GOOD NEWS ABOUT CANCER

It was once thought of as a death sentence. But thanks to amazing new drugs, some cancer patients are living longer and stronger than ever before.

9 YEARS
Living with **BREAST CANCER**
Noreen Fraser
Los Angeles, California

When Wendy Harpham, M.D., learned she had non-Hodgkin lymphoma 19 years ago, her first thought was for her kids. She was only 36, but as a doctor she knew the scary stats: Her life expectancy was only about seven years. She decided to focus on staying alive long enough to see her children, then 5, 3 and 1, graduate from elementary school.

She did better than that. Recently she celebrated her oldest daughter's engagement and her youngest daughter's acceptance to medical school. Back in 1990 Harpham couldn't have imagined being alive to hear this happy news. But advances in medicine transformed her prognosis and her future.

Harpham is a member of a small but growing contingent of cancer patients who live with metastatic or otherwise-incurable disease for years, even decades. As Elizabeth Edwards famously told Katie Couric in 2007, "I pretty much know what I'm going to die

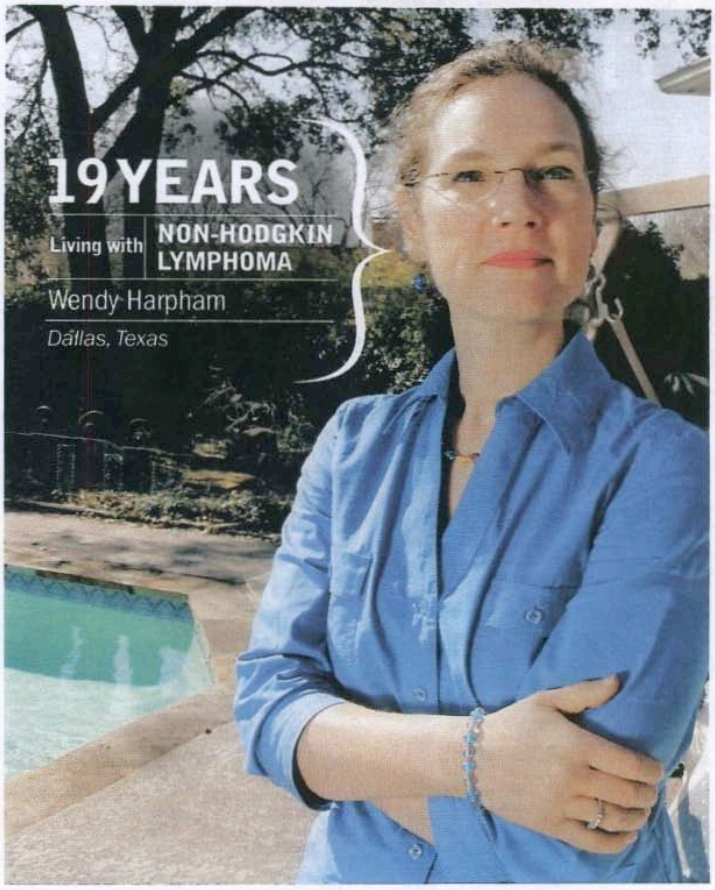
of. You can live with cancer and you can live a full life." While no one would envy the stresses that Edwards has had to endure in her personal life recently, she's reportedly keeping her stage-IV breast cancer at bay except for "some little spots" and getting on with her life. Other cancer survivors are on the same path. While the road may be rough, they're grateful to be on it at all.

LONGER LIFE EXPECTANCIES

In the past two decades, HIV/AIDS has shifted from an illness that once killed almost everyone who got it to one that many patients now live with for years. That's because of innovations in types and combinations of medications. It's been almost 20 years since Magic Johnson announced his retirement from basketball because he was HIV positive. And former Olympian Greg Louganis, who has been living with the disease since 1988, says he's healthy and happy and would like to appear on *Dancing With the Stars*.

