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BARBARA ANN
KARMANOS
CANCER INSTITUTE

Wayne State University

CAN ASPIRIN PREVENT CANCER?

Mounting evidence suggests low-dose, daily aspirin may help



You've probably heard that aspirin can help prevent and manage heart disease and stroke. Now, there is growing evidence that low-dose daily aspirin can also help prevent colorectal cancer. Recent studies also indicate that aspirin may reduce the risk of other cancers and prevent the disease from spreading.

"The most recent data is very promising," says Anthony Shields, M.D., Ph.D., associate center director of Clinical Sciences at the Karmanos Cancer Center and professor of Medicine and Oncology at Wayne State University School of Medicine. "Some randomized trials show that aspirin and similar medications decrease the incidence of polyps in patients who have a family history of colorectal cancer. However, the data is not definitive."

To further explore the effects drugs like aspirin have on cancer, Dr. Shields is running a national study focusing on celecoxib (Celebrex®, Pfizer), a medication

commonly used to treat arthritis. Researchers will monitor 2,500 stage III colon cancer patients for three years to see if celecoxib prevents cancer recurrence or the formation of new polyps. The study is randomized—patients will either receive celecoxib or a placebo.

Although aspirin may help some people with a family history of colorectal cancer, Dr. Shields says it's important to consider the risks and benefits of an aspirin regimen.

"Regular aspirin use may cause bleeding and stomach ulcers," Dr. Shields says. "Ask your doctor if taking low-dose aspirin daily is appropriate for you. Do not self-medicate without considering the risks."



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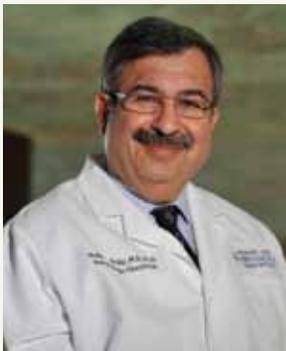
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(1-800-527-6266) or visit www.karmanos.org.

LEADERSHIP

Dear Friends,

With this latest edition of Karmanos Hope, you'll find a wide variety of health- and cancer-related stories, including stories that provide facts on fibroids, thyroid cancer, oral chemotherapy, and aspirin and its potential in cancer prevention. Our doctors also discuss radiation and how it's used to treat cancer, as well as a question-and-answer piece where I talk about neuroendocrine tumors and why you need to consult of team of specialists if you or a loved one is diagnosed with these tumors.



At Karmanos, providing specialists who treat nothing but cancer – all 200-some forms of it – is why we're considered one of the best cancer centers in the country.

Karmanos employs world-renowned cancer specialists who provide real hope to cancer patients, no matter what kind of cancer they have.

As always, we welcome your feedback on what you read in Hope. And we hope you'll let us know what health and cancer subjects you'd like us to cover. Please enjoy this issue.

PHILIP A. PHILIP, M.D., PH.D., F.R.C.P.,
LEADER OF THE GASTROINTESTINAL AND
NEUROENDOCRINE MULTIDISCIPLINARY TEAM
AND VICE PRESIDENT OF MEDICAL AFFAIRS

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KARMANOS HOPE

September 2012

ABOUT KARMANOS

The Barbara Ann Karmanos Cancer Institute is one of only 41 National Cancer Institute-designated comprehensive cancer centers in the United States. Federal designation as a comprehensive cancer center is the pinnacle of translational oncology research.

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Hear cancer. THINK KARMANOS.

▶ *I've been diagnosed with cancer. Can I get a cancer expert's opinion?*

Yes. Our team of experts at Karmanos recommends individual patient treatment plans daily at our facilities in midtown Detroit and Farmington Hills. We are committed to offering more treatments with better outcomes. We know that our medical teams are most effective when brought in before any treatment begins.

▶ *Where can I go for screening and diagnostic tests, as well as receive a specialist's opinion on breast, prostate and other types of cancer?*

Karmanos offers many diagnostic tests at its primary locations in Detroit and Farmington Hills. Each team of experts focus on a specific form of cancer, whether that's breast, prostate, skin, colon and many other types of cancer. In fact, our doctors treat the more than 200 known types of cancer. At Karmanos, patients receive the latest tests and diagnostic procedures from leading experts in the disease.

▶ *Do I need a physician referral?*

Anyone with a diagnosis of cancer can make an appointment themselves at the Karmanos Cancer Institute. You do not need to be referred by a physician unless required by your insurance company. Please call 1-800-KARMANOS (1-800-527-6266). However, it is important to keep your physicians aware of your care. You will be asked to bring information on prior treatments and test results to help our doctors and health care teams plan the best course of therapy. We can help you collect all the necessary information when you call.

Call Karmanos Cancer Institute –
we're focused completely on fighting cancer.

