

**This year in the U.S., more than 230,000 men will learn they have prostate cancer. Doctors disagree about how to treat them. Here's what five men chose to do.**

By Anthony Effinger

◀ One day in Chicago, Dave Bigg is about to drink a few beers with his buddies and divvy up Cubs baseball tickets when his cell phone rings. It's the doctor, and he doesn't like what he sees. Bigg's biopsy looks bad. The cells from his prostate are warped and buckled. It's cancer.

Bigg can't believe what he's hearing. He's 46 years old. He doesn't look sick. He doesn't feel sick. Hell, he feels great—he's training for a triathlon. "It was like a punch in the stomach," Bigg recalls.

Bigg phones his wife, Melissa. She's about to have lunch with friends at the Cherry Pit Café, near their home in Deerfield, Illinois. She sits in her car and screams. Cancer? How can my husband have cancer? "You can't wrap your mind around it," she says. "You look at this healthy, energetic guy, and you can't believe it."

This year, more than 230,000 men in the U.S. will get bad news like Bigg's, according to the American Cancer Society. And, like him, these men will face difficult choices about what to do next. Out of the blue, a diagnosis of prostate cancer will throw them into the middle of a raging medical debate over how to treat this disease—or whether to treat it at all. For some, the decisions they make will determine whether they live or die. For others, their choices will mean the difference between an active sex life and impotence.

# Playing the Odds



**'You have to take the  
management of your disease  
into your own hands.'**

**Bill Lewis, diagnosed at 60**



**'What's scary is that you can feel so good and have this.'**

**Dave Bigg, diagnosed at 46**

One man in six in the U.S. will be diagnosed with prostate cancer during his lifetime, the ACS says. After age 40, the danger grows with each passing year. If you live long enough, the question becomes when, not if, you're likely to get this cancer. Autopsies show that 30 percent of U.S. men over 50 have at least some malignant cells in the gland. For men older than 80, that figure climbs to 80 percent, according to the ACS.

Prostate cancer kills one in 34 men in the U.S. Virulent tumors often spread to the bone. More than 27,000 U.S. men are likely to die from prostate cancer this year, the ACS says. This form of cancer is more common in men than any other cancer aside from that of the skin. It's more prevalent than cancer of the lung, which strikes one man in 13; of the colon, which hits one in 17; or of the bladder, which besets one in 28, according to the National Cancer Institute.

Prostate cancer is difficult to treat without life-changing side effects. The gland, which helps produce semen, is lodged deep in the abdomen, just below the bladder. It surrounds the urethra, through which urine and semen flow, and borders the rectum. The nerves that control erections lie along the prostate like delicate wires glued to a golf ball. Cut them, and a man becomes impotent. Sometimes, drugs like Viagra can help, provided at least one of the nerves remains intact.

Most prostate tumors are slow growing and, as cancers go, relatively benign. Some are fast moving and deadly. Doctors can't always determine which are which.

"We have a difficult time telling which cancers are aggressive and which are not," says Dr. Tomasz Beer, director of prostate cancer research at the Oregon Health & Science University Cancer Institute in Portland.

**S**tatistically, prostate cancer is less lethal than many other forms of cancer. It accounts for 9 percent of U.S. cancer deaths, whereas lung cancer accounts for 31 percent, according to the ACS. If the doctor says you have lung cancer, you usually have one course: surgery, fast. If he says you have prostate cancer, your choice may not be so apparent. Many men who learn they have prostate cancer are left wondering how to treat it. Surgery, radiation therapy, high-intensity ultrasound—those are some of the options. Another is to wait, watch and hope the cancer never spreads, a strategy known as active surveillance.

Choose surgery or radiation, and there's a chance you'll end up impotent. Wait and watch, and there's a chance you'll die. Undergoing a prostatectomy, the surgical removal of the gland, meant impotence for about three in four men as reported in a study published in the *Journal of the National Cancer Institute* in September 2004. One man in seven was incontinent five years after the operation. With radiation, the odds of impotence were about the same: 73 percent, according to this study. The incontinence rate was lower, at 4.9 percent. Top surgeons report outcomes that are much better.

Men who undergo these treatments get no guarantee their cancer won't return. From 30 to 40 percent of men relapse,

says Dr. Bruce Montgomery, an oncologist at the Seattle Cancer Care Alliance.

Given all this, some doctors advise patients to do something radical in modern cancer care: Wait and see. Dr. Lawrence Klotz, a professor of surgery at the University of Toronto, has been monitoring 231 men for about seven years. If their cancer gets worse, he treats them. About two-thirds of these patients are still waiting. Three have died of their disease. Over time, about 1.5 percent of men who could have been saved with surgery or radiation but chose active surveillance instead will succumb, Klotz says. "I have no doubt that we will lose the occasional patient who is curable," Klotz, 53, says in an e-mail. For most men, the chance of dying from prostate cancer is so small—and the odds of impotence and incontinence after surgery or radiation are so great—that active surveillance is worth the risk, he says.

How do you crunch all these numbers? Many men wind up plugging them into computer programs called nomograms—this many billionths of grams, that degree of cell deformity—to try to predict how lethal their cancer is and find the best treatment. They must ask themselves hard questions. Am I willing to risk dying to preserve my sex life? Can I afford to wait?

Bigg, who makes his living trading corn options on the Chicago Board of Trade, says he's one of the fortunate ones. A blood test during a routine physical provided the first, vital clue that something was wrong. His blood showed elevated levels of prostate-specific antigen, a marker for cancer. That first PSA test led to a second, which led to a biopsy, which uncovered a dangerous tumor. Bigg underwent a prostatectomy. In the months following his surgery, he had a little trouble controlling his bladder. He says he's fine now. Bigg says his erections aren't what they used to be but that his sex life is good. Now, at 49, he is cancer free. "I was lucky," Bigg says. "I didn't have a choice."

Men such as Will Weinstein, whose cancer wasn't as severe as Bigg's, must weigh conflicting medical advice and balance the risks and benefits of various treatments. Weinstein, diagnosed at 56, spent seven months interviewing 44 doctors before deciding on brachytherapy, which involves implanting radioactive pellets in the prostate. Ten years on, Weinstein, a former hedge fund manager who now teaches ethics at the University of Hawaii in Honolulu, says he can get an erection and control his bladder. He says that if he got the same diagnosis today, he might try active surveillance, provided he could stomach living with cancer.

Jim Hurley, 53, has seen more than his share of this disease. Prostate cancer killed his father at the age of 72 and struck two of his five brothers. Both brothers have had prostatectomies, and both have survived. When his time came, Hurley, a plasterer from New Jersey, turned to the Internet and discovered high-intensity focused ultrasound. HIFU hasn't been approved by the U.S. Food and Drug Administration, and some surgeons scoff at it. Hoping to avoid impotence,



**'Before the diagnosis,  
I didn't even know what  
the prostate was.'**

**Jim Hurley, diagnosed at 53**

# Doc Stars

*Executives network to see leading doctors before other patients.*

By Anthony Effinger

Getting to see a top prostate doctor isn't easy. Unless you know someone.

When Charles "Chip" Baird, managing director of North Castle Partners LLC, a Greenwich, Connecticut-based buy-out firm, was diagnosed with prostate cancer in 2004, he set out to find the best surgeon in the country.

Baird, 53, did his homework and zeroed in on Dr. Peter Scardino, then chairman of urology at Memorial Sloan-Kettering Cancer Center in New York.

Scardino, 60, has removed more than 3,000 cancerous prostates. In July, he was named chairman of all surgery at Sloan-Kettering.

Scardino says anyone can make an appointment. You may have to wait eight weeks for initial consultation. And

Scardino may refer you to a colleague.

