FRANKLY SPEAKING ABOUT CANCER

Chronic Myeloid Leukemia (CML)



If you or a loved one has chronic myeloid leukemia (CML), you may be feeling overwhelmed. You may have a lot to process and many doctor visits. It can seem sometimes like your health care team is speaking another language. Whether you have decisions to make about your treatment or not, it helps to know what to expect with a CML diagnosis. This booklet gives an overview of a CML diagnosis, treatment, and how to cope. We hope this booklet will help you learn more about your options, know what questions to ask, and start to feel empowered to take control of your cancer and your life.





What is CML?

Chronic myeloid leukemia (CML) is a blood cancer. CML begins in the bone marrow, the sponge-like inner part of certain bones, where myeloid cells are made. Myeloid cells normally mature into blood cells (red cells, some kinds of white cells, and platelets). In CML, genetic changes cause some myeloid cells to grow faster, last too long, and leave the bone marrow early. CML mostly causes white blood cells to grow out of control. Often platelets, the blood cells that help with clotting, increase as well. Because of these increases, red blood cells, which carry oxygen from your lungs to other parts of your body, can decrease.

Between 10 and 15 percent of all new cases of leukemia are CML. More than 8,000 people are diagnosed with CML in the United States each year. The average age at diagnosis is 64 years old.. CML does not run in families.

CML is caused by an abnormal gene (a mutation) inside of leukemia cells called BCR-ABL. It is formed when pieces of chromosomes 9 (ABL) and 22 (BCR) swap places as cells divide. The ABL gene on chromosome 9 joins (fuses) to the BCR gene on chromosome 22. This swapping is called a "translocation." The changed chromosome 22 is called the Philadelphia (Ph) chromosome. This is seen in nearly all CML cases.

TALKING ABOUT CML

You will hear many words used to describe CML. Some key ones to know are:

BCR-ABL: The abnormal gene that causes CML.

BLASTS: Immature white blood cells that grow out of control in leukemia. Normally they are only found in the bone marrow, not in the blood.

LEUKEMIA: (*loo-KEE-mee-uh*) A cancer of the blood cells.

PHILADELPHIA CHROMOSOME

(Ph): (FIH-luh-DEL-fee-uh KROHmuh-some) A genetic change on chromosome 22 where part of chromosome 9 attaches to it (also creating the fusion gene BCR-ABL).

TYROSINE KINASE INHIBITORS

(TKIs): A type of targeted therapy that blocks a specific process that helps cancer cells grow and spread.



Adapted from "Schematic of the Philadelphia Chromosome" by Aryn89 https://creativecommons.org/licenses/by-sa/4.0

What does it mean to have a chronic cancer?

CML may develop slowly. It may not be noticed until blood tests are done for other reasons. As a chronic disease, it lasts over time.

The drugs available now can control CML very well in most patients. These drugs may allow for a type of cure in some people where medicine can be stopped after many years of treatment. Other people with CML may be on treatment continuously.

While some patients may be able to stop treatment, they need to be watched very carefully to check for return of the leukemia. They need to restart treatment again if the disease returns.

CML is a lifelong condition. Even when on treatment, you may not appear sick to others. Many patients say that because of this, friends, family, and colleagues sometimes forget they are sick or don't realize how much the disease can affect their everyday life.

Diagnosis and Phases

You may not have any symptoms when you are diagnosed with CML. Many people find out they have CML after their doctor orders blood tests during a routine checkup, or for another health problem. If there are symptoms, they may include:

- Feeling tired or weak
- Losing weight
- Fevers
- Sweating (especially at night)
- Pain or fullness in the left side of the belly when the spleen, an organ that filters blood and fights infection, gets bigger, and can cause symptoms

These vague symptoms could also be caused by other health problems. Because of this, many people are surprised to be diagnosed with cancer. It is also common for a CML diagnosis to take time to be figured out.

Your health care team will run tests to learn as much as they can about your leukemia. This process includes diagnosis, staging, and risk stratification.

DIAGNOSIS = Do you have CML?

STAGING = Does your CML have signs of "acceleration" (other genetic changes, growing faster, shifting towards an acute form of leukemia)? Has it shifted into a form of acute leukemia (called a "blast phase")?

RISK STRATIFICATION = How do all your specifics (age and general health) and those of the CML (how high the white blood cell counts are, how enlarged your spleen is, how many blast cells are in the blood and in the bone marrow, etc.) predict what treatment is best and what chances of success will you have?

