PATIENT RESOURCE

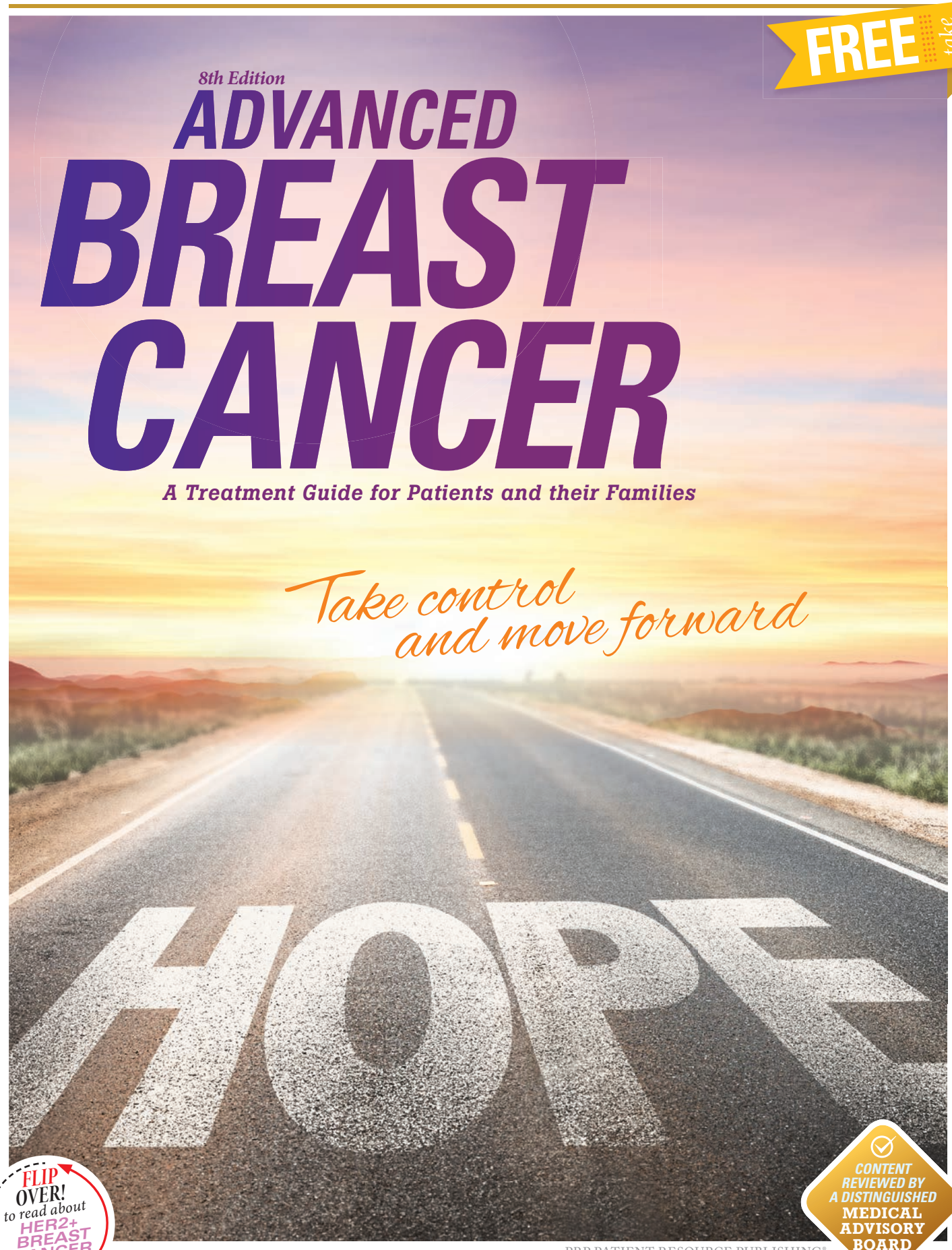
FREE take one

8th Edition

ADVANCED BREAST CANCER

A Treatment Guide for Patients and their Families

Take control and move forward



FLIP OVER! to read about HER2+ BREAST CANCER

CONTENT REVIEWED BY A DISTINGUISHED MEDICAL ADVISORY BOARD

PRP PATIENT RESOURCE PUBLISHING®

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.

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 that came 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

*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 trial had gone without disease progression. When more than half of the people had lived without disease progression, mPFS has not been reached.

What is ENHERTU?

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

- Breast cancer that cannot be removed by surgery or that has spread to other parts of 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 at least 7 months after the last dose.
- **Males** who have female partners that are able to become pregnant should use effective birth control (contraception) during treatment with ENHERTU and for at least 4 months after the last dose.

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

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

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

How will I receive ENHERTU?

- You will receive ENHERTU into your vein through an intravenous (IV) line by your healthcare provider.
- ENHERTU is given 1 time every three weeks (21-day treatment cycle).
- Your healthcare provider will decide how many treatments you need.
- Your healthcare provider 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 in people with breast cancer, include:

- Nausea
- Low white blood cell counts
- Low red blood cell counts
- Increased liver function tests
- Feeling tired
- Vomiting
- Low platelet counts
- Hair loss
- Constipation
- Low levels of blood potassium
- Decreased appetite
- Diarrhea
- Pain in muscles and bones
- Infections of the respiratory tract
- Headache
- Stomach-area (abdominal) pain

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

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

What is ENHERTU?

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

- Breast cancer that cannot be removed by surgery or that has spread to other parts of 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 at least 7 months after the last dose.
  - **Males** who have female partners that are able to become pregnant should use effective birth control (contraception) during treatment with ENHERTU and for at least 4 months after the last dose.

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

What is ENHERTU?

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

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

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

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

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

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

How will I receive ENHERTU?

- 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 breast cancer, include:

- nausea
- low white blood cell counts
- low red blood cell counts
- increased liver function tests
- feeling tired
- vomiting
- low platelet counts
- hair loss
- constipation
- low levels of blood potassium
- decreased appetite
- diarrhea
- pain in muscles and bones
- infections of the respiratory tract
- headache
- stomach-area (abdominal) pain

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

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

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

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

General information about the safe and effective use of ENHERTU.

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

What are the ingredients in ENHERTU?

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

Manufactured by: Daiichi Sankyo, Inc., Basking Ridge, NJ 07920 U.S. License No. 2128
Marketed by: Daiichi Sankyo, Inc., Basking Ridge, NJ 07920 and AstraZeneca Pharmaceuticals LP, Wilmington, DE 19850
 USMG-ENH-C8-0522-r003
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: 05/2022

8th Edition

ADVANCED BREAST CANCER

Scan to download

IN THIS GUIDE

ADVISORY BOARD

PATIENT RESOURCE

Chief Executive Officer	**Mark A. Uhlig**
Editor-in-Chief	**Charles M. Balch, MD, FACS, FASCO**
Senior Vice President	**Debby Easum**
Vice President, Publications	**Dana Campbell**
Managing Editor	**Colleen Scherer**
Contributing Writer	**Annie Stuart**
Graphic Designer	**Michael St. George**
Medical Illustrator	**Todd Smith**
Circulation & Production Manager	**Sonia Wilson**
Vice Presidents, Business Development	**Amy Galey** **Kathy Hungerford**
Office Address	**8455 Lenexa Drive** **Overland Park, KS 66214**
For Additional Information	**prp@patientresource.com**
Advisory Board	**Visit our website at PatientResource.com to read bios of our Medical and Patient Advisory Board.**

For Additional Copies: To order additional copies of *Patient Resource Advanced Breast Cancer Guide,* visit PatientResource.com, call 913-725-1600, or email orders@patientresource.com.

Editorial Submissions: Editorial submissions should be sent to editor@patientresource.com.

By **Lillie Shockney, RN, BS, MAS, ONN-CG**
Patient Resource Patient Advisory Board Member and Breast Cancer Survivor

Newly diagnosed with advanced breast cancer

You have recently received the shock of your life — you have been told that you have advanced breast cancer. Likely you didn't see it coming and might even still feel a bit numb.

