

thrive

Time to Heal

A look at the long-term
impact of cancer treatments,
side effects and cures

25
YEARS



University of Michigan
Comprehensive Cancer Center



thrive

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For more information about the stories in Thrive or any other cancer-related information, please call the Cancer AnswerLine at 800-865-1125.

On the cover:

Detective Sean Dush nears the end of his 3-year maintenance therapy for adult acute lymphoblastic leukemia.

Research **today** for a cancer-free **tomorrow**

When friends or family ask what they can do to help a patient undergoing cancer treatment, we have the perfect opportunity.

The American Cancer Society is recruiting men and women across the United States and Puerto Rico for a landmark new research study to better understand the genetic, environmental and other factors that may cause or prevent cancer.

Cancer Prevention Study-3, or CPS-3, is the third major, long-term cancer prevention study from the American Cancer Society. Some of the findings from previous Cancer Prevention Studies include:

- Linking smoking and lung cancer
- Prompting warning labels on cigarette packs and boxes
- Tying excess weight and obesity to an increased risk of death from 10 or more types of cancer
- Associating aspirin with lower risk of colorectal cancer
- Linking physical inactivity and certain dietary factors to cancer risk

“Our community has a unique opportunity to help finish the fight against cancer. Participating in this study could be the most important and meaningful action to fight cancer if even just one person could be spared a cancer diagnosis,” says James Montie, M.D., Valassis Professor of Urologic Oncology at the University of Michigan.

As part of enrollment, individuals who choose to participate will simply fill out a comprehensive survey packet about health history, provide a small blood sample (to be collected by trained phlebotomists) and provide a waist measure. Enrollment will take approximately 20-30 minutes. From that point forward, study participants will be followed over time to update information via periodic, mailed surveys.

Study participants must be willing to make a long-term commitment to the study (which involves completing follow-up surveys periodically over the next 20-30 years), be between ages 30 and 65 and have never been diagnosed with cancer, excluding basal or squamous cell skin cancer.

If you don't meet the eligibility requirements, your significant participation comes from telling everyone you know about the opportunity to help prevent cancer.

The University of Michigan Comprehensive Cancer Center is partnering with the American Cancer Society to host enrollment events from Oct. 30-Nov. 6.



For more information,
visit mcancer.org/cps3,
call **888-604-5888**
or email cps3@cancer.org.

*Spread the word about this
long-term cancer prevention study.*

Pathology 101

What you need to know about the report that explains how your cancer looks under the



Celina Kleer, M.D.

Chances are, the treatment plan for your cancer was determined by the results presented on a pathology report. Before your diagnosis, you probably had a biopsy or surgery where a doctor removed cells or tissue for study under a microscope. Specialists called pathologists spend their days viewing these samples, understanding how they look compared to normal cells and preparing reports which summarize the findings on each biopsy for oncologists and surgeons. Pathology reports are written using technical medical language, which a patient may or may not see or understand.

We spoke with Cancer Center Pathologist, Celina Kleer, M.D., director of the Breast Pathology Program, to find out the information contained in a report and how your oncologist uses it to decide the best course of treatment for your cancer.

Q What are the first steps a patient will take to begin the process of getting a pathology report?

To obtain a pathology report, a patient must undergo some procedure. A physician orders the procedure based on a patient's symptoms, like a lump in her breast, or other unusual findings that might indicate illness or cancer. The procedure could be any sort of tissue sampling, such as a core biopsy or a larger surgery.

Q What details are included on a pathology report?

A pathology report contains basic patient information, such as name, birthdate, biopsy date, and an assigned pathology accession number. It also contains a gross description of the sample, which is how it looks to the naked eye before it is inspected under the microscope. Then the report gives details of the tissue changes that the pathologist saw under the microscope, which allows for visualization of individual cells. The diagnosis section provides the location of the site, the tumor type and grade, the tumor size, and as much information as the pathologist can provide given the extent of the biopsy. Finally, there is a comments section where the pathologist can note any unusual aspects of the sample or concerns.

