FOR PATIENTS, SURVIVORS & THEIR CAREGIVERS

BREAST CANCER

cure® 20TH anniversary

Cancer Updates, Research & Education®

SPECIAL ISSUE · 10.2022

Creating A NEW WAY TO DEFINE BREAST CANCER

THE DESIGNATION OF HER2-LOW STATUS IS RAPIDLY RESHAPING HOW RESEARCHERS AND CARE PROVIDERS THINK ABOUT BREAST CANCER.

Also in this issue

SECONDARY BREAST CANCERS
Navigating secondary angiosarcoma after completing treatment for primary disease.

Ki-67 SCORING
Some experts believe this method to predict tumor growth may aid in treatment decisions.

POST-MASTECTOMY NUMBNESS
A therapist describes ways to cope with sensation loss after the procedure.

Granted FDA BREAKTHROUGH STATUS and approved for adults with metastatic breast cancer (mBC) who received a prior treatment for HER2+ mBC or have breast cancer that has come back within 6 months of completing treatment for their early-stage breast cancer

Not an actual patient.
HER2, human epidermal growth factor receptor 2.

ENHERTU REDUCED THE RISK OF PEOPLE'S CANCER PROGRESSING, or of them dying, by 72% compared to Kadcyla*†

ENHERTU was compared to Kadcyla® (ado-trastuzumab emtansine) in a clinical trial of 524 people who:

- Had HER2+ breast cancer that had spread to other parts of their body or could not be removed by surgery, and
- Had received a prior treatment for HER2+ metastatic breast cancer or had cancer come back during or within 6 months of treatment after surgery

In this trial, 261 people were treated with ENHERTU and 263 were treated with Kadcyla.

Find out more about ENHERTU by speaking to your healthcare provider, and by visiting ENHERTU.com/learnmore

*174 out of 261 people treated with ENHERTU lived without their cancer progressing or them dying at the time of follow-up compared to 105 out of 263 people treated with Kadcyla.

†Median progression-free survival (mPFS) was not reached with ENHERTU at the time it was assessed, and mPFS for people taking Kadcyla was about 7 months. Median progression-free survival is the length of time from the start of treatment that half of the people in the study had gone without disease progression. When more than half of the people had lived without disease progression, mPFS had not been reached.

What is ENHERTU?

ENHERTU is a prescription medicine used to treat adults who have:

- Human epidermal growth factor receptor 2 (HER2)-positive breast cancer that cannot be removed by surgery or that has spread to other parts of the body (metastatic), and who have received a prior anti-HER2 breast cancer treatment:
  - for metastatic disease, **or**
  - have breast cancer that has come back during or within 6 months of completing treatment for their early-stage breast cancer.

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® (fam-trastuzumab deruxtecan-nxki)?

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 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 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 will give medicines before your infusion to help prevent nausea and vomiting.
- 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 at the 5.4 mg/kg dose include:

- Nausea
- Low white blood cell counts
- Low red blood cell counts
- Feeling tired
- Low platelet counts
- Increased liver function tests
- Vomiting
- Hair loss
- Constipation
- Muscle or bone pain
- Decreased appetite
- Low levels of blood potassium
- Diarrhea
- 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 to treat adults who have:

- Human epidermal growth factor receptor 2 (HER2)-positive breast cancer that cannot be removed by surgery or that has spread to other parts of the body (metastatic), and who have received a prior anti-HER2 breast cancer treatment:
  - for metastatic disease, **or**
  - have breast cancer that has come back during or within 6 months of completing treatment for their early-stage breast cancer.

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 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 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 to treat adults who have:

- human epidermal growth factor receptor 2 (HER2)-positive breast cancer that cannot be removed by surgery or that has spread to other parts of the body (metastatic), and who have received a prior anti-HER2 breast cancer treatment:
  - for metastatic disease, **or**
  - have breast cancer that has come back during or within 6 months of completing treatment for their early-stage breast cancer.
- HER2-low breast cancer that cannot be removed by surgery or that has spread to other parts of your body (metastatic), and who have received a prior chemotherapy
  - for metastatic disease, **or**
  - your disease has returned during or within 6 months of completing adjuvant chemotherapy (after surgery). Your healthcare provider will perform a test to make sure ENHERTU is right for you.
- non-small cell lung cancer (NSCLC) that has a certain mutation in the HER2 gene and cannot be removed by surgery or has spread to other parts of your body (metastatic), and who have received a prior treatment. Your healthcare provider will perform a test to make sure ENHERTU is right for you.
- stomach cancer called gastric or gastroesophageal junction (GEJ) adenocarcinoma that is HER2-positive and 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?

- 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 will give you medicines before your infusion to help prevent nausea and vomiting.
- 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 metastatic breast cancer and HER2-mutant non-small cell lung cancer include:

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

The most common side effects of ENHERTU, when used in people with HER2-positive gastric or GEJ adenocarcinoma, 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
 USMG-ENH-C9-0822-r005
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: 08/2022

cure® 20TH anniversary Contents

BREAST CANCER SPECIAL ISSUE · 10.22

» **JEANNE SMITH** was diagnosed with a secondary cancer years after undergoing treatment for her primary breast cancer.

20

» After her Ki-67 score was calculated, **KATE LASETER**'s care team quickly knew where her treatment plan should start.

28

COVER IMAGE: SHOLIK_DRAW / STOCK.ADOBE.COM ADAPTED BY GWEN SALAS / LASETER BY JESSICA MONTOYA; SMITH BY REBECCA SIMONOV

12

FEATURES

ALSO IN THIS ISSUE

YEMMA HERB

cure®

EDITORIAL & PRODUCTION

Editor-in-Chief Debu Tripathy, M.D.
Vice President, Content Kristie L. Kahl
Associate Editorial Director Ryan McDonald
Managing Editor Darlene Dobkowski; editor@curetoday.com
Senior Editors Brielle Benyon; Sailaja Darisipudi
Associate Editor Colleen Moretti
Assistant Editor Miranda Lankas
Vice President, Copy Jennifer Potash
Copy Chief Paul Silverman
Copy Supervisor Nicole Canfora Lupo
Senior Copy Editors Cheney Baltz, Marie-Louise Best, Kelly King
Copy Editors Georgina Carson, Kirsty Mackay, Justin Mancini, Ron Panarotti, Mercedes Pérez, Yasmeen Qahwash
Creative Director, Publishing Melissa Feinen
Senior Art Director Gwendolyn Salas
Creative Services Manager & Photo Editor Emily Hakkinen

SALES & MARKETING

Vice President, CURE Media Group Erik Lohrmann / elohrmann@mjhassoc.com
Vice President & Executive Producer, MJH Productions David Lepping / dlepping@mjhassoc.com
Executive Vice President, Oncology Professional Relations Donna Short, M.A.
Associate Director Brittany Hansen
Senior Manager, Strategic Alliance Partnerships Brooke Weinstein
Director, Marketing Melissa Hindle
Group Coordinator Samantha Melassanos
Sales and Marketing Coordinator Nicole Wagner

OPERATIONS & FINANCE

Circulation Director Jon Severn; subscribe@curetoday.com, circulation@mjhassoc.com
Vice President, Finance Leah Babitz, CPA
Controller Katherine Wyckoff

CORPORATE

President & CEO Mike Hennessy Jr.
Chief Financial Officer Neil Glasser, CPA/CFE
Chief Operating Officer Michael Ball
Chief Marketing Officer Brett Melillo
Executive Vice President, Global Medical Affairs & Corporate Development Joe Petroziello
Senior Vice President, Content Silas Inman
Senior Vice President, Mergers & Acquisitions, Strategic Innovation Phil Talamo
Senior Vice President, Human Resources & Administration Shari Lundenberg
Executive Creative Director, Creative Services Jeff Brown

Mike Hennessy Sr.
FOUNDER | 1960-2021

AN MJH life sciences® BRAND

MJH Life Sciences, LLC.
2 Clarke Drive, Suite 100
Cranbury, N.J. 08512
609-716-7777

All the stories you read in *CURE*® are reported and edited without the influence of advertisers or sponsors.

Subscriptions: *CURE*® is FREE to cancer patients, survivors or caregivers who live in the U.S. FREE bulk subscriptions are available for physicians, cancer centers and other organizations. Subscriptions may be obtained at www.curetoday.com/subscription, or by calling 800-210-2873 or requested via email to subscribe@curetoday.com.

CURE® (ISSN 1534-7664, USPS 022-616) is published quarterly for cancer patients, survivors and caregivers by CURE Media Group, LLC, Inc., 2 Clarke Drive, Suite 100, Cranbury, NJ 08512. Periodicals postage paid at Princeton, NJ and additional mailing offices. POSTMASTER: Send address changes to *CURE*®, P.O. Box 606, Cranbury, NJ 08512.

publisher's note

The Importance of Self-Advocacy

ADVOCATING FOR ONESELF IS a critical component throughout the cancer journey. Treating cancer while keeping the patient in mind is a fine balance that all cancer teams must strive for. But what if the tables are turned — and it's the researchers who need to advocate for something they feel strongly about? For example, what if a specific measurement has the capacity to predict the response to cancer treatment for a patient, but the time-consuming process of deciphering its results has created "tension between accuracy and efficiency for reading this test"?

In this special issue of *CURE*®, we see a prime example of this in an article on scoring Ki-67, a protein that's expressed when tumor cells divide. Researchers have found that measuring a patient's Ki-67 score — with a higher score indicating aggressive tumor growth — can help cancer teams decide which treatment may be best for a patient with breast cancer. Renewed focus on Ki-67 scoring stems from a recent Food and Drug Administration approval of a drug that showed benefit in patients with higher Ki-67 scores.