You may assume the goal is to cure you of this cancer and for you to become cancer-free. If you were diagnosed with an earlier stage of the disease in the past, that was the goal the first time around. The goal is different now, however; the goal today is to get the cancer under control so that you can live in harmony with it. Newer treatments have changed the dynamics and discussions, enabling patients to live longer — maybe a decade or even two post diagnosis. Ideally, we would love to see your scans post-treatment show NED — no evidence of disease. (I am known for congratulating patients whose scans show no measurable evidence of cancer and telling everyone that they are "living with Ned, in love with Ned, sleeping with Ned, and hope to have Ned in their lives for as long as possible!")

For 70 percent of patients diagnosed with advanced breast cancer, the cancer cells have favorable prognostic factors — hormone receptor positive and *HER2* negative. If you fall into this majority, know that new treatments are available that are turning advanced breast cancer on its ear. This means it is crucial to have accurate pathology results, which may require having a second pathologist examine slides from the biopsies done of the bone, liver, lung or elsewhere the cancer cells have migrated. This should take place at a cancer center where there are breast pathologists. Never rely on the prognostic factors from the primary breast tumor that is or was inside of the breast. When breast cancer travels, interestingly enough, its prognostic factors of *ER*, *PR* and/or *HER2* can change and become the opposite of what they were originally when the breast biopsy was done. Accuracy is key because your treatment plan will be based on this information.

For 30 percent of patients, however, their metastatic disease may be triple negative (*ER-*, *PR-*, *HER2-*) or triple positive (*ER+*, *PR+*, *HER2+*) or even *ER-* and/or *PR-* and *HER2+*. These clinical pathology results call for very different treatments to get the disease under control. In the past decade, specific drugs have been developed for triple-negative disease. And those with *HER2+* cancer can benefit from old and new biologic targeted therapies. Individuals with hormone receptor positive breast cancer cells, whether *ER*, *PR* or hopefully both, are benefiting from agents that block female hormones in ways that are highly effective in most cases.

Whether you have been diagnosed with cancer or not, get your legal and financial affairs in order. It is an excellent way to maintain control. Don't leave family members to figure out how you want things handled on your behalf. I don't have advanced breast cancer, that I know of at least, but I personally like knowing I am in charge even after my death!

You are by no means alone — hundreds of thousands of people are living with advanced breast cancer today. Ask your nurse navigator about support groups and educational programs, and check them out to find the one that serves you best.

You may find that friends, co-workers and even some family members don't understand advanced breast cancer. It will be up to you to educate them. And, yes, expect some people to say insensitive things like, "You look great. Are you sure you have advanced breast cancer?" "Why are you still working if you have cancer?" By the way, if you're able and you enjoy your job, keep working. Working provides normalcy, a steady income and stable health insurance. And, likely, many of your close friends are co-workers. Don't just sit at home on the sofa thinking about cancer and eating junk food.

Make your treatment team aware of milestones coming up in the next 6 to 9 months (such as a son's graduation or a daughter's wedding) so that treatment can be worked around these important events. Don't let cancer and its treatment take away any more of you and your joys in life than what is absolutely necessary. It doesn't deserve it. You remain in charge and in control.

Also, tell them your life goals. That doesn't mean you will be here in 20 years to see your husband walk your daughter, who currently is just 10, down the aisle on her wedding day. But some life goals can be achieved through innovative thinking. I have helped hundreds of patients and their families with this.

Let your treatment team know that you want to be an active partner in decision making about your treatment. You also want to call the shots on when you want to stop treatment based on criteria that you develop for yourself. You may choose to stop treatment that is largely ineffective and has significant side effects. Also request to meet with a palliative care expert. Palliative care gets a bad rap because people think it is hospice care. It is not. Palliative care should be part of the plan very early on. Why? Because it is all about symptom management. Specifically, the job of a palliative care specialist is to preserve or restore your quality of life. Think of this specialist as your Quality of Life Coach.

So, if you're newly diagnosed with advanced breast cancer, remember you aren't alone. Better treatments and symptom management options provide a different image of what patients with advanced cancer look like, can do, and how long they can live and enjoy doing so. My hope is that you get to live with "Ned." ■

Feeling empowered begins with information

Your world changes when you hear you have advanced breast cancer. Whether your cancer was diagnosed as metastatic or it has recurred or progressed from an early stage, give yourself time to absorb the news — then look for ways to empower yourself. It may help to know you are not alone. The advanced breast cancer community is a close-knit, knowledgeable group of survivors, health care professionals and advocates who are ready and willing to guide and support you.

WHERE DO YOU BEGIN?

To feel more in charge of your situation, it may help to identify the parts of your life you can control. Use these suggestions to get started.

1. **Find a doctor/treatment center** with expertise in treating your type or subtype of breast cancer.
2. **Seek a second opinion.** Different doctors may have different recommendations based on their experience.
3. **Learn as much as you can** about your diagnosis.
4. **Surround yourself with support.** Draw on the people in your life who support you, then connect with other survivors in online and in-person support groups.
5. **Get to know** your case manager or social worker.

UNDERSTANDING AN ADVANCED BREAST CANCER DIAGNOSIS

Advanced breast cancer is a diagnosis that applies to locally advanced and metastatic disease. Locally advanced describes breast cancer that has progressed but not yet spread outside the breast or beyond local lymph nodes. This is typically Stage III and is treated with curative intent. Metastatic breast cancer describes malignant (cancerous) cells that began in breast tissue that have broken away and traveled through the bloodstream or lymph vessels to one or more distant sites in the body. When that occurs, cancer is staged as or upgraded to Stage IV.

After the lymph nodes, the most common sites of metastasis for breast cancer are the bones, lungs, brain and liver. No matter where it spreads, it is still considered breast cancer and will be treated as such.

Also referred to as metastatic breast cancer or Stage IV disease, advanced breast cancer may be detected upon diagnosis (that is referred to as de novo). It may also be found in a follow-up exam after treatment for early-stage breast cancer or because of new symptoms.

Because a cure for metastatic breast cancer is not available at this time, your treatment goal is to slow the cancer's growth or stop its progression for as long as possible while managing side effects. Keep in mind that not all advanced breast cancers are the same. Multiple subtypes of breast cancer have been identified, and researchers continue to find differences in the ways these breast cancers grow and respond to treatment. These advances are enabling many people with advanced breast cancer to manage their disease and live happy, full lives.

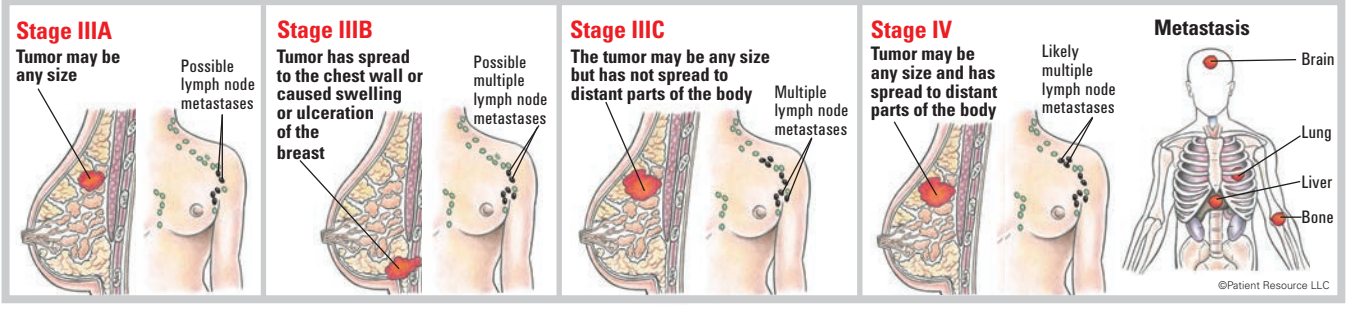
Following are some types of breast cancer that have the potential for metastasizing:

- Invasive ductal carcinoma, the most common, starts in the lining of the milk ducts in the breast when abnormal cells grow out of control, forming a mass that spreads from the ducts to normal breast tissue.
- Invasive lobular carcinoma, the second most common, starts in the lobules (glands that make milk) and spreads to surrounding normal tissue.
- Inflammatory breast cancer (IBC) is a rare, very aggressive form that grows rapidly and is automatically classified as Stage III or Stage IV, depending on whether it has spread. IBC tends to spread quickly, making it challenging to treat. Most cases are invasive ductal carcinomas in which cancer cells block the lymph vessels, causing the lymph fluid to build up. This results in breast tenderness, swelling, redness and pain. Breast skin can thicken and appear pitted like an orange peel.