Q What information might a patient learn about his or her cancer?

Pathology reports tell you whether a patient has a malignancy, what type of cancer and whether it is confined or has spread to the lymph nodes or other organs. There are some features of the cancer cells which indicate whether a tumor may behave more aggressively. For example, based on the proliferation of the cancer cells, a pathology report tells you whether a tumor grows quickly, which will alert the oncologists and surgeons to select the most appropriate treatment course.

Q What is the difference between a pathologist and an oncologist?

A pathologist studies and makes diagnosis of diseases through examination of organs and tissues, including their study under the microscope. In the case of cancer, the pathologist generates a diagnostic report naming the specific tumor that a patient has so that oncologists can plan treatment.

It is important to note that a whole multidisciplinary team (which includes radiologists, oncologists, pathologists, radiation oncologists, surgeons, nurses, geneticists, psychiatrists and social workers) is closely involved in the decision-making and care of cancer patients. Their close communication is essential in providing optimal treatment. For example, in breast cancer, here at the Cancer Center, we present each patient's case to our breast multidisciplinary tumor board. We show slides on a projector and discuss the diagnosis and treatment plan of each individual patient. Everyone is able to offer his or her expertise.



m microscope

Q How does a patient interpret and understand the results of a pathology report?

Patients will hear results from their doctor. Pathology reports contain a lot of medical terms that patients may not understand. The doctor (who may be an oncologist) interprets them and conveys the diagnosis to patients in an understandable way.

Q What genetic information might be included on a pathology report?

We don't include genetic information right now in pathology reports. If genetic testing is indicated, this information is included in a special report. The Cancer Center has uniquely qualified specialists in this area.

However, moving forward toward the idea of personalized medicine, some people have their tumors sequenced to find specific genes that have mutated, which may give clues to what treatments will work for what tumor types.

Q Should patients get a second opinion on their pathology results?

I think second opinions are always worthwhile. Here at the Cancer Center, it is easy to get many opinions on a patient's pathology report. We have a resident physician review a case. Then, the resident reviews the case with a fellow and an attending physician. That's already three sets of eyes. If there are any doubts about a diagnosis, the case will be reviewed with another pathologist.

This all takes place before the tumor board meeting, where a room full of experts reviews the case and weighs in on treatment options. There are a lot of opportunities for clinicians to raise questions or flags.

Often, smaller hospitals and clinics send cases out for consultation to larger institutions like the University of Michigan. In our pathology department, we evaluate a lot of cases from regional hospitals. If a patient has doubts, a second opinion is a good idea.

Maintenance therapy:



Longer-term treatment, longer life

Mimi Norwood takes great pride in her heritage and family, as her parents came to the United States from China for a better future. At 64, the Ypsilanti mother and grandmother has accomplished a lot. She has two grown children, five grandchildren and a network of friends, and has had careers in respiratory therapy and social work.

When Norwood was diagnosed with chronic myelogenous leukemia in 2010, she worried about preserving her independence. She lives alone with her dog Mai, has a house to take care of and supports herself teaching sociology at Washtenaw Community College.

Her cancer, CML, is a slowly progressing blood and bone marrow disease. The first line of treatment was a daily dose of a chemotherapy drug called Gleevec. The drugs Tasigna and Sprycel were approved for patients whose diseases progressed or were intolerant of Gleevec. These drugs are taken for as long as the disease remains in remission. Unlike older chemotherapy, Gleevec does not cause long-term organ damage so people can take it and lead normal lives.



WHAT IS MAINTENANCE THERAPY?

For patients with certain cancers, maintenance therapy is an effective way to use an ongoing, less intensive program of chemotherapy to help lower the risk of your cancer coming back after it has been treated. Most maintenance therapy will not only prolong the duration of the original remission, it will also increase the chance for cure. Some maintenance drugs are taken forever.