Baird didn't want to wait. So he began to network.

At the time, North Castle owned Equinox Holdings Inc., a chain of U.S. health clubs. Equinox Chief Executive Officer Harvey Spevak put Baird in touch with Leslie Michelson, CEO of Michael Milken's Prostate Cancer Foundation. Michelson called Scardino. A few hours later, in the middle of a partners meeting, Baird's phone rang. Scardino was on the line.

"It was like God calling," Baird says.

Scardino removed Baird's prostate in July 2004, preserving both erectile nerves. Two years later, Baird says he's able to have sex and control his

bladder. Things aren't exactly the same, Baird says, but pursuing Scardino was worth it. Out of gratitude to Michelson, Baird has joined the board of the Prostate Cancer Foundation.

Many people work connections to reach top doctors, says Laurie Zoloth, director of the Center for Bioethics, Science and Society at the Feinberg School of Medicine at Northwestern University in Chicago.

"If you think you might die, fighting as hard as you can for survival is a basic instinct," Zoloth says. And doctors should help their friends, she says. "We want them to respond to personal narratives," she says. "You don't want to strip that out of medicine."

Even so, people without

money and connections may be offended when those who do get to see star doctors and they don't, Zoloth says. "Our system of justice doesn't extend to health care," she says.

Milken, a prostate cancer survivor, is often one of the first people the well connected call.

Gary Shansby, managing director of TSG Consumer Partners LP, a San Francisco-based firm that buys and sells consumer product companies, met Milken years ago when Shansby was CEO of Shaklee Corp., a direct marketer of vitamins and cosmetics.

When Shansby was diagnosed with prostate cancer two years ago, he phoned Milken. To Shansby's surprise, Milken flew to San Francisco from his home in Southern California to meet with him. He offered to put Shansby in touch with Dr. Stuart "Skip" Holden, the urologist who treated Milken at Cedars-Sinai Medical Center in Los Angeles. Milken also recommended Dr. Peter Carroll, chairman of urology at the University of California, San Francisco. Shansby decided to let Carroll operate.

Then Shansby had second thoughts. He'd once been on the board of UCSF. He began to think the institution was too bureaucratic. "I felt like a number," he says.

So Shansby flew to L.A. and met with Holden at Cedars-Sinai, a private hospital. To Shansby, the place looked like a Four Seasons hotel. Holden introduced Shansby to David Agus, director of prostate cancer research and a leader in the field.



**Peter Scardino** is one of the most sought-after prostate surgeons in the U.S.





**Charles Baird** networked to get an appointment with Dr. Scardino.

"A lot of rich people have gone there and gotten good treatment," Shansby says of Cedars-Sinai. Many of them have donated money.

Shansby decided to join them. He'd have to travel, but his wife could stay at the nearby Peninsula hotel in Beverly Hills.

So Shansby did the unthinkable: He canceled on Carroll because another star could see him sooner. Shansby had surgery the day he sold Mauna Loa Macadamia Nut Corp. to Hershey Co. for \$130 million. Hershey CEO Richard Lenny sent him a big package of chocolates. Shansby walked the halls carrying his catheter, handing out candy.

For more than a year, Shansby had trouble getting an erection. Then, one night, he woke up with one. "I

almost started jumping for joy," Shansby says.

Shansby says he knows he's lucky. "If you're just a regular person who doesn't have a network, it's pretty tough," he says.

Shansby, like Baird, has since joined the board at Milken's foundation. Shansby is returning the favor in other ways, too. This year, someone called him and said he was going to be treated for prostate cancer in Greenwich, Connecticut, where he lives. "You're crazy!" Shansby shouted.

Shansby arranged for the man to see Scardino. The connection? Agus, the researcher at Cedars-Sinai. Agus once worked at Sloan-Kettering, where Scardino practices. Small world, if you try hard enough.

Hurley flew to Canada for HIFU. He says he made the right choice: He can have sex and hold his urine.

And then there's Bill Lewis, 64. A former partner at McKinsey & Co., Lewis took what some surgeons call the most radical route of all: He monitors his condition with twice-yearly PSA tests and annual biopsies. That's it. No surgery. No radiation. No HIFU. His cancer seems to have disappeared.

On the following pages, these four men share their private battles and intimate fears. They're speaking out because other men will face what they have.

**A** fifth man, one who's well known to Wall Street, shares his thoughts on cancer, too. His name is Michael Milken. The onetime junk bond king of Drexel Burnham Lambert Inc., Milken has raised more than \$300 million for prostate cancer research. His Santa Monica, California-based Prostate Cancer Foundation is financing the search for new, more-accurate tests for deadly tumors. Until researchers find one, Milken, 60, urges men to get a PSA test.

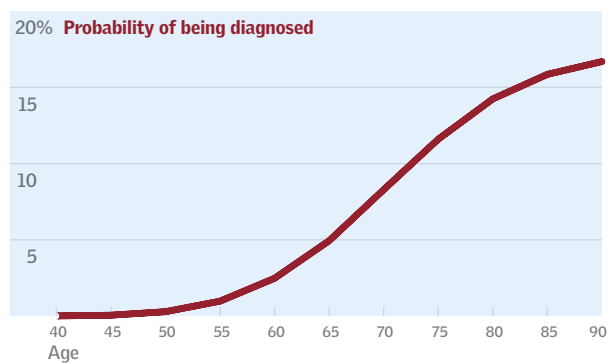
These five stories tell a larger one. Within the U.S. medical community, sometimes within the same hospital, a debate is taking shape that may upend prostate cancer care. Doctors no longer agree on how to diagnosis this disease or what to do about it.

In medical terms, the PSA test—which doesn't test for cancer but rather for a substance associated with it—is sensitive and nonspecific. Translation: The test often lies. An infection or having sex before a PSA test can artificially inflate your result. The U.S. Preventive Services Task Force, a division of the U.S. Department of Health & Human Services, says PSA screening often leads to anxiety-provoking false positives and unnecessary biopsies. Neither the agency nor the ACS recommends that doctors require routine PSA screening. Some doctors do; others don't. (See "The PSA Controversy," page 39.)

Dr. Patrick Walsh of Johns Hopkins University School of Medicine in Baltimore, who invented modern prostate surgery, says the PSA test saves lives. The U.S. death rate from

## Growing threat

The risk of getting prostate cancer rises with age.



Data is the latest available for U.S. men in 2006. Source: National Cancer Institute

prostate cancer fell 27 percent from 1991 to 2001 because more men are getting tested, Walsh, 68, says.

Bigg's surgeon, Dr. William Catalona of Northwestern University Feinberg School of Medicine in Chicago, has performed more than 4,500 prostatectomies and is a vociferous proponent of early screening. In 1991, he showed that PSA could be used to screen for prostate cancer. Catalona and Walsh say men should get their first PSA test at 40. "It's such an easy thing to do," Catalona, 63, says. "Otherwise, you're sticking your head in the sand."

Dr. James Talcott disagrees. A professor at Harvard Medical



**'It's such an easy thing to do. Otherwise, you're sticking your head in the sand.'**

**Dr. William Catalona of Northwestern, on PSA testing**

School in Boston, Talcott, 54, says PSA tests are so unreliable that men should avoid them completely. Talcott, an oncologist who studies medical outcomes, says he doesn't get PSA tests and probably never will. (He says he does get regular rectal exams.) PSA tests often prompt men to undergo surgery or other treatments that leave them impotent or incontinent, even when there's little chance that prostate cancer will kill them, Talcott says.

Talcott knows this view goes against the grain. "Early detection is like apple pie and motherhood," he says.