STAGING AND CLASSIFICATION

The tumor, node and metastasis (TNM) system developed by the American Joint Committee on Cancer (AJCC) is used to stage

ILLUSTRATED STAGES OF ADVANCED BREAST CANCER *(For more information, see page 6)*



and classify breast cancer (see Tables 1 and 2). The system includes the tumor (T) size, cancer cells found in nearby lymph nodes (N) and cancer that has metastasized (M), or spread, to other parts of the body, such as the bones, brain, liver or lungs.

Genomic testing is ordered to look for biomarkers — specific genes or proteins in or on cancer cells. The biomarker expression is critical in determining the type and subtype of the cancer as well as defining treatment.

The most common biomarkers in breast cancer are the hormone receptors estrogen (*ER*) and progesterone (*PR*), as well as receptors for human epidermal growth factor receptor-2 (*HER2*). Each can be positive (*ER+*, *PR+* and *HER2+*) or negative (*ER-*, *PR-* and *HER2-*) and in various combinations.

Patients with advanced breast cancer generally need a biopsy of the metastatic site(s) to confirm the diagnosis as breast cancer and not a second cancer, and to assess biomarkers on tissue samples of areas where the breast cancer has spread.

Your doctor may order multi-gene panels on the primary tumor to help understand how the cancer may behave and help determine which therapies may be most effective in slowing the cancer's growth or stopping progression.

Once all these factors, including the results of a biopsy, imaging scans and genomic testing, are taken into consideration and after the breast cancer is classified, it is staged.

IF YOU LEARN YOUR BREAST CANCER IS HEREDITARY…

…informing your family is critical. People who have inherited abnormalities in some breast cancer-related genes have an increased likelihood of developing breast cancer and/or ovarian cancer.

The BReast CAncer 1 (*BRCA1*) and BReast CAncer 2 (*BRCA2*) genes are the most common hereditary susceptibility genes, and your doctor may test for others. Newly-diagnosed breast cancer patients found to have a *BRCA* mutation face an increased risk of another new breast cancer.

Having an inherited mutation means the risk of developing cancer is increased. There are ways to lower the risk, such as preventive surgery, medication or lifestyle changes. Frequent screenings will most likely result in early detection.

Risk factors that suggest a person carries the *BRCA* mutation include a family history of any cancer or multiple cancers, especially rare cancers, ovarian and male breast cancers, cancer at an early age, triple-negative (*ER-*, *PR-*, *HER2-*) breast cancer (TNBC), certain ancestry (such as Ashkenazi Jewish heritage), and a personal history of TNBC. ■

TABLE 1

STAGES OF ADVANCED BREAST CANCER

Stage	TNM classification
IIIA	T0-T3, N2, M0 **//** T3, N1, M0
IIIB	T4, N0-N2, M0
IIIC	Any T, N3, M0
IV	Any T, Any N, M1

Used with permission of the American Joint Committee on Cancer (AJCC), Chicago, Illinois. The original and primary source for this information is the AJCC Cancer Staging Manual, Eighth Edition (2017) published by Springer Science+Business Media.

TABLE 2

AJCC TNM SYSTEM FOR CLASSIFYING BREAST CANCER

Classification	Definition
Tumor (T)	
TX	Primary tumor cannot be assessed.
T0	No evidence of primary tumor.
Tis (DCIS)	Ductal carcinoma in situ.
Tis (Paget)	Paget disease of the nipple NOT associated with invasive carcinoma and/or carcinoma in situ (DCIS) in the underlying breast parenchyma (tissue).
T1 **T1mi** **T1a** **T1b** **T1c**	Tumor ≤ (not more than) 20 mm in greatest dimension. Tumor ≤ (not more than) 1 mm in greatest dimension. Tumor > (more than) 1 mm but ≤ (not more than) 5 mm in greatest dimension. Tumor > (more than) 5 mm but ≤ (not more than) 10 mm in greatest dimension. Tumor > (more than) 10 mm but ≤ (not more than) 20 mm in greatest dimension.
T2	Tumor > (more than) 20 mm but ≤ (not more than) 50 mm in greatest dimension.
T3	Tumor > (more than) 50 mm in greatest dimension.
T4 **T4a** **T4b** **T4c** **T4d**	Tumor of any size with direct extension to the chest wall and/or to the skin (ulceration or macroscopic nodules). Extension to the chest wall. Ulceration and/or ipsilateral (on the same side) macroscopic satellite nodules and/or edema (including peau d'orange) of the skin that does not meet the criteria for inflammatory carcinoma. Both T4a and T4b are present. Inflammatory carcinoma.
Node (N)	
pNX	Regional lymph nodes cannot be assessed.
pN0 **pN0(i+)** **pN0(mol+)**	No regional lymph node metastasis identified or ITCs (isolated tumor cells) only. ITCs (isolated tumor cells) only (malignant cell clusters no larger than 0.2 mm) in regional lymph node(s). Positive molecular findings by reverse transcriptase polymerase chain reaction (RT-PCR); no ITCs (isolated tumor cells) detected.
pN1 **pN1mi** **pN1a** **pN1b** **pN1c**	Micrometastases; or metastases in 1-3 axillary (armpit) lymph nodes; and/or clinically negative internal mammary nodes with micrometastases or macrometastases by sentinel lymph node biopsy. Micrometastases (approximately 200 cells, larger than 0.2 mm, but none larger than 2.0 mm). Metastases in 1-3 axillary (armpit) lymph nodes, at least one metastasis larger than 2.0 mm. Metastases in ipsilateral (on the same side) internal mammary sentinel nodes, excluding ITCs (isolated tumor cells). pN1a and pN1b combined.
pN2 **pN2a** **pN2b**	Metastases in 4-9 axillary (armpit) lymph nodes; or positive ipsilateral (on the same side) internal mammary lymph nodes by imaging in the absence of axillary lymph node metastases. Metastases in 4-9 axillary (armpit) lymph nodes (at least one tumor deposit larger than 2.0 mm). Metastases in clinically detected internal mammary lymph nodes with or without microscopic confirmation; with pathologically negative axillary (armpit) nodes.
pN3 **pN3a** **pN3b** **pN3c**	Metastases in 10 or more axillary (armpit) lymph nodes; *or* in infraclavicular (below the clavicle) (Level III axillary) lymph nodes; *or* positive ipsilateral (on the same side) internal mammary lymph nodes by imaging in the presence of one or more positive Level I, II axillary lymph nodes; *or* in more than three axillary lymph nodes and micrometastases or macrometastases by sentinel lymph node biopsy in clinically negative ipsilateral internal mammary lymph nodes; *or* in ipsilateral supraclavicular (above the clavicle) lymph nodes. Metastases in 10 or more axillary (armpit) lymph nodes (at least one tumor deposit larger than 2.0 mm); *or* metastases to the infraclavicular (below the clavicle) (Level III axillary) lymph nodes. pN1a or pN2a in the presence of cN2b (positive internal mammary nodes by imaging); *or* pN2a in the presence of pN1b. Metastases in ipsilateral (on the same side) supraclavicular (above the clavicle) lymph nodes.
Note: (sn) and (f) suffixes should be added to the N category to denote confirmation of metastasis by sentinel node biopsy or FNA/core needle biopsy respectively, with N0 further resection of nodes.	
Metastasis (M)	
M0 **cM0(i+)**	No clinical or radiographic evidence of distant metastases. No clinical or radiographic evidence of distant metastases in the presence of tumor cells or deposits no larger than 0.2 mm detected microscopically or by molecular techniques in circulating blood, bone marrow, or other nonregional nodal tissue in a patient without symptoms or signs of metastases.
cM1	Distant metastases detected by clinical and radiographic means.
pM1	Any histologically proven metastases in distant organs; or if in nonregional nodes, metastases greater than 0.2 mm.

Olivia Franz treasures the support system that has helped her manage the HER2+ Stage IV inflammatory breast cancer diagnosis she faced at 27. She is now considered no evidence of disease (NED) and is looking forward to enjoying life as a new mom with her husband and their son.

