

Living as a Breast Cancer Survivor

Whether you are living with breast cancer or have finished treatment, you may have questions and concerns about life as a survivor.

Living as a Survivor

Learn more about living as a breast cancer survivor and get information about next steps.

- Follow-up Care After Breast Cancer Treatment
- Can I Lower My Risk of Breast Cancer Progressing or Coming Back?
- Body Image and Sexuality After Breast Cancer

Other Concerns After Treatment

Treatment may remove or destroy the cancer, but you might still have other concerns after treatment.

- Pregnancy After Breast Cancer
- Menopausal Hormone Therapy After Breast Cancer
- Second Cancers After Breast Cancer

Follow-up Care After Breast Cancer Treatment

- Typical follow-up schedules
- Ask your doctor for a survivorship care plan
- Keeping health insurance and copies of your medical records
- If the cancer comes back

Many women are relieved to be finished with breast cancer treatment, but also worry about the cancer coming back and can feel lost when they don't see their cancer care team as often.

But for some women with advanced breast cancer, the cancer may never go away completely. These women may continue to get treatments to help keep the breast cancer under control and to help relieve symptoms from it. Learning to live with advanced breast cancer that doesn't go away can have its own types of stress and uncertainty.

Even if you have completed breast cancer treatment, your doctors still will want to watch you closely, so it's very important for you to go to all of your follow-up appointments. During these visits, your doctors will ask if you are having any problems and will examine you. Lab tests and imaging tests typically aren't needed after treatment for most early-stage breast cancers. But they might be done in some women who are having symptoms to see if they're the result of the cancer returning or are from treatment-related side effects.

Almost any cancer treatment can have <u>side effects</u>¹. Some might only last for a few days or weeks, but others might last a long time. Some side effects might not even show up until years after you have finished treatment. Your doctor visits are a good time for you to ask questions and talk about any changes or problems you notice or concerns you have. However, if concerns about your cancer come up between visits, you shouldn't wait until your next scheduled visit. Call your doctor's office right away.

Typical follow-up schedules

Your follow-up schedule can depend on many factors, including the type of breast cancer, how advanced it was when it was found (the <u>stage</u>² of the cancer), and how it was (or is being) treated.

• **Doctor visits:** If you have finished treatment, your follow-up visits will probably be every few months at first. The longer you have been free of cancer, the less often the appointments are needed. After 5 years, they are typically done about once a year.

Mammograms: If you had breast-conserving surgery³ (lumpectomy or partial

Ask your doctor for a survivorship care plan

Talk with your doctor about developing a <u>survivorship care plan</u>¹⁰ for you. This plan might include:

- A summary of your diagnosis, the tests that were done, and the treatment you received
- A suggested schedule for follow-up exams and tests
- A schedule for other tests you might need in the future, such as early detection (screening) tests for other types of cancer, or tests to look for long-term health effects from the breast cancer or its treatment
- A list of possible late- or long-term side effects from your treatment, including what to watch for and when you should contact your doctor
- Diet, physical activity, and other lifestyle modification suggestions

Keeping health insurance and copies of your medical records

Even after treatment is finished, it's very important to keep your <u>health insurance¹¹</u>. Tests and doctor visits cost a lot, and even though no one wants to think their cancer might come back, this could happen.might include:

Cancer: Principles and Practice of Oncology. 11th ed. Philadelphia, Pa: Lippincott Williams & Wilkins; 2019.

National Comprehensive Cancer Network (NCCN). Practice Guidelines in Oncology: Breast Cancer. Version 8.2021. Accessed at https://www.nccn.org/professionals/physician_gls/pdf/breast.pdf on October 18, 2021.

Ruddy KJ, Partridge AH. Approach to the patient following treatment for breast cancer. UpToDate. 2021. Accessed at https://www.uptodate.com/contents/approach-to-the-patient-following-treatment-for-breast-cancer on October 18, 2021.

Runowicz CD, Leach CR, Henry NL, et al. American Cancer Society/American Society of Clinical Oncology Breast Cancer Survivorship Care Guideline. *J Clin Oncol.* 2016;34(6):611-635.

Last Revised: January 5, 2022

Can I Lower My Risk of Breast Cancer Progressing or Coming Back?