GETTING A DIAGNOSIS

If your doctor suspects CML, tests will be done, including:

Physical exam

Your doctor will do a physical exam and ask many questions. Describe how you have been feeling and any changes you have noticed. For instance, a person with CML may have a swollen or enlarged spleen. This takes up space in your abdomen and makes you feel full even after small meals or causes pain on the left side of your body below your ribs.

Lab tests

These tests are done to diagnose CML. They are also often used over time to see how well treatment is working.

Blood tests — A complete blood count (also called "CBC") is done to see how many white blood cells, platelets, and red blood cells you have and whether they look abnormal. A "differential" is done with the CBC to check the different types of white blood cells in the blood sample. For information on normal results for Complete Blood Count (CBC) tests, visit www.

CancerSupportCommunity.org/CBC.

Bone marrow tests — These tests are taken from the pelvic (hip) bone or rarely from the breastbone (sternum), to look at the blood where it is being made. The amount of immature white blood cells (blasts) in the bone marrow and blood determine the phase of CML (see image below).

- An aspiration takes a sample through a needle to examine the cells of your bone marrow.
- A biopsy samples a solid piece of the marrow to examine the total amount of blood growing and how it is organized.
- Molecular testing (testing for the cancer cells' genes) Three main types of tests look at changes in the genes (DNA) linked to CML.
 - Cytogenetics (also called karyotyping)

 This test looks at whole chromosomes (coiled DNA strands) from your bone marrow cells under a microscope to check their number and structure.
 - Fluorescence in situ hybridization (FISH) – This test looks at the chromosomes in bone marrow cells after tagging certain parts with a dye you can see under a certain light.



© 2007 Terese Winslov U.S. Govt. has certain right • Quantitative polymerase chain reaction (qPCR) – qPCR measures the amount of the BCR-ABL gene in the blood or bone marrow and compares it to genes that are normally there. It is the most sensitive test and is used at diagnosis and throughout treatment and remission. For more information on PCR, see "Monitoring CML Treatment on page 12."

PHASES OF CML

Tests that diagnose CML also show the phase of the disease. The phase describes the extent that CML has grown and if it is behaving more aggressively. Different phases require different treatment. The three phases are:

- Chronic most CML patients are diagnosed during the chronic phase.
 CML in this phase often responds better to treatment than CML in other phases.
- Accelerated the number of blasts and the size of the spleen increases. Blood counts are more out of balance; for example the platelets may drop low. Often there are more mutations in the genes of the leukemia cells (in addition to the Philadelphia chromosome) in this phase.

 Blast or Blast Crisis — the number of blasts go up to the point where the disease looks and behaves like acute leukemia (either acute myeloid or acute lymphoid leukemia). CML in the blast phase is difficult to manage. Treatment can sometimes bring it back to the chronic phase or into remission. Treatment for acute myeloid leukemia or acute lymphocytic leukemia (for more information, see **www**.

CancerSupportCommunity.org/Leukemia) is used for patients with CML blast phase disease. TKIs are often also part of treatment.

The chronic phase can last for several years. Without treatment, the disease will likely progress to the accelerated or blast phases within a few years. With TKI treatment, the progress to these higher phases has been greatly reduced.

HOW YOUR DOCTOR DECIDES ON WHAT TREATMENT TO RECOMMEND

Some of the factors that help your team decide what treatment to recommend include:

- The phase of CML you have
- The results of genetic and biomarker tests
- The size of your spleen
- Number of white blood cells and platelets in the blood
- Your age
- Your overall health
- Your medical history
- Your values, goals, and preferences

Treatment Planning

After you find out you have CML, your doctor will tell you which treatments are best for you. Your doctor may ask you what you want to do. This is called treatment planning.

Because CML is a chronic condition, your health care team may include different people during different times of your treatment. They may include:

- Doctor specializing in the treatment of CML (may be a hematologist-oncologist, hematologist, or medical oncologist)
- Oncology nurse, nurse practitioner, or physician assistant
- Oncology social worker, counselor, or therapist
- Patient navigator or nurse navigator
- Nutritionist or dietician
- Palliative care specialist
- Pharmacist specializing in oncology

If you are facing a cancer treatment decision, Cancer Support Community's *Open to Options*[®] program can help you prepare a list of personalized questions to share with your doctor. Our *Open to Options*[®] specialists can help you create a written list of specific questions about your treatment plan for your doctor. Call 888-793-9355 to schedule an appointment or to find a Cancer Support Community near you.