Doctors are forever telling us to get checked for hypertension and high cholesterol. It's hard to imagine a woman refusing a mammogram on the grounds that she'd prefer not to know she has breast cancer. And Katie Couric underwent a colonoscopy on NBC's *Today* in 2000 to raise public awareness about colon cancer screening after her husband, Jay Monahan, died of that disease at 42.

Lewis's doctor, H. Ballentine Carter of Johns Hopkins, says many prostate tumors are best left untreated. Often, cancers never leave the prostate, where they pose little threat, Carter, 53, says.

"Fifty percent of the cancers we identify are low risk," says Carter, who monitors 350 patients, including Lewis. Active surveillance isn't about ignoring prostate cancer, Carter says. He calls his program "expectant management with curative intent" to reflect his aim for a cure.

**M**any men would live just as long—and be happier—if they never found out they had prostate cancer, OHSU's Beer, 41, says. Too many men are risking impotence and incontinence to treat tumors that may never kill them, he says. "If you had a cancer that was never going to kill you, you'd be better off not knowing about it," Beer says.

Prostate cancer doesn't care if you're rich or famous. The disease has struck Andy Grove, former chief executive officer of Intel Corp.; John Kerry, the U.S. senator and 2004 Democratic presidential candidate; and Rupert Murdoch, CEO of News Corp. Prostate cancer has killed Wayne Calloway, chairman of PepsiCo Inc.; jazz flutist Herbie Mann; Steve Ross, chairman of Warner Communications Inc.; and rock musician Frank Zappa. It claimed Earl Woods, golfer Tiger Woods's father, in May.

No one knows what causes prostate cancer. Dr. Bill Isaacs, a professor of urology and oncology at Johns Hopkins, says men who are stricken relatively young probably inherited rogue genes from their parents. The faulty code predisposes them to the disease. If a man's father or brother has had the disease, the odds that he'll get it narrow to one in three, according to the ACS. A high-fat diet may foster the disease, Carter says. Fats seem to prompt tumor cells to divide faster.

In almost all men, the prostate tends to swell with age. Sometimes the growth reflects what's called benign prostatic hyperplasia, a noncancerous enlargement of the gland. Dr. Peter Scardino, chairman of surgery at Memorial

# One Man's Surgery

How 6½ hours in an OR beat cancer.

By Anthony Effinger

The path that led John Clapp to this operating table in Portland, Oregon, began in May. That's when Clapp, 60, was diagnosed with prostate cancer.

Clapp, a construction worker who lives in Woodland, Washington, first considered a laparoscopic, or "keyhole," prostatectomy, which is less invasive than traditional surgery. In laparoscopic operations, doctors make several half-inch incisions in the abdomen, through which they insert tiny instruments held by robotic arms. Mini cameras send images to video monitors so the doctors can see what they're doing.

Then Clapp thought of his two sons, ages 17 and 10. He says he worried that the keyhole surgery might miss some of his cancer. He opted for a traditional "open" prostatectomy so his doctor could get a better look. "I said, 'Anything that looks suspicious, get it out,'" Clapp says.

It's a sunny Friday in late June when Dr. Mark Garzotto, director of urologic oncology at the Portland Veterans Affairs Medical Center, operates. Garzotto, 42, performs all the prostatectomies at the VA hospital. A New Orleans native, he did a six-year urologic residency at the University of Florida and spent four additional years studying urologic oncology at Memorial Sloan-Kettering Cancer Center in New York.

Clapp is wheeled into surgery at 7:45 a.m. and is anesthetized at 8:38 a.m. At about 9 a.m., Garzotto and his team make an 8-inch incision from Clapp's navel to the top of his pubic bone. They place two metal retractors into the cut, push Clapp's intestines up into

his chest and brace them there. The hole is as big and round as a volleyball. Garzotto and his chief resident, Dr. Jim Loos, use 11-inch clamps to remove lymph nodes near the prostate. It's a precaution: Cancer cells often travel through the body via the lymph system. Loos uses a hot cauterizing scalpel to remove nodes one by one. There's a whiff of burning flesh.

The radio is playing classic rock.

Every man's anatomy is different. Clapp turns out to have an oversized dorsal venous complex, the system of veins that runs over the prostate. Garzotto ties up the complex and cuts it. Clapp bleeds heavily.

"Sponge stick," Dr. Garzotto says. The nurse hands him a wand with a knot of gauze on the end, which the doctor uses to mop up the blood. Now and then, another nurse counts the sodden cloths to make sure none gets left inside Clapp. The swabs are striped with metal that shows up on an X-ray, just in case.

It's 2½ hours before the doctors get their first clear view of the prostate. The gland looks like a red-tinged egg in the middle of Clapp's pelvis. Garzotto peels the gland away from the bladder and the rectum and then—slowly, gently—from the nerves that control erections. Here, Clapp's anatomy is a blessing. Erectile nerves are bundled

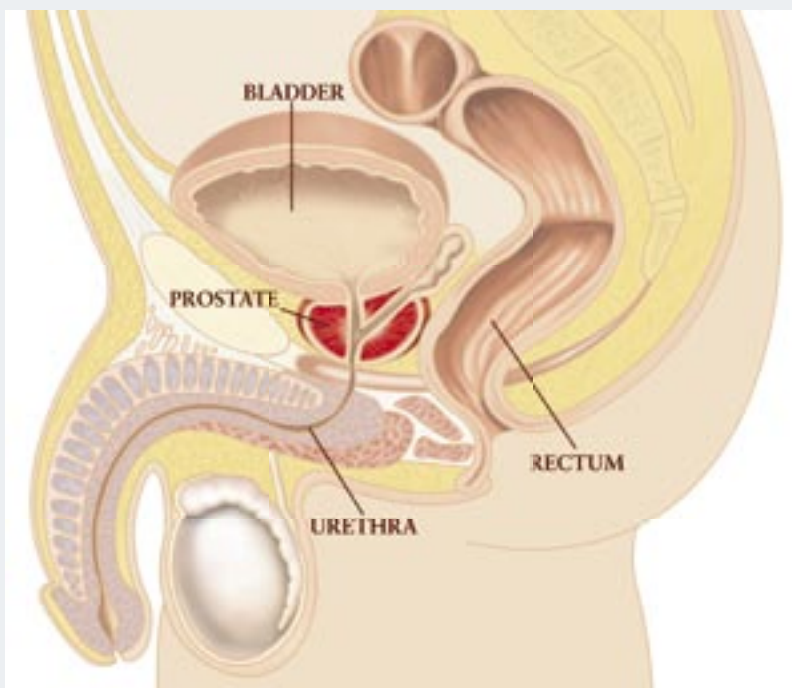
with veins, and his large veins are easy to see.

"The battle is going to be won or lost here," Garzotto says, indicating the right side of Clapp's prostate, where his cancer was most dense. The nerves are white and sinewy. They look like dental floss.

Garzotto has to take some of the nerve tissue on the right side to make sure the cancer is gone. He tries to leave enough to give Clapp a chance at having sex

the size and shape of a walnut. Clapp's diseased gland looks more like a plum. Through a surgical glove, the left side feels smooth. The right is hard and bumpy, like there's a piece of gravel inside. That's the cancer.

Garzotto fills Clapp's open wound with three pitchers of water. Cancer cells, he explains, aren't good at keeping water out. When immersed, they absorb water and burst. "Tumor cells put everything into dividing and



The prostate, in red, is lodged deep within the abdomen.

again. He leaves almost all the nerves on the left side.

Around noon—three hours after making the incision—the team gives Clapp a unit of blood. He'll lose about a liter (1 quart), a fifth of his entire supply. Garzotto and Loos cut Clapp's urethra, the tube that empties the bladder, and ease out the prostate.

Doctors often describe a healthy prostate as being about

spreading," Garzotto says.