- · Getting to a healthy weight
- Being physically active
- Eating a healthy diet
- Dietary supplements
- Alcohol
- If the cancer comes back

If you have (or have had) breast cancer, you probably want to know if there are things you can do (aside from your treatment) that might lower your risk of the cancer growing or coming back, such as getting or staying active, eating a certain type of diet, or taking nutritional supplements. Fortunately, breast cancer is one of the best studied types of cancer in this regard, and research has shown there are some things you can do that might be helpful.

Staying as healthy as possible is more important than ever after breast cancer treatment. <u>Controlling your weight, being physically active, and eating well¹ may help</u>

lymphedema, or improve lymphedema for women who already have it.

As with other types of lifestyle changes, it's important to talk with your treatment team before starting a new physical activity program. This will likely include meeting with a physical therapist as well. Your team can help you plan a safe and effective program.

Eating a healthy diet

Most research on possible links between diet and the risk of breast cancer coming back

Dietary supplements

Women often want to know if there are any <u>dietary or nutritional supplements</u>⁴ they can take to help lower their risk. So far, no dietary supplements (including vitamins, minerals, and herbal products) have been shown to clearly help lower the risk of breast cancer progressing or coming back. This doesn't mean that there aren't any that will help, but it's important to know that none have been proven to do so.

Dietary supplements are not regulated like medicines in the United States – they do not have to be proven effective (or even safe) before being sold, although there are limits on what their makers are allowed to claim they can do. If you're thinking about taking any nutritional supplement, talk to your health care team. They can help you decide which ones you can use safely while avoiding those that might be harmful.

Alcohol

It's clear that alcohol – even as little as a few drinks a week – increases a woman's risk of **developing** breast cancer. But whether alcohol affects the risk of breast cancer **coming back** is not as clear. Drinking alcohol can raise the levels of estrogen in the body, which in theory could increase the risk of breast cancer coming back. But there is no strong evidence from studies to support this.

<u>It is best not to drink alcohol.</u>⁵ Women who do drink should limit it to no more than 1 drink a day to help lower their risk of getting certain types of cancer (including breast

Hyperlinks

- 1. www.cancer.org/cancer/survivorship/be-healthy-after-treatment.html
- 2. www.cancer.org/cancer/managing-cancer/side-effects/swelling/lymphedema.html
- 3. www.cancer.org/cancer/managing-cancer/side-effects/fatigue.html
- 4. <u>www.cancer.org/cancer/managing-cancer/treatment-types/complementary-and-integrative-medicine/dietary-supplements.html</u>
- 5. <u>www.cancer.org/cancer/risk-prevention/diet-physical-activity/acs-guidelines-</u> <u>nutrition-physical-activity-cancer-prevention.html</u>
- 6. <u>www.cancer.org/cancer/types/breast-cancer/treatment/treatment-of-breast-cancer-by-stage/treatment-of-recurrent-breast-cancer.html</u>

References

Ligibel J, Meyerhardt JA. The roles of diet, physical activity, and body weight in cancer survivors. UpToDate. 2021. Accessed at https://www.uptodate.com/contents/the-roles-of-diet-physical-activity-and-body-weight-in-cancer-survivors on October 20, 2021.

National Comprehensive Cancer Network (NCCN). Practice Guidelines in Oncology: Breast Cancer. Version 8.2021. Accessed at https://www.nccn.org/professionals/physician_gls/pdf/breast.pdf on October 20, 2021.

Rock CL, Thomson CA, Sullivan KR, et al. American Cancer Society nutrition and physical activity guideline for cancer survivors. *CA Cancer J Clin*. 2022. Accessed at https://acsjournals.onlinelibrary.wiley.com/doi/full/10.3322/caac.21719 on March 16, 2022.

Rock CL, Thomson C, Gansler T, et al. American Cancer Society guideline for diet and physical activity for cancer prevention. *CA: A Cancer Journal for Clinicians.* 2020;70(4). doi:10.3322/caac.21591. Accessed at https://onlinelibrary.wiley.com/doi/full/10.3322/caac.21591 on June 9, 2020.

Ruddy KJ, Partridge AH. Approach to the patient following treatment for breast cancer. UpToDate. 2021. Accessed at https://www.uptodate.com/contents/approach-to-the-

love physically and emotionally after treatment, especially after surgery. But breast cancer can be a growth experience for couples – especially when both partners take part in decision making and go to treatments.

To learn more, see <u>Sex and the Adult Female with Cancer⁶</u>.

