sexual identity, those who identify within LGBTQIA+ often face harsher obstacles when it comes to starting a family, including the financial burden of fertility services, foster care or adoption.

Uncomfortable and possibly discriminatory situations such as what Valenzuela experienced are what keep many LGBTQIA+ community members from seeking health care on a regular basis.

Valenzuela reported the doctor's remarks to her health care provider immediately and requested that she see only female doctors in the future. She was determined to not let one situation keep her from getting the health care she deserved. "Barriers exist, but putting off getting your diagnosis is the last thing you want to do," she says.

IDENTIFYING THE BARRIERS

Among other barriers, the LGBTQIA+ community has higher rates of smoking, drinking, depression and risk of obesity. These issues, along with the fear of facing discrimination, may prevent them from seeing the doctor on a regular basis, which, in turn, increases the risk of cancer or delays their receiving a cancer diagnosis and treatment.

VALENZUELA was 40 years old when she received a diagnosis of breast cancer.

"LGBTQIA+ individuals use tobacco products at rates 40% higher than the general population," Michelle Veras, project director at the National LGBT Cancer Network, explains. "Why? Rejection and discrimination, the places we work and live, a legacy of targeting by the tobacco industry — these all become risk factors for diseases like cancer."

The National LGBT Cancer Network reports that insurance claims sometimes are denied if a particular test is ordered

KALEN JESSE PHOTOGRAPHY

that does not align with a person's current gender identity, affecting the transgender and gender nonconforming communities. "This not only presents logistical issues in terms of getting tests and procedures covered but it can compound feelings of being discriminated against by the health care system," she says.

Even for some members of the LGBTQIA+ community with health insurance, gaining access to the appropriate care is difficult, Veras says. For instance, someone who is transgender may not be covered for any procedure or cancer screenings that are inconsistent with the gender marked on the insurance card, such as a Pap smear for a transgender man who is assigned female at birth and still has an intact cervix. "Risk factors for our communities are the result of systemic inequalities; personal choice plays such a small role in our health outcomes," Veras says.

In addition, a primary factor that contributes to these disparities is a lack of trust in the health care system due to homophobia and transphobia, according to Dr. Jennifer Aldrich, a professor of clinical medicine at Lewis Katz School of Medicine at Temple University in Philadelphia.

"Recent surveys indicate that LGBTQIA+ people are fearful of discrimination by medical providers, causing them to seek care less frequently and be diagnosed and treated later than their straight and cisgender counterparts," she explains.

Health care professionals need training to become inclusive, Aldrich emphasizes.

Dr. Anosheh Afghahi, a medical oncologist at the University of Colorado Cancer Center in Aurora, adds that transexuals on estrogen supplementation also face an increased risk of breast cancer and other hormone-driven cancers. At greatest risk are individuals with a strong family history of breast cancer or who have inherited a genetic mutation such as BRCA1 or BRCA2.

FINDING SUPPORT

Catherine Sumner, who is a lesbian, survived thyroid cancer in 2003. She had no known history of breast cancer, and she says she was good about getting medical checkups, especially after receiving her diagnosis of thyroid cancer.

In 2010, Sumner found herself in the doctor's office for a cortisone shot after she believed she had pulled a muscle training for a triathlon. "I was feeling great, and I would run one to three miles a day," she says. "I went in for a checkup when I found a lump above my breast while I was rubbing in Tiger Balm after pulling a muscle. … So I went to my primary (care) doctor."

The nurse practitioner was preparing the cortisone shot when she realized that it could be more than just a pulled muscle. After a same-day appointment to examine the lump with an oncology surgeon, she was diagnosed with breast cancer. "And it blew me out of the water at age 31," Sumner says.

That was in March. By April 1, she had started a treatment of chemotherapy plus Herceptin (trastuzumab). By September 9, she had had a lumpectomy with clear margins. Her cancer diagnosis changed from stage 3 to a "smaller" stage 2, and she began two months of daily radiation, then continued the Herceptin. Sumner was lucky enough to have providers who were thoughtful with her treatment and care at Virginia Hospital Center in Arlington.

"Too often, doctors don't work with patients in the gay community, and if that collaboration isn't there, having someone talk at you and not with you — it doesn't work," Sumner explains. "My oncology team, even though I'm gay, (they) asked things like, 'Don't you want to freeze your eggs?' I'm like, 'With this? No way.' But (my oncologist) told me that maybe I would want them someday."

Sumner adds, "(My oncologist) was very aware of my fertility and treated me like a woman, not 'Oh, she's gay and she's not going to get pregnant.'"

Sumner says she still struggled to find an inclusive support group where she could feel comfortable. The first group she attended consisted mainly of heterosexual women, and although Sumner says she was sure they were nice, she wasn't able to relate as closely with their experiences. "I learned that it is very difficult to be the only lesbian in a breast cancer support group. I didn't feel comfortable coming out to a group of older straight women. I had trouble relating to them and generally felt very out of place, so I didn't go back after the first visit," Sumner explains.

Instead, she relied on friends, family and her priest for support, and often she brought a friend with her to appointments, as well.

"It's wise to bring someone with you and look for a doctor you feel comfortable with," she adds. "The last thing you want to do is let fear take hold of you and you don't go to your appointment, or you feel like you don't have someone to talk to who understands you."

BREAKING DOWN BARRIERS

When it comes to breaking down the barriers — such as those experienced by Valenzuela and Sumner — in health care for the LGBTQIA+ community, Afghahi believes medical professionals haven't done enough to eliminate disparities.

"The medical community also has been slow to incorporate specific learning opportunities for providers and students so they can learn about specific issues surrounding the health of LGBTQIA+ individuals. That's another reason why disparities persist," she says.

Approximately 30% of LGBTQIA+ adults don't seek health care services or have a primary health care provider, compared with 10% of heterosexuals, according to study results presented at the 2020 American Society of Clinical Oncology Quality Care Symposium. In the study, researchers partnered with the LGBT Community Center of Greater »

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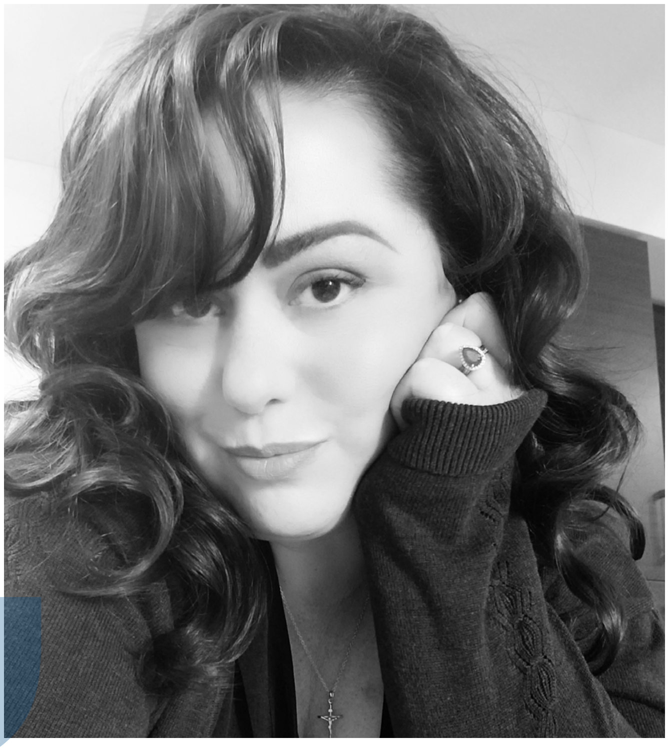
>
> —*CATHERINE SUMNER*



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Cleveland, Plexus LGBT & Allied Chamber of Commerce and TransOhio to create programming, including a mammogram clinic for sexual/gender minority women, a "Cancer is a DRAG" show and a tobacco-free campaign. The result? More than 150 people were educated about these disparities and more than 85 were screened within the first year, proving that creating meaningful partnerships between health care and LGBTQIA+ communities, as well as programming patients can relate to, may help decrease health disparities in that subset.