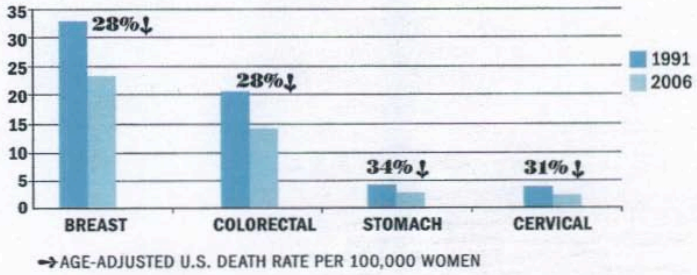
The same thing is starting to happen with certain cancers. "We're not getting rid of the cancer, but we are gaining some control," says Otis Brawley, M.D., chief medical officer of the American Cancer Society. "For some patients, we can turn it into a manageable disease." Virginia Garner, who has been treated for chronic myelogenous leukemia (CML) for 12 years, is one of the lucky ones.

Finding out she had cancer at age 51 was devastating, Garner says. But she took action and enrolled in a clinical trial at UCLA, where she was among the first patients to take Gleevec, a drug that has redefined survival for people with CML. "It was like drowning and then having somebody pull you out of the water," she says. Garner, who lives in Claremont,



CANCERS ON THE DECLINE

Thanks to better screening and treatment, plus a downturn in smoking, the overall cancer death rates for women decreased about 12 percent between 1991 and 2006, with the greatest improvements seen in these four cancers.



MISTY KEASLER

California, is still taking the drug and is training for her 10th marathon. "I consider the fact that I wake up every day a miracle," she says. "I live my life as if I don't have leukemia."

Today more and more lymphoma and leukemia patients have a better chance of long-term survival. Physicians are seeing similar success with some types of breast cancer as well as a type of stomach and intestinal cancer called gastrointestinal stromal tumor (GIST). And some patients with non-small-cell lung cancer are now living more than three times the standard survival rate—as long as six years instead of less than two.

GROUNDBREAKING NEW DRUGS

At the heart of the advances are new targeted therapies, drugs that work at a molecular level to attack the development or functioning of specific types of cancer cells. These include Gleevec (approved by the FDA in 2001 for CML patients) and Herceptin (approved in 1998 for treatment of some metastatic breast cancers), which zero in on parts of the cancer molecule. Avastin, which cuts off cancer's blood supply, won FDA approval in 2004 for some metastatic colorectal cancers, with subsequent approvals for certain forms of lung and breast cancer.

"Targeted drugs are less toxic to normal tissue; they reflect a better understanding of the biology of cancer," says Paul Richardson, M.D., clinical director of the Jerome Lipper Center for Multiple Myeloma at the Dana–Farber Cancer Institute, in Boston. Some of these new drugs come in capsules or pill form, so they're easier to take and tolerate than drugs given intravenously. Doctors may use them alone or in combination with more traditional treatments like chemotherapy or radiation.

And these drugs are showing promise with cancers beyond the ones they were designed to treat. Herceptin, for example, which kills HER2-positive breast cancer (tumors that contain a protein called human epidermal growth factor receptor 2), is being tested on HER2-positive stomach tumors. Gleevec is being used to treat GIST as well. "As we better understand the genetic changes that lead to cancer, we'll see cancers treated more according to their genetic makeup rather than the organ where it started," says Allen S. Lichter, M.D., CEO of the American Society of Clinical Oncology.

Another new avenue in attacking cancer lies in combining targeted

drugs. "The model for the new drugs takes advantage of our understanding of molecular switches that trigger cancer. Maybe if we can turn two switches off at the same time the disease won't come back," says Michael Fisch, Ph.D., chair of the general oncology department at MD Anderson Cancer Center, in Houston, adding that new delivery systems can take the drugs directly to the tumor. Ellen Rigby, 47, a New York City real-estate attorney, is in her ninth year of treatment for breast cancer that had already spread to her liver at diagnosis. She participated in a clinical trial that attaches a chemo drug to Herceptin. "It's amazing. Herceptin becomes the delivery system that takes the chemo right to the tumor," she says.

In addition to fighting the illness when it first hits, doctors are using some of these drugs in a new way—as maintenance therapy to keep cancer from returning. One of the first successes was Herceptin; taking it along with chemotherapy after breast-cancer tumor removal reduces the chances the disease will recur by as much as 50 percent, according to Mayo Clinic researchers. Maintenance therapy is

The Next Cancer BREAKTHROUGHS

We talked with Allen S. Lichter, M.D., head of the American Society of Clinical Oncology, and other top cancer-research experts. They mentioned many promising areas, from targeting a cancer's genetic fingerprint to finding new blood markers for early detection, as well as the ones below.