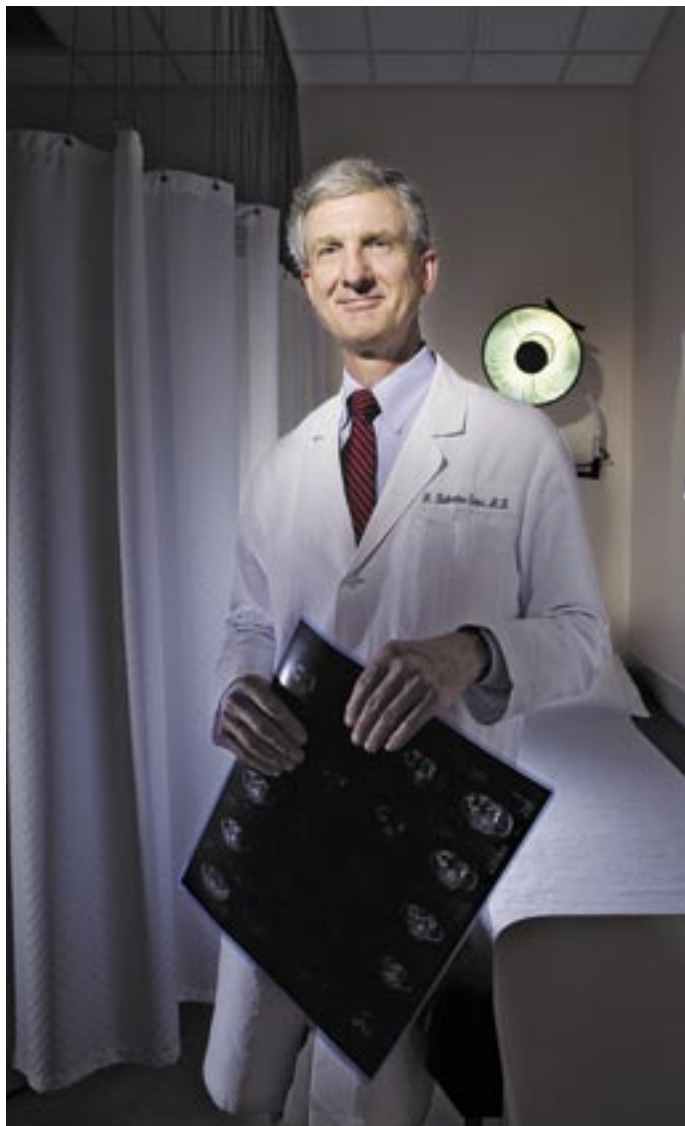
Loos puts the last stitch in Clapp's incision at 2:15 p.m. Total elapsed time since Clapp entered the room: 6 hours, 30 minutes.

Since the surgery, Clapp has been doing tai chi. Garzotto has prescribed Levitra to jump-start his erectile function. The best news is that the cancer hadn't spread. Garzotto says the prognosis is excellent.



Sloan-Kettering Cancer Center in New York and co-author, with Judith Kelman, of *Dr. Peter Scardino's Prostate Book: The Complete Guide to Overcoming Prostate Cancer, Prostatitis and BPH* (Avery, 496 pages, \$27.95), says testosterone is the likely culprit. Prostate cancer feeds on the male sex hormone. Until the 1980s, doctors castrated men to starve their cancers of testosterone. Today, they use drugs in severe cases to achieve the same results.

Bigg says he thought he was too young and healthy to get prostate cancer. Until he got that call from his doctor, in April 2004, Bigg says he never dreamed he'd be among



**'Fifty percent of the cancers we identify are low risk.'**

**Dr. H. Ballentine Carter  
of Johns Hopkins**

those afflicted, even after his PSA readings came back high.

Bigg is quiet for a guy who makes his living shouting "buy" and "sell" on the floor of the CBOT. He's 5 feet 11 inches tall, weighs 200 pounds and is barrel chested from a lifetime of swimming. Bigg is bald, with a fringe of close-cropped hair. In profile, he looks a little like Bruce Willis. On the CBOT floor, he wears a lightweight blue trading jacket and carries a stack of folded papers with calculations for options prices—his "shopping list," he calls it.

Bigg's story begins in 2003. Melissa Bigg, now 52, had taken a part-time job at a local Starbucks, which offered better health insurance than the coverage Bigg was buying for the family. He went in for a physical, grudgingly. He'd seen a doctor once in the previous 20 years, for strep throat.

During the exam, the doctor drew blood for a PSA test. PSA normally leaves the prostate through ducts leading to the urethra. Cancerous prostate cells leak above-average amounts of PSA into the bloodstream. PSA is measured in nanograms, or billionths of a gram, per milliliter. For a man of 45, a PSA reading of more than 2.5 ng/ml is cause for concern, Walsh says.

Bigg's PSA reading came back at 3.6. He says he wasn't alarmed. He'd been biking hard to train for a triathlon, which he'd heard could inflate PSA numbers. "I was ready to blow it off," he says.

Then, four months later, Dave's younger brother Steve got wind of his PSA results. Steve happens to be a urologist. He told Dave to get tested again.

**T**his time, Bigg's results were even worse—around 4 ng/ml. Bigg's doctor told him to get a biopsy, and he agreed. Working on the CBOT has taught him a few things. "I'm a believer in the trend," he says.

In a biopsy, a doctor harvests cells by inserting an ultrasound probe into the rectum, along with a gun that shoots a hollow needle through the rectal wall and into the prostate. The needle returns a core sample of tissue about a half inch (15 millimeters) long. Most doctors take a dozen cores.

A biopsy hurts. "They stick a staple gun in your ass," says Charles "Chip" Baird, managing director of North Castle Partners LLC, a Greenwich, Connecticut-based private equity firm. Baird, 53, had his prostate removed in 2004.

Bigg's doctor sent the sample to a pathologist, who examined the cells under a microscope. Pathologists look for cells that are misshapen. The more deformed those cells are, the worse the cancer is. Pathologists assess the patterns and assign what's called a Gleason grade, from 1 to 5. The score is named for Dr. Donald Gleason, the pathologist who devised this system in 1966. A Gleason grade of 1 indicates the malignant cells are close to normal. A score of 5 means the cells are almost unrecognizable as prostate cells—a sign of severe cancer.

Most men have cells that fall into at least two categories, so pathologists add the grade for the most-prevalent type to the grade for the second-most-prevalent type for a combined

# The PSA Controversy

Doctors disagree about when—or whether—men should get a common blood test to spot cancer.

By Anthony Effinger

There are no easy answers when it comes to prostate cancer screening. The American Cancer Society suggests that doctors offer men a prostate-specific antigen (PSA) test and digital rectal exam at age 50. African-Americans and men with a family history of the disease should consider testing at 45, the ACS says. PSA, a protein produced by the prostate, is a marker for cancer.

The U.S. Preventive Services Task Force, a division of the U.S. Department of Health & Human Services, doesn't advocate routine PSA screening. Some doctors do; others don't.

Dr. Patrick Walsh of Johns Hopkins University School of Medicine, who invented modern

prostate surgery, recommends men get tested starting at age 40.

Dr. James Talcott, a professor at Harvard Medical School, says PSAs are so unreliable that men should avoid them completely. The tests often prompt men to undergo surgery or other treatments that leave them impotent or incontinent, even when there's little chance prostate cancer will kill them, he says.

So what should you do? First, get informed.

A doctor can feel the prostate through the rectal wall. If your doctor finds something suspicious, follow up.

A PSA test requires that blood be drawn from a man's arm. Normally, PSA leaves the prostate through ducts leading to the urethra. Cancerous prostate

cells leak PSA into the bloodstream. PSA is measured in nanograms, or billionths of a gram, per milliliter.