It is educational programs and outreach such as this that Afghahi thinks could jump start the conversation and recognition of what needs to be changed in the health care system to be inclusive of all. She says, "Engaging in a two-way conversation to allow the patients to teach providers about their concerns is a way to start the conversation. I think it always starts with educating providers on the health issues that matter for this patient population, engaging in discussion with each other and having an open mind."

Aldrich adds another important element needed to break down barriers: educating those within the health care field so that inclusivity starts at the beginning of a patient's journey within a cancer center or hospital.

"It is important to collect sexual orientation and gender identity when we first meet a patient," she emphasizes. "Open communication will help providers address potential concerns about treatment effects on sexual activity, body image and relationships, and will allow the team to include the important people in the patients' care."

Increasing education and information about patients in this subset could build a stronger patient-provider bond, allowing for more compassionate conversation and mindfulness. "Traditionally, the medical establishment has been heteronormative (the belief that heterosexuality is the normal mode of sexual orientation), and LGBTQ+ patients often have not disclosed their orientation or gender identities to their providers. We, as medical professionals, must ask the appropriate questions and allow patients to feel safe in disclosing to us, so that we can together build a trusting, nondiscriminatory relationship," Aldrich adds.

Dr. Mitchell Lunn, an assistant professor in the Division of Nephrology of the Department of Medicine at Stanford University School of Medicine in California, agrees as both a provider and as someone who identifies as a gay man.

Lunn says the health care community needs to be better trained to "not make assumptions about people and their personal experiences including partners or sex life."

He says understanding the LGBTQIA+ community means "training (providers) to ask patients about the name they use, as well as which pronouns they use, and understanding that a partner may want to accompany the patient during procedures."

The bottom line, Lunn concludes: "It is important for all providers to be welcoming and affirming to LGBTQIA+ people." C

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Finding New Hope in TNBC Treatments

Three therapeutic breakthroughs are revolutionizing care for the disease and saving women's lives.

By ANDY POLHAMUS

Sarah Hosea was terrified. In February 2019, the 27-year-old had just received a diagnosis of breast cancer, and she didn't like the information that a Google search turned up.

"I didn't really know anything about triple-negative breast cancer (TNBC)," says Hosea, now 30, who lives in Missouri City, Texas. "No one in my family had ever had breast cancer. I didn't even know there were different types. But when you Google it, it's not a pretty picture. It's pretty scary."

Doctors at her local hospital were frank. The diagnosis was a difficult one, with a significant chance that she would not survive. They wanted her to begin a rigorous course of chemotherapy later that week. But Hosea hesitated. She knew time was of the essence, but she decided to seek a second opinion at The University of Texas MD Anderson Cancer Center in Houston. »

TNBC is defined more by what it isn't than what it is. TNBC cells lack receptors for the hormones estrogen and progesterone and do not overproduce the HER2 protein. That means that targeted drugs against hormone or HER2 receptors are not effective for this cancer type, so chemotherapy is generally required. But that's not to say that all TNBCs are the same.

"Triple-negative breast cancer refers to a very heterogeneous group of breast cancers," says Dr. Rita Nanda, an associate professor of medicine and director of the breast oncology program at UChicago Medicine in Illinois. "All these triple-negative cancers get lumped together because of lack of expression. But there are differences."

There is some nuance among TNBCs, but generally there are variations that make the cancer more likely to respond to one treatment over another. A prime example is a mutation in the BRCA1 or BRCA2 genes, which is what Hosea had. It responds to poly (ADP ribose) polymerase inhibitors, commonly known as PARP inhibitors, which work by blocking an enzyme that cancer cells produce to repair their DNA, ultimately killing the cells since BRCA mutations also affect DNA repair, giving the cells a "double whammy."

TNBCs are widely thought of as aggressive because they tend to be diagnosed at higher grades, often appear in younger people and grow faster than some other breast cancers. Furthermore, when these cancers do not respond to chemotherapy at early stages, they have a high tendency to spread to other parts of the body. The American Cancer Society reports that the five-year relative survival rate for people with TNBC is 77% for all stages, 65% with regional metastases and 12% with distant metastases. Even when the disease is caught early, by some estimates, approximately one-third of patients will experience a relapse of TNBC after standard therapy with chemotherapy and surgery.

"For patients with pretreated metastatic TNBC, standard chemotherapy is associated with low response rate and poor progression-free survival," explains Dr. Aditya Bardia, director of the breast cancer research program and an associate professor of medicine at Harvard Medical School in Boston. "TNBC traditionally has been tough to treat because it lacks actionable receptors and is associated with significant genomic heterogeneity and aggressive tumor biology."

He estimates that with standard-of-care chemotherapy for patients with pre-treated metastatic TNBC, the response rate is as low as 5% to 10%. Further, patients with metastatic TNBC who receive standard chemotherapy often see their disease progress within two or three months.

However, as researchers learn more about the variations in TNBC and develop more targeted therapies, a diagnosis that used to seem hopeless now comes with new rays of hope, largely thanks to major advances in treatment that have taken place over the past two or three years. "I would say we've made a ton of advancement recently," Nanda says. "Within the past couple of years we've had a lot of drugs approved for triple-negative disease."

Bardia adds that the difficulty of treating TNBC is precisely what has spurred these recent developments. "Triple-negative breast cancer represents a major unmet need in the field of breast oncology and consequently there has been considerable interest in developing novel therapies for patients," he explains.

Recent advances in TNBC can be sorted into three categories: immunotherapy drugs, antibody-drug conjugates and PARP inhibitors.

> "I would say I was positive during treatments. I would also say that with the positives come dark moments, too, that only other survivors are going to understand."
>
> *—KRISTEN PERELLO*

USING THE IMMUNE SYSTEM

Immunotherapy options for patients dealing with cancer are not new. But on July 26, the Food and Drug Administration (FDA) announced it had approved the immunotherapy drug Keytruda (pembrolizumab) for the treatment of high-risk, early-stage TNBC. Immunotherapy drugs work by activating the body's immune system to attack cancer cells. Keytruda is approved both in combination with typical chemotherapy as a neoadjuvant, or pre-surgery, treatment and for use alone and as an adjuvant therapy.

Kristen Perello, who received a diagnosis of stage 2 TNBC in August 2017, participated in the phase 3 clinical trial, called KEYNOTE-522, examining the efficacy of Keytruda that led to the drug's approval. "It was definitely a total shock," she remembers. "I didn't know people could survive from this type of diagnosis."

One week after Perello's initial appointment, her surgeon introduced her to Dr. Joyce O'Shaughnessy at Texas Oncology, Baylor Sammons Cancer Center, who was running the trial, and with a treatment plan in place, Perello felt a sense of relief.