Finding help and support after breast cancer treatment

Regardless of the changes you may experience, it's important to know that there is advice and support out there to help you cope. Speaking with your doctor or other members of your health care team is often a good starting point to find it. There are also many support groups available, such as the <u>American Cancer Society Reach To</u> <u>Recovery program</u>⁷

- 5. <u>www.cancer.org/cancer/types/breast-cancer/treatment/hormone-therapy-for-breast-cancer.html</u>
- 6. <u>www.cancer.org/cancer/managing-cancer/side-effects/fertility-and-sexual-side-effects/sexuality-for-women-with-cancer.html</u>
- 7. www.cancer.org/support-programs-and-services/reach-to-recovery.html
- 8. <u>www.cancer.org/cancer/managing-cancer/side-effects/fertility-and-sexual-side-effects/how-cancer-treatment-affects-fertility.html</u>

References

Henry NL, Shah PD, Haider I, et al. Chapter 88: Cancer of the breast. In: Niederhuber JE, Armitage JO, Doroshow JH, Kastan MB, Tepper JE, eds. *Abeloff's Clinical Oncology*. 6th ed. Philadelphia, Pa: Elsevier; 2020.

Jagsi R, King TA, Lehman C, et al. Chapter 79: Malignant tumors of the breast. In: DeVita VT, Lawrence TS, Rosenberg SA, eds. *DeVita, Hellman, and Rosenberg's Cancer: Principles and Practice of Oncology*. 11th ed. Philadelphia, Pa: Lippincott Williams & Wilkins; 2019.

Ruddy KJ, Partridge AH. Approach to the patient following treatment for breast cancer. UpToDate. 2021. Accessed at https://www.uptodate.com/contents/approach-to-the-patient-following-treatment-for-breast-cancer on October 21, 2021.

Last Revised: January 5, 2022

Pregnancy After Breast Cancer

- Can I have a baby after having breast cancer?
- Could pregnancy or breastfeeding make my breast cancer come back?
- How long after breast cancer treatment should I wait before becoming pregnant?

pregnant?

Breast cancer survivors who want to become pregnant are sometimes advised to wait at least 2 years after treatment is finished before trying. The best length of time to wait is not clear, but 2 years is thought to be enough time to find any early return of the cancer, which could affect your decision to become pregnant.

For women with hormone receptor-positive breast cancer, adjuvant <u>hormone therapy</u>³ is typically recommended for 5 to 10 years after the initial treatment. Women who want to have children during this time are often advised to take hormone therapy for at least 2 years before stopping it and then waiting a few months before trying to become pregnant. Hormone therapy can then be started again after the baby is born.

Keep in mind that the advice about waiting 2 years is not based on data from any clinical trials. And some breast cancers can come back after the 2-year mark, so every case is different. Your decision should take into account many things, including your age, desire for more pregnancies, type of breast cancer, and the risk of the cancer coming back early.

If I 0 0u, gs 76want to

Can I breastfeed after breast cancer treatment?

If you have had breast surgery and/or radiation, you might have problems breastfeeding from the affected breast. This might include reduced milk production in that breast as well as structural changes that can make breastfeeding painful, or make it harder for the baby to latch onto the breast. Still, many women are able to breastfeed.

If you are still taking any medicines to treat your breast cancer (such as hormone therapy), it's very important to talk with your doctor before trying to breastfeed. Some drugs can enter the breast milk and might affect the baby.

Talk to your doctor

If you have or have had breast cancer and are thinking about having children, talk with your doctor. Ask how the cancer and its treatment might affect your chances for pregnancy, as well as if being pregnant could affect your risk of the cancer coming back.

In many cases, counseling can help you sort through the choices that come with surviving breast cancer and planning a pregnancy.

Hyperlinks

- 1. <u>www.cancer.org/cancer/managing-cancer/side-effects/fertility-and-sexual-side-effects/fertility-and-women-with-cancer.html</u>
- 2. <u>www.cancer.org/cancer/types/breast-cancer/risk-and-prevention/lifestyle-related-breast-cancer-risk-factors.html</u>
- 3. <u>www.cancer.org/cancer/types/breast-cancer/treatment/hormone-therapy-for-breast-cancer.html</u>
- 4. <u>www.cancer.org/cancer/types/breast-cancer/treatment/treating-breast-cancer-</u> <u>during-pregnancy.html</u>

References

Azim HA Jr, Santoro L, Pavlidis N, et al. Safety of pregnancy following breast cancer diagnosis: A meta-analysis of 14 studies. *Eur J Cancer*. 2011;47:74-83.

its impact on reproductive function. Hum Reprod Update. 2009;15:323-339.