Olivia (in pink) surrounded by her husband, son, parents and sister

My whole life is still ahead of me

Mastitis or a clogged milk duct seemed a reasonable explanation for the lump I felt a few months after our son was born. When it interfered with my nursing, I saw my OB/GYN who diagnosed it as mastitis and ordered an ultrasound. The radiologist agreed with the diagnosis. I was started on an antibiotic and told to massage the area.

A week later, the lump, which I described as a Silly Putty egg, had grown, and the skin on my breast looked like the peel of an orange. My OB/GYN ordered another ultrasound, but the tech had already left for the day. Because my doctor wanted it as soon as possible, the scheduler called around and, amazingly enough, the breast center could get me in the next morning. Usually it takes weeks or months to get in.

My mom went with the baby and me to the appointment. After the scan, things happened like wildfire. A patient advocate came in to schedule a biopsy for the next week. The radiologist changed it to that afternoon, then they decided to do it right then. I had a needle core biopsy in three places, skin samples in five places and samples taken from lymph nodes in my armpit.

It was just before Thanksgiving weekend, and we tried to enjoy the holiday while we waited for the results. On Monday, my mom went back with me to hear I had inflammatory breast cancer that was probably Stage III. The rather unfeeling doctor who gave me the news handed me a book about breast cancer and wished me good luck. We sat in the car for the next hour, calling my husband, my dad and my sister, and crying.

I contacted Driven by Heart, a local group designed to help people like me — newly diagnosed with no idea what to do first. Through them I found an oncologist and began to learn a whole new language.

My first PET scan showed the cancer had spread to my bones. My diagnosis was revised to Stage IV, *HER2+* inflammatory breast cancer. My new doctor looked at me and said, "I'm going to get you into remission." And he and the rest of my medical team did.

My treatment plan consisted of combination drug therapy, a single radical non-skin-sparing mastectomy that also removed 37 lymph nodes with no reconstruction, and radiation therapy. I'll take drug therapy for as long as it is effective.

My incredible support system makes it possible for me to find joy in my life as a new mom with my wonderful husband and our perfect son, even through the cancer treatments.

My husband: Because he worked long hours, the baby and I moved in with my parents to make sure we had the best care. He had dinner with us every night after work and played with the baby before going home to sleep. He is supportive of everything I want to do with treatment. He is my rock.

My mom: Her selflessness is unending. She went with us to endless appointments. She cared for the baby when I couldn't. She fed us, did our laundry and even climbed into the shower fully clothed to hold me when my long, platinum blonde hair suddenly fell out in clumps. She moved to Houston with the baby and me for six weeks while I had radiation therapy.

My dad: Before the diagnosis, I quit my job at the sheriff's office to be a stay-at-home mom. There was a lapse before I could get on my husband's insurance, but my dad insisted on getting us coverage just in case we needed it for the baby. As it turns out, we needed it for me! My dad bought a bell for me to ring when I finished chemotherapy. We had a full-blown Facebook event. Hundreds of people came out, including the SWAT team from the sheriff's department and the local news. He also took charge of caring for my drains after surgery.

My sister: She changed her work schedule to help take care of the baby and me. Whether it was ordering the best wigs and caps, doing my makeup or just pampering me, she always made sure I felt beautiful.

My friends: I found a *HER2+* group on Facebook. A friend of my mom's connected me with an IBC survivor who became my guiding light. My best friend created a GoFundMe page and held fundraisers. Other friends donated breast milk when I could no longer nurse. My church family brought meals and prayed for us.

My faith: I believe my strong faith is why so many things fell into place. Each little miracle paved the way for the next.

Being NED is amazing, but it's not peaceful. With every ache or pain, I wonder if it's cancer. And with all my follow-ups, I get anxious. Anxiety medicine does wonders for me, and every NED scan increases my confidence. I have my whole life ahead of me. ■

Partner with your doctor to tailor a plan for you

Today, the goal of treating advanced and metastatic breast cancer is to prevent or slow the spread of the cancer and to relieve any pain or discomfort. New advances in treatment continue to be introduced, offering more hope for a cure and more ways to improve the quality of life for people who are living with these diagnoses.

Once you receive a diagnosis, you will work closely with your doctor and a multidisciplinary team to develop a treatment plan. Just as no two breast cancer diagnoses are the same, your treatment plan will be customized to your cancer and its biomarkers.

During treatment planning, it is important to discuss your expectations for quality of life. Some questions to ask yourself and discuss with your doctor include the following:

- Will I feel well enough to work?
- Can I travel extensively?
- Can I take my treatment at home instead of going into a clinic?
- What kind of side effects should I expect, and how can they be managed?

Once treatment begins, you will be monitored closely so that your therapy can be adapted as needed. Therefore, communicating regularly with your health care team and keeping follow-up appointments are crucial.

DRUG THERAPY

Multiple types of drug therapy may be used and include targeted therapy, hormone therapy, chemotherapy and immunotherapy. These treatments are systemic because they travel throughout the body. You may receive them through an IV into a vein, through a port in your body, as an injection (shot) or orally as a pill or liquid.

Targeted therapy uses drugs or other substances to identify, attack and destroy specific types of cancer cells or to slow disease progression. Some interfere with the cancer cells' internal functions; others attack specific receptors on the cancer cells' surfaces; and some target the blood vessels that supply the tumor. Targeted therapy is typically used for *HER2*+ breast cancer and is usually combined with chemotherapy. Other targeted therapy drugs are sometimes used in combination with hormone therapy to treat *ER*+ or *PR*+ breast cancers or *HER2*- breast cancer with the BReast CAncer 1 or 2 (*BRCA1* or *BRCA2*) mutations.

Following are types of targeted therapies that may be used.

- Anti-*HER2* drugs are laboratory-made proteins that can bind to cancer cells. They can be used alone or to carry drugs, toxins or radioactive substances directly to cancer cells. These drugs are often given with chemotherapy for *ER*+/*PR*+ and/or *HER2*+ breast cancer.
- Kinase inhibitors target cancer cells' ability to grow and survive by targeting kinases, which are enzymes that speed up chemical reactions in the body. These inhibitors can be designed to attack enzymes within a cell, proteins or enzymes needed for a cell's growth, or receptors on the cell's surface. CDK inhibitors are often used for hormone positive, *HER2*- cancer. They may be used with endocrine therapy to control cancer longer.
- Monoclonal antibodies (mAbs) are commonly used. Antibodies (proteins) are made by the immune system to help fight infection. Laboratory-made mAbs can attach to specific proteins and attack cancer cells. They can prevent growth signals from *HER2* receptors and can deliver cell-specific chemotherapy to the tumor.
- mTOR inhibitors block a protein called mTOR (mechanistic target of rapamycin), which helps control cell division. Blocking mTOR's action may keep cancer cells from growing and prevent the growth of new blood vessels that tumors need to grow.
- A *PIK3CA* inhibitor blocks the *PIK3CA* gene, which is frequently mutated in breast cancer and can prevent growth of cells.
- Poly (ADP-ribose) polymerase (PARP) inhibitors prevent cancer cells from repairing themselves and lead to tumor cell destruction.
- Tumor-agnostic treatment targets specific genetic mutations to prevent growth regardless of cancer type or where it is in the body.

Hormone therapy, also called endocrine therapy, is primarily used to treat cancer that is estrogen- and/or progesterone-receptor positive (*ER*+/*PR*+). It is actually an anti-hormone because it reduces or blocks the stimulating effect of estrogen on tumor cells. When tumor cells test positive for one or both hormones (*ER*+ and/or *PR*+), that means hormones are fueling the cancer's growth. Blocking hormone receptors can be highly effective in slowing cancer growth or stopping progression.

Drug therapies have been developed to target different combinations of *ER*, *PR*, and *HER2* receptor expression (see Table 1). These are sometimes used in combination with other types of treatment.

Hormone therapy is not effective for cancer that is *ER*-/*PR*- because the growth is not driven by hormones. In some cases, biopsied tumor cells may test negative for all three biomarkers (*ER*-, *PR*- and *HER2*-), which is referred to as triple-negative breast cancer.

Following are types of hormone therapy that may be used.