STOPPING CANCER STEM CELLS

One of the most exciting recent medical discoveries is that many cancers seem to have a small number of self-renewing stemlike cells that fuel most of the growth of a tumor. The theory is that these cells may remain even after a tumor is treated or removed surgically, so they can still cause the cancer to spread. The trick is to figure out a way to home in on and get rid of those stem cells (and thus, presumably, the cancer) without harming healthy cells.

IMMUNOTHERAPY

We know now that the human papillomavirus is linked to some cervical, oral and head and neck cancers. Many researchers are exploring other possible infectious causes of cancer as well as methods of using the body's immune system to attack these cancers. "There are some tantalizing hints that we can make the body defend itself against cancer cells with vaccines," says Dr. Lichter. "It's difficult and complex work but ripe with possibility."

NANOBIOLOGY

"We're going to see new ways of delivering therapies right to cancer cells," says Dr. Lichter. This means assembling extremely tiny carriers that can literally stick medication onto a cancer cell, and maybe also an imaging molecule to show that it got there and did its job. There may even be a nano way to remove cancer cells from the body. While there are still hurdles, including possible toxicity, "there's tremendous excitement about this," says Dr. Lichter.

controversial, however. Clinical trials are currently gauging how effective newer cancer drugs such as Taxol, Rituxan and Revlimid are at keeping various cancers at bay.

For patients like Harpham and Garner, the lifesaver was getting into a clinical trial that gave them access to a new drug. For others the benefit is having more lines of treatment to choose from—another drug to turn to when the effectiveness of the one you're using wanes. Dr. Fisch calls it the hitchhiker method. "Say you're in Houston trying to get to Albuquerque. You're unlikely to find somebody going all the way, so you choose a series of rides that are going in the right direction." Similarly, doctors administer a succession of cancer drugs, riding along with one for as long as it helps, switching to another when necessary.

MORE HOPE, LESS FEAR

These advances are just a start. "The conversion of an acute disease to a chronic one isn't a final achievement," says Larry Norton, M.D., medical director of the Evelyn H. Lauder Breast Center at Memorial Sloan–Kettering Cancer Center. "It's a step toward a cure. Testicular cancer used to be rapidly fatal, then it became a disease that could be managed for a long period. Now in the majority of cases it can be wiped out." Tour de France champion Lance Armstrong is proof. Dr. Norton believes that eventually other forms of cancer will follow the same treatment curve from lethal to chronic to cure.

All this promise and potential gives patients new hope. But until science gets closer to a cure, they have to balance gratitude with uncertainty about the future. They may have to deal with side effects of treatment, too. Garner, the competitive runner, is lucky to have minimal side effects from Gleevec. For others, discomfort and disability are the dues they pay for long-term survival.

When Noreen Fraser, a TV producer in Los Angeles at the time, was

CELEBRITY SURVIVORS

BREAST CANCER


Christina Applegate


Sheryl Crow


Melissa Etheridge


Edie Falco


Hoda Kotb


Kylie Minogue


Olivia Newton-John


Robin Roberts


Jaclyn Smith


Suzanne Somers

THYROID CANCER


Catherine Bell


Katee Sackhoff


Sofia Vergara

OVARIAN CANCER


Kathy Bates

COLON CANCER


Sharon Osbourne

UTERINE CANCER


Fran Drescher

diagnosed with breast cancer in 2001, she was 47. "It was so shocking it was surreal," she recalls. "I felt numb." After a lumpectomy and radiation, her doctor told her there was just a 4 percent chance the disease would come back. So she was devastated two years later when a scan revealed cancer cells in her bones. "The second wave was a whole new thing. Now I had incurable cancer. But my doctor told me, 'We are going to make this manageable, the way diabetes is manageable.'" And for seven years, that's how it's worked. Fraser has taken several drugs—first Femara, then Faslodex—to keep the cancer at bay. On a bad day, when her tumor markers have risen or she's due for a scan, she says she wakes up and thinks, *This sucks. I'm in trouble.* But on a good day, she says, "I believe I will have a normal lifespan."