Lambertini M, Blondeaux E, Bruzzone M, et al. Pregnancy after breast cancer: A systematic review and meta-analysis. *J Clin Oncol*. 2021;39(29):3293-3305.

National Cancer Institute. Breast Cancer Treatment and Pregnancy (PDQ®). 2019. Accessed at www.cancer.gov/types/breast/hp/pregnancy-breast-treatment-pdq on October 21, 2021.

Ruddy KJ, Partridge AH. Approach to the patient following treatment for breast cancer. UpToDate. 2021. Accessed at https://www.uptodate.com/contents/approach-to-the-patient-following-treatment-for-breast-cancer on October 21, 2021.

Last Revised: January 5, 2022

Menopausal Hormone Therapy After Breast Cancer

- Can I take menopausal hormone therapy after breast cancer?
- Relieving menopausal symptoms without hormone therapy

Taking <u>post-menopausal hormone therapy (PHT)</u>¹, also called hormone replacement therapy (HRT), to help with menopause symptoms may not be safe for women who have had breast cancer. If you are bothered by menopause symptoms, talk to your doctor about ways to get relief.

Many women have menopause symptoms such as hot flashes after treatment for breast cancer. This can happen naturally as women get older, but it can also be caused by some breast cancer treatments. Some pre-menopausal women have menopause symptoms as a result of <u>chemotherapy</u>² or from <u>hormone therapy drugs</u>³ used to treat breast cancer (such as tamoxifen and aromatase inhibitors). Women who are past menopause might also get symptoms if they had to stop taking PHT when they were diagnosed with breast cancer.

Can I take menopausal hormone therapy after breast cancer?

When women reach menopause, some choose to take PHT, which is made up of female hormones (estrogen, sometimes along with progesterone) to help reduce menopause symptoms. But there have been concerns about women who have had breast cancer using PHT, because of the known link between estrogen levels and breast cancer growth.

A well-designed clinical trial (the HABITS study) found that breast cancer survivors taking PHT were much more likely to develop a new or recurrent breast cancer (cancer that comes back after treatment) than women who were not taking these hormones. Because of this, doctors generally do not recommend PHT if a woman was previously treated for breast cancer.

Relieving menopausal symptoms without hormone therapy

If you are having trouble with menopause symptoms, such as hot flashes, talk to your doctor about ways other than PHT to help with specific symptoms. Some women might want to try using non-hormonal medicines or other methods first to see if they help.

Losing weight

Some women find that losing weight helps with menopausal symptoms such as hot flashes.

Diet and dietary supplements

Some women find that changing the way they eat, such as eating smaller meals and avoiding 'triggers' (such as spicy foods) is helpful for them.

The effects of specific foods and dietary supplements on menopausal symptoms are not clear. This doesn't mean they won't help, but it's important to understand that the evidence supporting their use is limited.

Phytoestrogens: These are estrogen-like substances found in certain plants, such as soy, red clover, and black cohosh. Some women take supplements containing these substances to try to help with symptoms of menopause.

Eating soy foods seems to be safe for breast cancer survivors, although it's not clear if it can help relieve menopause symptoms. Women can get higher doses of phytoestrogens in some dietary supplements (such as soy or isoflavone supplements). However, not enough is known about these supplements to know for sure if they are safe and if they work. If you are considering taking one of these supplements, be sure to

talk with your doctor first.

Exercise, relaxation techniques, and behavioral therapies

Some women find these types of approaches help them with menopausal symptoms. Although there is only limited research showing these techniques might be helpful, there's likely to be little harm in trying them. Before starting any exercise program after being diagnosed with breast cancer, it's important to speak with your doctor or someone on your health care team.

Some research has suggested that **acupuncture** might be helpful in treating hot flashes, although not all studies have found this. This might be another option to discuss with your doctor.

Non-hormone medicines for hot flashes

Drugs without hormone properties that may be helpful in treating hot flashes include:

- Certain antidepressant drugs, such as venlafaxine (Effexor), citalopram (Celexa), or paroxetine (Paxil)*
- The nerve drug gabapentin (Neurontin)
- The blood pressure drug clonidine
- Oxybutynin, a drug used to treat overactive bladder
- Fezolinetant (Veozah), a drug that targets the nervous system activity that can lead to hot flashes

*If you are taking tamoxifen, it's important to note that some antidepressants can interact with tamoxifen and could make it less effective. Ask your doctor about any possible interactions between tamoxifen and any drugs you are taking.