1-800-KARMANOS (1-800-527-6266)

BATTLING RARE TUMORS *as a Team*

KARMANOS SPECIALISTS FOCUS ON NEUROENDOCRINE CANCER

The Gastrointestinal Multidisciplinary Team (MDT) at the Karmanos Cancer Center recently expanded its scope to include the diagnosis and treatment of neuroendocrine tumors. Philip A. Philip, M.D., Ph.D., F.R.C.P., leader of the newly named Gastrointestinal and Neuroendocrine MDT, professor of Medicine and Oncology, and vice president of Medical Affairs at Karmanos, explains the unique nature of neuroendocrine tumors and why it's important to consult a team of experts familiar with the disease.

Dr. Philip has been with Karmanos for 17 years. He is actively involved in the research of gastrointestinal cancers, which include those that affect the esophagus, stomach, liver, pancreas, gall bladder and colon/rectum.

Q: What are neuroendocrine tumors?

A: The neuroendocrine system makes up a portion of the nervous system and the endocrine system. They work together to keep the body functioning properly. The majority of neuroendocrine tumors, sometimes referred to as carcinoid tumors, occur in organs of the digestive system, like the small intestine and pancreas. However, they tend to grow slower than the common variety gastrointestinal tumors. Patients with neuroendocrine tumors can survive many years, sometimes up to 10 years, even with advanced disease.

Q: Are neuroendocrine tumors more difficult to diagnose than gastrointestinal tumors?

A: Yes. These tumors can either produce no symptoms until advanced or produce symptoms that are non-specific. Some of these tumors produce hormones that cause symptoms such as hot flashes, diarrhea or even high blood pressure. See a neuroendocrine tumor specialist if you have unexplained chronic diarrhea, weight loss, skin flushing or abdominal pain—especially if these symptoms occur together and over a long period of time.

LEARN MORE ABOUT CARCINOID TUMORS

What: At this free lecture, Dr. Philip will speak about new treatments for carcinoid tumors, which are slow-growing cancers that affect the digestive tract or the lungs.

When: Wednesday, Sept. 12, 6:30-8 p.m.

Where: Karmanos' Weisberg Cancer Treatment Center, 31955 Northwestern Highway, Farmington Hills, 48334

To register: Call **1-800-KARMANOS** (1-800-527-6266). Attendance is limited.

Q: Why is it important for patients to seek a multidisciplinary team of experts if they have neuroendocrine tumors?

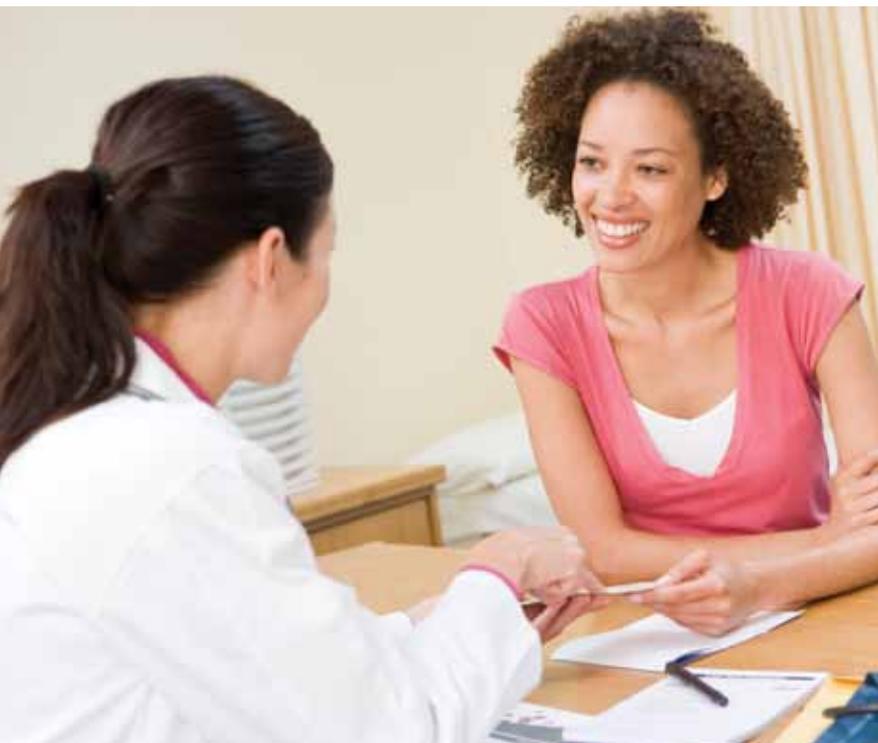
A: Since these tumors are uncommon, expertise is limited. It's essential that patients seek a multidisciplinary group of specialists who are familiar with these tumors, the latest research developments and treatment options. With increased awareness of the disease, researchers are quickly developing new treatments. Karmanos is the only Michigan hospital with a team of specialists dedicated to treating neuroendocrine tumors.