In the past, patients like Norwood with CML would most likely receive a bone marrow transplant, a procedure associated with hospitalization, serious side effects and, for people her age, a 20 percent chance of death. Newer drugs, like Gleevec and Tasigna, have fewer and less serious side effects and less chance of serious complications.

Though no patient wants to have to take medication for the long-term, John Krauss, M.D., points out several factors should be considered, starting with putting the disease in perspective.

“Mimi has chronic leukemia, meaning it can result in death in three to five years if untreated, not three to five days,” he says. “It is also important to put the treatment in perspective. Before these drugs, we had a bone marrow transplant. Everybody had severe side effects. While these newer drugs take some getting used to, they are better than a bone marrow transplant.”

In other words, being at maintenance with minimal side effects and a cancer in deep remission is better than progressive cancer.





MAINTAINING A QUALITY OF LIFE

Upon diagnosis, Krauss informed Norwood that her cancer could be treated with oral medication. She began taking Gleevec, only to find it gave her severe diarrhea and unbearable hives. The hives came on so suddenly, she ended up in the emergency room for a shot of Benadryl and steroids. To control the hives, she was given a slowly tapering dose of prednisone.

"I turned into the Hulk," she says. "I went to Sam's Club and bought a roast chicken. I made potato salad. I stir fried green beans. I had to make myself stop eating so I didn't get sick. I even cleaned out my garage. The neighbors wanted to know what had gotten into me."

Krauss lowered her dose of Gleevec, but the side effects continued and they agreed Norwood couldn't live with them. She went on Tasigna instead.

"Dr. Krauss said we needed to take it one day at a time," she says. "He was very patient with me."

She responded well to the new drug and, after three years, has few side effects. She'll stay on the drug to keep her cancer in remission until a better drug is developed, or Krauss says otherwise.

"One of the biggest lessons I learned is not to be a hero," Norwood says. "You're human. You really have to get to know yourself and your limitations. Learn to rely on help from friends and neighbors. They are more than happy to help. They just need you to ask."

LOOKING TO THE FUTURE

These days Norwood feels well enough to take care of her house, walk her dog and go to the gym. Occasionally, she'll get some itching on her palms, a side effect of the medication, but it can be easily managed with a topical cream.

She recently hosted her entire family, including her two sons and five grandchildren, for a week at her home. Sticking with tradition, they played games, had a foosball tournament and played baseball down the street at Candy Cane Park.

Norwood sees Krauss every six months for blood work.

Her biggest complaint about maintenance therapy is the cost of the drugs. Her current insurance covers the cost, with a \$20 co-pay, but her receipt from Walgreen's indicates her insurance saves her \$9,608.59 each month. **t**

While doctors are hoping to cure CML, controlling the disease for decades with a single daily pill is the next best thing.

Doctors treat and research maintenance therapy for these cancers:

- Colorectal
- Melanoma
- Multiple myeloma
- Non-Hodgkin Lymphoma
- Gynecologic cancers

Source: American Society of Clinical Oncology

Possible disadvantages of maintenance therapy:

- Side effects
- Higher treatment costs
- More doctor visits
- Limited data on survival rates
- Drug resistance after long use

Source: American Society of Clinical Oncology

A Quarter-Century of Care



2013 marks the 25th anniversary of the U-M Comprehensive Cancer Center. What better way to celebrate than speak to patients treated way back when...who are still cancer-free today. Here are the stories of two Cancer Center patients who beat the disease and whose lives were enriched by the experience of healing.