COMMUNICATING WITH YOUR HEALTH CARE TEAM:

- Your health care team will give you a lot of information in a short amount of time. Listen closely and ask questions until you understand what is being said.
- Write down as much as possible. Bring a friend or relative to take notes, or request a patient navigator or social worker, if available. Ask if you can record the visit.
- Feel free to ask follow-up questions after appointments by email or through your hospital's patient portal. Ask your doctors how best to contact them. Because CML involves long-term treatment, you may go for long periods without seeing your main cancer doctor. Find out who is best to contact during those times, such as a nurse practitioner or hematology/oncology fellow.
- Let your health care team know how you are doing. Report any side effects or symptoms you experience. Use a notebook to keep track of side effects, take notes when you talk with your health care team, and remember questions to ask your health care team.
- Talk to your health care team or financial navigator about ways to manage treatment cost before you start treatment.
- Use CSC's "Preparing for your Doctor's Visit: A Worksheet for People with CML," available at www.
 CancerSupportCommunity.org/CML

QUESTIONS TO ASK YOUR HEALTH CARE TEAM

Questions for Newly Diagnosed:

- What phase is my CML in? Chronic? Accelerated? Or blast phase?
- Have you done all of the genetic, molecular, or other biomarker tests on my leukemia? If so, what do those results mean for me?
- Is my CML Philadelphia chromosome positive? What does this test result mean for me?
- Should I go to an academic medical center or CML specialist for my treatment?
- Are there any clinical trials that would be right for me? How do I find out more about them?
- What are my different treatment options and what are the risks and benefits?
- How will I receive this treatment? How will this treatment impact my everyday life? Will I need to miss work/school?
- What treatment side effects should I expect (short and long term)? What can be done about them? Is there anything that I can do to reduce risk?
- How will we know if this therapy is working?
- How often should I be tested during treatment?
- How much will this therapy cost?
- Is this treatment (and other expenses) covered by my insurance? If not, can I get help paying for it?
- Are there programs that can help with treatment and other costs (prescriptions, childcare, household costs)? Is there a financial navigator that I can talk with?

QUESTIONS TO ASK YOUR HEALTH CARE TEAM

- Should I be thinking about a stem cell transplant? If so, when will the transplant team start looking for a stem cell donor?
- Can my leukemia be cured? What would a "cure" look like for me?
- Whom should I call if I have questions or problems during office hours? After hours and weekends?

Questions for During Treatment:

- What side effects do I need to be looking out for? When would I need to contact my doctor?
- Should I see any other specialists to manage side effect risks, like a cardiologist or cardiooncologist?
- Is there any alternative or complementary medicine I can use? OR I was thinking of using as a complementary treatment. Would it interfere with my current treatment?
- How often will I need office visits? How much time will I need for these?
- What do I do if I miss a dose?
- Are there certain medicines I need to avoid during treatment?
- How do I find a therapist?
- How do I find a caregiver or support at home? Are there support services for caregivers?
- How do we know if I am in remission? When does this happen?
- What will happen if I relapse or the drugs I am taking stop working for me?
- When could we consider stopping treatment?

GETTING A "SECOND OPINION"

The best cancer treatments can be very complicated and change all the time with new discoveries. You want a doctor you trust to take the best care of you. You also want the best treatment. If you are unsure that you have these, ask for a "second opinion" with a doctor who specializes in CML.

Talking with a second doctor can help you understand your disease and how to better treat it. It can also reassure you that the first treatment recommended is best. Let your doctor know if you want a second opinion. Second opinions with CML specialists are recommended when you are being considered for "treatment-free remission" (being taken off treatment and observed closely).

Treatment for CML

If possible, you should have your first treatments at a center experienced with treating CML. Look for a major cancer center or university hospital. You may have to travel for this if you don't live in a major urban area.

The main types of treatment for CML are:

- Targeted therapy
- Stem cell transplant
- Chemotherapy & Immunotherapy
- Clinical trials, to test new drugs, combinations of drugs, or different ways of doing stem cell transplant

TARGETED THERAPY

Targeted drugs aim to block cancer growth "driven" by changes in the leukemia's genes. The targeted therapy drugs used for CML are tyrosine kinase inhibitors, or TKIs. These drugs block the BCR-ABL protein that allows white blood cells to grow out of control in CML.