Because a man's prostate tends to grow with age and secrete more PSA, there's no single accepted reading that suggests he might be in danger. If you're in your 40s, your PSA is less than 0.6 and your rectal exam is normal, wait five years before getting tested again, Walsh says. If your PSA exceeds 0.6 but is below 2.5, come back in two. If your PSA is 2.5 or higher, get a biopsy, he says. If you're in your 50s, a reading above 3 should prompt a biopsy. Over 60, the threshold is 4.

A high reading doesn't necessarily mean you have cancer. An infection or benign prostatic

hyperplasia—an enlargement of the prostate—can cause the prostate to release PSA. Ejaculation and rectal exams can, too.

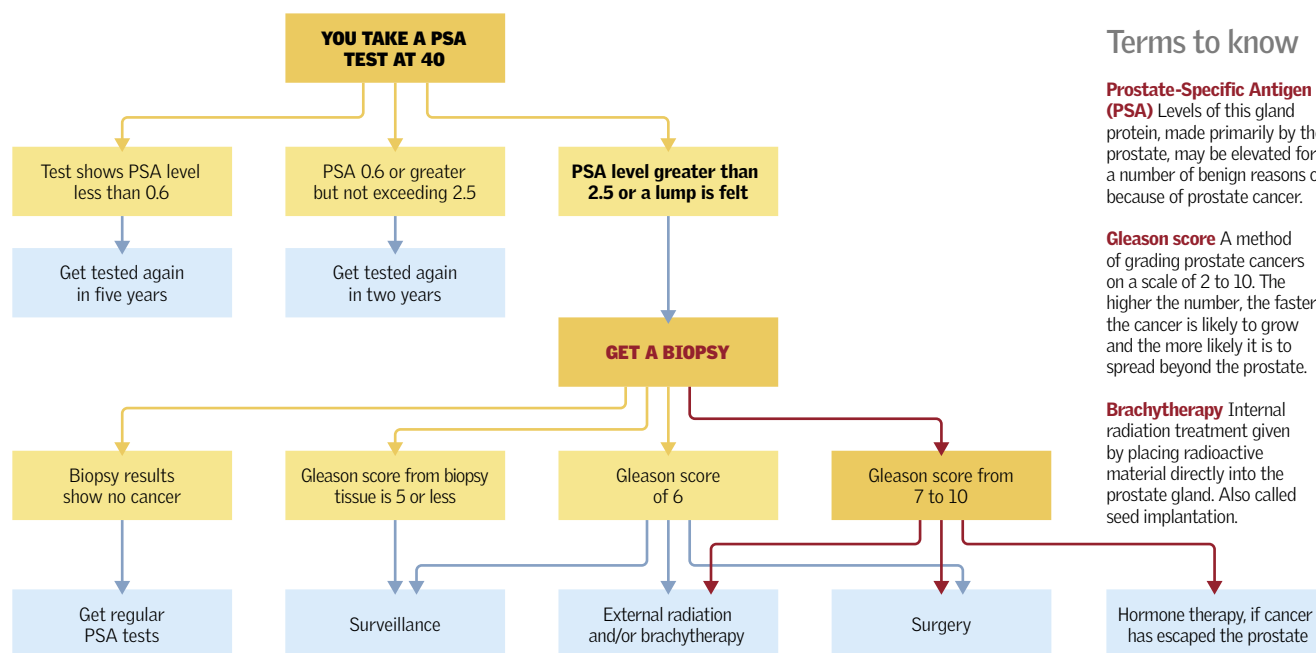
Walsh recommends getting a PSA early so you can track the change over time, a measure known as PSA velocity. If your PSA is less than 4 but has increased by more than 0.2–0.4 annually, consider a biopsy, Walsh says.

Talcott says the PSA does a bad job of distinguishing between dangerous tumors and those that are essentially benign. Eight of 10 men who undergo prostate cancer treatment probably wouldn't die from the disease anyway, he says.

Talcott, 54, says he doesn't get a PSA test and probably never will.

## Weighing the risks

Dr. Patrick Walsh of Johns Hopkins recommends that men get their first PSA test at age 40. If your PSA level is high, your doctor may recommend a biopsy. The results, scored on the Gleason scale, help determine your options for treatment.



### Terms to know

**Prostate-Specific Antigen (PSA)** Levels of this gland protein, made primarily by the prostate, may be elevated for a number of benign reasons or because of prostate cancer.

**Gleason score** A method of grading prostate cancers on a scale of 2 to 10. The higher the number, the faster the cancer is likely to grow and the more likely it is to spread beyond the prostate.

**Brachytherapy** Internal radiation treatment given by placing radioactive material directly into the prostate gland. Also called seed implantation.

PSA numbers are nanograms per milliliter of blood. Guidelines are simplified. Only your doctor can give medical advice. Sources: American Cancer Society; Dr. H. Ballentine Carter and Dr. Patrick Walsh, Johns Hopkins University School of Medicine



**'I spent seven months on the phone and on planes.'**

**Will Weinstein, diagnosed at 56, on researching treatment**

Gleason score, or sum. Hence, a 2 is the best Gleason score (1 + 1), and 10 is the worst (5 + 5).

Because the first number in the Gleason score indicates the more prevalent cell type, you're better off if the first number is the lower of the two. A Gleason 4 + 3 is worse than a Gleason 3 + 4, for example. In the latter, most of the cells are Gleason 3, not 4.

As a rule, a Gleason sum of 6 or less means that the cancer is treatable. A sum of 8 or more suggests cancer cells have escaped the prostate.

Bigg's Gleason grades were bad: 4 + 3, for a combined score of 7. When Bigg and his wife got home that day, they held each other.

Dave called his brother and asked his advice. "I told my brother, 'If you don't have surgery, you're crazy,'" Steve says. "Dying of prostate cancer is one of the worst deaths you can possibly have."

Steve recommended Dave see Catalona at Northwestern, who removed the prostate of New York Yankees Manager Joe Torre in 1999.

Steve Bigg had a connection, too. He'd trained under Catalona. "He's the man," he says.

Prostate surgery takes practice. Results vary from surgeon to surgeon, and it's not always easy to get in to see a top doctor. (See "Doc Stars," page 34.) No U.S. government agency or organization tracks how many of the patients a doctor treats end up impotent and incontinent. Patients have to trust what their doctors tell them.

**C**atalona says about 85 percent of his prostate surgery patients in their 50s can get erections afterward.

Walsh, at Johns Hopkins, says men who come to him in their 40s and 50s have a 90 percent chance. "It can take a little Viagra," Walsh says.

Bigg told Catalona that he wanted the cancer out, whatever the cost. He says he cared more about surviving than he did about sex. He and his wife have two grown children, ages 22 and 18, and didn't want any more, so Bigg didn't bank his sperm. Men still produce sperm after a prostatectomy, but the sperm no longer reach the urethra, the canal that runs through the penis.

Bigg had to wait for the biopsy holes in his prostate to heal before Catalona could operate. "That's the longest two months of anyone's life," Melissa Bigg says.

Bigg hit the pool, hard. Just before surgery, he placed second in his age group in the 100-yard butterfly in the Illinois Masters Swimming Association championships. He swam faster than he had in high school. "What's scary is that you can feel so good and have this," Bigg says.

Bigg went in for surgery on a Monday in May. Men who opt for surgery have Walsh to thank.

The first documented prostatectomy was performed at Johns Hopkins in 1904. For the next 78 years, the surgery virtually guaranteed that a man would never have intercourse again.

Many became incontinent, and 2 percent died within 30 days from loss of blood. Surgeons didn't know where the erectile nerves were. Nor had anyone completely mapped the veins around the prostate.