In the article, we speak with a patient who said her Ki-67 score changed the trajectory of her care plan and created a sense of urgency around treatment. She said that if this test hadn't been performed, the tumor could have continued to grow and potentially spread. This situation also taught her the importance of self-advocacy because she demanded the biopsy that determined her Ki-67 score.

Another article in this issue examines how patients can navigate a secondary cancer diagnosis months or years after completing treatment for primary breast cancer. We learn how radiation, a treatment with many benefits, may be the cause of some secondary cancers. Although the risk of a secondary cancer is low, it's important for patients to be diligent no matter where they are in their cancer journey.

Also in this issue, a clinical psychologist pens her advice for patients who experience chest numbness after undergoing a mastectomy. She highlights advancements that potentially alleviate numbness and the value in patients discussing this common side effect with loved ones and their cancer team.

"There are physical and emotional ways to move forward after a mastectomy, but they are only possible by bringing the sadness, embarrassment and pain of sensation loss into the light," she wrote.

Additional topics include recent study results on metastatic breast cancer and the fear of recurrence.

As always, we hope you find our stories inspirational and informative. Thank you for reading.

MIKE HENNESSY JR.
President & CEO
MJH LIFE SCIENCES®

A New Definition With New Opportunities

IT HAS BEEN ALMOST 25 years since the approval of Herceptin (trastuzumab), a groundbreaking therapy that targeted the human epidermal growth factor receptor 2 (HER2) oncogene and ushered in a new phase of targeted therapy that has saved thousands of lives. Ongoing research in the biology of the HER2 signaling pathway led to many newer lines of investigation that continue to generate novel successful treatments, further improving the life expectancy of patients with HER2-positive breast cancer.

As detailed in this issue of *CURE*®, a big leap forward has been taken just this summer with the reporting of the DESTINY-Breast04 trial. This trial was a first because it addressed a group of patients with tumors that were technically HER2 negative — in that they expressed low levels of HER2 that fall below the threshold for which any response or benefit from Herceptin would be expected. The story began when the antibody-drug conjugate, Enhertu (fam-trastuzumab deruxtecan-nxki), which had recently been approved by the Food and Drug Administration as a later line of therapy for advanced HER2-positive breast cancer, had been shown in a pilot study to break the barrier in activity with patients who had HER2-negative tumors that showed a small amount of HER2 in the cell membrane using standard HER2 antibody staining techniques.

We are still trying to understand this newly coined class of "HER2 low" tumors. It is not clear that these are biologically different from HER2-negative tumors. However, because Enhertu is an antibody-drug conjugate designed to bind to HER2-expressing cells regardless of their biology, HER2-low cells could be vulnerable due to the way antibody-drug conjugates work. The HER2 antibody part of the antibody-drug conjugate binds to the HER2 receptor on the cell surface, and together with the linked toxic drug, is drawn into the cell. Like a Trojan horse, the "soldiers" — a drug called deruxtecan that inhibits cell growth by interfering with DNA division — are released into the cell. The design of this antibody-drug conjugate is different than that of earlier versions like Kadcyla (T-DM1, or ado-trastuzumab emtansine), which only kills HER2-positive but not HER2-low cells.

The DESTINY-Breast04 trial compared Enhertu to standard chemotherapy for patients with HER2-low breast cancer and showed such a notable improvement in the time to tumor progression and overall survival that it drew a standing ovation when presented at the American Society of Clinical Oncology meeting in June 2022. Given the fact that more than half of all breast cancers are HER2 low, this significantly expands options when hormonal or chemotherapeutic drugs are no longer effective. Moreover, it lays the foundation for a whole new generation of antibody-drug conjugates made of antibodies that can be customized to bind to proteins expressed by certain tumors and linked to drugs that have not been used as prior therapy, maximizing chances for success.

DEBU TRIPATHY, M.D.
EDITOR-IN-CHIEF
Professor of Medicine
Chair, Department of Breast Medical Oncology
The University of Texas MD Anderson Cancer Center

CURE® EDUCATED PATIENT® METASTATIC BREAST CANCER SUMMIT

Saturday, November 12, 2022 | 11 AM ET | 8 AM PT

CURE®'s Educated Patient® Metastatic Breast Cancer Summit is a half-day virtual event designed to provide patients, survivors and caregivers with the latest research and information on standards of cancer care, emerging therapies, and general wellness.

Discussion Topics

- First, second, third line therapy options for HR+ breast cancer
- Management of HER2+ and Triple Negative breast cancers
- Therapeutic resistance
- Addressing disparities within breast cancer

Learn more!

Scan the QR code or visit curetoday.com/events

Summit Chairs

Aditya Bardia, MD, MPH

Director, Breast Cancer Research
Massachusetts General Hospital

Leif Ellisen, MD, PhD

Program Director and Professor of Medicine
Massachusetts General Hospital

Interested in watching previous summits?

Curetoday.com offers on-demand sessions and summaries of previous educational events.

Support provided by: Daiichi-Sankyo

In partnership with: The donna Foundation, SHARE, Surviving Breast Cancer . Org, Susan G. Komen, TRIAGE CANCER

Scan to learn more.

cure® *cares*

A cancer diagnosis can transform a person's life in an instant, forcing you to become an educated patient overnight in order to be involved in the decision-making process of your care.

We are proud to share a new online resource, Cancer Horizons, which provides patients and caregivers with a thorough overview of:

- the cancer type
- potential diagnosis
- available treatments
- guidance on living with cancer

Learn more and share with others:
curetoday.com/cancer-horizons

cure® 20TH anniversary

AN MJH life sciences® BRAND

Trodelvy May Fulfill Unmet Need

Compared with physician's choice of treatment, this drug improved survival and quality of life for pretreated patients with HR-positive/HER2-negative metastatic disease.

By COLLEEN MORETTI

TRODELVY (sacituzumab govitecan-hziy) significantly improved overall survival in pretreated patients with hormone receptor (HR)-positive/human epidermal growth factor receptor 2 (HER2)-negative metastatic breast cancer who were endocrine therapy-resistant, a population with limited treatment options, according to recent study results.

The median overall survival was 14.4 months with Trodelvy compared with 11.2 months with physician's choice of treatment, demonstrating a statistically significant and clinically meaningful improvement, according to a presenter at the 2022 European Society for Medical Oncology Congress.

"This statically significant and clinically meaningful benefit of (Trodelvy) over (physician's choice of treatment) from the TROPiCS-02 (clinical trial) supports the use of (Trodelvy) as a novel therapy for patients with pretreated HR-positive/HER2-negative metastatic breast cancer," said Dr. Hope S. Rugo, during the presentation. Rugo is a professor of medicine and director of breast oncology and clinical trials education at the University of California, San Francisco Helen Diller Family Comprehensive Cancer Center.

Rugo explained that current international guidelines recommend sequential endocrine therapy combined with targeted agents for these patients; however, optimal sequencing of treatment following endocrine therapy remains unclear. For patients who are resistant to endocrine therapy, single-agent chemotherapy is the standard of care but is associated with declining efficacy and increased toxicity.

"With this in mind, there remains a high unmet clinical need for novel, effective therapy options for patients with pretreated HR-positive/HER2-negative metastatic breast cancer in the late-line setting," Rugo said.

Patients in this study had HR-positive/HER2-negative metastatic breast cancer and were previously treated with a taxane, endocrine therapy, CDK4/6 inhibitor and two to four lines of chemotherapy. A total of 543 patients were enrolled in this study and received either Trodelvy (272 patients) or physician's choice of chemotherapy treatment (271 patients) until disease progression or unacceptable toxicity.

"(Trodelvy) is a first-in-class antibody-drug conjugate directed to Trop-2, a transmembrane calcium signal transducer that has been linked to tumor progression and poor prognosis," Rugo said. "Trop-2 is highly expressed in approximately 80% of breast cancers."

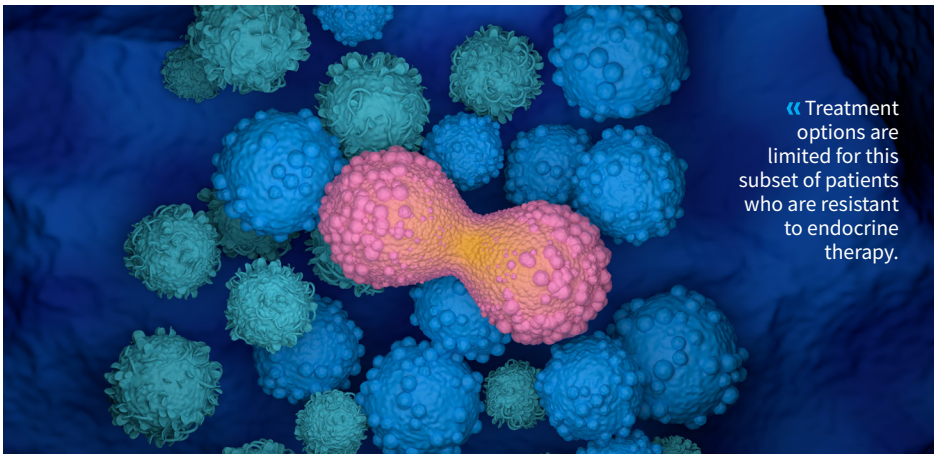
Additional results demonstrated a significant improvement in objective response rate (the rate of a measurable response to the treatment) in the Trodelvy group (21%) compared with the physician's-choice-of-treatment group (14%).

Median duration of response (the time the disease responds to a treatment without growth or spread) was prolonged at 8.1 months with Trodelvy compared with physician's choice of treatment at 5.6 months.

Improvements in quality of life and fatigue were also observed in the Trodelvy group.

Side effects that occurred with Trodelvy were consistent with previous reports and were manageable. Six percent of patients in the Trodelvy group and 4% in physician's-choice-of-treatment group discontinued treatment due to side effects.