Treatments for vaginal dryness

Vaginal dryness and discomfort can be bothersome menopausal symptoms for some women.

Several non-hormone treatments, including vaginal moisturizers, lubricants, and gels, are available to help treat vaginal dryness. If these aren't helpful, low-dose hormonal rings, tablets, capsules, or creams that are put directly into the vagina might be helpful.

Devices that use lasers or other forms of energy to 'rejuvenate' vaginal tissue are now

being studied as well, although it's not yet clear how helpful they might be. It's important to discuss the possible risks and benefits of these treatments with your doctor before deciding if one is right for you.

Hyperlinks

- 1. <u>www.cancer.org/cancer/risk-prevention/medical-treatments/menopausal-hormone-replacement-therapy-and-cancer-risk.html</u>
- 2. <u>www.cancer.org/cancer/types/breast-cancer/treatment/chemotherapy-for-breast-cancer.html</u>
- 3. <u>www.cancer.org/cancer/types/breast-cancer/treatment/hormone-therapy-for-breast-cancer.html</u>

References

Bachmann G, Santen RJ. Genitourinary syndrome of menopause (vulvovaginal atrophy): Treatment. UpToDate. 2021. Accessed at https://www.uptodate.com/contents/genitourinary-syndrome-of-menopause-vulvovaginal-atrophy-treatment on October 26, 2021.

Holmberg L, Anderson H. HABITS (hormonal replacement therapy after breast cancer -- is it safe?), a randomised comparison: Trial stopped. *Lancet*. 2004;363:453–455.

Leon-Ferre RA, Novotny PJ, Wolfe EG, et al. Oxybutynin vs placebo for hot flashes in women with or without breast cancer: A randomized, double-blind clinical trial (ACCRU SC-1603). *JNCI Cancer Spectr.* 2019 Oct 21;4(1):pkz088.

Lesi G, Razzini G, Musti MA, et al. Acupuncture as an integrative approach for the treatment of hot flashes in women with breast cancer: A prospective multicenter randomized controlled trial (AcCliMaT). *J Clin Oncol.* 2016;34:1795-1802.

Rock CL, Doyle C, Demark-Wahnefried W, et al. Nutrition and physical activity guidelines for cancer survivors. *CA Cancer J Clin*. 2012;62:243-274.

Ruddy KJ, Partridge AH. Approach to the patient following treatment for breast cancer. UpToDate. 2019. Accessed at https://www.uptodate.com/contents/approach-to-the-patient-following-treatment-for-breast-cancer on October 26, 2021.

Santen RJ, Loprinzi CL, Casper RF. Menopausal hot flashes. UpToDate. 2021.

Accessed at https://www.uptodate.com/contents/menopausal-hot-flashes on October 26, 2021.

Sussman TA, Kruse ML, Thacker HL, Abraham J. Managing genitourinary syndrome of menopause in breast cancer survivors receiving endocrine therapy. *J Oncol Pract.* 2019;15(7):363-370.

Walker EM, Rodriguez AI, Kohn B, et al. Acupuncture versus venlafaxine for the management of vasomotor symptoms in patients with hormone receptor-positive breast cancer: A randomized controlled trial. *J Clin Oncol.* 2010;28:634-640.

Last Revised: May 17, 2023

Second Cancers After Breast Cancer

- Follow-up after breast cancer treatment
- Can I lower my risk of getting a second cancer?

Breast cancer survivors can be affected by a number of health problems, but often a major concern is facing cancer again.

If this happens, it's most often the result of the breast cancer coming back after treatment. This is called a breast cancer **recurrence**. But some cancer survivors develop a new, unrelated cancer later on. This is called a **second cancer**.

Women who've had breast cancer can still get other cancers. Although most breast cancer survivors don't get cancer again, they are at higher risk for getting some types of cancer.

any late effects from cancer treatment.

If you have not had both breasts removed, you still need regular <u>mammograms</u>⁵ to look for breast cancer (either a recurrence of the cancer or a new breast cancer). See <u>Follow-up Care After Breast Cancer Treatment</u> for more on the other types of tests you might need after treatment.