Then Walsh came along and traced the erectile nerves in stillborn fetuses, in which the nerves are easier to see. He also figured out how to tie off veins that lie along the prostate, limiting blood loss. In March 1982, he removed the bladder and prostate from a 67-year-old man with bladder cancer. Walsh had never seen a patient remain potent after the procedure. This man got an erection 10 days later. Since then, Walsh has done 4,000 nerve-sparing prostatectomies. He says he's never been bored. "There is much more variability to the male anatomy than there is to every golf course in the world," Walsh says. A prostatectomy is major surgery and often runs five hours or more. (See "One Man's Surgery," page 37.)

Halfway through Bigg's operation, Catalona called Melissa Bigg and told her things looked good. Bigg's cancer hadn't spread. For the first time in months, she felt relieved.

Bigg was discharged from the hospital that Wednesday. He wore a catheter for a week while his urethra, which has to be cut, healed. He took a month off from work to recuperate.

For the first three months after his surgery, Bigg leaked urine when he screamed on the trading floor. Since then, he's had no problems, he says.

Bigg and his wife say the surgery hasn't diminished their sex life. "Erections aren't what they were like when I was 16, but they weren't anyway," Bigg says.

"I have no complaints," Melissa Bigg says.

Men whose cancer is less dangerous than Bigg's must grapple with conflicting opinions and weigh the potential risks and benefits of various treatments. When Weinstein, the former hedge fund manager, was diagnosed 10 years ago, his Gleason score was a moderate 6: 3 + 3. He concluded that his cancer didn't pose an immediate threat to his life. Divorced and interested in a new relationship, he didn't want to risk impotence.

Weinstein set out to learn as much as he could. He had the resources: After working as a managing partner at Montgomery Securities, the San Francisco brokerage that's now part of Bank of America Corp., he became a financial adviser to the billionaire Pritzker family, which controls the Hyatt hotel chain. These days, Weinstein splits his time between San Francisco and Honolulu. "I drove people crazy," Weinstein says. "I spent seven months on the phone and on planes." He still has the rainbow of colored ID cards from all the hospitals he visited.

Weinstein says some of the surgeons he talked to didn't impress him. In a 79-page account of his experience that he shares with men who call for advice, he says one doctor talked to him on the phone for all of 15 minutes before recommending surgery.

Weinstein spoke to Intel's Grove, who chose to treat his



**'I wouldn't be here  
today if it wasn't for PSA.'**  
**Michael Milken, diagnosed at 46**



cancer by having radioactive seeds injected temporarily in his prostate. Weinstein says Grove told him that the survival statistics were skewed in favor of surgery because men whose cancer had breached the prostate—harder cases, in general—often ended up being treated with radiation.

## Scardino dismisses HIFU. 'There's a lot of marketing and hype,' he says.

Weinstein's conclusion, after visiting 30 doctors in the U.S. and corresponding with 14 abroad: "There are 8,500 urologists in the U.S., and 8,200 don't have the faintest idea what they're talking about."

Weinstein opted for permanent radioactive seeds. The seeds are actually titanium capsules the size of rice grains, with bits of radioactive iodine, palladium or cesium inside. Radiologists image the prostate with ultrasound and then use a computer to figure out how many seeds they need to radiate the gland. As many as 150 are implanted, says Dr. Peter Grimm, co-founder of the Seattle Prostate Institute. They're placed through a needle inserted near the scrotum.

The advantage of seeds, Grimm says, is that patients are on their feet the next day. Continence isn't a problem because the internal urinary sphincter—one of two sphincters that control urination—isn't removed, as it is in surgery. Urination can be frequent or urgent for a few months, but then it returns to normal.

What's more, 80–90 percent of patients who choose seeds are usually able to have sex afterward, Grimm says. Their erections are unlikely to be as good as they had been before. "There's nothing perfect," Grimm, 54, says. He and his partners were among the first to use seeds, in 1986. One of their early patients

was Grimm's father, Huber, in 1988. He had a Gleason grade of 6 and a palpable tumor. Almost 20 years later, Grimm's dad is still cancer free.

One of Grimm's partners, Dr. John Blasko, treated Weinstein. Everything went smoothly, Weinstein says. When a friend—the funniest person he knows—showed up afterward and started cracking jokes, Weinstein laughed so hard that one of the seeds dislodged and passed out in his urine. He found it in a screen used to catch such errant seeds and put it in a special radiation-proof capsule that Dr. Blasko had given him.

Weinstein says urination was painful and urgent for about six months. During that time, he traveled by private jet, rather than on commercial airlines, on business trips because he was afraid he'd get stuck waiting to use the toilet. He'd tell his limo driver to take back roads so he could stop to relieve himself. One time, in Sonoma County, California, he asked to use the bathroom in a convenience store. When the owner refused, Weinstein walked out and urinated on the side of the building. Today, Weinstein says he's cancer free, potent and continent.

**H**urley had seen prostate cancer kill his father and ravage two brothers, and he knew he didn't want to go through surgery. When his time came, Hurley, 53, says an operation seemed extreme. Hurley is 6 feet, wiry and, he says with a laugh, happily divorced. He says he wasn't ready to risk surgery and not being able to have sex. "Ripping it out of my stomach seemed like a radical thing to do," he says. "It's like blowing up a mosquito with a stick of dynamite."

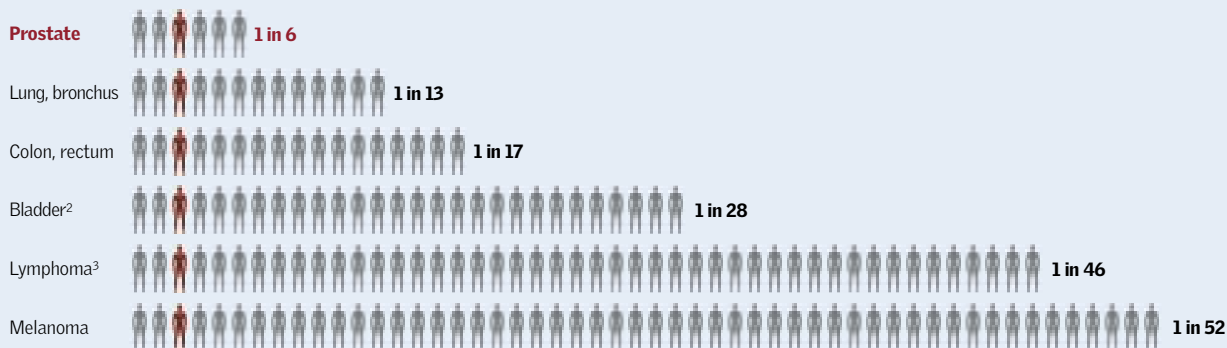
Hurley had to educate himself. "Before the diagnosis, I didn't even know what the prostate was," he says. He turned to the Internet and ran across HIFU. These machines use ultrasound powerful enough to destroy prostate tissue. It works like a magnifying glass focusing sunlight and is accurate to the millimeter. HIFU is popular in Europe and is currently undergoing clinical trials in the U.S.

When Hurley told friends he was considering a trip to

## High risk

The odds are that one in every six men in the U.S. will get prostate cancer.