It was previously reported that the study met its main goal of progression-free survival (time during and after treatment when the patient lives without disease progression) with Trodelvy by reaching 5.5 months compared with four months with physicians' choice of treatment.



« Treatment options are limited for this subset of patients who are resistant to endocrine therapy.

LASZLO / STOCK.ADOBE.COM

Coping With Sensation Loss After Mastectomy

Chest numbness can be truly daunting, but patients don't have to suffer in silence — and it may not be something they have to live with.

By CARLA MARIE MANLY, PH.D.

JUST AS A loss of hearing or sight can fundamentally shape a patient's identity, so too can a loss of sensation, especially in an area of the body as essential to one's identity as the breasts. For many women, the breasts and chest are not only part of their sexuality, but also part of their identity. That's why a lack of sensation can feel like walking through the world with a piece of you missing.

Chest numbness is a common side effect of mastectomy. This may be acknowledged as a possible side effect in the preoperative paperwork, but a patient may not be prepared for the actual effects it will have on their quality of life as a cancer survivor or previvor. The chest area accounts for nearly 10% of a body's surface, and it's the heart space that a person presents to the world.

It can be difficult to grasp the full effect of a lack of sensation, especially in the whirlwind of being diagnosed with breast cancer or the BRCA1 or BRCA2 gene. A hug no longer has that enveloping power. A woman may not be able to feel her child's head against her chest as she rocks them to sleep. How she interacts with her romantic partner may shift. She may move through the world silently feeling "different" from other women.

The good news is that patients don't have to cope with this side effect on their own — and it may not be something they have to live with. Thanks to recent advances in treatment, there is hope to restore sensation during breast reconstruction or some revision surgeries.

SPEAK UP, INVESTIGATE OPTIONS

A patient who underwent a mastectomy may be hesitant to talk about chest numbness. Perhaps she feels an overwhelming sense of "I should just be grateful to be alive" and worries that others will think it's trivial. In truth, a person can feel deeply grateful to be alive and also desire to live without a loss of chest sensation. It's natural to want to have sensation in all parts of one's body — especially the intimate area of one's chest.

In my practice as a clinical psychologist, my first course of action when a client mentions chest numbness is to suggest they talk with their physician to determine if any medical interventions are available. It's wise, however, to be proactive whenever possible, meaning that a woman doesn't have to wait until after mastectomy to address the potential for numbness with her oncology care team.

Surgical intervention could potentially restore sensation. During a mastectomy, nerves are severed when cancerous breast tissue is removed. If the nerves aren't surgically repaired, the connection is lost between the skin on one's chest and their brain — hence, a lack of sensation.

Even women who had a mastectomy years ago may have options. With breast neurotization (breast nerve repair), a specially trained plastic reconstructive surgeon may be able to reconnect nerves cut during the mastectomy using a nerve graft at the time of breast reconstruction or during some revision procedures. Nerves regenerate over time, which can

> Self-care is also vital as a woman heals and moves toward embodying herself fully.
>
> —CARLA MARIE MANLY, PH.D.

lead to regaining sensation in the chest and breasts. Many plastic surgeons who perform breast neurotization report that women typically start to regain sensation several months after surgery and that the feelings can continue to develop for up to two years.

STRATEGIES FOR COPING

Patients who lose sensation in their chest area following a mastectomy don't have to settle for going through life as though a piece of them is missing. A skilled mental health professional can help them prepare for sensation loss prior to surgery and develop the tools to cope as they go forward in their cancer journey.

Although everyone has experienced temporary numbness before — whether it's a foot that's fallen asleep from sitting too long or numbness following a dental procedure — it can be hard to imagine what that numbness would be like over a large part of the body. I can't fully prepare my clients for what it may feel like to lose sensation in their chest area, but I can guide them through visualizations and demonstrations.

For instance, I may have a client hug their partner with a piece of cardboard between them to prepare for what having a sensation barrier might feel like. I may also support the client in learning how to talk about the numbness in an age-appropriate way with a child or other loved one.

Self-care is also vital as a woman heals and moves toward embodying herself fully. With a lack of sensation, the breasts may feel like a "hands off" area, but my advice is to show that area self-care in ways that bring joy, such as doing self-massages and using essential oils. One's chest may not have sensation yet, but it can still be a loved part of their being.

The most powerful thing that can be done is to talk about it with loved ones, the cancer care team and other survivors. There are physical and emotional ways to move forward after a mastectomy, but they are only possible by bringing the sadness, embarrassment and pain of sensation loss into the light.

Carla Marie Manly, Ph.D., is a clinical psychologist based in Sonoma County, California. Her clinical work focuses on supporting overall well-being and building interpersonal relationships through increased self-awareness.

SMOLNIK_DRAW / STOCK.ADOBE.COM ADAPTED BY GWEN SALAS

Creating A NEW WAY TO DEFINE BREAST CANCER

THE DESIGNATION OF HER2-LOW STATUS IS RAPIDLY RESHAPING HOW RESEARCHERS AND CARE PROVIDERS THINK ABOUT BREAST CANCER.

By ANDY POLHAMUS

In February 2014, Tiffany O'Donnell, then 33, felt an odd pain in her right breast. The discovery was enough to send her to a doctor, who referred her for a mammogram. The mammogram led to a biopsy, at which point she received life-changing news.

"I had the biopsy done on a Friday," says O'Donnell. "That Monday, I got a phone call to come into the office because it was breast cancer."

Although the mass in her right breast was benign, she had stage 2B cancer in her left breast.

"I went into a little bit of shock," O'Donnell remembers. "I think it took a while for it to really sink in."

O'Donnell recalls those early days after her diagnosis as "a whirlwind." »

TIFFANY O'DONNELL learned that her breast cancer was considered HER2 low once it metastasized.

She remembers meeting doctors and scheduling an operation, but in general, she says, the period was a blur. Along with her husband, O'Donnell brought her father with her to medical appointments. He helped keep track of what her care team told her about her illness and treatment and was able to ask questions that O'Donnell, overwhelmed by an avalanche of information, might not have thought to mention on her own.

After she underwent a double mastectomy with reconstructive surgery and chemotherapy, it looked as though O'Donnell's condition was stable. But in 2019, after speaking to doctors about back pain that wouldn't go away, she learned that the cancer had metastasized to her bones. In the years that followed, she also developed metastases on her liver and brain. The HER2 status (or receptor status) of the cancer was different now as well. The initial disease had been classified as human epidermal growth factor receptor 2 (HER2) negative, meaning the cancer did not express abnormal levels of HER2, a protein involved in cell growth that is sometimes found to be overexpressed in breast cancer. This time, however, the disease fell into a category called HER2 low.

The designation of HER2-low status is rapidly reshaping how researchers and care providers think about breast cancer. As many as four out of five instances are considered HER2 negative, according to the National Cancer Institute, meaning the cells in the tumor do not express overly high levels of the HER2 protein. But in truth, many cancers that have been called HER2 negative might be more accurately characterized as HER2 low, meaning they produce only small amounts of this protein. Although having marginal levels of HER2 expression is common in breast cancers (the National Cancer Institute estimates

YENMA HERB

YENMA HERB

that anywhere from 50% to 60% of breast cancers can be considered HER2 low), it wasn't until very recently that doctors were able to exploit this trait to treat the disease.

BREAST CANCER SUBTYPES

Understanding why HER2-low status represents a breakthrough requires a quick lesson in breast cancer subtypes. Historically, doctors have used three major markers to distinguish between breast cancers: two to describe those expressing receptors for the hormones estrogen and progesterone and another to describe those expressing unusually high levels of the protein HER2.

"If the tumor expresses hormone receptors, we call that breast cancer 'hormone-receptor positive' breast cancer. If HER2 is overexpressed on the tumor, we call the cancer 'HER2-positive breast cancer.' If none of these three (estrogen receptors, progesterone receptors or HER2) are expressed, then we call those breast cancers 'triple-negative breast cancer,'" explains Dr. Heather Han, director of research in the department of breast oncology at Moffitt Cancer Center in Tampa, Florida.

"We have these groups because we target these markers to tailor specific treatments for patients," Han continues. "So far, we were able to identify effective treatments targeting hormone receptors and HER2-targeted therapy for HER2-positive breast cancer. Once HER2 was identified as a marker many decades ago, we knew some tumors had some expression of HER2, but not at high enough levels for us to call it overexpressed. HER2-targeted therapy worked the best for only HER2 overexpressed tumors."

The first and still commonly used anti-HER2 antibody, Herceptin (trastuzumab), only is effective for truly HER2-positive but not HER2-low tumors. This was proven in a large clinical trial.

The problem with these HER2-low cancers was that even though oncologists knew about them, there was no way to use the biomarker to inform treatment for this subset of patients with cancer. This was the case for Janie Branscomb, a patient of Han's from Myakka City, Florida. Unlike O'Donnell, Branscomb had metastatic disease when she was first diagnosed.

And her first doctor wasn't much help.

"The doctor came in and she said, 'There's nothing we can do. You're stage 4,'" Branscomb says.

The doctor estimated that she had three to five years to live.

"That's when I was like, I'm not good with that. We've got to figure something else out,'" Branscomb says.

When she found out she had HER2-low cancer, there wasn't much anyone could do with the information. Her breast biopsy was HER2 negative, but her metastases were HER2 low.

"I was diagnosed in 2017, so they really weren't saying too much about HER2 low," Branscomb recalls. "It was either negative or positive. There wasn't really much of the in between." »

JANIE BRANSCOMB received a diagnosis of HER2-low breast cancer at a time when not much was known about the category.

A NEW STANDARD OF CARE?

Historically, clinicians had to use chemotherapy on HER2-low breast cancer, which produced only limited success. But in the past few months, a new drug has offered a possible solution.