COMPREHENSIVE CANCER CURES

AS TOLD BY TWO LONG-TERM PATIENTS



Name: **Regina Royan**

Birthdate: **Dec. 17, 1987**

Diagnosis: **Acute Lymphoblastic Leukemia (ALL)**

U-M Doctor: **Laurence Boxer, M.D.**

Age at diagnosis: **5**

Regina Royan's mother worried when her 5-year-old daughter kept running a low-grade fever. A complete blood count revealed acute lymphoblastic leukemia, the most common type of cancer in children, a disease of the blood and bone marrow. She remembers some of the painful things, like spinal taps and bone marrow tests. She remembers the frequent drives from her home in Howell, Mich., to Ann Arbor, which seemed like it took hours as a child. And, she remembers the parties on the seventh floor of Mott Children's Hospital for birthdays, holidays and children who had completed treatment.

"At Christmas, we did a make-believe trip to the North Pole, where we actually went to the Detroit airport, got on a plane and visited Santa. It was really awesome stuff. Sheila Morris in Child Life did such a tremendous job giving kids things to look forward to when they were in the hospital."

After three years of treatment and five years of follow-up tests, Royan was officially cured and now visits her primary care doctor for an annual physical, just like any other healthy 25-year-old.

HOW CANCER CHANGED HER LIFE:

"Dr. Boxer was such a big influence on my young life and an interest in medicine seemed like a natural fit. When I was in high school, I sent him an email and asked if I could come to the hospital and shadow him. He gave me a great opportunity to learn."

Royan received degrees in biology and political science from Eastern Michigan University and a master's in epidemiology from the University of Michigan. Her goal is to attend the U-M Medical School to become a physician.

IMPROVEMENTS SHE'S NOTICED IN CARE:

"It's great to see targeted treatments starting to come out that don't affect healthy cells like traditional therapy did. Side effects aren't as bad. Kids don't get as sick. They have a better quality of life to maintain an active childhood."

25 YEARS CANCER CENTER

Name: **Clark Charnetski**
Birthdate: **Jan. 17, 1942**
Diagnosis: **Bladder Cancer**
U-M Doctor: **James Montie, M.D.**
Age at diagnosis: **54**

In the spring of 1996, Clark Charnetski had a backache. Initially suspecting a urinary problem, an X-ray with dyes found a tumor. Within a few hours, he had an appointment with James Montie, M.D., who diagnosed bladder cancer. That summer, Charnetski underwent chemotherapy and radiation to shrink the tumor before surgery.

“Chemo at the time was very difficult,” he says. “I was really sick, especially combined with the radiation. I was in a wheelchair by the end, just because I was so weak. I had to recover physically before surgery.”

Charnetski remembers turning to his one-person sailboat for exercise to get his strength back. He still sails the boat today.

In surgery, Montie discovered the tumor was entirely encased in scar tissue. This was good news: it meant the chemo and radiation did its job to shrink the tumor. There was no cancer found in surrounding lymph nodes. After a 15-day hospital stay and several months of recovery, Charnetski remains cancer-free.


HOW HE GIVES BACK:

“The first meeting of the bladder cancer support group met when I was in the hospital for surgery. I missed it, but my wife went down. She and I have gone ever since. As time goes by, there are people there facing surgery or who have recently had it. It gives them hope to see someone who has survived all these years.”

WHAT'S HE'S MOST GRATEFUL FOR:

“At one point, I was worried I wouldn't live to see the 21st century,” Charnetski says.

He remembers attending a millennium party, watching the clock and being happy when the lights stayed on at the turn of the century.

Since his diagnosis in 1996, he's also seen his son get married, has two grandchildren (now 11 and 13) and retired from his job as a physicist to participate on committees working to improve transportation issues for senior citizens and people with disabilities. 

Defining Growth

Our Center is one of 41 in the U.S. to earn the National Cancer Institute's “Comprehensive” designation.

What is the NCI? The government agency which conducts and supports research, training, health information dissemination, and other programs related to cancer. This includes rehabilitation from cancer and the continuing care of cancer patients and their families.

What does “comprehensive” mean?

A comprehensive cancer center must conduct laboratory, clinical and population-based research. It must test new therapies. Its experts must collaborate and share research to further cancer care. It must serve and educate the public with all cancer-related advances. And, it must provide training for health professionals.