Lifetime probability of developing cancer among U.S. men,<sup>1</sup> 2000–02

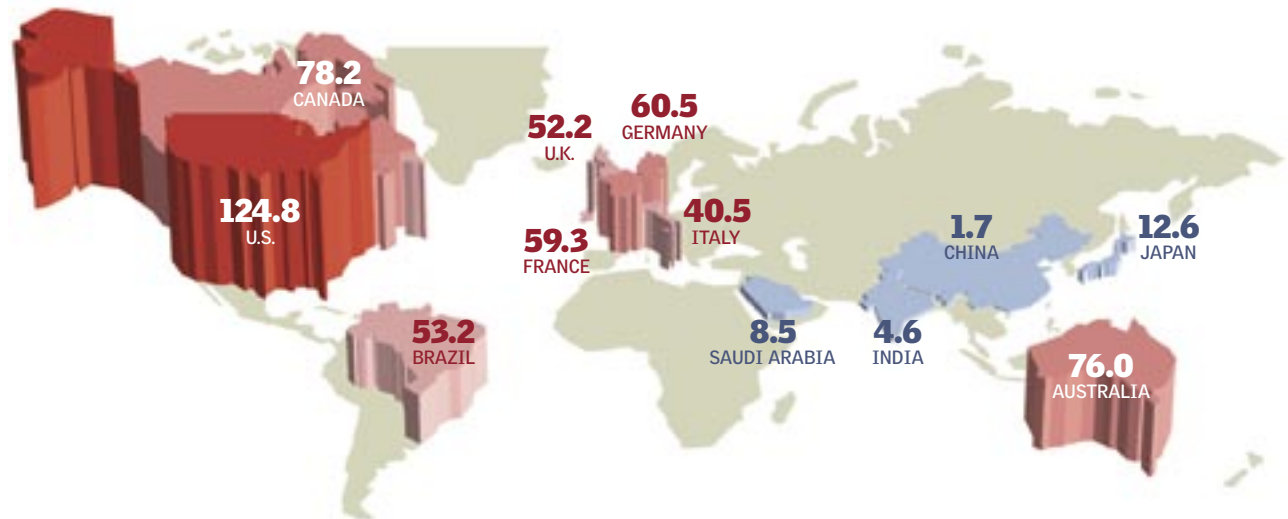


<sup>1</sup>For those free of cancer; excludes basal and squamous cell skin cancers. <sup>2</sup>Includes invasive and *in situ* cancer cases. <sup>3</sup>Non-Hodgkin's. Source: National Cancer Institute

## Prosperous and plagued

High-fat diets popular in wealthier nations may foster higher incidences of prostate cancer.

Cases per 100,000 men



Numbers are adjusted to a standard age distribution for countries worldwide. Map is stylized. Source: International Agency for Research on Cancer

Canada, where HIFU is approved, they said he was crazy. “You’d be astounded by the resistance,” he says.

Some U.S. urologists dismiss HIFU. “I think it’s a hammer looking for a nail,” Walsh says.

“It’s never been tested in a thoughtful clinical trial,” Scardino says. “They don’t have any good data. There’s a lot of marketing and hype.”

Dr. John Warner, medical director at Maple Leaf HIFU Co., a Canadian company that operates a HIFU machine in Toronto, says HIFU is the future. A urologist, Warner is no stranger to surgery. He’s removed 800 cancerous glands. “It’s only a matter of time before this becomes state of the art in North America,” Warner, 48, says.

Because it’s so new, fans like Warner have little data with which to promote HIFU’s effectiveness. A study by doctors in Germany, reported in the journal *Urology*, showed that 93 percent of men with tumors confined to the prostate had

## Carter says 30 percent of patients would be eligible for active surveillance.

negative biopsies up to five years after HIFU treatment. Five years is a short time when dealing with prostate cancer.

Hurley’s urologist recommended surgery or radiation treatment. Hurley wanted more opinions. A health care consultant in Seattle, a woman who had survived breast cancer, reviewed his Gleason scores and recommended HIFU, the treatment he’d

seen on the Internet. “It sounded so humane,” Hurley says.

Hurley flew to Toronto on March 29, a Wednesday. He had a preoperative appointment shortly after he landed. Maple Leaf HIFU arranged for a room at the Westin. The next afternoon, Hurley went in. The doctors gave him an epidural to keep him still and a sedative to make him sleep. The procedure took just under 2 hours. The following day, he had an exam and flew home to New Jersey. By Tuesday, he was back on the scaffolding applying plaster.

**T**here was one complication. Hurley had to wear a catheter to keep his urethra clear of dead prostate tissue that might migrate there. Two weeks after that catheter was removed, a piece of tissue got lodged. He rushed to Overlook Hospital in Summit, New Jersey; tossed his truck keys to the parking valet; and waited for three hours in the emergency room, in agony from being unable to urinate.

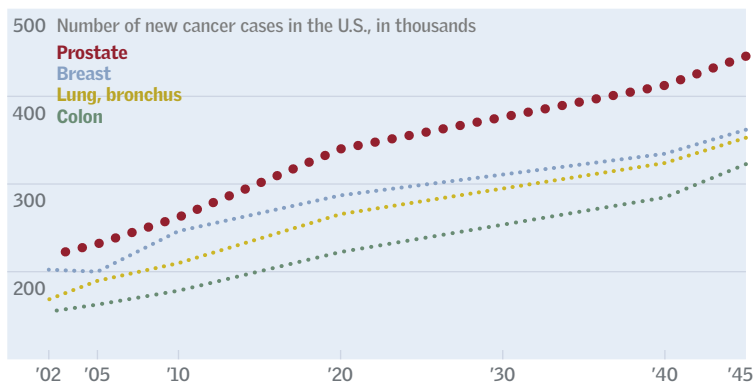
Finally, a doctor inserted a new catheter. When Hurley left the next day, he found the valet had lost his truck. “It was crazy,” Hurley says “But it’s a small price to pay.”

Like Hurley and Weinstein, Lewis wasn’t about to let the doctors make up his mind for him. A Rhodes scholar with a Ph.D. in theoretical physics, Lewis worked for U.S. Defense Secretary Robert McNamara in the 1960s, trying to figure out how the U.S. should spend money to win the Cold War. He later became associate provost at Princeton University. He joined McKinsey in 1982 and became head of the McKinsey Global Institute, the firm’s economic think tank, in 1990.

When Lewis was diagnosed with cancer, he’d just retired from McKinsey and was writing a book about why some countries are wealthy and others aren’t. He and his wife,

## Danger ahead

By 2020, cases of prostate cancer could exceed those of colon cancer by almost 53 percent.



Figures are forecasts by the Prostate Cancer Foundation using data from the National Cancer Institute. Source: Prostate Cancer Foundation

Jutta, had purchased land near Carmel, California, where they planned to build a house.

"All these plans were up in the air all of a sudden," Lewis says. "It was quite a jolt."

Lewis is the epitome of a man aging well. He has a head of gray hair, and he retains a lanky build that helps on the squash court. One of his biggest worries was that prostate cancer would change his sex life. "Sexuality is very much a part of personality, and until that dies, I didn't want to change my personality," he says.

Lewis's biopsy suggested his cancer was relatively benign. His urologist took 14 cores from his prostate, and only one hit cancer. His Gleason score was a moderate 6.

The diagnosis, though better than many, left Lewis to choose among treatments, all of which had disadvantages. His doctor recommended a prostatectomy.

Lewis set out to learn all he could. He got out his kids' old microscope and looked at slides of his biopsy tissue, comparing it with samples put on the Internet by Stanford

University to see if he agreed with the pathologist. He spoke with men who'd had surgery. He talked to doctors at the University of California, San Francisco, about new radiation techniques. Doctors in Florida told him about cryotherapy, in which the prostate is turned into an ice ball to kill the cancer inside it.

Lewis concluded that for him, the risk of incontinence after surgery was one out of three, and that the risk of impotence was about the same. "The chances are two out of three that you'll get at least one of them," Lewis says. "That didn't sound attractive."

Then, in June 2003, almost a year after his first abnormal PSA test, his squash partner gave him a booklet by Carter at John Hopkins that had a section on active surveillance. Lewis had heard about Carter's program. He was impressed that a doctor at Hopkins, an institution known for its prostate surgeons, would be so interested in active surveillance. "He had the answer I was looking for," Lewis says.