In August 2022, the Food and Drug Administration (FDA) approved Enhertu (fam-trastuzumab deruxtecan-nxki) for treating patients with metastatic HER2-low breast cancer. Laboratory studies suggested that HER2-low tumor growth could also be blocked with Enhertu, and it was subsequently confirmed in a small study of patients with HER2-low tumors. This led to a larger trial that led to the new approval and dramatically expanded the number of patients eligible to be treated with the medication.

The FDA based its approval on the DESTINY-Breast04 study, a randomized clinical trial that included more than 500 adults with HER2-low breast cancer that had either metastasized to other parts of their bodies or couldn't be removed with surgery. Researchers randomly assigned the patients to two groups: one that was treated with a doctor's choice of existing chemotherapies and another group, twice as large as the first, that was treated with Enhertu.

The results were dramatic enough that an article about the trial published by the American Society of Clinical Oncology called Enhertu "a new standard of care" for people with metastatic HER2-low breast cancer. Not only that, but the study's principal investigator, Dr. Shanu Modi of Memorial Sloan Kettering Cancer Center in New York, received a standing ovation after she gave a presentation of her team's findings — an uncommon occurrence at these meetings.

Risk of dying or disease progression was cut in half for patients in the study assigned to intravenous infusions of Enhertu. Overall, patients assigned to Enhertu were 36% less likely to die than those assigned to conventional

JESSIE GREENBERG

JESSIE GREENBERG

chemotherapy. Patients assigned to Enhertu lived for a median of 9.9 months before cancer progression compared with 5.1 months for the chemotherapy group, the researchers reported. In terms of overall survival, patients given Enhertu lived for a median of 23.4 months compared with 16.8 months for those given conventional chemotherapy. Traditionally, most cancer treatments start out as an option only for patients with advanced disease. Once researchers can see the therapy in action, further studies will explore expanding the number of patients who can be treated with Enhertu.

"The ultimate goal is for the medicine to be studied in patients with high-risk early-stage (disease), so potentially we can cure more patients," says Han.

HOW ENHERTU WORKS

Enhertu is an antibody-drug conjugate, which means it belongs to a group of therapies that use the proteins expressed by cancer cells to deliver cancer-killing drugs right to the source. In the case of Enhertu, the medicine uses HER2 proteins as an actual target to attach to and enter cancer cells and kill them.

"It's a chemotherapy drug that is attached to a HER2-targeted agent," says Dr. Jane Lowe Meisel, an associate professor of hematology and medical oncology at Emory University School of Medicine in Atlanta. "It gets driven to the HER2-overexpressing cells by the targeting agent, and then the chemotherapy gets deployed into that cancer cell and can kill it off more selectively (than standard chemotherapy)."

An antibody is a protein made by the immune system that attacks foreign bodies, like viruses or bacteria.

HER2 proteins may not be necessarily driving the growth of these breast cancers, but they are a door through which medicine can infiltrate and destroy tumor cells. Dr. V.K. Gadi, a researcher and medical oncologist in the department of hematology and oncology at the University of Illinois Cancer Center in Chicago, describes the antibody-drug conjugate as a sort of guided missile.

"Unlike normal antibodies that your body generates because it's seeing a virus or bacteria, trastuzumab was engineered in a laboratory," Gadi explains, noting that this is a simplified explanation. "And instead of caring about bacteria or a virus, it was engineered to attack HER2. And once it found HER2, it invited an immune response to that area."

But trastuzumab had only limited success when there were smaller amounts of the HER2 protein on the surface of the cell, Gadi adds. The same was true of many conventional chemotherapies: The substances designed to enter and destroy cancer cells didn't work particularly well in the presence of low HER2 levels.

"(The researchers who created Enhertu) took that molecule trastuzumab, and now they've glued on a »

super-toxic chemotherapy to it," says Gadi. "By putting the chemotherapy on that antibody, which works like a little guided missile, now that chemotherapy's being delivered straight to the cancer cell."

The chemotherapy, deruxtecan, is especially effective because it is chemically different from many chemotherapies used in breast cancer, says Gadi. Patients with advanced disease have already been heavily treated with conventional chemotherapy, so the disease is often resistant to many types of chemotherapy. Deruxtecan, on the other hand, is not as closely related to these therapies, which means the tumor is less likely to resist treatment.

Furthermore, experts say, Enhertu has what's known as a "bystander effect," in which the drug kills cancer cells neighboring those that were initially targeted.

"Not only did the missile kill the target, it killed the neighborhood around it as well," Gadi says. "If you have enough of those things happening, you can impact the whole tumor."

The result is a medicine that works for patients with both high and low levels of HER2 expression.

"We used to define patients as either HER2 positive or negative," Meisel says. "The HER2-low category was really created by the investigators who came up with the idea for this study. This trial really brought that term to life."

> It's a step closer to (this cancer) being a chronic disease instead of a terminal disease. And another step closer to hopefully finding a cure. ... It's an exciting step forward.
>
> —TIFFANY O'DONNELL

NEW CLASSIFICATION EXPANDS PATIENT OPTIONS

The study and subsequent FDA approval has prompted care providers, including Meisel, to review the disease characteristics of some of their patients.

"As I've had patients in my own clinic who've progressed, before making a choice about what to offer them next, I've actually gone back and said, 'Were they really HER2 negative? Or were they HER2 low?,'" Meisel says. "And then I'd classify them in our clinic notes and be able to explain to them this new way that we are defining their cancer, and the options this might open up for them going forward."

In some cases, the new classification has resulted in Meisel recommending Enhertu to her patients.

"That's been an exciting thing to be able to offer," she says.

The sheer number of patients who stand to benefit is also noteworthy.

"It could impact as many as half the patients living with stage 4 breast cancer," says Meisel, adding that some studies are already examining the possibility of using Enhertu in earlier stages of breast cancer and that it could become common in treating high-risk, early-stage disease in the next several years. She describes the rise of antibody-drug conjugates in breast cancer as "a new paradigm."

O'Donnell began Enhertu after doctors found new lesions on her liver in July 2022. In O'Donnell's case, it wasn't the changing terminology that led to her newfound HER2-low status, but rather an actual change in the biomarkers of the tumors: Cancers can change their HER2 status during the course of treatment.

She'd discussed the possibility of trying Enhertu with her oncologist already, and because of her job as an administrator at the Penn State Health Breast Center in Hershey, Pennsylvania, O'Donnell was more informed about new breakthroughs in the field than other people might have been. She has already been through several lines of therapy, including multiple chemotherapies, and with two Enhertu treatments under her belt so far, she says the side effects are much less severe than with some conventional chemotherapy drugs she's taken. But it's too soon to tell whether the drug has begun to work for her.

Both O'Donnell and Branscomb have each had more than half a dozen different treatments. Branscomb, who estimates that Enhertu is her seventh line of therapy, first began Enhertu late last winter. Since then, the tumors on her brain have shrunk out of existence, and her tumor markers have improved by almost half. Other tumors, though they have not gotten any smaller, have not gotten worse, either.

Patients should be aware, however, that Enhertu does come with side effects, some of which are serious. The most common side effects reported in the DESTINY-Breast04 trial were loss of appetite, nausea,

constipation, vomiting, hair loss, diarrhea and musculoskeletal pain. The drug also comes with a boxed warning from the FDA. This warning alerts patients to the possibility of interstitial lung disease, an illness connected to inflammation and the formation of scar tissue on the lungs, which occurred in some patients assigned to Enhertu in the DESTINY-Breast04 study (none of the patients assigned to conventional chemotherapy developed this disease). It can rarely be fatal in about 1% of patients. Furthermore, the FDA says patients who are pregnant should not take Enhertu.

O'Donnell has noticed, just as she did when she was on conventional chemotherapy, that she is losing hair again and is experiencing the same fatigue she experienced with other treatments.

"At first I was unsure because I didn't want to go through chemotherapy again," she says. "I think that's what upset me most: the possibility of losing my hair again. But at the same time, it's a step closer to (this cancer) being a chronic disease instead of a terminal disease. And another step closer to hopefully finding a cure. We're getting there, little by little. It's an exciting step forward."

Branscomb, on the other hand, says her hair has begun to grow back since starting Enhertu, although she, like O'Donnell, also has fatigue. But it's still a far cry from the alopecia, nausea, diarrhea and abdominal pain she experienced with standard chemotherapy.

GETTING ON WITH LIFE

O'Donnell has become involved in patient advocacy and made friends through survivor networks. At the time of her interview, she was preparing for a fundraising bike ride with friends from the survivor community. Those bonds have at times been bittersweet because she's lost some of these friends to cancer.

"You can't think about the future," O'Donnell says of living with metastatic cancer. "You have to take it one day at a time. Live in the moment with your family and friends and try not to think about the worst-case scenario."

Like O'Donnell, Branscomb is getting on with life. She runs her family's small cattle ranch and continues to follow her favorite baseball team, the New York Yankees.

"I think it's incredible," Branscomb says of Enhertu. To those going through a similar ordeal, she says, "Don't let cancer dictate your life. Keep going. Make memories."

DJVSTOCK / STOCK.ADOBE.COM

THE ONE-TWO PUNCH

ALTHOUGH RARE, HOW CAN PATIENTS NAVIGATE A SECONDARY CANCER DIAGNOSIS MONTHS OR YEARS AFTER COMPLETING TREATMENT FOR PRIMARY BREAST CANCER?

By SONYA COLLINS

Jeanne Smith of Ferndale, Michigan, was diagnosed with invasive ductal carcinoma, the most common form of breast cancer, in May 2014 at the age of 44. The cancer was caught very early, and after a lumpectomy and six weeks of radiation, "I was on my way," she says.