Q: How are neuroendocrine tumors treated?

A: We create individualized treatment plans that work best for our patients. Options may include new drugs that target specific genes or proteins that contribute to cancer growth and survival or treatments focused on directly attacking tumors within an organ such as the liver. We also run clinical trials that may lead to better treatments in the future.

What you should know about FIBROID TUMORS

UTERINE TUMORS ARE ALMOST ALWAYS BENIGN



Although fibroid tumors are very common among women, they usually aren't cause for concern. Fibroids occur in about 60 percent of women between age 30 and 50, but the risk of one being cancerous is about one in 2,000, says Robert Morris, M.D., a gynecologic oncologist at the Karmanos Cancer Center.

"Fibroids are muscular tumors that grow in the wall of the uterus," Dr. Morris says. "More research is needed to determine why they occur. We believe that estrogen stimulates their growth. Fibroids tend to shrink after a woman reaches menopause."

Dr. Morris encourages women to be aware of fibroid symptoms and have any uterine tumors checked out by a gynecologist. Most fibroids are discovered during routine gynecological exams.

"Most fibroids don't cause any symptoms," Dr. Morris says. "However, women should pay attention to prolonged menstrual flow, increased vaginal bleeding, more frequent urination or anything that might suggest a mass in the pelvis. Bring any of these symptoms to the attention of your gynecologist."

Fibroid tumors can vary in size from 1 cm (0.4 inches) up to a 40 cm (15.7 inches). Doctors usually order an ultrasound to determine if a pelvic mass is a fibroid.

"If a fibroid tumor causes moderate to severe pain or bleeding, it can be removed surgically during a myomectomy (which leaves the healthy tissue of the uterus intact) or a hysterectomy (complete removal of the uterus)," Dr. Morris says. "Hormone medications can also help shrink a fibroid mass. For the most part, fibroids are smaller and don't require any treatment."

What to Watch for...

Most fibroids are harmless and show no symptoms. But a larger fibroid mass can lead to serious health issues. Be sure to get regular health exams and alert your gynecologist if you experience any of these symptoms:

- Heavy bleeding or painful periods
- Feeling of fullness in the pelvic (lower stomach) area
- Enlargement of the lower abdomen
- Frequent urination
- Pain during sex
- Lower back pain



CONTACT US

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THE FACTS ABOUT

Thyroid Cancer

THE DISEASE IS VERY TREATABLE WHEN DETECTED AT AN EARLY STAGE

In the past nine years, the number of thyroid cancer cases has risen dramatically. Since 1993, the overall incidence rate has risen 157 percent, while the incidence rate for women has risen 165 percent, according to the American Cancer Society.

George Yoo, M.D., FACS, chief medical officer and associate director of Clinical Affairs at the Karmanos Cancer Center, says the reason for these rate increases may be due to increased early detection.

“More research is needed to determine the cause, but the rise in thyroid cancer could be due to incidental findings,” Dr. Yoo says. “More people are getting routine CT scans and ultrasounds than in the past, which could lead to more diagnoses. We know that radiation exposure causes thyroid cancer. But there are no studies that support the idea that cell phone use or the occasional dental x-ray causes the disease.”

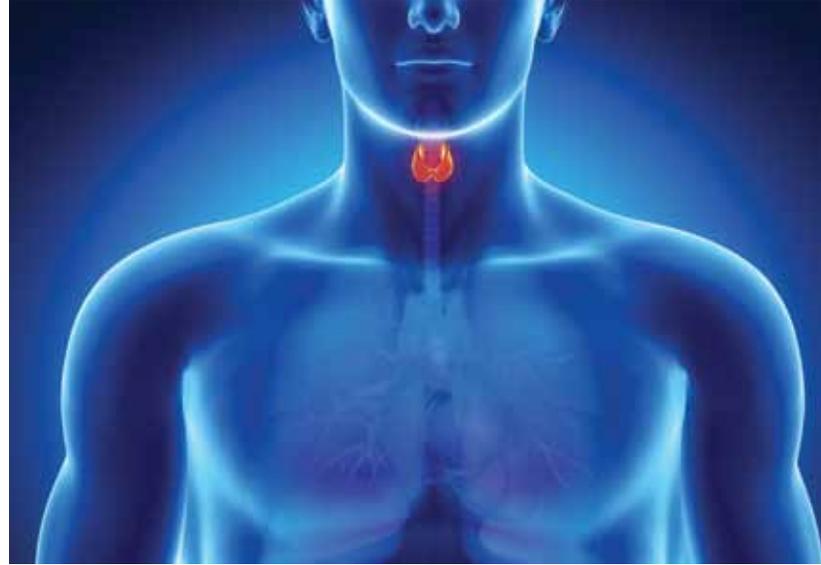
The thyroid gland is located in the front of the neck under the Adam’s apple. It produces hormones that control your body’s metabolism. The most common symptom of thyroid cancer is a lump or swelling in the neck, which may be felt during a routine physical. A doctor may do a lump biopsy to check for cancer cells.