- Antiestrogens are substances that keep

TABLE 1

RECEPTOR AND TREATMENT RESPONSE

Receptors	Likely treatment response
***ER*+ and/or *PR*+, *HER2*+**	Typically responds to antiestrogen drugs (hormone therapy) and anti-*HER2* drugs (targeted therapy)
***ER*- and *PR*-, *HER2*+**	Typically responds to anti-*HER2* drugs (targeted therapy) and to chemotherapy but not to antiestrogen drugs (hormone therapy)
***ER*+ and/or *PR*+, *HER2*-**	Typically responds to antiestrogen drugs (hormone therapy)
***ER*- and *PR*-, *HER2*- (triple negative)**	Typically treated with chemotherapy, may be treated with targeted therapy and immunotherapy; not likely to respond to antiestrogen drugs (hormone therapy) or anti-*HER2* drugs.

cells from making or using estrogen. They may stop some cancer cells from growing or even destroy them.

- Aromatase inhibitors are drugs that prevent estradiol, a female hormone, from forming by interfering with an aromatase enzyme. They may benefit postmenopausal women with hormone-dependent breast cancer or younger women whose ovarian function is blocked by drugs or who have had their ovaries removed. Aromatase inhibitors cannot be used in premenopausal women with functioning ovaries.
- Hormones are made by glands, circulate in the bloodstream and control the actions of certain cells or organs. High doses may be used to stop cancer growth.
- Ovarian ablation uses surgery, radiation or extreme heat or cold to permanently stop the ovaries from making hormones.
- Ovarian suppression can stop the ovaries from making hormones that promote cancer growth in *ER+/PR+* cancers. Drugs called luteinizing hormone releasing hormone (LHRH) agonists are typically used instead. For premenopausal women, these drugs provide an equivalent alternative to removing the ovaries.
- Bilateral oophorectomy is surgery to remove both ovaries, and it may be an ablation option for premenopausal women.

Chemotherapy kills rapidly multiplying cells throughout the body. It can be given as a single drug or combined with other chemotherapy drugs or other types of treatment. It is most often used to treat *ER-/PR-* cancers or *ER+/PR+* cancers that no longer respond to hormone therapy.

It is also used to treat *HER2+* cancers when combined with certain anti-*HER2* targeted therapy drugs. It may be used before or after surgery or to help control symptoms caused by the tumor.

Immunotherapy harnesses the potential of the body's own immune system to recognize and destroy cancer cells. The following types of immunotherapy are approved for advanced breast cancer.

- Immune checkpoint inhibitors prevent the immune system from slowing down, allowing it to keep up its fight against the cancer. These drugs do this by targeting and blocking PD-1 or PD-L1.
- Monoclonal antibodies (mAbs) are laboratory-made antibodies that are designed to target specific tumor antigens, which are substances that cause the body to make a specific immune response. When a mAb is combined with a toxin, such as a chemotherapy drug, it is called an antibody drug conjugate.
- Tumor-agnostic treatment, when used as immunotherapy, is approved to treat any type of cancer that has molecular alterations known as microsatellite instability-high (MSI-H), deficient mismatch repair (dMMR) or tumor mutational burden-high (TMB-H). MSI-H describes cancer cells that have a greater-than-normal number of genetic markers called microsatellites, which are short, repeated sequences of DNA. Every time a cell reproduces itself, it makes a copy of its genes and DNA. During the process, errors in duplication can be made. The body normally corrects the error, but sometimes it is not caught and fixed, resulting in a dMMR. It then becomes a mutation that is reproduced in later versions of the cell. Cancer cells that have large numbers of microsatellites may have defects in the ability to correct mistakes that occur when DNA is copied.

Bone-strengthening drugs or **bone-modifying agents** may be used to prevent or delay bone fractures, in addition to systemic treatment or radiation therapy, when breast cancer has spread to the bones. These include bisphosphonates, radiopharmaceuticals and targeted therapies that help increase bone mass and strengthen bones.

RADIATION THERAPY

This therapy uses high-energy X-rays to kill cancer cells or keep them from growing. The most common type is external-beam radiation therapy (EBRT), in which a machine targets radiation beams to specific spots on the body. It may be recommended for pain management or to reduce the size of tumors causing discomfort. If cancer has metastasized to the brain, whole brain radiation, stereotactic radiosurgery or fractionated stereotactic radiotherapy may be used.

SURGERY

This is not typically a primary treatment for advanced breast cancer but may be an option to alleviate pain related to large tumors or metastases in the brain, spine or lungs. When cancer has metastasized to the bones, surgery may help support or stabilize weakened or broken bones.

CLINICAL TRIALS

These medical research studies may offer access to therapies not yet widely available. Extensive research is underway to study the effectiveness of new types of therapy, therapy combinations, drugs targeted at additional biomarkers and genetic markers, and improved treatments for managing various side effects. ■

COMMON DRUG THERAPIES FOR ADVANCED BREAST CANCER

These therapies may be used alone or in combination. For some combination therapies your doctor might suggest, go to www.patientresource.com/Metastatic_Breast_Treatment.aspx

CHEMOTHERAPY

- capecitabine (Xeloda)
- carboplatin (Paraplatin)
- cisplatin
- cyclophosphamide
- docetaxel (Taxotere)
- doxorubicin (Adriamycin)
- epirubicin (Ellence)
- eribulin (Halaven)
- fluorouracil (5-FU)
- gemcitabine (Gemzar)
- ixabepilone (Ixempra)
- liposomal doxorubicin (Doxil)
- paclitaxel (Taxol)
- protein-bound paclitaxel (Abraxane)
- vinorelbine (Navelbine)

HORMONE THERAPY

- anastrozole (Arimidex)
- ethinyl estradiol
- exemestane (Aromasin)
- fluoxymesterone
- fulvestrant (Faslodex)
- goserelin acetate (Zoladex)
- letrozole (Femara)
- leuprolide acetate (Eligard, Lupron, Lupron Depot)
- megestrol acetate (Megace)
- tamoxifen
- toremifene (Fareston)

IMMUNOTHERAPY

- pembrolizumab (Keytruda)

TARGETED THERAPY

- abemaciclib (Verzenio)
- ado-trastuzumab emtansine (Kadcyla)
- alpelisib (Piqray)
- entrectinib (Rozlytrek)
- everolimus (Afinitor, Afinitor Disperz)
- fam-trastuzumab deruxtecan-nxki (Enhertu)
- lapatinib (Tykerb)
- larotrectinib (Vitrakvi)
- margetixumab-cmkb (Margenza)
- neratinib (Nerlynx)
- olaparib (Lynparza)
- palbociclib (Ibrance)
- pertuzumab (Perjeta)
- pertuzumab, trastuzumab and hyaluronidase-zzxf (Phesgo)
- ribociclib (Kisqali)
- ribociclib and letrozole (Kisqali Femara Co-Pack)
- sacituzumab govitecan-hziy (Trodelvy)
- talazoparib (Talzenna)
- trastuzumab (Herceptin)
- trastuzumab and hyaluronidase-oysk (Herceptin Hylecta)
- tucatinib (Tukysa)

As of 6/29/22

Special services ensure your whole person is cared for

You are strong, but now is not the time to rely on yourself alone. Navigating your diagnosis will take the knowledge, resources, strength and support of many people, including your family and friends, health care team, spiritual community and many others you have yet to meet. Open your mind and heart, and accept their valuable advice and experience.

WHAT IS SUPPORTIVE CARE?

Supportive care can begin as soon as you receive your diagnosis. You may hear it referred to as palliative care, but do not let that alarm you. It is not the same as hospice care. Instead, it is specialized medical care for people living with a serious illness. Palliative care is all about preserving or restoring your quality of life, and your palliative care specialists will work closely with you to ensure your needs are met.

Many types of services fall within the supportive care category, and they are designed to accomplish the same goal: help you maintain your desired quality of life by offering physical, emotional, practical, financial and spiritual support for you and your loved ones. Your doctor, nurse, patient navigator or case worker can explain how you may benefit and how to get started.