For the next three years, Smith had follow-up appointments every six months to ensure she remained cancer-free. By February 2017, she was cleared to drop down to yearly follow-ups. But in July 2017, while swimming in her sister's pool, Smith noticed a small purple bruise on her right breast, the same side where she had cancer. She figured she had bumped it when she jumped onto a pool float. A month later, however, at her annual gynecology appointment, the bruise was still there, so she pointed it out to her doctor. He said bruises were not uncommon on previously radiated breasts but that if it was still there in two weeks to call him. »

JEANNE SMITH became concerned when she saw a bruise on her right breast years after receiving treatment on that side.

"Two weeks later, the bruise seemed to be growing, which was odd. Bruises shouldn't grow. It was also odd that the bruise was painless," Smith says.

Her gynecologist referred her back to her breast specialist, but the breast specialist commented that she'd never seen anything like that and referred her back to her radiation oncologist. Smith wasn't able to see the oncologist right away, so the nurse took a picture of the bruise and sent it to the doctor.

"That night, my radiation oncologist called me and said, 'I need to get you in here. I think you have angiosarcoma.'"

THE BENEFITS AND RISKS OF RADIATION

Smith had secondary breast angiosarcoma, also called radiation-induced breast angiosarcoma. This type of cancer develops in people who have previously been treated for breast cancer. Most often, it happens in women who have had radiation to the breast. But it can also arise in women who've had long-term lymphedema (swelling) in the breast or arm.

Breast angiosarcoma starts in the blood or lymphatic vessels of the breast, and the first signs can appear on the skin of the breast or the arms. It can grow and sometimes spread quickly to other parts of the body.

Smith didn't know what angiosarcoma was, and it's no wonder. It's extremely rare. Far fewer than 1% — 0.05% to 0.3% — of breast cancer survivors who have breast-conserving surgery followed by radiation later develop secondary breast angiosarcoma, according to study findings published in the journal *Clinical Sarcoma Research* in 2017.

Smith didn't recall learning about the risk for secondary cancers before she started radiation, but even if she had, it wouldn't have changed her care.

"The benefits of radiation far outweigh the risk of ever getting angiosarcoma," she says.

Angelia Carpenter of New London, Missouri, developed angiosarcoma of the breast five years after completing treatment for breast cancer, which included a lumpectomy, chemotherapy and radiation. Only then did she go back and look at some of the patient information she received prior to starting radiation.

REBECCA SIMONOV

SMITH was diagnosed with secondary breast angiosarcoma, which may be associated with the radiation she previously received.

"At the bottom of the page, it says that less than 1% of patients that receive radiation may have some of these other problems," Carpenter recalls.

When doctors don't go into great detail about the extremely low risk of angiosarcoma after breast radiation, it's not necessarily an oversight. They may underemphasize this risk by design. Like any medical decision, the benefits must be weighed against the risks — and in most situations, the reduction in the risk of recurrence or death due to breast cancer by far outweighs the risk of developing or dying of angiosarcoma. However, this points out the need to provide these numbers as best estimates of the patient's specific situation.

"We can educate as long as we don't alarm people," says Dr. David Euhus, a breast surgeon and professor of surgery at Johns Hopkins Medicine in Baltimore. "Angiosarcoma is a terrible thing, but if anyone ever decided not to have radiation because they didn't want to get angiosarcoma, then we would have done them a huge disservice."

When women do learn about this risk, they typically hear about it from their radiation oncologist before undergoing treatment.

"At our institution — and I would imagine at other tertiary care centers — patients are informed of the risk of developing a secondary angiosarcoma post-radiation, typically showing up six to 10 years after they've had radiation, but we emphasize that the risk is less than 1%," explains Dr. Yara Abdou, a breast medical oncologist at UNC Lineberger Comprehensive Cancer Center in Chapel Hill, North Carolina.

POTENTIAL RISK FACTORS

Because secondary breast angiosarcoma is so rare, it's a challenge to study large groups of women who have had this cancer and identify any potential risk factors they may have in common. As a result, there is limited research in this area.

"The typical patient who will get this is someone who's had breast-conserving therapy, which includes lumpectomy followed by radiation, for their generally early-stage breast cancer. Many years after that's completed, a small subset of these people will develop secondary angiosarcoma," advises Dr. Michael Wagner, a medical oncologist who treats sarcomas at Fred Hutchinson Cancer Center in Seattle and assistant professor at the University of Washington School of Medicine.

Besides radiation exposure, chronic lymphedema after breast cancer treatment is also a risk factor. Outside these known risks, there isn't a consensus on other risk factors.

A study published in the *Annals of Surgical Oncology* in 2021 of nearly 600 women who had secondary breast angiosarcoma found that the following factors may also put patients at higher risk:

- White race.
- Older age.
- Having had an invasive tumor.
- Lymph node removal (a cause of lymphedema).
- Having had a lumpectomy.
- Having had a tumor in the left breast.

"Identifying the risk factors for this late complication is one of the main challenges," notes Dr. Suzanne George, a medical oncologist and director of clinical research at the Dana-Farber Cancer Institute Sarcoma Center and associate professor of medicine at Harvard Medical School in Boston. "What puts someone at risk, and is there anything we can do to modify »

ANGELIA CARPENTER's husband, **TOM,** was by her side throughout the extensive treatment she underwent during her breast cancer journey.

RACHEL B PHOTOGRAPHY

those risk factors early on? That's a super important question."

DIAGNOSING SECONDARY CANCERS

Although risk for this secondary cancer is extremely low, it's important to know the signs to catch it early, especially because angiosarcoma of the breast can spread quickly.

"As with many cancers, management when it's (diagnosed) early likely improves longer-term outcomes," George says.

The most common signs of secondary breast angiosarcoma are:

- Swelling in the breast or arm.
- A painful lump in the breast.
- A discoloration on the skin of the breast or arm that looks like a bruise or rash.

"Women can get bruises on their breasts," Euhus mentions. "That's far more common than angiosarcoma. But a bruise should start to fade in a couple of days. A bruise that's not fading needs a skin punch biopsy — a two-minute procedure in the office."

Women can also develop other types of radiation-related discolorations on their breasts that aren't cancerous.

"They can get little vascular lesions, but they're not growing, which can be confused with angiosarcoma," Wagner notes. "Or an angiosarcoma can be confused with just an abnormal growth of blood vessels. That's why it's very important that a pathologist trained and experienced in sarcoma review the biopsy sample."

A skin biopsy is the key tool in diagnosis of secondary breast angiosarcoma and is ideally done in the context of an evaluation by a dermatologist. Diagnosis might also involve a mammogram, breast MRI, PET scan or ultrasound.

> I've learned I also have to live my life. I'm just diligent about it. If anything comes up around my scar, we watch it.
>
> —*ANGELIA CARPENTER*

DETERMINING EFFECTIVE TREATMENTS

Another challenge of extremely rare cancers is identifying the most effective treatment. There's no standard, go-to treatment for secondary breast angiosarcoma, so doctor recommendations may vary by hospital.

"Since it's a very rare tumor, there's a limited number of published studies, so treatment guidelines are based on expert opinion rather than published data," Abdou mentions. "We usually extrapolate data or experience from other soft tissue sarcomas."

Surgery, however, is the key component of treatment. Surgical options include complete mastectomy of the radiated breast or removal of only the affected, discolored area, much like removal of a cancerous mole.

"We think of it as a malignancy of the skin," George advises. "It can extend deeper into the breast tissue itself, but we think of it as originating in the skin."

Research has begun to show that the more radical surgery option gets far better results. A 2017 study in *Annals of Surgery* looked at the percentage of women who had not died from breast angiosarcoma (that is, disease-specific survival) within five years of either radical or conservative surgery. The five-year disease-specific survival rate among women who'd had the most aggressive surgery was 86% compared with 46% of women who'd had the more conservative surgery.

Surgery is the mainstay of treatment for secondary breast angiosarcoma. Whether doctors recommend additional adjuvant chemotherapy or radiation treatments varies from one health care facility to the next. When they do recommend it, doctors tend to use a taxane-based chemotherapy regimen. But it may not be beneficial for everyone.

"The vast majority (of patients) are not terribly chemotherapy sensitive, but there is a small subset of patients who are exquisitely »

SCAN THE QR CODE to hear more about Angelia Carpenter's cancer journey.

cancer HORIZONS by cure

sensitive to Taxol (paclitaxel), the common chemotherapy drug we use in the breasts," Euhus notes.

In some cases, though it may seem counterintuitive, people get radiation for this type of cancer, too.

"It's the tissue damage and inflammation (from previous radiation) that's causing the breast angiosarcoma in the first place, but the radiation therapy post surgery is cleaning up whatever cancer cells may be left in the breast," Abdou says.

THE IMPORTANCE OF DILIGENCE

Smith had surgery to remove the radiated breast and chemotherapy to treat the breast angiosarcoma. She has been cancer-free since she completed treatment in 2018.

Carpenter had surgery in 2016, and nine months later, that familiar purple bruise reappeared near her mastectomy scar.

Recurrence rates for this type of cancer are high — around 50% according to some estimates. Carpenter, now 62, has learned to live with that risk.

"Some tell me my risk for another recurrence goes down as I get older, but others say it's not 'if' but 'when,'" she notes. "I've learned I also have to live my life. I'm just diligent about it. If anything comes up around my scar, we watch it."

After her recurrence, Carpenter had another surgery, which she describes as having left a hole in her chest, to remove as much tissue as possible from the radiated side of her chest and additional tissue from under her arm. After surgery, she underwent chemotherapy.

"When we get a localized recurrence, if it's possible to do another surgery, we would treat it in the same way with surgery and chemotherapy," Wagner advises. "If a repeat surgery isn't possible, we would use systemic medicines, such as chemotherapy or targeted drugs."