What is “multidisciplinary care?” It is a team approach, with multiple doctors and caregivers sharing expertise on each patient's case. More than 350 U-M faculty members provide care to patients in the Cancer Center while working together on research.



Time to Heal

Sean Dush considers himself lucky when it comes to having been diagnosed with adult acute lymphoblastic leukemia. At 37, he experienced shortness of breath and swollen lymph nodes for just four days. His cancer was caught early. He responded to treatment and, after just a few months, received a clean bill of health from his oncologist, Dale Bixby, M.D., Ph.D.

“When I got to U-M and people found out I had four little kids, I told them I had no choice but to beat this,” Dush says. “I believe God has healed me, thanks to Dr. Bixby and (Physician Assistant) Heather Fox.”

With his cancer gone and no symptoms, Dush had a decision to make. His treatment protocol for ALL included maintenance therapy for three years to give him the best chance of being cured. But with long-term treatment comes long-term side effects.

“Even though these maintenance medications are often pills, they are still chemotherapy,” says Bixby. “Patients often need blood monitoring to ensure stable kidney and liver functions and stable blood counts. Moreover, chronic side effects like gastrointestinal problems, fatigue and memory loss can become issues with specific medications.”

Dush, then a road patrol sergeant for the Clinton County Sheriff’s office, was unable to work nights because of his suppressed immune system and fatigue. He sometimes sleeps for 16 hours and still wakes up tired. He has come to expect 10-12 “bad” days every time he begins the 28-day regimen. He takes anti-nausea medication when needed. Dush credits the support of his family, friends and coworkers as the driving force behind keeping his life on track during treatment.

One Cancer Center patient’s story of long-term treatment and coping with side effects





QUESTIONS TO ASK YOUR DOCTOR ABOUT LONG-TERM SIDE EFFECTS:

- Could someone in your office write down what treatments I received?
- Am I at risk of specific late effects?
- Are there any other doctors I should see, such as a cardiologist or endocrinologist?
- Are there any signs or symptoms I need to watch for?

Source: American Society of Clinical Oncology

CANCER CENTER RESOURCES * TO MANAGE SIDE EFFECTS:

- Symptom Management and Supportive Care Program
- Patient Education Resource Center
- PsychOncology Program

* See back cover for contact info.



Now a detective, Dush investigates everything from low-level property crimes to homicides. Because he lives close to the Sheriff's department, he has the advantage of being able to go home and sleep during his lunch hour. He also eats well and walks four to five times per week.

With the end of his three-year maintenance period coming this December, was it worth it?

"I believe God put me in contact with Dr. Bixby for a reason and I'm going to listen to him. Even though the side effects can be tough, ALL has a 90 percent cure rate."

Bixby tries to ensure patients like Dush understand the goals of therapy and possible bumps in the road.

"With Sean, he has been the model patient," he says. "He never misses appointments, calls with side effects or questions, and makes sure he understands the plan."

Now 40, Dush has installed an in-ground swimming pool to thank his wife and kids for taking such good care of him during treatment. With his maintenance therapy almost behind him, the family plans to enjoy it for years to come. **t**

Visit mCancer.org/thrive for tips on bone health when you're lactose intolerant.

Bone Up for Bone Health

BY NANCY BURKE, R.D., DANIELLE KARSIES, M.S., R.D., AND MELISSA SHANNON-HAGEN, R.D., CSO
U-M COMPREHENSIVE CANCER CENTER SYMPTOM MANAGEMENT AND SUPPORTIVE CARE PROGRAM



It's officially fall. The leaves are changing and you've probably seen at least a few Halloween skeletons. Although they're great decorations and a time-honored costume, they're also important organs in our bodies that need special attention during and after cancer treatment.

Many side effects of treatment can induce bone loss, cause thinning of the bones (osteopenia) and increase the risk of fractures. There is also a connection between cancer-related bone disease and death. Keeping your bones strong and healthy is more than just a good idea. It can also be a lifesaver.