TKIs used for chronic phase CML include:

- Imatinib (Gleevec[®])
- Dasatinib (Sprycel[®])
- Nilotinib (Tasigna[®])
- Bosutinib (Bosulif[®])
- Ponatinib (Iclusig[®])

Based on how the first drug works or any side effects you have, you may be moved from one of these drugs to another.

While most people with CML respond to one of the available drugs, some don't. Also, for some people the drug will work at first and then may stop working. Ask your health care team if your leukemia has been tested for all of the reasons your treatment may not be working, including a change in the BCR-ABL protein called the T315I mutation, for which specific therapies are currently available. TKIs are pills you take by mouth. They may be taken once or twice daily. You can take them at home. This is more convenient, but also easier to make mistakes or forget to take them.

For TKIs to work well, you must take them exactly as directed. If you miss or change doses or stop taking TKIs, they may not work properly. Some strategies for remembering to take the drugs on schedule include: setting reminders on your phone, using a pill calendar, and storing pills in a place where you will see them every day.

- Food affects how well TKIs work. You will need to avoid grapefruit and starfruit, as these affect the amount of TKI in your system. You may need to take your TKI with food or on a completely empty stomach.
- Follow your doctor or pharmacist's instructions on what to do if a dose is missed and tell your doctor about any missed doses at your regular appointments.
- Ask about whether your other medicines can interfere with TKIs. Talk to your health care team if you take medicines for stomach acid/heartburn, especially prescription medications called "proton pump inhibitors." They can block the absorption of some TKIs by more than 50%.

TKIs need to be pre-approved through your insurance company. This may take days to weeks to complete. Based on the drug

ordered, your insurance company will tell you where you can purchase these drugs (such as through a specialty pharmacy, mail order, or a local pharmacy).

SIDE EFFECTS OF TKIs

A common side effect from these therapies is fatigue. Each targeted therapy can cause additional other side effects. Some of them can be serious. Your health care team should monitor you closely for side effects. There are drugs that can prevent or treat them.

TKIs, and your CML responding to treatment, can cause low white and red blood cells and platelets. This can put you at increased risk for infection, anemia, and/or bleeding. This is often short-lived and can be managed by a brief stop or lowering the dose of a TKI. Sometimes it just requires close watch. Other common side effects include nausea and vomiting, diarrhea, muscle cramps or muscle/joint pains, puffy eyes, headache, and skin rash.

TKIs may increase the risk of heart disease or related problems in the circulatory system. If you are taking TKIs your doctor should monitor your heart health and your risk of heart disease. There are heart specialists called cardio-oncologists, who are specially trained cardiologists familiar with cancer treatment and heart/circulatory complications who can help.

STEM CELL TRANSPLANT

This procedure allows a person with leukemia to be treated with high doses of chemotherapy, radiation, or both. These high doses help eliminate remaining leukemia but also greatly reduce normal blood cells in the bone marrow. After the high dose treatment, healthy stem cells are given through a vein to replace the ones destroyed by the treatment and to regenerate your immune system. This boosts the chances of the leukemia of going into or staying in remission.

For more information on stem cell transplant, visit **www. CancerSupportCommunity.org/SCT.**

CHEMOTHERAPY

Chemotherapy uses drugs to attack cancer cells. These very strong drugs can kill many cells at one time and may harm healthy cells too. This is why they tend to have many side effects.

- Hydroxyurea (Droxia[®], Hydrea[®]) in all phases of CML, it may be given to lower the number of white blood cells before oral TKI therapy or to help if TKIs are not working. This drug is given as a pill.
- Another chemotherapy drug used for CML is omacetaxine mepesuccinate (Synribo[®]). It is used when TKIs haven't worked. It is also used for some patients whose CML has the T315l mutation. This drug is given as an injection.

Chemotherapy, like hydroxyurea, is sometimes used with TKIs briefly as CML is being diagnosed. Other chemotherapy medicines or sometimes high dose steroids are combined with TKIs for patients with blast phase disease to get them back into the chronic phase.

IMMUNOTHERAPY

Before TKIs, immunotherapy was the main treatment for CML patients who could not have a stem cell transplant. Interferon (Pegasys[®], PegIntron[®], Intron[®]A, Roferon[®]-A) is the main immunotherapy drug used. It may be used for some patients who can't use TKI therapy or sometimes in patients who are pregnant. These are given by injection.