FURTHERING THE SPACE

Recurrences can be harder to get under control than first occurrences. Research is underway to identify other medications that may be more effective than the current options. The Alliance for Clinical Trials in Oncology has an ongoing trial examining the efficacy of immunotherapy in the treatment of angiosarcomas. Trial participants who have never been treated with taxane-based chemotherapy will receive Taxol with or without Opdivo (nivolumab). Those who have already had taxane will receive Opdivo and Cabometyx (cabozantinib).

Opdivo, already in use in numerous metastatic cancers, is what's known as a checkpoint inhibitor, the most common class of immunotherapy used in cancer. It blocks proteins on the surface of cancer cells that protect them from an immune system attack. Cabometyx, also used in the treatment of several other metastatic cancers, is what's known as a kinase inhibitor and targets certain gene mutations in cancer cells that help the cancer grow and spread.

"Novel approaches to immunotherapy, targeted therapy and combinations with standard chemotherapy are all areas of current research interest," George says. "This disease can be very challenging when it recurs, so we need to continue to work toward improving systemic therapies through ongoing international trials and collaboration across the community of patients and physicians. That's what's going to help us improve outcomes."

cure®
EDUCATED PATIENT®

BREAST CANCER SUMMIT

Save the date!

Saturday, March 4, 2023 • Miami Beach, Florida

CURE®'s Educated Patient® Breast Cancer Summit is a full-day event, hosted in conjunction with the 40th annual Miami Breast Cancer Conference® being held at the historic Fontainebleau Miami Beach on Saturday, March 4, 2023.

This summit will provide patients, survivors and caregivers with the latest research and information on standards of cancer care, emerging therapies, and general wellness.

Join CURE's eNewsletter list to stay up-to-date on all upcoming events!

RESURGENCE OF Ki-67 SCORING?

AN FDA APPROVAL PUT THIS PROTEIN THAT MAY PREDICT TUMOR GROWTH BACK IN THE SPOTLIGHT, BUT WHAT THAT MEANS LONG TERM TO PATIENTS DEPENDS ON WHOM YOU ASK.

By DON VAUGHAN

The speed at which cancer cells grow can be an important factor in determining cancer treatment. Among the best-known biomarkers for the rate of cancer growth is a protein known as Ki-67, which is expressed when tumor cells divide. A high Ki-67 index indicates aggressive tumor growth.

For example, Kate Laseter of Thornton, Colorado, was diagnosed with stage 2 invasive ductal carcinoma in September 2021 and informed that her Ki-67 score was 65%. Of note, the median Ki-67 score is 15%. As a histological technician with Theralink Technologies, Laseter immediately knew what that meant.

"It was very aggressive and growing rapidly and had invaded everything," she recalls. "I looked at my (results) ... and I had less than 10% normal tissue in my biopsy." »

KATE LASETER received a diagnosis of stage 2 invasive ductal carcinoma with a Ki-67 score of 65%.

JESSICA MONTOYA

Because Laseter was just 29 when she noticed a lump in her breast, she was told that it was probably just a fibrous mass and to wait and see. She refused and demanded a biopsy. Based on her high Ki-67 score, she was placed on treatment immediately and received a chemotherapy regimen that included carboplatin and docetaxel in combination with the targeted therapies Herceptin (trastuzumab) and Perjeta (pertuzumab). She also underwent a bilateral mastectomy. In March 2022, she was declared in remission and cancer-free.

"My Ki-67 score clearly changed how quickly my care team wanted to start treatment on me," Laseter observes. "If they hadn't performed that test, my tumor could have just kept growing and possibly metastasized. It's important for patients to educate and advocate for themselves."

USING KI-67 TO DETERMINE TUMOR GROWTH

Ki-67 is used to determine tumor growth in several types of cancer including breast cancer, says Dr. Ruth O'Regan, chair of the department of medicine at the University of Rochester in New York. "We use it to determine the type of breast cancer a patient has, which helps us make treatment decisions," O'Regan notes. "It's commonly used in cancers that express estrogen receptors, which makes up about two-thirds of the breast cancers that we treat."

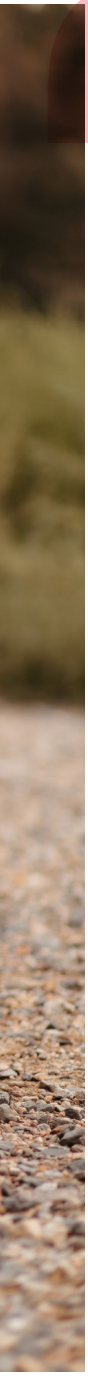
Ki-67 has been used to determine the rate of tumor growth for many years, but there have been issues around the consistency and reproducibility of clinical scoring of Ki-67 levels. However, using more automated technology to read scores and consensus meetings of the experts in the area have led to more widespread acceptance. The protein was given a boost in October 2021 when the Food and Drug Administration (FDA) approved Verzenio (abemaciclib), a CDK4/6 inhibitor, with endocrine therapy for adjuvant treatment (additional therapy given after primary treatment to lower the risk of the cancer returning) of adults with hormone receptor-positive, human epidermal growth factor receptor 2 (HER2)-negative, node-positive, early breast cancer at high risk of recurrence and a Ki-67 score of 20% or greater.

"This was a game changer because it was the first FDA approval of a CDK4/6 inhibitor in the curative setting, notably after this class of drugs had dramatically improved outcomes when added to hormone therapy for metastatic breast cancer," observes Dr. Heather McArthur, an associate professor in the Department of Internal Medicine at UT Southwestern Medical Center in Dallas. "It's hugely impactful to have the addition of a CDK4/6 inhibitor in our arsenal of drugs for early-stage breast cancer."

The efficacy of Verzenio with endocrine therapy was evaluated in monarchE, a multicenter clinical trial that included women and men with the above-described

JESSICA MONTOYA

form of early breast cancer with a high risk of recurrence. Patients received either two years of Verzenio plus their physician's choice of standard endocrine therapy or standard endocrine therapy alone. In patients with high risk of recurrence and a Ki-67 score of 20% or greater, the trial showed a statistically significant improvement in invasive-disease-free survival (the time after treaatment that a patient survives without signs of cancer) among the cohort receiving Verzenio.



> My Ki-67 score clearly changed how quickly my care team wanted to start treatment on me.
>
> —KATE LASETER

'TENSION BETWEEN ACCURACY AND EFFICIENCY'

Ki-67 levels are usually scored at the time of diagnosis. When a tumor is biopsied, a small sample is stained through a process known as immunohistochemistry, which reveals the cells expressing Ki-67. In some labs, pathologists examine the slide and estimate the number of cells rather than actually count them, notes Dr. David Rimm, a professor in the department of pathology at Yale University School of Medicine in New Haven, Connecticut. "Some would only count a few cells, and some would count more because the more cells you count, the more accurate you are, though it takes more time," he explains. "So there was a sort of tension between accuracy and efficiency for reading this test."

For breast cancer, a Ki-67 score of 5% or less is considered low, and greater than 30% is considered high. "Those are the cutoff points at which we can have great concordance among pathologists, and the International Ki67 in Breast Cancer Working Group also recommends those cut points," says Rimm.

The FDA's approved cutoff point for the use of Verzenio is 20%, which could result in different interpretations among pathologists. "The maker of (Verzenio) didn't take that into account when they designed their cut point," Rimm says. "There are laboratories that still use a cut point of 12%, 13% or 14%, which is what led to the problems of nonreproducibility in the first place. It's tough for pathologists to be really reproducible in that range, even counting every cell."

In response, the American Society of Clinical Oncology and the National Comprehensive Cancer Network issued their own recommendations for consideration of Verzenio in high-risk patients, says McArthur, although their recommendations were agnostic of Ki-67 and did not include a cutoff.

"Those decisions were made based on a variety of reasons, namely the fact that not every cancer center performs Ki-67 testing, that Ki-67 has been a notoriously unreliable biomarker with a lot of interobserver and interlab variability, and uncertainty as to the optimal cutoff for determining high-versus-low scores," McArthur notes. "It's a test that's been fraught with challenges over the years, and it was interesting that the FDA decided to include the 20% cutoff in their approval."

Concern over the accuracy of Ki-67 scoring may also result from the inherent heterogeneity of tumors, adds Rimm. "Even though we can measure the amount of Ki-67 relatively accurately, we're only sampling a tiny piece of the tumor," he explains. "When we make a diagnosis of cancer, we sample less than 1% of the tumor, so if proliferation is heterogeneous (varies by location), it might be inaccurate or only represent part of the tumor."

MOVING INTO THE DIGITAL AGE

As medicine moves into the era of digital pathology, automated approaches to scoring Ki-67 are becoming more commonly accepted, Rimm notes. "I led the work by the (International Ki67 in Breast Cancer Working Group), which showed that an automated assessment was as good or even better than the assessment by counting pathologists," he says. "However, we didn't want to require automated assessment because there are still sites that don't have the machinery to do it."

UT Southwestern is among the institutions that do not use automated assessment to score Ki-67 in breast tumors, although it does see it more consistently in outside reports, says McArthur. "We typically repeat all biomarkers in-house to ensure that our breast cancer-dedicated pathologists agree with outside interpretations, especially when they are automated," she adds. "We are pretty rigorous in confirming those results within our breast cancer-dedicated pathology service."