Preventing, minimizing and managing the physical side effects of the cancer and its treatment is one of the most common needs you will have. Though some side effects are simply an inconvenience, others can disrupt your quality of life. Examples include severe diarrhea that keeps you homebound or mouth sores that prevent you from eating and getting the nutrition your body needs. Still others have the potential to be serious or even life-threatening and could be a side effect or symptom of the cancer progressing (such as having a seizure), making it critical that you know what to do if a potentially serious side effect or symptom occurs.

Along with offering physical relief, resources are also available to help you with your emotional well-being. You can expect to experience a range of feelings, from anxiety and fear to doubt and depression. It is very important to acknowledge and address them and to realize that it will be much easier to have help doing so. Consider discussing your fears with your friends, a support group or a therapist.

Your nurse navigator can connect you with the advanced breast cancer community. Support is available there in many forms — in person, by phone and online. Many organizations offer one-on-one buddy and peer support programs that pair you with another person who shares your diagnosis. Sharing your feelings with an advanced breast cancer survivor can offer a level of understanding and comfort that is difficult to find with someone who has not experienced advanced or metastatic cancer.

Following are more areas to explore. If you need help in an area not listed here, talk with a member of your health care team.

- **Nutritional support** may be needed to ensure you are able to get the nutrients your body needs. If a dietitian or nutritionist is not on your health care team, ask for a referral.
- **Sexual health** is an important part of life. Your treatments may have physical or emotional side effects that affect your desire, confidence or physical ability. Talk with your doctor about ways to maintain your sexuality, or ask for a referral to a therapist who has experience working with people who have metastatic breast cancer.
- **Financial counseling** may help relieve the stress and anxiety of managing the ongoing costs associated with treating advanced breast cancer. Understanding the costs early and learning about the resources that may help financially can make you feel more in control.
- **Spiritual or religious guidance** can be available from a chaplain or spiritual care advisor at your hospital or in your religious community. Spiritual support is available to you even if you do not consider yourself a religious person. ■

Boost your mood by leading a healthy lifestyle

➥ ***Feeling good about the decisions you make can be uplifting. And though you may feel as if many parts of your life are out of your control, you can – for the most part – choose the foods you eat, the exercise you take part in and the activities that give you joy.***

Follow a nutritious diet. Maintaining a healthy weight is important, especially if treatment is causing you to lose or gain weight. Whether you are trying to lose, gain or maintain, make sure to eat the essential nutrients, including carbohydrates, fats and protein. If following a healthy diet is a challenge, consider meeting with a registered dietitian. Together, you can create a nutrition plan and discuss your concerns. If a dietitian is not on your medical team, ask your nurse navigator for a referral.

Exercise. Even a 10-minute daily walk can energize you and offer multiple health benefits, such as reducing anxiety, depression and fatigue. Physical activity is also a natural way to boost your mood, offering drug-free relief for many of the emotional side effects of cancer and its treatment.

Take care of you. Whether it's reading a book, watching a movie, crocheting, getting a massage by a certified oncology massage therapist or something else, make time to do whatever puts you in your happy place.

Follow-up appointments will guide your treatment path

Ongoing testing will now become a very important part of your world. Your doctors will watch you closely to learn about any symptoms you have, detect new signs of cancer growth, check for treatment resistance (when cancer no longer responds to a certain treatment) and identify other changes in your health.

KEEP YOUR FOLLOW-UP APPOINTMENTS

This part of your treatment is a team effort. Your doctor will rely on you to be diligent about making and keeping your follow-up appointments. The earlier changes in your condition are identified, the faster they can be addressed. As a result, your treatment plan may change, and this may include a change in dosage, therapy or treatment type.

Before your visits. Stay organized to get the most out of your appointments. Keep a file of medical records related to your cancer, as well as a list of your drugs. Bring them to each appointment. Track any symptoms you are having and their severity at specific times of the day or week. Write down questions to ask your doctor. Find someone to go with you if possible. This person may take notes or record the conversation, which may help you remember what has been said.

Get your lab work and other tests done so the results are available to discuss with your doctor at your appointment. Lab and imaging tests will be done to see how well treatment is working, plan treatment and find if and where cancer has spread.

Blood tests will be performed to check for signs of disease and see how well your organs are working. This may include:

- A complete blood count
- A comprehensive metabolic panel, which measures many substances in your blood
- Liver function tests

Periodically, your doctor may order a biopsy to determine whether the biomarkers in the cancer have changed (mutated), which may alter future treatment options.

Some biomarkers your doctor may test include estrogen receptor (*ER*), progesterone receptor (*PR*), human epidermal growth factor receptor-2 (*HER2*), cancer antigen 125 (CA-125), carcinoembryonic antigen (CEA), cancer antigen 15-3 (CA 15-3), cancer antigen 27.29 (CA 27.29) and circulating tumor cells, which are pieces of the tumor that break off and move throughout the bloodstream. Higher numbers indicate the cancer may be growing.

You may need more than one type of imaging test to monitor for and detect the cancer's size and spread. Your doctor may use some or all of the following:

- A bone scan uses small amounts of radiation and a special camera to help spot areas of bone damage from treatment or from cancer that has spread.
- Computed tomography (CT) uses X-rays and a computer to take many images of a body part from different angles. Contrast material (a dye) may be used to make pictures clearer.
- Magnetic resonance imaging (MRI) combines a powerful magnet and radio waves to create pictures. You may receive contrast (dye) before the test.
- Positron emission tomography (PET) uses a tracer (radioactive drug) to see how and where cancer is growing. Sometimes doctors combine PET with CT.
- Ultrasound uses high-energy sound waves to create images. It is helpful for spotting small areas of cancer on or near the body's surface.
- An X-ray uses low-dose radiation to take one picture at a time.

During your visits. Your doctor will perform a physical exam and ask how you are feeling, both emotionally and physically. Be sure to answer honestly, and don't hesitate to ask questions.

Describe your symptoms and any changes in your health. Know that symptoms may be from treatment or from the cancer itself. And always be honest when providing this information.

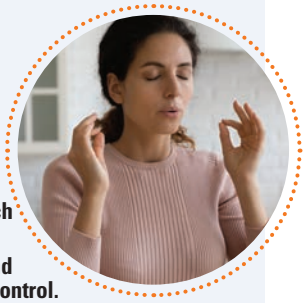
Tell your doctor if:

- You have any new symptoms such as bone pain or trouble breathing after treatment.
- Side effects have not gone away or are not being managed to your satisfaction.
- You are having any trouble with your day-to-day activities.

In between visits. Ensure you have access to information you may need.

- Keep a record of phone numbers to call. You might need to get in touch with someone for routine care, change an appointment or see someone right away. Add these phone numbers to your file.
- Call your doctor's office if you are really worried about something. Don't wait until your next scheduled office visit. ■

How to cope with scanxiety



Most people feel anxious before scans or other tests and while waiting for results. Here are a few things that may help you cope:

- **Learn how to recognize "scanxiety." Pay attention to how it shows up in your body. For instance, you might breathe more quickly or feel tension in certain parts of your body.**
- **When this happens, use techniques to manage it. You might watch a funny movie, call a friend, go for a walk in nature or meditate.**
- **Find out when to expect results, how you will receive them, and who will deliver them to you. This may give you some sense of control.**
- **Have a friend or family member with you when you receive your test results.**
- **Above all, go easy on yourself! This is tough stuff, and it really is normal to have feelings like these.**

Planning for the costs of cancer care

Coming to terms with an advanced breast cancer diagnosis and understanding the treatments that are best for you is obviously your focus. Though it may feel like less of a priority, it is also important for you to be aware of the costs involved in your care. Knowing which costs you may have and how to plan for them in your budget is helpful as you move forward.

Health care costs and insurance issues can be complex. Keep in mind that you do not have to tackle this alone. Many people are available to help. Ask your nurse navigator or a member of your supportive care team to put you in touch with a financial representative at your doctor's office or hospital. Do not feel embarrassed to talk with them about your financial situation. They expect you to, and they are skilled at guiding you to reputable sources for answers and assistance.

Following are the general types of expenses you are likely to have. Familiarize yourself with them to get a basic understanding of the costs ahead.

Step 1

Medical expenses. These include medical office visits, tests, treatments, drugs and caregiving, which are the most obvious additions to your spending. Contact the financial staff at your doctor's office. They can help you understand your insurance policy and out-of-pocket expenses. They may also have access to programs that offer certain medications at reduced costs. You can also refer to the financial resources below.