You should also follow the <u>American Cancer Society guidelines for the early detection of</u> <u>cancer</u>,⁶ such as those for colorectal cancer and cervical cancer. Screening tests can often find these cancers early, when they are likely to be easier to treat. In some cases, the tests might even help prevent these cancers if pre-cancers are found and treated. For women who have had breast cancer, most experts do not recommend any additional testing to look for second cancers unless you have symptoms.

Let your doctor know about any new symptoms or problems, because they could be caused by the breast cancer coming back or by a new disease or second cancer. For These steps may also lower the risk of some other health problems.

See <u>Second Cancers in Adults¹¹</u> for more information about causes of second cancers.

Hyperlinks

- 1. <u>www.cancer.org/cancer/types/breast-cancer/risk-and-prevention/breast-cancer-risk-factors-you-cannot-change.html</u>
- 2. <u>www.cancer.org/cancer/types/breast-cancer/treatment/radiation-for-breast-cancer.html</u>
- 3. <u>www.cancer.org/cancer/types/breast-cancer/treatment/chemotherapy-for-breast-cancer.html</u>
- 4. <u>www.cancer.org/cancer/types/breast-cancer/treatment/hormone-therapy-for-breast-cancer.html</u>
- 5. <u>www.cancer.org/cancer/types/breast-cancer/screening-tests-and-early-</u> <u>detection/mammograms/having-a-mammogram-after-youve-had-breast-cancer-</u> <u>surgery.html</u>
- 6. <u>www.cancer.org/cancer/screening.html</u>
- 7. www.cancer.org/cancer/risk-prevention/tobacco.html
- 8. www.cancer.org/cancer/risk-prevention/diet-physical-activity.html
- 9. <u>www.cancer.org/cancer/risk-prevention/diet-physical-activity/acs-guidelines-</u> <u>nutrition-physical-activity-cancer-prevention.html</u>
- 10. <u>www.cancer.org/cancer/risk-prevention/diet-physical-activity/alcohol-use-and-cancer.html</u>
- 11. <u>www.cancer.org/cancer/survivorship/long-term-health-concerns/second-cancers-in-adults.html</u>

References

Bertelsen L, Mellemkjaer L, Christensen J, Rawal R, Olsen JH. Age-specific incidence of breast cancer in breast cancer survivors and their first-degree relatives. *Epidemiology*. 2009;20:175-180.

Boice JD Jr, Harvey EB, Blettner M, Stovall M, Flannery JT. Cancer in the contralateral breast after radiotherapy for breast cancer. *N Engl J Med.* 1992;326:781-785.

Brown LM, Chen BE, Pfeiffer RM, et al. Risk of second non-hematological malignancies

among 376,825 breast cancer survivors. Breast Cancer Res Treat. 2007;106:439-451.

Curtis RE, Ron E, Hankey BF, Hoover RN. New Malignancies Following Breast Cancer. In: Curtis RE, Freedman DM, Ron E, Ries LAG, Hacker DG, Edwards BK, Tucker MA, Fraumeni JF Jr. (eds). New Malignancies Among Cancer Survivors: SEER Cancer Registries, 1973-2000. National Cancer Institute. NIH Publ. No. 05-5302. Bethesda, MD, 2006. Accessed at

http://seer.cancer.gov/archive/publications/mpmono/MPMonograph_complete.pdf on October 26, 2021.

Rock CL, Thomson C, Gansler T, et al. American Cancer Society guideline for diet and physical activity for cancer prevention. *CA: A Cancer Journal for Clinicians.* 2020;70(4). doi:10.3322/caac.21591. Accessed at https://onlinelibrary.wiley.com/doi/full/10.3322/caac.21591 on October 26, 2021.

Smith RE, Bryant J, DeCillis A, Anderson S. Acute myeloid leukemia and myelodysplastic syndrome after doxorubicin-cyclophosphamide adjuvant therapy for operable breast cancer: The National Surgical Adjuvant Breast and Bowel Project experience. *J Clin Oncol.* 2003;21:1195-1204.

Wolff AC, Blackford AL, Visvanathan K, et al. Risk of marrow neoplasms after adjuvant breast cancer therapy: The National Comprehensive Cancer Network experience. *J Clin Oncol.* 2015;33:340-348.

Last Revised: January 5, 2022

Written by

The American Cancer Society medical and editorial content team (<u>https://www.cancer.org/cancer/acs-medical-content-and-news-staff.html</u>)