A tumor's Ki-67 score helps establish the rate of tumor growth, but its influence in developing treatment options often depends on the oncologist in charge, says Dr. Joseph Geradts, a clinical professor in the department of pathology and laboratory medicine at the East Carolina University Brody School of Medicine in Greenville, North Carolina. "The oncologists at (East Carolina University) usually make treatment decisions in the absence of a Ki-67 index, and that's true for many oncologists around the country," he explains. "This is because they already have a lot of information that allows them to make treatment decisions, such as the routine pathology report, which includes the tumor grade and mitotic index, both of which are correlated with the Ki-67 index, and other assays such as Oncotype DX. It's a relatively small group of patients for whom Ki-67 adds a lot to what is already known, though there are oncologists who rely on it more heavily." »

Through her own research, **MEGAN-CLAIRE CHASE** navigated conflicting opinions about her Ki-67 score and knew she made the right decision about her treatment.

In addition to helping determine the rate of tumor growth at diagnosis, Ki-67 expression can be a useful monitor of tumor response to preoperative endocrine therapy. "In many cases, preoperative endocrine or chemotherapy is very effective, but sometimes it is not," Geradts says. "That's where Ki-67 comes in because it has been shown that in those tumors where the Ki-67 index goes down after treatment, the patient benefits from that therapy. That's another area where Ki-67 has proved useful, but admittedly, it's a relatively small percentage of patients."

DETERMINING TREATMENT

Although Ki-67 may play a minimal role in deciding treatment for some patients, an extremely high Ki-67 score can be quite determining for others.

Megan-Claire Chase of Dunwoody, Georgia, had her treatment influenced by a high Ki-67 score. After months of unusual symptoms followed by the discovery of a hard lump in her left breast, Chase was diagnosed in September 2015 with stage 2 invasive lobular breast cancer. Her treatment regimen included 16 rounds of chemotherapy (Adriamycin PFS [doxorubicin hydrochloride], Cytoxan [cyclophosphamide] and Taxol [paclitaxel]), 33 rounds of radiation, and a lumpectomy, reduction and reconstruction.

"The biopsy of my tumor showed that I was ER (estrogen receptor) positive (95%), PR (progesterone receptor) positive (99%), HER2 negative, and my Ki-67 score was 60%," says Chase, who is the breast cancer program director at SHARE Cancer Support. "With that plus genetic counseling, my family history and the fact that I had an unknown variant, my oncologist felt it was important to give me the motherload of chemotherapy to kill everything."

As she entered the survivorship phase, Chase chose another oncologist, who shocked her by telling her that he wouldn't have recommended chemotherapy even with her high Ki-67 score. However, Chase did her own research and realized that her Ki-67 score and other factors made her an ideal candidate for the treatment she received. "The chemo was supposed to, first,

AMY ARRINGTON

MEGAN-CLAIRE CHASE blogs about her breast cancer journey and partners with organizations to help other patients with the disease.

contain my tumor from spreading, and then shrink it as much as possible, and that's what it has done," she states.

Unlike Laseter, Chase was unfamiliar with Ki-67 at the time of her diagnosis. Intent on understanding as much as possible about her cancer, she questioned the reasoning behind her recommended treatment regimen. "I asked, 'Why are you giving me this? Is this a cookie-cutter treatment?' And I was told no. It was based on several factors, including my Ki-67 score of 60%," Chase says.

WHAT'S ON THE HORIZON

Although the FDA approval of Verzenio with endocrine therapy for early breast cancer put a new spotlight on the role and value of Ki-67, most pathologists believe the approval was a one-off that won't lead to significantly greater use within cancer pathology. Of greater interest are technologies that make Ki-67 scoring more reliable and less subjective.

"I believe an automated way of measuring Ki-67 will be important because it takes the subjectivity out of the measurements," says O'Regan. "But honestly, more and more, we're moving toward looking at genes rather than proteins in terms of what drives cancer. So it may be that how proliferation is measured will be completely different than what we do now."

Geradts also believes that digital image analysis is the way of the future, noting, "Ki-67 is very much observer dependent, and that can be eliminated by using computer algorithms. As these algorithms become more commonplace and affordable, we'll likely see an increased number of laboratories that will choose to quantitate Ki-67 because it will be much more reproducible."

It all makes for a very exciting time to be treating breast cancer, says McArthur.

"We have had in recent years an unprecedented number of FDA approvals that have had a huge clinical impact in terms of decreasing risk of developing metastatic disease for patients with early-stage breast cancer and improving overall survival for patients who do have metastatic breast cancer," she says. "We want to learn more about cell proliferation and other factors so that we can offer more effective treatments to patients who need it and optimize treatment recommendations for those who can achieve those same great outcomes — but with less toxicity in the form of fewer drugs."

Cancer Treatment Centers of America

The Fear of Recurrence Is Nearly Universal

Empowering strategies and actions in survivorship help manage this anxiety so it doesn't become overwhelming or debilitating. *By* DR. AJAZ M. KHAN

THROUGHOUT 15 YEARS AS a medical oncologist primarily caring for patients with breast cancer, I have found that fear of recurrence — the fear that cancer will return or advance — is nearly universal among patients with cancer undergoing curative treatment. My conversations with patients experiencing this fear and associated feelings are among the most challenging and complex.

Much of the survivorship literature has described this fear along a spectrum, ranging from mild to severe symptoms involving feelings of worry, distress or concern that a cancer may recur or persist despite curative treatment. At the mild end, patients may experience occasional thoughts about cancer. But with moderate to severe symptoms, patients may suffer from the inability to control more frequent thoughts of recurrence, causing intrusive distress to daily life and feelings of hopelessness and despair. Studies have revealed that close to 70% of patients with breast cancer are vulnerable to this type of fear, driven by a range of factors including the predicted risk of recurrence, young age and psychosocial adjustment following treatment completion.

Women initially diagnosed with breast cancer before age 35 may carry significant fear about life expectancy as well as perceived risk of developing recurrent breast cancer throughout their lifetime. Furthermore, a patient's underlying stress, anxiety and depression at diagnosis can lead to higher levels of fear.

Meet Sally

To bring this younger patient population to life, let me share a story about my patient, Sally*, a 34-year-old mother of three young children, a practicing attorney and an avid athlete who was diagnosed with locally advanced triple-negative breast cancer. During our first meeting, she described feelings of stress related to caring for her young children and older mother through treatment, coupled with uncertainty about family finances, completing treatment, achieving health and ultimately survival. She also had trouble processing certain information we discussed due to losing a friend to cancer.

To help Sally manage her fear, we openly and thoroughly discussed her treatment, possible side effects and chances of recurrence. We also screened her level of distress through a validated questionnaire. Our care team provided close psychological monitoring via face-to-face interactions and telephone discussions to help alleviate anxiety and distress and to provide coping strategies aimed at maintaining lower levels of stress and addressing fears as they occur.

Upon completing treatment, Sally reported her fear was low. At her first survivorship visit, she expressed distress over development of chemotherapy-induced neuropathy in her feet that required long-term physical therapy with strength and balance rehabilitation. She returned to work but needed acclimation to walking slower and shifting her weight properly when going downstairs to prevent falls.

I reminded Sally that her fear was normal and experienced by many survivors. In fact, upon completion of curative treatment, more than 95% of women with early-stage breast cancer will achieve remission and join the more than 3.9 million survivors (as of 2019) who begin their journey anticipating that life will settle back into normalcy. Yet, for countless patients, side effects from cancer or its treatment create a new norm with significant challenges — challenges that require developing coping mechanisms to help them achieve greater balance and overcome physical, emotional and psychosocial challenges. Like Sally, numerous patients experience anxiety-inducing side effects driven by

**Name has been changed for anonymity.*

reduced quality of life, inability to assimilate back to daily routines and a perpetual fear of cancer recurrence.

A Focus on Empowerment

I believe in partnering with my patients throughout their cancer journeys. With Sally, that meant creating a lineup of empowering strategies and actions in her survivorship. It also meant listening to her questions and ideas.

During subsequent follow-ups, I emphasized addressing versus suppressing feelings of distress and anxiety by connecting with family, friends and her psychologist. We also identified possible fear- and anxiety-invoking triggers such as follow-up visits, imaging scans and the anniversary of her diagnosis.

Through her reading and research, Sally shared with me antioxidants and herbal medicines that may protect her from cancer recurrence. I recognized her diligence and further explained that although supplements such as minerals, vitamins and antioxidants are vital components to our diet, no long-term studies have shown consistent or long-term benefit with any particular supplement.

We discussed what a healthy lifestyle for people who have had breast cancer looks like:

- Be proactive and well-informed.
- Stay on top of cancer screening, which enables greater control in detecting early recurrence.
- Maintain a healthy, balanced diet, which includes dietary fiber and plant-based foods, and reduce processed meats and refined sugars to help lower cancer risk.
- Limit alcohol intake to one to two drinks daily.
- Engage in stress-reducing activities like hobbies and exercise (if possible, a minimum of 150 minutes of exercise per week may help reduce risk of recurrence, reinforced by multiple studies demonstrating beneficial results in breast cancer survivors).

With the support of our follow-ups, conversations and interventions, Sally has been coping well and maintaining a better balance in her quality of life and daily activities.

The fear of recurrence is real. It's natural. There are ways to manage this fear so it doesn't become overwhelming or debilitating. Physicians like me and a network of resources are here to help.

Dr. Ajaz M. Khan is a medical oncologist and chair of the department of medical oncology at Cancer Treatment Centers of America in Chicago.

cure® VOICES

LEARN MORE ONLINE
SCAN the QR code to read more and to learn how to send in your own stories.

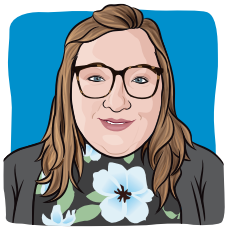
A Letter to My Younger Self and Those Newly Diagnosed With Cancer

After four years of "warriorhood," I wrote this to heal, to grieve — and to let go.