The emotional toll of living on what feels like borrowed time can be high. "The next ache or pain could be the cancer getting worse or it could be just a day-to-day ache or pain. Not making yourself crazy is the real challenge," says Ann Partridge, M.D., an assistant professor of medicine at Harvard Medical School who treats breast-cancer patients at Dana–Farber/Brigham and Women's Cancer Center. Mary Jane Massie, M.D., an attending psychiatrist at Memorial Sloan–Kettering Cancer Center, says there's widespread anxiety about scans because they could reveal a recurrence. "Some patients need sleeping pills or anti-anxiety meds before a scan."

Over time many chronic cancer patients come to terms with continual treatment. "I don't live from scan to scan anymore," says Harpham. "These days I have to leave little sticky notes on my mirror to remember them." But it took a long time for her to reach this feeling of well-being. "I went to counseling after my second recurrence because I didn't want to be incapacitated by fear. I had

WILLING TO EXPERIMENT

The most successful cancer patients are deeply involved in their own care. They research new treatments, enter clinical trials for new drugs and know the most minute details of their condition. Here are some good ways to find clinical trials and other information.

- Take a look at the Clinical Trials Matching Service of the American Cancer Society and its Online Matching Service, jointly sponsored with the Coalition of Cancer Cooperative Groups. Call 800-303-5691 or go to cancer.org (click on "Clinical Trials" under "Find It Fast").
- Check the central government clearinghouse at clinicaltrials.gov.
- Visit both the general-information and clinical-trials sections of websites of major cancer hospitals such as MD Anderson Cancer Center, in Houston (mdanderson.org), Dana–Farber Cancer Institute, in Boston (dana-farber.org), and Memorial Sloan–Kettering Cancer Center, in New York City (mskcc.org).
- Regularly visit the websites of organizations focused on your type of cancer. Good resources for breast cancer include Susan G.Komen for the Cure (komen.org), the Breast Cancer Network of Strength (networkofstrength.org) and the breast-cancer section of the National Cancer Institute (cancer.gov).

to learn coping skills and understand I'm doing everything I can to be healthy. There was no breakthrough moment; it was all little steps."

Some long-term survivors have found strength through helping others. Harpham had to quit her medical practice during her treatment, but she found a new calling. Now she writes about survivorship and doctor–patient relations, working in the morning and resting in the afternoon. Her seven books include *Happiness in a Storm*, a guide for finding good care and adjusting to living with an illness.

After her recurrence Fraser found a new way to fight the disease: She launched a nonprofit to raise money for a cure (noreenfraserfoundation.org). Melissa Etheridge is on its board of directors. Fraser also cocreated and coproduced the 2008 telethon *Stand Up to Cancer*, which has raised more than $100 million for cancer research. Her newest project, Men For Women Now, encourages guys to remind their sisters, wives and girlfriends to get mammograms and Pap smears.

New therapies are giving a growing number of cancer patients a much-brighter future. "In the past your fate was a flip of the coin," says Harpham. "You'd either be cured or you would die. Now more of us are living."

GOOD HUMOR

A dose of laughter may make living with cancer just a little bit better. Humor can help reduce stress, brighten your mood and boost pain tolerance, according to a review in *The Oncologist*. "Your outlook probably won't affect whether you live or die, but it does affect *how* you live with cancer," says lead author Richard T. Penson, M.D., clinical director of the Gillette Center for Gynecologic Oncology, at Massachusetts General Hospital.

In fact, several hospitals host humor-therapy programs. The Dana–Farber Cancer Institute, for instance, has its own clown troupe, the HumorUs Healers, as part of its complementary treatment program. Equipped with an arsenal of corny jokes, hospital clowns crack up (and help) adult patients as much as the kids. "When we appear, there is a break with reality, with where you are and with what's being done to your body," says clown Joan Frutkoff (also known as "Dr. Apple-a-Day" at Dana–Farber). "We know that laughter increases serotonin levels, and we leave people smiling and more relaxed."

SURVIVOR STORIES
Is someone you love battling breast cancer? Honor her by posting a photo and telling her story in our online photo gallery at LHJ.com/someonewelove