CLINICAL TRIALS

Clinical trials are research studies to test new treatments or learn how to use current treatments better. Every drug must be tested in clinical trials before being approved.

KEY THINGS TO KNOW ABOUT CLINICAL TRIALS:

- A clinical trial may be the only way to get certain treatments, including some that are very promising.
- The U.S. Food and Drug Administration and local review boards oversee all clinical trials to keep patients safe.
- If you join a clinical trial, you can leave at any time.
- Most often, the trial pays the costs of the drug being studied. Then your health insurance and your copay covers "standard" treatment costs. Be sure to ask what costs are covered.

Visit www.cancer.gov/ClinicalTrials and the clinical trials webpages of the groups listed on the back page to learn more about clinical trials and how to find them.

Monitoring CML Treatment

Many of the same diagnostic tests are used to see how well your treatment is working.

- Complete Blood Count with Differential

 When these counts show no signs of
 CML and your spleen returns to normal size, your doctor may say you have
 Complete Hematologic Response
 (CHR).
- Cytogenetics and FISH When these tests, typically done on bone marrow samples, can no longer detect any evidence of the Philadelphia chromosome, your doctor may say you have Complete Cytogenetic Response (CCyR).
- Polymerase Chain Reaction (PCR) - This test measures the relative amount of the BCR-ABL gene in your blood or bone marrow; PCR tell your doctors how deep you remission is over time. When your blood counts and cytogenetics go back to normal (CHR and CCyR), PCR can still tell your doctors how deep your remission is. Early in treatment, a drop in the PCR test to 1/10th the starting level is important and called an Early Molecular **Response (EMR)**. If the levels go down 1,000 times below the starting level, it is called a Major Molecular Response (MMR). Your doctor can follow the level even lower to **Deep Molecular Remission (DMR)**. After being in DMR for some time, your doctors may offer you to be taken off treatment and closely

observed (treatment free remission). Be sure your PCR lab uses the International Scale (IS) and ideally you are using the same lab over time to compare.

Managing Side Effects

After you start treatment, keep track of how you feel. Write down when you notice a problem, how long it lasts and if there is anything that makes it better. There may be medicine or other ways to manage side effects that will help you feel better. Consider using our *Preparing for Your Doctor's Visit* worksheet, available at

www.CancerSupportCommunity.org/CML.

This worksheet can help you talk with your health care team about symptoms, treatment options, side effects, and getting the emotional and practical support you need.

FATIGUE

Cancer-related fatigue is a feeling of tiredness that doesn't go away. Some people also have muscle weakness or difficulty concentrating. It may be caused by the cancer, by treatment, or other health problems. If you have cancerrelated fatigue, your doctor will try to find and treat what is causing your fatigue.

For more information on coping with side effects, visit www.CancerSupportCommunity.org/ cancer-treatment-side-effects.

Cost and Expenses

The treatment for CML and follow-up appointments can be costly. Keeping up with these costs might be overwhelming. Many families facing cancer say that financial worries about cancer costs are a big source of stress, and they don't know where to turn. If you have health insurance, it's important to learn about your policy. You may find it helpful to work with a financial counselor.

If you don't have health insurance, contact CSC's Cancer Support Helpline[®] at 888-793-9355, see pages 4-5 in our *Frankly Speaking About Cancer: Coping with the Cost of Care* book, visit **www.CancerSupportCommunity.org/Cost** and see the resources on the back page for more information.





DIANE'S STORY

For Diane, dealing with the cost of care has been "the most frustrating aspect" of having chronic myeloid leukemia. After she left her job, Diane moved from high-quality private insurance to Medicare. Suddenly, the drug she needed to survive was going to cost thousands of dollars a month.

"When I was diagnosed with leukemia, I did not cry. But when I was told how much the medicine was going to cost; that's when I cried." Diane thought she would die because she couldn't afford the medicine.

That's when Diane found Cancer Support Community (CSC). Through CSC, she learned of an organization that would help. They covered her co-pay until Diane took a break in treatment. When she returned, she'd lost her place in the program. Once again, Diane came up against the financial pain of cancer. This time, she learned of a hospital charity to cover the cost.

Diane feels fortunate to have found these programs, and recommends that people who are just diagnosed find resources like CSC. "Get involved in a CSC support group because they are not sad groups. People think we sit and cry. We don't. We laugh. We share knowledge. It's a great source of information."