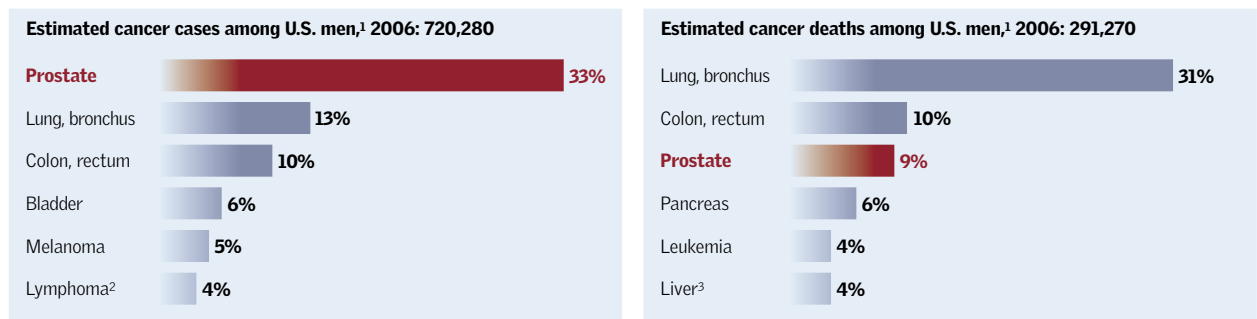
Jutta Lewis says she tried not to think about her husband's cancer. She says she believed he would tease out the critical information and present it to her to discuss. "I trust him to do the best job anyone can do," she says.

After three years of active surveillance, Lewis's cancer seems to have vanished. "It hasn't shown up in any of three subsequent biopsies," he says.

Carter says as many as 30 percent of the men who are diagnosed with prostate cancer would be eligible for his active surveillance program because their cancers aren't that severe. Today, just 2 percent of the men who come to Johns Hopkins with the disease enroll with Carter. Of those who have signed up, 55 percent are still monitoring their tumors. A third of the men have exhibited changes that prompted Carter to treat them. About 7 percent became so uncomfortable knowing they had cancer in their bodies that they chose treatment even though their tumors appeared stable. No one in Carter's program has died of prostate cancer. Klotz at

## Most prevalent, third most deadly

Prostate cancer may account for a third of all new cancer cases among men in the U.S. in 2006. The disease may cause 9 percent of all cancer deaths among men this year.



<sup>1</sup>Excludes basal and squamous cell skin cancers and *in situ* carcinomas except urinary bladder. <sup>2</sup>Non-Hodgkin's. <sup>3</sup>Includes intrahepatic bile duct. Source: American Cancer Society

University of Toronto says he plans to recruit 2,100 patients to study active surveillance.

Looking back, Lewis suspects he had an infection in his prostate. His biopsy just happened to hit the trace of cancer that so many men carry around later in life, he says. "Our bodies have cancers coming and going all the time," Lewis says.

## Milken's foundation is financing the search for tests for deadly tumors.

Milken, the onetime junk bond king, has made fighting prostate cancer his life's work. In 1993, when Milken was 46, he went for an overdue physical. He had just finished a 22-month prison term for securities fraud. He asked his doctor for a PSA test. Prostate cancer had just killed Warner's Ross, a friend, and he wanted a test himself. The doctor told Milken he was too young to worry.

"Humor me," Milken said. He has lost 10 close relatives to cancer, including his father (melanoma) and his mother-in-law (breast cancer).

**T**he results were terrible. Milken's PSA was 24 ng/ml, six times the level that usually prompts concern. Milken had a biopsy, and his Gleason score came back at a 9 out of 10. The bad news cascaded. The cancer had traveled to his lymph nodes. The doctors told Milken to get his affairs in order.

Instead, Milken did what many educated, wealthy people do: He networked. A friend recommended he see Dr. Stuart "Skip" Holden, a urological oncologist at Cedars-Sinai Medical Center in Los Angeles. Another friend, Dr. Neal Kassell, a neurosurgeon at the University of Virginia, suggested talking to Dr. Andrew von Eschenbach, then director of prostate cancer research at the University of Texas M.D. Anderson Cancer Center in Houston. Dr. Eschenbach was studying men who had cancer in their lymph nodes but not in their bones—Milken's situation exactly.

Soon, Holden put Milken on hormone-deprivation therapy to starve his cancer of testosterone. Then he had Milken's prostate and pelvic lymph nodes radiated over the course of eight weeks.

Milken adopted a strict diet. He avoided saturated fats found in meat and began eating more soy. His PSA dropped to zero. Today, he's still in remission.

"I wouldn't be here today if it wasn't for PSA," Milken says, sipping a purple smoothie containing—among other things—pomegranate juice, soy protein,

lemon zest, selenium, blueberries, vitamin E and green tea, all reputed cancer fighters.

His Prostate Cancer Foundation has given money to more than 1,200 researchers, many of them working on ideas that are too far out for other charities to support. This year, the foundation reassessed its priorities and decided to focus on two things: finding a blood test or other biomarker that gives more clues about prostate cancer's progression than PSA does and getting more drugs into human trials, especially for cancers that tend to recur.

"Where we have been really stuck is in effective treatment for men with recurrent disease," says Leslie Michelson, the head of the Prostate Cancer Foundation.

All of the men in this story remain cancer free. Weinstein, like Milken, is trying to avoid a recurrence by watching what he eats. Weinstein has adopted a mostly vegan diet. He avoids fats, except for olive oil, and takes green tea extract, milk thistle, saw palmetto and selenium, all reputed cancer fighters.

Lewis takes selenium and lycopene, a substance found in tomatoes. He and Jutta built their house in Carmel, and Lewis finished his book, *The Power of Productivity: Wealth, Poverty, and the Threat to Global Stability* (University of Chicago Press, 370 pages, \$28). They split their time between Washington, D.C., and California. The new house abuts wilderness, which Bill plans to explore. He still gets annual biopsies and twice-yearly PSA tests with Carter at Johns Hopkins.

Hurley got his first post-HIFU PSA test recently and it was a scant 0.2. His reading indicates that the cancer is gone. Prostate cancer can return years later, usually in the lymph nodes or bones, even after a prostatectomy. Nerve-sparing HIFU can leave some prostate tissue behind. The upside is that Hurley is continent and potent, no Viagra needed.

Bigg is back in the pool. He was set to compete in the Masters World Championships at Stanford University in August. Around her neck, Melissa Bigg wears a ruby encircled by diamonds. Ruby is Dave Bigg's birthstone; diamond is hers. The necklace was a 23rd anniversary present from Bigg. He says the charm symbolizes how he felt during his battle with cancer: surrounded by her love.

Five men, five stories. No two are alike. Every man who confronts prostate cancer—and there will be many—faces decisions no one else can make.

"The medical community didn't have a clear-cut recommendation for me," Lewis says. "You have to take the management of your disease into your own hands."

These men did, and so far, it's paid off. ▶

### Resources

AMERICAN CANCER SOCIETY  
[www.cancer.org](http://www.cancer.org)

CEDARS-SINAI MEDICAL CENTER  
[www.csmc.edu](http://www.csmc.edu)

JOHNS HOPKINS MEDICINE  
[www.hopkinsmedicine.org](http://www.hopkinsmedicine.org)

MEMORIAL SLOAN-KETTERING CANCER CENTER  
[www.mskcc.org](http://www.mskcc.org)

NATIONAL CANCER INSTITUTE  
[www.cancer.gov](http://www.cancer.gov)

PROSTATE CANCER FOUNDATION  
[www.prostatecancerfoundation.org](http://www.prostatecancerfoundation.org)

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