WHAT CANCER TREATMENTS AFFECT BONE HEALTH?

- Hormone therapy, such as aromatase inhibitors for breast cancer or androgen deprivation therapy for prostate cancer
- Steroids, such as prednisone
- Blood thinners
- Radiation therapy, especially to the pelvis

WHAT CAN YOU DO TO KEEP YOUR BONES STRONG?

Diet Eat calcium-rich foods, such as turnip or collard greens, navy beans and milk or cheese to meet the recommended daily allowance (RDA) for your age. For most, this is 1000-1200 mg daily.

- Get enough vitamin D to help the body absorb calcium. The RDA is 600-800 IU daily, depending on your age. A supplement may be needed to reach your goal.
- Eat a nutritious diet of whole grains, fruits, vegetables and lean proteins to maintain a healthy weight. This will ensure you get all the other nutrients your body needs, including vitamins A, C, K, phosphorus and more.

Exercise Weight-bearing exercise, such as weight training, walking, hiking, jogging and climbing stairs, helps strengthen bones. If you have health problems, check with your physician before you begin a regular exercise program.

Quit smoking If you don't smoke, don't start.

Limit alcohol Stick to no more than one drink for women, two drinks for men each day. One drink is defined as 12 oz beer, 1.5 oz of spirits or a 5 oz glass of wine.

Ask your doctor what you can do to keep your bones healthy.



To make an appointment for nutritional counseling, call **877-907-0859**.

NEW FINDINGS PAVE THE WAY FOR LOWER DOSAGE PAINKILLERS

For patients managing cancer and other chronic health issues, painkillers such as morphine and Vicodin are often essential for pain relief. The body's natural tendency to develop tolerance to these medications, however, often requires patients to take higher doses, increasing risks of harmful side effects and dependency.

Now, new research from the University of Michigan Health System and a major pharmaceutical company has identified a novel approach to moderate and severe pain therapy that paves the way for lower dosage painkillers. The findings appear in *Proceedings of the National Academy of Sciences*.

Drugs such as hydrocodone (the main ingredient of Vicodin) and oxycodone (Oxycontin) are often the best options for the treatment of moderate to severe pain for patients facing medical conditions ranging from a wisdom tooth extraction to cancer. The drugs bind to specific molecules called opioid receptors on nerve cells in the brain and spinal cord to prevent the feeling of pain.

"We have for the first time discovered compounds that bind to an alternative site on the nerve opioid receptors and that have significant potential to enhance the drug's positive impact without increasing negative side effects," says co-author John Traynor, Ph.D., professor of pharmacology at the U-M Medical School.

"We are still in the very early stages of this research with a long way to go, but we believe identifying these compounds is a key step in revolutionizing the treatment of pain. This opens the door to developing pain relief medications that require lower doses to be effective, helping address the serious issues of tolerance and dependence that we see with conventional pain therapy."



IMPORTANT NEWS FOR SMOKERS! PANEL BACKS ROUTINE LUNG CANCER SCREENING

In a major policy change, government advisers recommend annual CT scans for certain smokers and former smokers. The recommendations apply to adults who have no signs or symptoms, but are at high risk for developing the disease because they are current or former smokers. The U.S. Preventive Services Task Force released its draft recommendations last summer.

"By screening high-risk people with low radiation exposure chest CT scans, death from lung cancer can be significantly reduced, and done so cost effectively. The Task Force recommendation likely will lead to widespread insurance coverage for this important screening test," says Ella Kazerooni, M.D., M.S. (above), professor of radiology and director of cardiothoracic radiology at U-M.



"HIGH RISK" GENERALLY MEANS:

- people age 55-74 who are current or former smokers, and
- those who have smoked 30 packs per year or more, or
- former smokers who have quit within the last 15 years

About 90 percent of the people who have lung cancer die from the disease, in part because it is often not found until the cancer is advanced. The goal for making it routine to get low-dose CT scans for lung cancer screening is to find the cancer earlier, when treatment can more likely result in a cure.