By ELIZABETH MCSPADDEN

AS I REFLECT on four years of "warriorhood" since being diagnosed with stage 4 cancer, I wrote a letter to my younger self and to others just receiving a diagnosis. My therapist asked me to write this letter to myself at 30 (the age I was diagnosed) and to the newly diagnosed for reflection, as an act of healing, grieving and "letting go."

This is the letter I wrote ...



ELIZABETH McSPADDEN

To: A Life Recently Shattered,

The C-word. It happened. To you, of all people. I know life hasn't been kind all the time, adulthood hasn't gone according to plan and now this crap is piled on. Where do you even begin? How do you comprehend all of it?

You're allowed to be angry, sad, confused, shaken up, traumatized, numb, emotional, crying on and off, and wanting to scream (I screamed in my car several times before someone came over asking if the police needed to be called). It's going to be raw, like a Band-Aid ripped off an open wound. It's OK to feel gutted and wanting to shut out the world.

I chose to take 48 hours to be angry and all over the place emotionally. Then I got my ducks in a row by taking action.

If you share your news at all, some responses might be, "Oh, it's your breasts. You're lucky," "You get a new boob job!" "You're strong, you'll be fine," "My (name of relative) had breast cancer, and they are doing just great." Those responses are not always helpful but usually come from a person being unsure what to say to make you feel better. There isn't a lot that will actually "make you feel better" for a while, but give these folks a little credit for trying.

I chose to share my news intimately at first, and then with the world, because it's not in me to hide my feelings. Thank God I did share with those amazing people because they became my biggest cheer group — "Team Sunshine," after my nickname derived from my warm smile. They comfort me with joy and love when I need it the most.

Down the road, remember to help those who helped you.

A member of Team Sunshine gave me a dinosaur to eat my cancer, and I named him Rex. He came everywhere with me, and now I have a whole collection of dinosaurs/dino-themed support in honor of Rex.

Although I don't have regrets, being an advocate for yourself is the best advice I can give. If something doesn't sound clear, keep asking questions until it is. If a doctor isn't listening, you can always get a second opinion. Remember, this is your body and your decisions. You have this life to live, and at the end of the day, that is what matters. If it takes four different care teams to get it right, then so be it. You'll be so proud of yourself, and you will still be here to enjoy it.

Whatever the treatment plan is, ask what every single option is, and ask them to list it out on paper so you have copies to look back on. I still have the piece of paper from my first consult with my plastic surgeon, and it helped clearly define what I didn't want.

Take a journal along to your medical appointments, and if you can, bring a friend/spouse/family member to help take notes. I'm on my fourth journal, and I'm so appreciative of people for taking notes because my "Dory" brain (hard to remember) always fails me.

There will be bad and horrible days with treatment. Cancer isn't good; neither is the treatment.

But there are good days if you take the time to find joy. Every chemo appointment, I brought books, magazines and music. And despite chemo being crappy, I've been able to read a lot. Take the time for yourself — bring ChapStick, fun socks and a warm blanket, and make it feel like home. (Cue "Feels Like Home" by Chantal Kreviazuk, aka the amazing song in "How to Lose a Guy in 10 Days.")

Cancer isn't pretty, and most likely it will give you scars. I have way too many to count. Don't be afraid of the scars, but instead, look forward to how you will own them. You also have every right to cover them up if you want. I have two port scars because my port tried to kill me. I was so upset at that surgeon and for my radiation tattoos being my first real tattoos, so I went and got my first real chosen tattoo. I took my body back and gave the middle finger to cancer.

If you ask anyone who knew me growing up, I hated needles and would have never gotten a tattoo. Now I want a few more to add to my "going-flat scars."

Cancer will be a long road, sometimes feeling like there is no end. For me, there isn't an end because my disease is stage 4. That was hard to grasp, and I do curse the never-ending road, mainly because it is very exhausting. I always remind myself, though, that when I'm succumbing to the weight of my timeline, I search for the flame, the light and the sun peeking in. That's the beauty about darkness — you're never alone because there is always the light that comes.

Remember, we're always still fighting, which is why cancer will never win.

Utilizing Integrative Care

LIVING BEYOND BREAST CANCER

In *CURE*®'s "Speaking Out" video series, on behalf of Living Beyond Breast Cancer, Andrea Kassem discusses integrative care in metastatic breast cancer. By KRISTIE L. KAHL

AS PATIENTS WITH CANCER undergo treatment, it's important to focus on caring for the entire person — mind, body and spirit — in addition to treating the cancer itself. Integrating other aspects of care such as exercise, a healthy diet and quality sleep may also play a role in alleviating side effects from treatment.

As part of its *Speaking Out* video series, *CURE*® spoke with Andrea Kassem, a breast cancer nurse navigator at Baptist Health System in San Antonio, about how patients and their caregivers can work with nurse navigators and other members of their team to take care of themselves throughout their cancer journey.

Q: What is integrative care, and why is it important to include in the treatment of metastatic breast cancer specifically?

A: Integrative care is a comprehensive, holistic approach to care. It focuses on the whole person: mind, body and spirit. It's also care where the patient and the entire care team are partners throughout the patient's entire care continuum. What integrative health is *not* is alternative medicine. Integrative care does not replace conventional therapies. Rather, integrative care works alongside or in addition to conventional treatments to help meet the patient's needs, whether they're physical, emotional or social.

It's important that we include integrative care in the care of patients because, like I said, it's taking care of the whole person, not just the disease. And we have to remember that integrative care essentially is self-care. It's eating healthy food, it's exercising, it's getting good sleep, it's managing stress, it's nurturing our healthy relationships and finding meaning in life. All of these things not only help the patient stay on track with their treatment, but also support their overall health, which help them stay on track with life goals that are important to them and improve their quality of life.

continued on page 40

ARTINSPIRING / STOCK.ADOBE.COM

new

Clinical Trial CORNER

Responding to the needs of our readers, we are proud to announce the launch of the new Clinical Trial Corner resource on curetoday.com. There you'll find the latest news on clinical trial availability and enrollments.

Visit curetoday.com to stay up-to-date on clinical trials.

curetoday.com/clinical-trial-corner

continued from page 38

Q: What are some examples of the side effects that patients might experience from treatment and how integrative care will play a role?

A: There are many side effects that women unfortunately experience from the treatments of metastatic breast cancer, but one of the most common ones is menopausal symptoms. We know that about 75% of breast cancers are hormone positive or estrogen sensitive, and the anti-hormonal medication that we use to treat hormone-positive breast cancer blocks or decreases the estrogen in the bloodstream. This can result in women having side effects such as hot flashes or night sweats, some fatigue, anxiety and/or depression, sleep disturbances and weight gain.

In addition to menopausal symptoms, we also see that some of our patients experience changes in their intimacy and their sexual relationships. Patients may experience a decrease in their desire secondary to lack of libido, and this can be caused by surgery or just from other side effects of their treatment. We know that the anti-hormonal medication can decrease their estrogen levels. Patients may also just have feelings of fear or guilt or just lack of energy — and all of that can impact a patient's libido.

The most important thing we have to remember as providers is not to assume that our patients aren't interested in their sexual health. Our sexuality is part of our femininity and our self-esteem. And we, as clinicians, need to facilitate open communication with our patients about their sexual health.

Q: In particular, what is the nurse's role when it comes to managing these side effects for patients with metastatic breast cancer?

A: As nurses, we play a couple of different roles. First and foremost, we are able to provide evidence-based holistic interventions that can help support the patient. This can be as simple as suggesting to the patient that they start a walking routine because we know that exercise increases endorphins. Therefore, it decreases fatigue, it reduces inflammation and it improves their immune system. And those things not only help the patient feel better and feel stronger, they help them stay on track with treatment.

> "Integrative care works alongside or in addition to conventional treatments to help meet the patient's needs." —ANDREA KASSEM

The other thing is that nurses are often the single point of contact not only for patients, but for providers. Establishing trusted and transparent communication with our patients is key so that we can update physicians on certain side effects that patients may be experiencing in the event that they need some medication management because we never want our patients to be suffering alone in silence.

Q: Why is it important for patients to make sure they're talking about their side effects? And can you offer some advice on how they can start that conversation with their care team?

A: First and foremost, it's really important that patients talk to their clinicians about their side effects so that we can help them stay on track with their treatment plan. We can't have delays in care because of unmanaged side effects, so that is our primary goal. Having open conversations with clinicians is so important for patients so that we can keep them on track with their treatment.

In addition, integrative care components such as nutrition, exercise and self-care are important to living well with metastatic breast cancer. Like I said, we never want, our patients to suffer in silence. Knowing there are so many integrative approaches to care that can minimize side effects and improve quality of life (and making patients aware of these approaches) is how we can help our patients. Patients need to know too, that as providers, we learn from them each and every day. It's so important for them to share their stories with us because it helps us care for them and for others. In my experience working with patients with metastatic breast cancer, I've found that just having upfront discussions regarding their stage and their prognosis of the disease from the onset of diagnosis sets the best expectations for their future. Being honest and having a trusted and open dialogue with patients is the most effective approach.

Transcript edited for clarity and conciseness.

LEARN MORE ONLINE SCAN THE QR CODE
to see more videos from our "Speaking Out" series.

curetoday.com/EH23

cure® Extraordinary HEALER® 2023

SHINE A LIGHT ON AN *Extraordinary* ONCOLOGY NURSE!

Margaret Campbell, B.S.N., RN, Winner of 2022 Extraordinary Healer

CURE® is now accepting essay nominations for the 2023 Extraordinary Healer® award for oncology nursing! We invite you to describe the compassion, expertise and helpfulness a special oncology nurse has exhibited in caring for patients with cancer. Nominations are accepted from patients, caregivers, survivors, family members and peers.

Submit your essay today!

SUBMISSION DEADLINE: JANUARY 4, 2023

Scan the QR code or visit curetoday.com/EH23