Step 2

Lifestyle expenses. You may have increased living expenses because of new, cancer-related costs, which include supportive care items or wigs, prosthetics, etc. You may spend more money on transportation, travel, legal assistance, child or elder care, meal preparation or housecleaning. Reach out to your social worker, patient advocate or patient navigator at your medical facility. They can refer you to local organizations, advocacy groups and other nonprofit organizations that may offer assistance in these and other areas.

Step 3

Income changes and special expenses. Your income may be reduced if you have to cut back on hours at your job, take a leave of absence or stop working completely. Make a budget for your adjusted income. If you can, set aside funds for something special, such as activities or trips with your family and friends to help ease the stress of this difficult time. It may feel like splurging, but making happy memories with your loved ones can be wonderful and emotionally healing. ■

Breast cancer financial assistance programs

MyAbbVie Assist Solutions ..... www.abbvie.com/patients/patient-assistance, 800-222-6885
Abraxane Financial Assistance ..... www.abraxanepro.com/financial-assistance, 800-931-8691
Afinitor Patient Support .... www.us.afinitor.com/metastatic-breast-cancer/patient/cost, 877-577-7756
Arimidex Patient Direct ..... www.amiridex.com, 800-434-1121
Aromasin Savings Card ..... www.aromasin.com/savings, 866-562-6151
AstraZeneca Access 360 ..... www.myaccess360.com, 844-275-2360
AstraZeneca Patient Savings Program ..... www.astrazenecaspecialtysavings.com, 844-275-2360
AstraZeneca Prescription Savings Program (AZ&ME) ..... azandmeapp.com, 800-292-6363
Bayer US Patient Assistance Foundation ..... www.patientassistance.bayer.us, 866-228-7723
Bristol-Myers Squibb ..... bms.com/patient-and-caregivers/get-help-paying-for-your-medicines, 800-721-8909
Bristol Myers Squibb Access Support ..... www.bmsaccesssupport.bmscustomerconnect.com/patient, 800-861-0048
Bristol Myers Squibb Patient Assistance Foundation ..... www.bmspaf.org, 800-736-0003
Daiichi-Sankyo Access Central ..... dsiaccesscentral.com/patient, 866-437-4669
ENHERTU4U www.enhertu4u.com/patient/affording-your-medicine, 833-364-3788
Faslodex Co-pay Savings Program www.myaccess360.com/faslodex-fulvestrant/patient-affordability, 844-275-2360
Genentech Access Solutions ..... genentech-access.com/patient, 877-436-3683
Genentech Oncology Co-pay Assistance Program ..... copayassistancenow.com, 855-692-6729
Genentech Patient Foundation ..... gene.com/patients/patient-foundation, 888-941-3331
GSK for You ..... www.gskforyou.com/programs/reimbursement-support, 888-825-5249
Halaven $0 Co-Pay Program ..... www.halaven.com, 855-347-2448
Halaven Eisai Reimbursement Resources ..... www.eisaireimbursement.com/patient/halaven, 866-613-4724
Herceptin Access Solutions ..... genentech-access.com/patient/brands/herceptin, 877-436-3683
Herceptin Financial Assistance ..... www.herceptin.com/patient/financial-assistance.html, 866-422-2377
Herceptin Hylecta Access Solutions ..... www.genentech-access.com/patient/brands/herceptinhylecta, 866-422-2377
Ibrance Financial Assistance ..... www.ibrance.com/financial-support-resources, 844-942-7262
Ixempra Access + Support ..... www.ixempra.com/for-patients/get-patient-support/, 855-991-7277
Kadcyla Access Solutions ..... www.kadcyla.com/financial-assistance-programs, 877-436-3683
Keytruda KEY+YOU ..... www.keyplusyou.com, 855-398-7832, press 2
Keytruda Patient Assistance ..... www.merckaccessprogram-keytruda.com/hcc, 855-257-3932
Kisqali Care Patient Support Program ..... www.us.kisqali.com/patient-support/financial-resources, 800-282-7630
Lilly Cares Foundation Patient Assistance Program ..... www.lillycares.com, 800-545-6962
Lilly Oncology Support ..... www.lillyoncologysupport.com, 866-472-8663
Lupron Depot Savings Card ..... www.luprongyn.com/savings-and-support, 800-222-6885
Lynparza Support ..... www.lynparza.com/resources-support/financial-support, 844-275-2360
Margenza Access Support ..... www.margenzasupport.com, 844-633-6469
Merck Access Program ..... merckaccessprogram.com
Merck Patient Assistance Program ..... www.merckhelps.com, 800-727-5400
Nerlynx Puma Patientlynx Reimbursement Support ..... nerlynx.com/access-and-support/access-programs, 855-816-5421
Novartis Oncology Universal Co-Pay Program ..... copay.novartisoncology.com, 877-577-7756
Novartis Patient Assistance Foundation ..... www.novartis.us/our-products/patient-assistance/patient-assistance-foundation-enrollment, 800-277-2254
Novartis Patient Assistance NOW Oncology (PANO) ..... patient.novartisoncology.com/financial-assistance/pano, 800-282-7630
Perjeta Access Solutions ..... genentech-access.com/patient/brands/perjeta, 877-436-3683
Pfizer Oncology Together ..... www.pfizeroncologytogether.com/patient, 877-744-5675
Phesgo Access Solutions ..... genentech-access.com/patient/brands/phesgo, 877-436-3683
PIQRAY Patient Support Services ..... www.us.piqray.com/metastatic-breast-cancer/patient-resources/support, 800-282-7630
R-Pharm US Access + Support ..... enrollsource.rpharm-us.com, 855-991-7277
Rozlytrek Access Solutions ..... genentech-access.com/patient/brands/rozlytrek, 877-436-3683
Sanofi Patient Connection ..... www.sanofipatientconnection.com, 888-847-4877
SeaGen Secure ..... www.seagensecure.com, 855-473-2873
Talzenna Support & Resources ..... www.talzenna.com/support-and-resources, 877-744-5675
TerSera SupportSource ..... www.terserasupportsource.com, 844-864-3014
Teva Cares Foundation Patient Assistance Program ..... www.tevacares.org, 877-237-4881
Teva CORE ..... www.tevacore.com, 888-587-3263
Together with GSK Oncology ..... www.togetherwithgskoncology.com, 844-447-5662
Trodelvy Access Support ..... www.trodelvy.com/patient/mtnbc/access-support, 844-876-3358
Tukysa SeaGen Secure ..... www.seagensecure.com/patient/tukysa, 855-473-2873
Tykerb Co-pay Program ..... copay.novartisoncology.com/?name=tykerb, 877-577-7756
Verzenio Continuous Care Support Program ..... www.verzenio.com/savings-support, 844-837-9364
Vitrakvi Patient Assistance Program ..... www.vitrakvi-us.com/patient-assistance-program, 800-288-8374
Xeloda Access Solutions ..... genentech-access.com/patient/brands/xeloda, 877-436-3683
Zoladex Co-pay Card ..... www.zoladexhcp.com/access-support, 844-965-2339
Zoladex Patient Assistance Program ..... www.zoladex.com/savings-support, 844-965-2339