Perello joined the trial, in which 1,174 patients with newly diagnosed, untreated, early-stage, high-risk TNBC were randomly assigned to receive placebo plus chemotherapy before surgery followed up by placebo after surgery or Keytruda plus chemotherapy before surgery followed by Keytruda monotherapy after surgery.

Because of the design of the study, Perello does not know for sure whether she received Keytruda or a placebo as part of her treatment plan, but she took her prescribed medications and went through 16 rounds of chemotherapy followed by a double mastectomy and completed 16 rounds of chemotherapy, with a complete response after just three rounds. Through it all, she dressed up for her treatments and maintained high spirits. Chemotherapy is often a difficult experience characterized by fatigue and side effects such as hair loss and nausea, but Perello's course of treatment was fairly uneventful. "Honestly, I felt great the whole time," she says.

Although she avoided many side effects, Perello did find herself fatigued during so-called red devil treatments, which consist of an infusion of a bright-red chemotherapy drug called doxorubicin and are notoriously grueling for patients. But she was able to keep going to the gym and working full-time throughout her chemotherapy. Through cold capping, a practice in which patients wear devices on their heads to cool the scalp during chemotherapy, she was able to minimize hair loss.

"I would say I was positive during treatments. I would also say that with the positives come dark moments, too, that only other survivors are going to understand," she says.

In the trial, Keytruda combined with chemotherapy produced a complete pathological response in 63% of patients, meaning nearly two-thirds of patients had no evidence of cancer after treatment, compared with 56% among those who were assigned to receive chemotherapy alone. Overall, the drug reduced the risk for disease progression, recurrence or death by 37%.

KRISTEN PERELLO had a complete response after enrolling in the KEYNOTE-522 clinical trial.

LYDIA BREWER

Although Perello experienced differently, side effects in the study's participants were common. The most frequently reported were fatigue (70%), nausea (67%), hair loss (61%), rash (52%), constipation (42%) and diarrhea and peripheral neuropathy (both 41%).

ATTACKING CANCER AT THE SOURCE

Another major breakthrough for TNBC treatment is with antibody-drug conjugates, which are medications that combine monoclonal antibodies — artificially made proteins »

that target proteins on cancer cells — with highly toxic, tumor-killing chemicals. The result is a drug that delivers extremely potent anticancer medications directly to the tumors without harming the rest of the body, sometimes referred to as a "Trojan horse" effect.

Bardia is particularly interested in the antibody-drug conjugate Trodelvy (sacituzumab govitecan-hziy) and led a large randomized phase 3 trial, called ASCENT, on the therapy. In April 2020, the drug received accelerated FDA approval for metastatic TNBC that did not respond to other treatments based on an earlier phase 2 trial showing remarkable activity in heavily pre-treated patients, and a year later it received the FDA's regular approval for the same indications when the randomized trial showed a doubling of survival compared with standard chemotherapy options.

In the data recently published from the trial, Bardia and his team reported that patients with metastatic TNBC who received Trodelvy went a median of 5.6 months before their disease progressed, compared with less than two months in patients who received typical chemotherapy. Not only did patients live longer before their disease progressed, but they also lived longer overall: Median overall survival was 12.1 months in patients assigned to Trodelvy, compared with just 6.7 months in those who received standard chemotherapy. Trodelvy's most common severe side effects were neutropenia (low white blood cell count), which occurred in 51% of the Trodelvy group compared with 33% of the

LYDIA BREWER

chemotherapy group, diarrhea (11% versus less than 1%, respectively), anemia (8% versus 5%) and febrile neutropenia (5% versus 2%).

The patients in that trial all had advanced disease that did not respond to other treatments, and Bardia hopes to see this therapy turned into a first choice for patients with earlier-stage disease.

Dr. Tiffany Traina, who is section head of the TNBC research program at Memorial Sloan Kettering Cancer Center in New York, was a researcher on the ASCENT trial and is enthusiastic about the expanding range of options for patients with TNBC.

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>
> Throughout treatment, **PERELLO** continued working full time and going to the gym.

"Immunotherapy is curing more women of triple-negative breast cancer," she says. "And some of the novel agents (such as Trodelvy) are really moving the needle in how long women are living with their breast cancer, even with advanced disease," she says. "We've seen greater hope for women with triple-negative breast cancer in a meaningful way. ... This drug showed incredible activity."

Generally speaking, new cancer treatments make their debut as alternative strategies in late-stage cases, then make their way to being used as a frontline, or first-choice, therapy.

"Moving forward, the drug needs to be evaluated in earlier lines, including first-line therapy for metastatic TNBC," Bardia adds. "In the ASCENT trial, patients who had received prior immunotherapy also had benefit with (Trodelvy) suggesting there is no cross-resistance between (Trodelvy) and immunotherapy, and potentially combining (the drug) with immunotherapy would be an attractive therapeutic option for patients with PD-L1-positive metastatic TNBC."

CUTTING OFF CANCER'S DEFENSE

When Hosea went to MD Anderson for a second opinion, she was asked whether she wanted to participate in a clinical trial as part of her treatment for early stage TNBC. "Let's do it!" she remembers telling her care team. "Give me a plan."

She enrolled in an open-label phase 2 study, which means all of the 61 patients enrolled received Talzenna (talazoparib), a PARP inhibitor.

Hosea was one of a few dozen women with BRCA-mutated TNBC who took a PARP inhibitor as part of the study.

Dr. Jennifer Litton, vice president of clinical research and professor of breast medical oncology at MD Anderson, reported at the 2021 American Society of Clinical Oncology (ASCO) meeting that 49.2% of patients experienced a complete pathological response to Talzenna, meaning there was no evidence of cancer left in the affected breast after treatment and surgery.

"It was six months of a daily pill," Hosea says. "It would eventually make the cancer die." Depending on her progress with Talzenna, she could stay in the trial or drop out and proceed to the standard of care, which was chemotherapy. "I always had the choice to leave," Hosea says, which helped her make the decision to participate.

Throughout the drug trial, her hemoglobin levels dropped to levels so low that it looked as though she might need to drop out of the trial. "We had to reduce my dosage multiple times, but even with that I had a complete response," she says. This would remain an issue throughout her chemotherapy, as well.

Although she had no significant side effects with Talzenna, during chemotherapy she dealt with neutropenia and contracted pneumonia.

After the trial, Hosea had surgery, and no cancer was found — demonstrating that she had a complete pathologic response to Talzenna. She completed 30 rounds of radiation therapy after her double mastectomy, and received chemotherapy for six months.

"PARP inhibitors are really exciting as a proof of concept of using the DNA damage repair pathways," Litton says. "An oral drug really improves quality of life for patients with metastatic cancer and a germline BRCA mutation, and I'm looking forward to the next generation of DNA damage repair agents that can potentially have similar or longer-lasting effects with less toxicity."

Hosea initially hoped that her life would go back to normal after cancer, but like Perello, she found that some part of her had permanently changed.

In some ways, the change was bad, leaving a physical and emotional scar from a difficult diagnosis and intensive treatment. "The hardest part was that it happened at all," Perello says.

But in one major way, the change was a good thing. "I've always been a worrier," Hosea recounts. "And just worried a lot about every little thing. And I don't anymore. I always tell people I'm so thankful for this perspective."

‘A Step Toward Self-Acceptance’

A photographer is helping patients with breast cancer feel empowered by defying societal beauty standards and embracing their new bodies.