Coping with CML

The challenges of CML include having few breaks from treatment and possibly being on treatment for the rest of your life. People around you may forget you have cancer since you haven't been hospitalized and don't have visible symptoms, such as hair loss.

TIPS FOR COPING WITH CML:

- Consider travel arrangements if the nearest leukemia center is far away, or if you decide to join a clinical trial.
- Find support. Connect with other people who share your struggle. They will understand the specific challenges of living with chronic cancer. Seek out local resources, such as those offered by CSC's and Gilda's Clubs, who may have blood cancer support groups.
- Because CML is not a common cancer, there may not be local in-person resources for CML. For trusted information on the internet, seek out webpages and chat rooms offered by the patient groups listed on the back page.
- Ask your social worker about options to help you manage at home.
- Start thinking about how friends and family can help with household tasks, cooking, cleaning, errands, rides, childcare, financial support, etc. Consider using an online schedule, such as MyLifeLine.org.

- You may need to have conversations about how you might not look "sick." It can sometimes be hard for friends and family to realize you need help.
- Take care of your body. Focus on nutrition and exercise, based on the guidelines that your health care team gives you. If you smoke, try to stop.
- To increase energy levels, try to stay active throughout the day and maintain a routine sleep schedule.
- If you feel sad or depressed, seek medical help and/or let your care team know.
- Once your treatment is stable, you might only have appointments a few times a year. If you change anything (stop, or start something new) let someone on your health care team know. Even small changes can affect how well the drugs work.



CML Information & Support

Cancer Support Community • 888-793-9355 • www.CancerSupportCommunity.org/CML American Cancer Society • 800-227-2345 • www.cancer.org/cancer/chronic-myeloid-leukemia American Society of Clinical Oncology (ASCO) • 703-299-0158 • www.cancer.net/cml CancerCare • www.cancercare.org/chronic_myelogenous_leukemia CML Advocates Network • www.cmladvocates.net/ Leukemia & Lymphoma Society • 800-955-4572 • www.lls.org/CML The Max Foundation • 888-462-9368 • www.themaxfoundation.org/ National CML Society • 877-431-2573 • www.nationalcmlsociety.org/

Cancer Support Community Resources

The Cancer Support Community's (CSC) resources and programs are available free of charge. Call 888-793-9355 or visit **www.CancerSupportCommunity.org** for more info.

Cancer Support Helpline® — Have questions, concerns or looking for resources? Call CSC's toll-free Cancer Support Helpline (888-793-9355), available in 200 languages Mon - Fri 9am - 9pm ET.

Frankly Speaking about Cancer[®] — Trusted information for cancer patients and their loved ones is available through publications, online, and in-person programs.

MyLifeLine — CSC's private, online community allows patients and caregivers to easily connect with friends and family to receive social, emotional, and practical support throughout the cancer journey and beyond. Sign up at **www.MyLifeLine.org**.

Open to Options[®] — Need help making a cancer treatment decision? Our trained specialists can help you create a list of questions to share with your doctor. Make an appointment by calling 888-793-9355 or by contacting your local CSC or Gilda's Club.

Services at Local CSCs and Gilda's Clubs — With the help of 170 locations, CSC and Gilda's Club affiliates provide services free of charge to people touched by cancer. Attend support groups, educational sessions, wellness programs, and more at a location near you. www.CancerSupportCommunity.org/FindLocation

Cancer Experience Registry[®] — Help others by sharing your cancer patient or cancer caregiver experience via survey at **www.CancerExperienceRegistry.org**.

Grassroots Network — Make sure your voice is heard by federal and state policy makers on issues affecting cancer patients and survivors by joining our Network at **www.CancerSupportCommunity.org/become-advocate.**

FRANKLY SPEAKING ABOUT CANCER: CHRONIC MYELOID LEUKEMIA WAS MADE POSSIBLE WITH GENEROUS SUPPORT FROM:



The Cancer Support Community and its partners provide this information as a service. This publication is not intended to take the place of medical care or the advice of your doctor. We strongly suggest consulting your doctor or other health care professionals to answer questions and learn more.

This booklet is available to download and print yourself at www.CancerSupportCommunity.org/CML. For print copies of this booklet or other information about coping with cancer, visit Orders.CancerSupportCommunity.org.

© December 2018 Cancer Support Community. All rights reserved. Photographs by Mark Lozano and Ed Cunicelli.