The Task Force reviewed a number of studies on the potential benefits and harms of lung cancer screening, including results from the National Lung Screening Trial, a very large and important study of more than 50,000 people. The Task Force found that low-dose CT scans more accurately identify early stage cancer than other screening tests. They also found that many lung cancer deaths can be prevented by screening high-risk people every year.

"After spending 20 years researching better ways to treat people with lung cancer, I am convinced that prevention and early detection are the best ways to have a major impact on the high mortality associated with the disease. The recent data on CT screening for lung cancer promises to reduce the number of deaths from lung cancer. All high-risk smokers



should be encouraged to seek counseling and potential screening through comprehensive screening programs, such as the one offered at the University of Michigan," says Gregory Kalemkerian, M.D., professor of internal medicine and director of the U-M Multidisciplinary Lung Cancer Clinic.

To find out if you're eligible, call the Lung Cancer Screening Clinic at **734-647-9000**.



Do you have a question
for the pharmacist?
Email us at
ThriveMagazine
@med.umich.edu

Examples of drugs that
may cause nerve changes:

- Bortezomib
- Carboplatin
- Cisplatin
- Cytarabine (high doses)
- Docetaxel
- Lenalidomide
- Nelarabine
- Oxaliplatin
- Paclitaxel
- Thalidomide
- Vincristine
- Vinblastine
- Vinorelbine

WEB EXCLUSIVE

Visit **mCancer.org/thrive**
to read about Cancer
Center research on using
antidepressants to treat
neuropathy.

CHEMOTHERAPY AND NERVE CHANGES

By Emily Mackler, Pharm.D.

*U-M Comprehensive Cancer Center Symptom Management
and Supportive Care Program*

Chemotherapy is used to treat many types of cancers
and its side effects vary depending on the type of
chemotherapy received. Some cancers and some
chemotherapy agents may cause nerve changes, which
can increase with the more chemotherapy a patient
receives.

Nerve changes can lead to pain or problems with
movement called peripheral neuropathy.

Some examples of chemotherapy drugs known to cause
nerve changes are listed in the yellow box. These drugs
may cause numbness, tingling or pain in the hands or feet,
difficulty using your fingers (holding or picking things up),
constipation or hard stools, losing your balance or feeling
weak. Because nerve changes can increase over time, it is
important to let your oncologist know what symptoms you
are experiencing. In some cases, symptoms may improve
when chemotherapy is complete and in some cases,
medicine may be given to help the symptoms.

In addition to taking extra caution to prevent falls and
make sure you are protecting your hands and feet, certain
medications may also help to decrease the symptoms
of nerve damage. Medicines traditionally used to treat
depression and seizure disorders can be helpful in treating
nerve pain. Talk to your oncologist if you are experiencing
these symptoms.

The Cancer Center Symptom Management and Supportive
Care Clinic works with patients, their oncologists and other
pain specialists to develop effective pain treatment plans.



*To make an
appointment, call*
877-907-0859.

Just a Phone Call Away

Art Therapy
877-907-0859

Cancer AnswerLine
800-865-1125

Clinical Trials
800-865-1125

Fertility Counseling
877-907-0859

Financial Counseling
734-647-5120

Guided Imagery
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Nutrition Services
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THRIVE ONLINE

mCancer.org/thrive

Thrive doesn't end here! Visit **mCancer.org/thrive** for more. Here's what you'll find:

- Information on how much calcium and vitamin D you need
- Links to facts, figures and current-day programs and care at the Cancer Center
- An in-depth article to help you understand maintenance therapy
- Definitions of the different kinds of cancer treatments
- A link to learn more about different types of long-term side effects
- Tips for maintaining bone health when you're lactose intolerant
- Details on how to search for clinical trials that could help you become the future of cancer treatment