By ANTONIA DePACE

IN 2009, BOUDOIR PHOTOGRAPHER Charise Isis received an email from a man who wanted to hire her to do a photo shoot of his wife. He had seen an article in the local newspaper that described how empowered Isis’ clients felt after photo shoots with her, and he wanted his wife to experience the same. “The day of the shoot, this lovely woman with short, cropped, gray hair came into my studio,” Isis remembered. “And she had all these hat boxes and hangers that she was going to use during the shoot. (She wanted to stay) covered, which I thought was curious because she was doing a photo shoot for her husband.”

Isis got to work, quickly making a connection with the client.

“She suddenly stopped, and she said, ‘You know, I have a confession to make.’ And I said, ‘Sure, what is it?’ And she said, ‘Well, I’m a 12-year breast cancer survivor, and I feel mutilated on one side of my body where I’ve had a mastectomy, and my husband read about you. He thinks I’m beautiful and he wanted me to feel the way that the women who have been coming to your studio feel after they leave,’” Isis explained.

Isis continued taking photographs, and finally the woman felt empowered. Isis said, “Suddenly, she just takes off her shirt and throws it off, and she goes, ‘F--- it. I’m doing this for myself.’ And I’m photographing her and I’m going, ‘Holy crap, I just watched a woman let go of 12 years of shame from her body.’”

A few weeks later, Isis received another call from a friend. She had received a diagnosis of breast cancer and was scheduled for a mastectomy in three days. She wanted to photograph her body prior to the procedure. “In between those two women, I (thought,) ‘This is really powerful,’ and I had a feeling it hasn’t been explored enough,” she explained. “I started looking on the internet to see what was out there in terms of breast cancer portraits, and all I could find were these pictures, medical pictures, of women’s torsos from their head to just below their bellybutton with these fresh scars and bad medical lighting. … It was harsh. There was no humanity to it. There was no beauty to it … and I thought to myself, if I was a woman newly diagnosed, I’d be horrified to find these images on the internet.” From here, The Grace Project was born.

With a mission to tell the stories of women who have had mastectomies, Isis travels throughout the United States with a goal to photograph 800 portraits, representing the approximate number of breast cancer diagnoses in the U.S. every day. The style of The Grace Project photos is inspired by

CAMERA ICON: SINI4KA / STOCK.ADOBE.COM; PHOTOS COURTESY OF ISIS

Each photo is inspired by Hellenistic sculptures, which although cracked or broken, have survived throughout history and are celebrated as fine art.

CHARISE ISIS travelled to 27 states so far, completing over 500 portraits of women who have had mastectomies. Her goal is to complete 800 portraits, which will eventually be exhibited together in one space on large silk banners.

Hellenistic sculptures. "I had this vision of, 'Imagine if I could present 800 of these portraits in one space at one time to really show the impact of breast cancer in America every day,'" she said. She has completed more than 500 portraits.

With more than 100,000 women in the United States undergoing a mastectomy each year — whether it be for breast cancer or to prevent the risk of developing it — the project represents every one of them but shows that they are more than just a number. The project also aims to empower women. A mastectomy can severely affect a woman's self-esteem and lead to depression, anxiety and stress. Isis hopes to give confidence back to women who experience this — whether they participate in The Grace Project or just see the photos.

"The whole process of breast cancer can often make somebody feel worthless, and so I think taking a step toward self-acceptance, so that you can then go on to live, to have a healthy relationship with your body in terms of how you feel about it and even how you relate to others, is really important," Isis said. "You're never going to get back to that place, you're not going to ever have that body that you had before breast cancer, but if you can get to a place where you can accept your new body, then you're going to live a healthier, fuller life." C

SCAN THE QR CODE
Read more about **CHARISE ISIS** and The Grace Project from one of her clients.

Facing Up to Financial Toxicity

Talking with a doctor about costly cancer treatments and being frank with health care teams can ease financial distress. *By* ANTONIA DePACE

PATIENTS WITH CANCER OFTEN face another challenge: financial toxicity. And while demographics like tumor stage and treatment can influence this, one expert says there are ways to mitigate or plan for the costly effects of cancer treatment.

"We need to better characterize (patients with cancer who) are at risk of financial toxicity and identify interventions to mitigate it," said Dr. Rachel A. Greenup, an associate professor of surgical oncology and chief of breast surgical oncology at Yale School of Medicine in New Haven, Connecticut, in an interview with *CURE*®.

In this study, researchers assessed 571 patients with breast cancer who underwent lumpectomy or mastectomy. The findings demonstrated that elements such as work reduction or cessation, increased out-of-pocket spending and advanced tumor stage were all associated with increased financial distress. Patients with lower financial distress were more likely to have supplemental insurance, increasing annual household income and a credit score above 740.

Those facing financial toxicity often cope by borrowing money from friends or family, pulling money out of retirement or savings, fundraising and cutting down on daily spending. Greenup highlights that women from all socioeconomical backgrounds can be at risk for this toxicity.

"It is important to recognize that all women are at risk of cancer-related financial hardship, regardless of socioeconomic status or wealth — yet this can look different across varied patients," Greenup, who was an author on the study, said. "More affluent women are less likely to go into bankruptcy, yet they may still employ cost-reducing strategies such as using savings, taking out second mortgages on homes or cutting out vacations. Certainly, this is a very different presentation of financial toxicity when compared to our most vulnerable patients who are at risk of food insecurity and losing housing. Ultimately cancer treatment costs can be unaffordable for everyone."

The different treatment options for breast cancer may play a role in financial toxicity. Patients may not know what the financial implications of preference-sensitive decisions are, according to Greenup. She uses the example of deciding between a lumpectomy or mastectomy. "If I could say to a patient, 'You have a 2% lower risk of your breast cancer coming back if you undergo mastectomy compared to lumpectomy, but it may cost you $40,000 out of pocket if there are complications.' This cost transparency and communication may impact patient choice,'" she explained. In short, she said, there seems to be a lack of cost consideration when discussing cancer treatment choices with patients and their families.

"Arguably the health care system is not as clear as we probably should be with patients about the real burden of cancer treatment," she said.

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‘Preparedness Is Protective’

“Another important finding from our work is that unexpectedness or a lack of preparedness puts patients at higher risk of financial hardship,” Greenup explained.

Ways to prepare for the financial impacts of cancer treatment include knowing the total duration of treatment, how much time patients will need off work, how many appointments they might have, what the out-of-pocket payments are based on their insurance plan and what their plan deductibles may be.

Greenup noted data from previous studies that have demonstrated that cost discussions between patients and their physicians allow for health care teams to identify opportunities to reduce financial toxicity by coordinating appointments, writing prescriptions for generic drugs and even having expensive imaging done at offsite locations where costs are generally lower. According to Greenup, patients also have access to social workers and financial navigators, who can help to find resources to cope with financial burdens. “Preparedness is protective,” she said.

Socializing Financial Hardship

Making the idea of financial hardship more approachable as a reality of cancer care is important for next action steps, according to Greenup. “One of the more important aspects of our work is to socialize financial hardship as a common side effect of treatment in order to improve awareness among patients and society, and that will drive some of the patient questions, the behavior, kind of what normal discussions look like,” she said.