Support resources available for you

BREAST CANCER

ABCD After Breast Cancer Diagnosis ..... www.abcdbreastcancersupport.org
American Breast Cancer Foundation ..... www.abcf.org
Avon Foundation for Women ..... www.avonworldwide.com/supporting-women/breast-cancer
Bosom Buddies Breast Cancer Support, Inc. ..... www.bbbcsi.org
Breast360.org www.breast360.org
Breast Cancer Action ..... www.bcaction.org
Breast Cancer Research Foundation ..... www.bcrf.org
BreastCancer.org ..... www.breastcancer.org
BreastCancerTrials.org ..... www.breastcancertrials.org
Breast Friends ..... www.breastfriends.org
Bright Pink ..... www.brightpink.org
Carrie's TOUCH ..... www.carriestouch.org
Casting for Recovery ..... www.castingforrecovery.org
Celebrating Life Foundation ..... www.celebratinglife.org
Driving Miss Darby Foundation, Inc. ..... www.drivingmissdarby.org
Dr. Susan Love Foundation for Breast Cancer Research ..... www.drsusanloveresearch.org
Expedition Inspiration Fund for Breast Cancer Research ..... www.expeditioninspiration.org
FORCE: Facing Our Risk of Cancer Empowered ..... www.facingourrisk.org
Foundation for Women's Cancer ..... www.foundationforwomenscancer.org
HER2Support.org her2support.org
Here for the Girls ..... www.hereforthegirls.org
The IBC Network Foundation ..... www.theibcnetwork.org
The Inflammatory Breast Cancer Foundation ..... www.eraseibc.org
Inflammatory Breast Cancer Research Foundation ..... www.ibcresearch.org
Leslie's Week (Stage 4) ..... www.lesliesweek.org
Linda Creed Breast Cancer Organization ..... www.lindacreed.org
Living Beyond Breast Cancer ..... www.lbbc.org
Male Breast Cancer Coalition ..... www.malebreastcancercoalition.org
Metastatic Breast Cancer Alliance ..... www.mbcalliance.org
Metastatic Breast Cancer Network ..... www.mbcn.org
METAvivor ..... www.metavivor.org
My BCTeam (social network for women facing breast cancer) ..... www.mybcteam.com
My Breast Cancer Support ..... www.mybreastcancersupport.org
My Pink Planner ..... www.mypinkplanner.com
National Breast and Cervical Cancer Early Detection Program ..... www.cdc.gov/cancer/nbccedp
National Breast Cancer Coalition ..... www.stopbreastcancer.org
National Breast Cancer Foundation, Inc. ..... www.nationalbreastcancer.org
National Cancer Institute ..... www.cancer.gov/types/breast
National Cancer Institute (breast cancer treatment & pregnancy) ..... www.cancer.gov/types/breast/patient/pregnancy-breast-treatment-pdq
Nueva Vida, Support Network for Latinas With Cancer ..... www.nueva-vida.org
The Pink Agenda ..... www.thepinkagenda.org/fab-u-wish/apply-now
Reach to Recovery ..... www.cancer.org/reachtorecovery
SHARE Cancer Support ..... www.sharecancersupport.org
Sharsheret ..... www.sharsheret.org
Sisters Network Inc. ..... www.sistersnetworkinc.org
The Sister Study ..... www.sisterstudy.org
Support Connection ..... www.supportconnection.org
Susan G. Komen ..... www.komen.org
Sustain Inspire Survive ..... www.helpsis.com
Tigerlily Foundation ..... www.tigerlilyfoundation.org
Triple Negative Breast Cancer Foundation ..... www.tnbcfoundation.org, 877-880-8622
Young Survival Coalition ..... www.youngsurvival.org

CANCER EDUCATION

American Cancer Society ..... www.cancer.org
American Society of Clinical Oncology ..... www.cancer.net
CANCER101 ..... www.cancer101.org
Cancer*Care* ..... www.cancercare.org
Cancer Support Community ..... www.cancersupportcommunity.org
Centers for Disease Control and Prevention (CDC) ..... www.cdc.gov
Dr. Susan Love Foundation for Breast Cancer Research ..... www.drsusanloveresearch.org
FORCE: Facing Our Risk of Cancer Empowered ..... www.facingourrisk.org
The Gathering Place ..... www.touchedbycancer.org
Get Palliative Care ..... www.getpalliativecare.org
Global Resource for Advancing Cancer Education (GRACE) ..... www.cancergrace.org
The Hope Light Foundation ..... www.hopelightproject.com
National Cancer Institute ..... www.cancer.gov
National Comprehensive Cancer Network (NCCN) ..... www.nccn.org
National LGBT Cancer Network ..... www.cancer-network.org
NCI Cancer Information Service 800-422-6237
Patient Resource ..... www.patientresource.com
Physicians Committee for Responsible Medicine ..... www.pcrm.org/health-topics/cancer
Scott Hamilton CARES Foundation ..... www.scottcares.org
Triage Cancer ..... www.triagecancer.org
Union for International Cancer Control ..... www.uicc.org
U.S. National Library of Medicine ..... www.nlm.nih.gov

CAREGIVERS & SUPPORT

4th Angel Patient & Caregiver Mentoring Program www.4thangel.org, 866-520-3197
Cactus Cancer Society ..... www.cactuscancer.org
CanCare ..... www.cancare.org, 888-461-0028
CANCER101 ..... www.cancer101.org, 646-638-2202
Cancer and Careers ..... www.cancerandcareers.org, 646-929-8032
Cancer*Care* ..... www.cancercare.org, 800-813-4673
Cancer Connection ..... www.cancer-connection.org, 413-586-1642
Cancer Hope Network ..... www.cancerhopenetwork.org, 877-467-3638
Cancer Really Sucks! ..... www.cancerreallysucks.org
Cancer Support Community ..... www.cancersupportcommunity.org, 888-793-9355
Cancer Support Community Helpline 888-793-9355
Cancer Survivors Network ..... csn.cancer.org, 800-227-2345
Caregiver Action Network ..... www.caregiveraction.org, 855-227-3640
CaringBridge ..... www.caringbridge.org
Center to Advance Palliative Care ..... www.capc.org
Chemo Angels ..... www.chemoangels.com
Cleaning for a Reason ..... www.cleaningforareason.org
Connect Thru Cancer ..... www.connectthrucancer.org
Cooking with Cancer ..... www.cookingwithcancer.org, 205-978-3570
Family Caregiver Alliance ..... www.caregiver.org, 800-445-8106
Friend for Life Cancer Support Network www.friend4life.org, 866-374-3634
The Gathering Place ..... www.touchedbycancer.org, 216-595-9546
Guide Posts of Strength, Inc. ..... www.cancergps.org, 336-883-4483
Imerman Angels ..... www.imermanangels.org, 866-463-7626
Livestrong Foundation ..... www.livestrong.org, 855-220-7777
Living Hope Cancer Foundation ..... www.getupandlive.org
LivingWell Cancer Resource Center ..... www.livingwellcrc.org, 630-933-7860
Lotsa Helping Hands ..... www.lotsahelpinghands.com
The Lydia Project ..... www.thelydiaproject.org, 877-593-4212
MyLifeLine ..... www.mylifeline.org, 888-793-9355
National LGBT Cancer Project ..... www.lgbtcancer.org, 917-301-1913
Patient Empowerment Network ..... www.powerfulpatients.org
SHARE Caregiver Circle ..... www.sharecancersupport.org/caregivers-support, 844-275-7427
Stronghold Ministry ..... www.mystronghold.org, 877-230-7674
Triage Cancer ..... www.triagecancer.org, 424-258-4628
Well Spouse Association ..... www.wellspouse.org, 732-577-8899
weSPARK Cancer Support Center ..... www.wespark.org, 818-906-3022
Wigs & Wishes ..... www.wigsandwishes.org

CLINICAL TRIALS

BreastCancerTrials.org ..... www.breastcancertrials.org, 888-282-7099
Cancer Support Community ..... www.cancersupportcommunity.org/find-clinical-trial, 888-793-9355
Center for Information & Study on Clinical Research Participation ..... www.searchclinicaltrials.org, 888-793-9355
ClinicalTrials.gov ..... www.clinicaltrials.gov
Lazarex Cancer Foundation ..... www.lazarex.org, 877-866-9523, 925-820-4517
Metastatic Breast Cancer Trial Search ..... www.breastcancer.org/types/metastatic/treatment/clinical-trials, 610-642-6550
National Cancer Institute ..... www.cancer.gov/clinicaltrials, 800-422-6237
NCI Cancer Information Service 800-422-6237
TNBC Foundation Clinical Trials Matching Service ..... www.tnbcfoundation.org/research/clinical-trials, 646-942-0242
WCG CenterWatch ..... www.centerwatch.com, 866-219-3440

NUTRITION

American Cancer Society ..... www.cancer.org, 800-227-2345
Cancer*Care* ..... www.cancercare.org, 800-813-4673
Cancer Support Community ..... www.cancersupportcommunity.org, 888-793-9355
LLS | PearlPoint Nutrition Services ..... www.pearlpoint.org

For more resources, go to PatientResource.com

PATIENT
RESOURCE

Where information equals hope