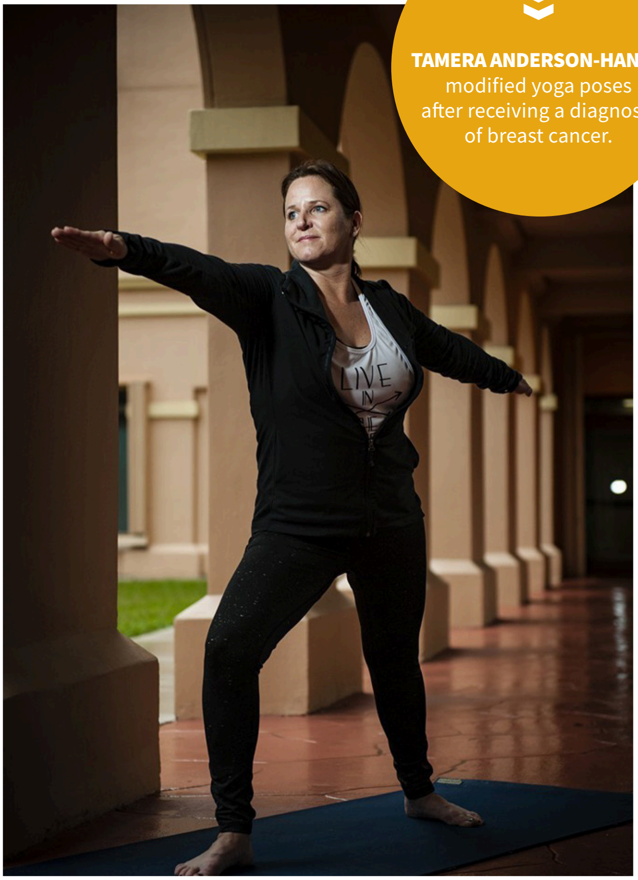
Some ways for patients to start bringing more awareness include knowing the details of their insurance plans and communicating with health care teams early if they are worried about finances.

“Historically — especially among marginalized populations — there has been concern that an inability to pay for care may result in care being withheld,” she concluded. “Contemporary health care systems have resources in place to support our patients. If patients have concerns about affordability, they should feel safe telling their doctors.”

Solace in Sun Salutations

A patient turned to yoga during treatment for breast cancer and is now helping others do the same.

By ANTONIA DEPACE



TAMERA ANDERSON-HANNA modified yoga poses after receiving a diagnosis of breast cancer.

TAMERA ANDERSON-HANNA credits one thing for helping her to regain strength and quiet her mind during treatment for breast cancer: yoga.

According to breastcancer.org, yoga may improve physical functioning, reduce fatigue, reduce stress, improve sleep and improve quality of life for patients with breast cancer.

For Anderson-Hanna, it all started in 2004 — 10 years before she received her diagnosis — when she stepped onto a yoga mat not long after giving birth to her daughter. She was hooked. For years, she practiced Ashtanga (an energetic yoga with synchronized breath and movements popularized by K. Pattabhi Jois), Vinyasa (a yoga with smoother transitions between poses) and other styles of yoga, but "for some reason, I got back into yoga very strongly … about the time that I had to go in and get a breast exam," she said.

She also had signed up for yoga teacher training. Two weeks later, Anderson-Hanna received a diagnosis of breast cancer.

"Everything I knew about yoga, every way I had practiced was kind of turned upside down," she said. Advanced poses were modified due to her reduced physical strength. But even then she pushed through, continuing her teacher training and learning a new way to practice that was best for her. "I was training in Vinyasa yoga, but I was able to modify everything. So while they were doing different poses, I found a pose that would work (for) my body, modifying it for surgeries, for post cancer and things like that," she explained.

Anderson-Hanna was told that she needed chemotherapy, radiation and a lumpectomy but she ended up opting for a double nipple- and areola-sparing mastectomy. "I would say I practiced throughout treatment, but there was a part of treatment where I couldn't be as physically active. So through pain or just the restrictions of the doctor, the recommendations and when you've got drains or other things, I couldn't have a physical practice," she explained. During these times, she opted for meditation.

A pivotal moment came after the mastectomy. "You can't really move, so I had what my daughter and I called 'little T-rex arms,'" Anderson-Hanna said. Even small things such as feeding herself were impossible. Once she was given the OK by her health care team, however, "yoga really kind of helped me build back up to get range of motion," she said.

Soon after recovering from surgery, she continued her yoga education with Tari Prinster, who founded the Yoga4Cancer Foundation, and became certified to teach yoga for patients with cancer two years later in 2017.

Today, Anderson-Hanna teaches free yoga classes for patients with cancer through Zoom to help them rebuild strength after treatment or surgery.

When it comes to trying yoga, Anderson-Hanna said, "Don't judge yourself. You should walk into a class and there should never be judgment." C

ACR23 / STOCK.ADOBE.COM ADAPTED BY GWEN SALAS; PHOTO COURTESY OF ANDERSON-HANNA

ANDERSON-HANNA recommends beginning poses to start your practice. Before starting, speak to your doctor or health care team to understand any limitations you need to monitor for.

1.

SEATED BREATHING: Take a seated position in a stable space, such as a chair without wheels. Connecting with breath is always the first part of practice. Ground down through your sit bones and place your feet hip width apart. Relax your jaw, gaze forward and breathe in and out of your nose. If you have lymphedema, wear a sleeve if recommended by your doctor. Attempt to make your focus to slow or relax your breath and take time to connect with your body.

2.

SEATED CHILD'S POSE: This can be a safety pose to return to throughout the practice if at any time you need to take a break from a pose, but can initially help to stretch the back. Begin by exhaling to rest your forearms on your thighs. Take a couple of breaths here to begin to prepare your body for further movement while taking a downward gaze. If feeling tension in your head and neck, you can take this time to gently move your head in a yes/no position and gently from side to side. If feeling dizzy, use another chair in front of you for safety to reach toward or bring hands higher up on the thighs and don't bend over as far.

3.

SEATED SUN SALUTATION: Take a seat, ground down through your sit bones and elongate your spine. Take a comfortable breath. Proceed into mountain pose by bringing your arms out alongside the body, palms open and facing forward. Inhale to bring your arms up, moving slowly, and look up. Feel your shoulder blades lift as you also open the chest. Exhaling, come back down to a forward gaze and lower arms into the seated pose. If regaining range of motion move as comfortably as you can and don't worry about how far you can reach overhead. With time, flexibility and range of motion improves as a goal.

4.

SEATED SUN SALUTATION CACTUS POSE: Do the seated sun salutation, but at the top bend your arms and bring elbows in level with shoulders (or somewhere near, depending on flexibility). Connect movement with breath: inhale, press your arms together in front of you, coming close to a giant prayer; exhale, open back up into original cactus pose.

5.

THE HUG/THE DIRTY T-SHIRT: Grab opposite shoulders with arms and give yourself a hug. Depending on range of motion, bend forward and start to bring your arms up overhead while keeping them crossed. Inhale, bring arms up, exhale, come back to starting hug. This pose can help to gain skills back to remove clothing, such as T-shirts, over your head. Switch the arms in the hug and repeat.

6.

TREE POSE: Use a chair or wall for support. This is a weight-bearing pose. Stand up in mountain pose, ground down through your feet and place them hip width apart. Engage the muscles and pull your belly button into the spine. Bring arms out alongside body and use one hand to grab onto chair or place on wall. Bring weight into right foot, find a focal point and start to lift your right leg. Turn heel in toward ankle. If comfortable, bring heel to calf, but do not press up against the knee. This pose will work to open your hip. For an added challenge, inhale to bring the lifted leg forward and then exhale to bring it back to the side. Repeat by switching sides.

7.

SEATED CHAIR POSE: Come to a seated mountain pose and ground down through feet. Inhaling, bring your arms up, palms facing in. Either stay seated or press into the heels to gently lift above the chair while using your quadriceps for strength. Exhale to sit back down. This is another weight-bearing pose that can help to keep the bones and muscles strong.

CLAUDIA NICHOLLS' (left) bucket-list interviews have included Neal Reddy from "Queer Eye," and Jenn Lyon from "Claws."

Bullying Cancer With Humor

Combine a mother's diagnosis with her daughter's comedy background — what do you get? A podcast that laughs in cancer's face. *By* DARLENE DOBKOWSKI, M.A.

PHOTO COURTESY OF NICHOLLS

CLAUDIA NICHOLLS RECEIVED a diagnosis of stage 1 breast cancer in 2017. It was what she and her daughter, Kate Nicholls, called "the Cadillac of cancers." It did, indeed, take her for a ride, as she then received a diagnosis of stage 3 and eventually stage 4 breast cancer when she went to Mercy Medical Center in Baltimore for a second opinion.

"That was when we went through kind of the grieving, the sadness and gathering family, but I don't feel like we were stuck in that (phase) for too long," Claudia Nicholls said.

Instead of dwelling on the sadness, Claudia decided to use this time to do something she always wanted to do with the help of her daughter, a professional comedian who moved from Los Angeles to Maryland to care for her. Claudia originally wanted to write a blog about a topic she's been passionate about for nearly a decade.

"I've been salty since 2012 when the movie 'Argo' beat out the movie 'Lincoln' for best picture, so I wanted to talk about that," she said.

Kate Nicholls added, "She wanted to make a blog as her bucket list thing. She comes out of her bedroom with a notebook that she had written — handwritten — five pages … and said, 'Put this on the internet. Let's start a blog.' 'So basically what you're asking me to do is type up your ramblings from your notebook and put it on the internet for you?' I was, like, no."

Although that's what Claudia wanted, Kate expanded on this idea to make a podcast to allow her mother to conduct "bucket-list-worthy interviews" using her daughter's contacts from her comedy and podcast connections. This is when their podcast, "Stage 4 Clinger," was born.

"The name 'Stage 4 Clinger' kind of just came to me," Kate said. "I was like, 'What do you think?' And (my mom) said, 'Explain it to me.' I (said), 'Well, you've got stage 4 (cancer) and you're really clingy."

Claudia agreed, saying she clings to her kids so it's only appropriate.

During each episode, which they host together, there are different segments such as "Let Me Get Something Off My Chest," where Claudia vents about whatever is on her mind, allowing mother and daughter to work out some issues. There is also the segment "Dying to Talk to You." For this, Kate sets up an interview for each episode and Claudia prepares questions for the celebrity. "(Kate) lets me talk during that segment," she jokes.

Some of Claudia's favorite guests include Yassir Lester ("Black Monday"), Neal Reddy (season 1 of "Queer Eye for the Straight Guy"), Rob Huebel ("The Office"), Poppy Liu ("Hacks"), Jon Glaser ("Parks and Recreation" and "Girls") and Jenn Lyon ("Claws").

The connection to the guests that they interview doesn't end when the podcast goes live. Claudia mentioned that they have met some "amazing people" along the way, some of whom have become lifelong friends of Kate and even text her to see how her mother is doing.

Actress Joan Cusack and singer Dolly Parton are at the very top of their bucket list for interviews they'd love to conduct.

They don't seek out guests who have a connection to cancer, but somehow many guests do.

"It's amazing to me how many of these people have a parent, best friend or someone who has dealt with cancer," Claudia said.

"I haven't reached out to anybody because of their connection to cancer, or at least the ones that I have didn't respond," Kate added. "It's just been people that I think that my mom would enjoy talking to, and then it does turn out that … everyone has a personal connection to cancer in some way or another."

Throughout the fun and laughs on their podcast, they use humor as a way to control the situation.

"Instead of whispering about cancer, or acting like … everything's so awful, we'd rather laugh and we'd rather bully cancer because cancer sucks," Kate said. "We're like, 'You're such a nerd, cancer. Get out of our face.' We're not fans of cancer, so that's why we like to be lighthearted about it and make jokes because cancer doesn't deserve our respect. People *with* cancer, we respect."

Claudia added, "And we don't want to hurt anyone's feelings. That's always been a little bit of a concern of mine, but this is how we deal with it. And it has made my life much better."

Throughout her cancer journey, Claudia credits humor for helping her along the way.

She said, "Now, this is not earth-shattering what I'm going to say, and everybody knows this, but laughter, I swear — we always kid on the podcast, I probably got an extra month (of life) out of this podcast because I've been laughing so much." ■

SCAN THE QR CODE to hear more of our conversation with Claudia and Kate Nicholls in their episode on the "*CURE*® Talks Cancer" podcast.

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Median is the middle number in a group of numbers arranged from lowest to highest.

What is ENHERTU?

ENHERTU is a prescription medicine used in adults to treat human epidermal growth factor receptor 2 (HER2)-positive breast cancer that cannot be removed by surgery or that has spread to other parts of your body (metastatic), and who have received two or more prior anti-HER2 breast cancer treatments.

ENHERTU was FDA approved for this use based on a clinical study that measured how many patients responded and how long they responded. ENHERTU is still being studied to confirm these results.

It is not known if ENHERTU is safe and effective in children.

Important Safety Information

What is the most important information I should know about ENHERTU?

ENHERTU can cause serious side effects, including: Lung problems that may be severe, life-threatening or that may lead to death. If you develop lung problems your healthcare provider may treat you with corticosteroid medicines. Tell your healthcare provider right away if you get any of the following signs and symptoms:

- Cough • Trouble breathing or shortness of breath • Fever
- Other new or worsening breathing symptoms (e.g., chest tightness, wheezing)

Please see additional Important Safety Information and a Brief Summary of full Prescribing Information, including Boxed WARNINGS, on following pages.

ENHERTU®
fam-trastuzumab deruxtecan-nxki
20 mg/mL INJECTION FOR INTRAVENOUS USE

Important Safety Information

What is the most important information I should know about ENHERTU?

ENHERTU can cause serious side effects, including:

Lung problems that may be severe, life-threatening or that may lead to death. If you develop lung problems your healthcare provider may treat you with corticosteroid medicines.
Tell your healthcare provider right away if you get any of the following signs and symptoms:

- Cough
- Trouble breathing or shortness of breath
- Fever
- Other new or worsening breathing symptoms (e.g., chest tightness, wheezing)

Low white blood cell count (neutropenia). Low white blood cell counts are common with ENHERTU and can sometimes be severe. Your healthcare provider will check your white blood cell counts before starting ENHERTU and before starting each dose. Tell your healthcare provider right away if you develop any signs or symptoms of an infection or have fever or chills during treatment with ENHERTU.

Heart problems that may affect your heart's ability to pump blood. Your healthcare provider will check your heart function before starting treatment with ENHERTU. Tell your healthcare provider right away if you get any of the following signs and symptoms:

- New or worsening shortness of breath
- Coughing
- Feeling tired
- Swelling of your ankles or legs
- Irregular heartbeat
- Sudden weight gain
- Dizziness or feeling light-headed
- Loss of consciousness

Your healthcare provider will check you for these side effects during your treatment with ENHERTU. Your healthcare provider may reduce your dose, delay treatment or completely stop treatment with ENHERTU if you have severe side effects.

Harm to your unborn baby. Tell your healthcare provider right away if you become pregnant or think you might be pregnant during treatment with ENHERTU.

- If you are able to become pregnant, your healthcare provider should do a pregnancy test before you start treatment with ENHERTU.
- **Females** who are able to become pregnant should use effective birth control (contraception) during treatment with ENHERTU and for at least 7 months after the last dose.
- **Males** who have female partners that are able to become pregnant should use effective birth control (contraception) during treatment with ENHERTU and for at least 4 months after the last dose.

Before you receive ENHERTU, tell your healthcare provider about all of your medical conditions, including if you:

- Have lung or breathing problems.
- Have signs or symptoms of an infection.
- Have or have had any heart problems.
- Are breastfeeding or plan to breastfeed. It is not known if ENHERTU passes into your breast milk. Do not breastfeed during treatment with ENHERTU and for 7 months after the last dose.

Tell your healthcare provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements.

How will I receive ENHERTU?

- You will receive ENHERTU into your vein through an intravenous (IV) line by your healthcare provider.
- ENHERTU is given 1 time every three weeks (21-day treatment cycle).
- Your healthcare provider will decide how many treatments you need.
- Your healthcare provider may slow down or temporarily stop your infusion of ENHERTU if you have an infusion-related reaction, or permanently stop ENHERTU if you have severe infusion reactions.
- If you miss a planned dose of ENHERTU, call your healthcare provider right away to schedule an appointment. Do not wait until the next planned treatment cycle.

What are the possible side effects of ENHERTU?

ENHERTU can cause serious side effects. See "What is the most important information I should know about ENHERTU?"

The most common side effects of ENHERTU, when used in people with breast cancer, include:

- Nausea
- Low white blood cell counts
- Low red blood cell counts
- Feeling tired
- Vomiting
- Hair loss
- Increased liver function tests
- Low platelet counts
- Constipation
- Decreased appetite
- Diarrhea
- Low levels of blood potassium
- Cough

ENHERTU may cause fertility problems in males, which may affect the ability to father children. Talk to your healthcare provider if you have concerns about fertility

These are not all of the possible side effects of ENHERTU. Call your doctor for medical advice about side effects. You may report side effects to Daiichi Sankyo at 1-877-437-7763 or to FDA at 1-800-FDA-1088.

What is ENHERTU?

ENHERTU is a prescription medicine used in adults to treat human epidermal growth factor receptor 2 (HER2)-positive breast cancer that cannot be removed by surgery or that has spread to other parts of your body (metastatic), and who have received two or more prior anti-HER2 breast cancer treatments.

ENHERTU was FDA approved for this use based on a clinical study that measured how many patients responded and how long they responded. ENHERTU is still being studied to confirm these results.

It is not known if ENHERTU is safe and effective in children.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

Please see a Brief Summary of full Prescribing Information, including Boxed WARNINGS, on following pages.

Daiichi-Sankyo | AstraZeneca

Medication Guide
ENHERTU® (en-HER-too)
(fam-trastuzumab deruxtecan-nxki) for injection

What is the most important information I should know about ENHERTU?

ENHERTU can cause serious side effects, including:

Lung problems that may be severe, life-threatening or that may lead to death. If you develop lung problems your healthcare provider may treat you with corticosteroid medicines. Tell your healthcare provider right away if you get any of the following signs and symptoms:

- cough
- trouble breathing or shortness of breath
- fever
- other new or worsening breathing symptoms (e.g., chest tightness, wheezing)

Low white blood cell count (neutropenia). Low white blood cell counts are common with ENHERTU and can sometimes be severe. Your healthcare provider will check your white blood cell counts before starting ENHERTU and before starting each dose. Tell your healthcare provider right away if you develop any signs or symptoms of an infection or have fever or chills during treatment with ENHERTU.

Heart problems that may affect your heart's ability to pump blood. Your healthcare provider will check your heart function before starting treatment with ENHERTU. Tell your healthcare provider right away if you get any of the following signs and symptoms:

- new or worsening shortness of breath
- coughing
- feeling tired
- swelling of your ankles or legs
- irregular heartbeat
- sudden weight gain
- dizziness or feeling light-headed
- loss of consciousness

Your healthcare provider will check you for these side effects during your treatment with ENHERTU. Your healthcare provider may reduce your dose, delay treatment or completely stop treatment with ENHERTU if you have severe side effects.

Harm to your unborn baby. Tell your healthcare provider right away if you become pregnant or think you might be pregnant during treatment with ENHERTU.

- If you are able to become pregnant, your healthcare provider should do a pregnancy test before you start treatment with ENHERTU.
- **Females** who are able to become pregnant should use effective birth control (contraception) during treatment with ENHERTU and for at least 7 months after the last dose.
- **Males** who have female partners that are able to become pregnant should use effective birth control (contraception) during treatment with ENHERTU and for at least 4 months after the last dose.

See **"What are the possible side effects of ENHERTU?"** for more information about side effects.

What is ENHERTU?

ENHERTU is a prescription medicine used in adults to treat human epidermal growth factor receptor 2 (HER2)-positive

- breast cancer that cannot be removed by surgery or that has spread to other parts of your body (metastatic), and who have received two or more prior anti-HER2 breast cancer treatments.
- stomach cancer called gastric or gastroesophageal junction (GEJ) adenocarcinoma that has spread to areas near your stomach (locally advanced) or that has spread to other parts of your body (metastatic), and who have received a prior trastuzumab-based regimen.

It is not known if ENHERTU is safe and effective in children.

Before you receive ENHERTU, tell your healthcare provider about all of your medical conditions, including if you:

- have lung or breathing problems.
- have signs or symptoms of an infection.
- have or have had any heart problems.
- are breastfeeding or plan to breastfeed. It is not known if ENHERTU passes into your breast milk. Do not breastfeed during treatment with ENHERTU and for 7 months after the last dose.

Tell your healthcare provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements.

How will I receive ENHERTU?

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- If you miss a planned dose of ENHERTU, call your healthcare provider right away to schedule an appointment. Do not wait until the next planned treatment cycle.

What are the possible side effects of ENHERTU?

ENHERTU can cause serious side effects. See "What is the most important information I should know about ENHERTU?"

The most common side effects of ENHERTU, when used in people with breast cancer, include:

- nausea
- low white blood cell counts
- low red blood cell counts
- feeling tired
- vomiting
- hair loss
- increased liver function tests
- low platelet counts
- constipation
- decreased appetite
- diarrhea
- low levels of potassium
- cough

The most common side effects of ENHERTU, when used in people with stomach cancer, include:

- low red blood cell counts
- low white blood cell counts
- low platelet counts
- nausea
- decreased appetite
- increased liver function tests
- feeling tired
- diarrhea
- low levels of blood potassium
- vomiting
- constipation
- fever
- hair loss

ENHERTU may cause fertility problems in males, which may affect the ability to father children. Talk to your healthcare provider if you have concerns about fertility.

These are not all of the possible side effects of ENHERTU. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

General information about the safe and effective use of ENHERTU.

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. You can ask your pharmacist or healthcare provider for information about ENHERTU that is written for healthcare professionals.

What are the ingredients in ENHERTU?

Active Ingredient: fam-trastuzumab deruxtecan-nxki.
Inactive Ingredients: L-histidine, L-histidine hydrochloride monohydrate, polysorbate 80, and sucrose.

Manufactured by: Daiichi Sankyo, Inc., Basking Ridge, NJ 07920 U.S. License No. 2128
Marketed by: Daiichi Sankyo, Inc., Basking Ridge, NJ 07920 and
AstraZeneca Pharmaceuticals LP, Wilmington, DE 19850
ENHERTU® is a registered trademark of Daiichi Sankyo Company, Ltd.
USMG-ENH-C4-0121-r002
For more information, call 1-877-437-7763 or go to
https://www.ENHERTU.com

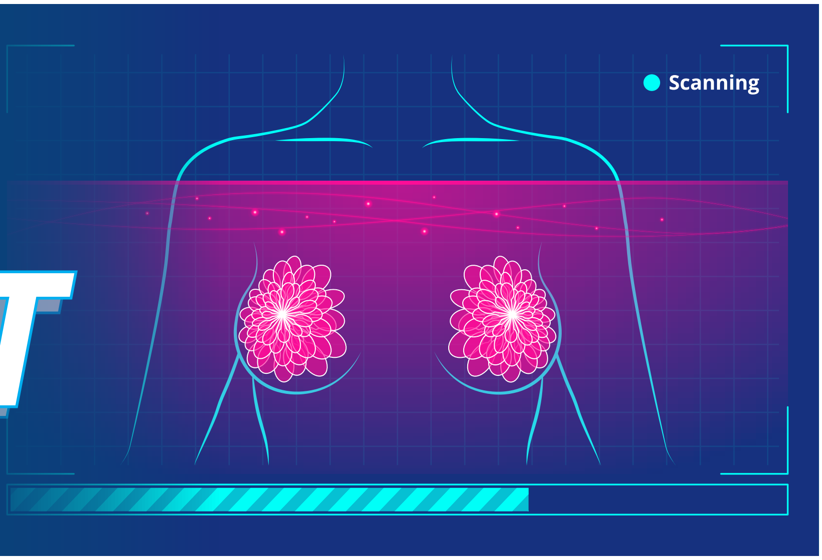
This Medication Guide has been approved by the U.S. Food and Drug Administration.

Revised: 01/2021

SPEAKING OUT

HER2-POSITIVE BREAST CANCER

On TARGET



Tigerlily Foundation
Beauty. Strength. Transformation.

Dr. Angelique Richardson discusses HER2-positive breast cancer, its treatment options and the hope moving forward for people with the disease. *By* KRISTIE L. KAHL

OCCURRING IN APPROXIMATELY 1 of every 5 breast cancers, human epidermal growth factor receptor 2 (HER2)-positive disease tends to be more aggressive compared with other subtypes of breast cancer. Although the prognosis years ago was not positive, new and effective treatment options that target the HER2 protein have changed the landscape over recent years.

To help patients better understand the disease, as part of its “Speaking Out” video series, *CURE*® spoke with Dr. Angelique Richardson, a medical oncologist and assistant professor of medicine at UC San Diego Health in California, on behalf of the Tigerlily Foundation, about the importance of testing for HER2 in breast cancer, the available treatment options and what patients have to look forward to.

Q: Can you explain what the HER2 protein is and what it means for a patient’s diagnosis?

A: (HER2) … is a protein that sits on the breast cancer cell. And when breast cancer cells have too much of it, it tells the breast cancer to grow rapidly and out of control. About 1 in 5, or approximately 20%, of women diagnosed with breast cancer will have too much HER2 protein. And the importance of knowing if your breast cancer has the HER2 protein expressed on it is because that will determine the types of treatments that we would offer you.

Q: Why is testing for HER2 important?

A: If we find that the HER2 (protein) is overexpressed or there’s too much of it on your breast cancer cells, then we will offer you treatment that will target the HER2 receptor protein.

Q: How exactly is HER2-positive breast cancer different from the other subtypes of breast cancer?

A: HER2-positive breast cancer is more aggressive. It tends to grow faster and spread outside of the breast a lot sooner than the less aggressive, more common hormone-positive and HER2-negative breast cancer. »

DR. ANGELIQUE RICHARDSON

ANDRII / STOCK.ADOBE.COM

Q: Can you discuss the available therapies for patients?

A: The good news is that we have a lot of treatments now available for women with HER2-positive breast cancer. One of them, the first one that we had approved was Herceptin (trastuzumab), and that is a monoclonal antibody. (That) is a man-made version of our immune system's proteins, which are called antibodies. They're designed to attack a specific target. So in this case, it's the HER2 protein.

We also have drugs like Kadcyla (trastuzumab emtansine), and that's an antibody-drug conjugate, a monoclonal antibody, as well. But it's linked to a chemotherapy agent. And so that attaches to the HER2 (protein) and it gets taken into the cell. And then once it's inside the cell, then it can cause cell death.

We also have small molecule inhibitors or tyrosine kinase inhibitors. And the example of that is lapatinib or Tukysa (tucatinib). That blocks the cell signals from the HER2 protein that tell the cancer to grow.

So we have a fairly good amount of therapy that we can offer.

Q: With these therapies that are available, what is the prognosis for a patient with HER2-positive breast cancer?

A: With all of these options, the prognosis for HER2-positive breast cancer is actually quite good. It depends on several factors, of course, including stage of disease. But with these new treatments, we are seeing many women have survival rates that have significantly improved (in) both early-stage and metastatic breast cancer.

Q: What do patients with HER2-positive breast cancer have to look forward to?

A: In the past, having HER2-positive breast cancer was associated with a poor outcome. But we have so many treatment options available now that we didn't have just a few years ago. I think what they have to look forward to is that there are so many good options available. We really have moved the needle in this area of breast cancer therapy. And there are so many good options that are in the pipeline that we're really excited to see moving to the clinic at some point. They have to look forward to some other good therapies and, perhaps, the next best thing is yet to come.

FINISH breast cancer
donna™

FEARLESS RACE SERIES

The National Marathon to Finish Breast Cancer and all of the events of the DONNA Fearless Series will return with live, in-person events and we cannot wait to enjoy them. Together. Participate in all three, and earn your DONNA Fearless Medal! Plan your destination race with us today. Virtual options are available.

THE PLAYERS DONNA 5K presented by Nimnicht Family of Dealerships

OCTOBER 2, 2021 | PONTE VEDRA BEACH, FL

The 15th Running of THE PLAYERS DONNA 5K will be the highlight of breast cancer awareness month.This family friendly event welcomes runners and walkers of all levels to experience a unique 5K race on the back 9 of the PLAYERS Stadium Course at TPC Sawgrass.

15th Anniversary DONNA Marathon Weekend

FEBRUARY 4-6, 2022 | JACKSONVILLE, FL AND THE BEACHES

DONNA Marathon Weekend will include a Health and Wellness Expo, Marathon, Half Marathon, 5K, Challenge Events and NEW 15K Relay honoring the 15th Anniversary of the only National Marathon to Finish Breast Cancer.

Black Knight DONNA Mother's Day 5K

MAY 7, 2022 | JACKSONVILLE, FL

DONNA Mother's Day Your Way returns in 2022 with a new in-person 5K race through the charming tree-lined streets of historic Riverside.

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Learn more and register: breastcancermarathon.com/fearless-series