THYROID CANCER SYMPTOMS

Patients may experience some of the following symptoms:

- A lump or swelling in the neck
- Pain in the neck or sometimes in the ears
- Trouble swallowing
- Trouble breathing or constant wheezing
- Frequent hoarse voice
- A frequent cough that is not related to a cold

Source: WebMD



“The good news is thyroid cancer is very treatable, particularly when detected early,” Dr. Yoo says. “Patients under age 45 are almost always diagnosed at stage I or II. The five-year survival rate for patients at stage I and II is close to 100 percent.”

Surgery to remove part or the entire thyroid is the most common treatment method, followed by radioactive iodine therapy. Minimally-invasive surgeries with small incisions are available. Patients who have their thyroid removed can take medication to replace the thyroid hormones.

“Ask your doctor to check for neck masses during your next physical,” Dr. Yoo says. “If a mass is found and further analysis is needed, patients can make an appointment at Karmanos with a head and neck surgeon and possibly an ultrasound study.”



CONTACT US

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Radiation Therapy: HIGH-ENERGY CANCER TREATMENT

Of the standard methods used to treat cancer, only one harnesses the power of high-energy waves: radiation therapy.

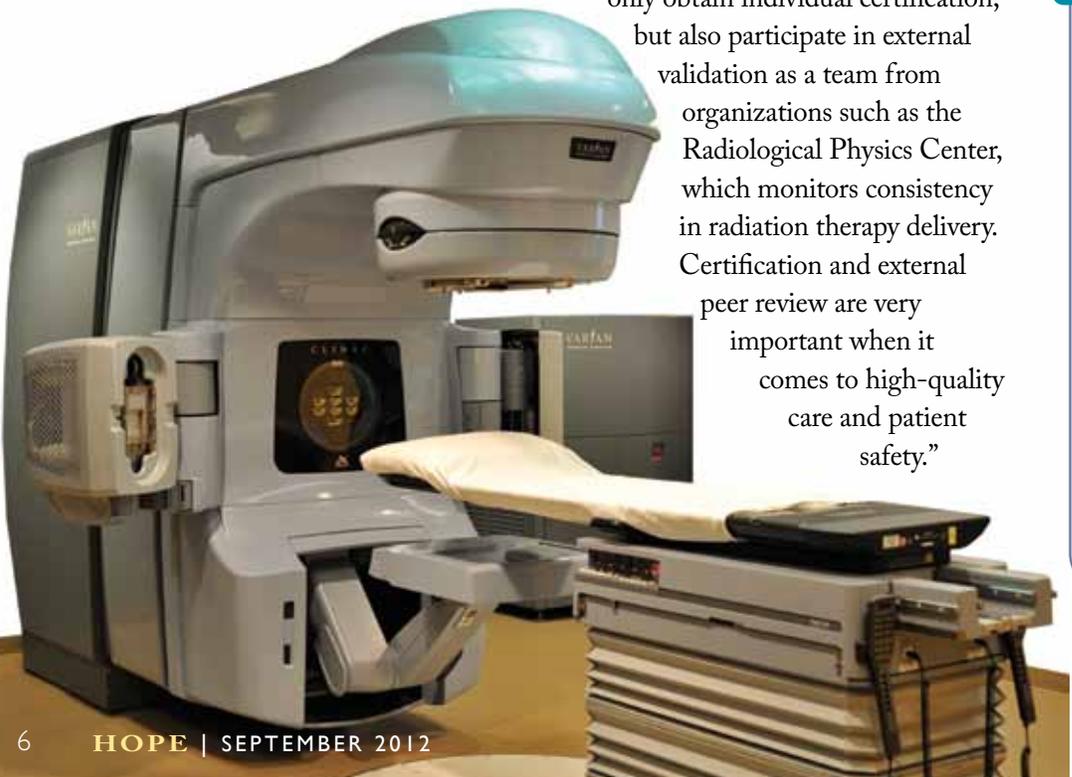
“The radiation we deliver is much like the ultraviolet wavelength in sunlight, only at a higher frequency,” says Andre Konski, M.D, MBA, FACR, chief of Radiation Oncology at the Karmanos Cancer Center. “Radiation therapy kills cancer cells and stops them from spreading. It can also relieve symptoms in patients who cannot be cured. The treatment is very effective on lymphoma as well as breast, head and neck, prostate and gastrointestinal cancers.”

Patients usually receive radiation therapy in small doses over several weeks from a machine outside the body. Though doctors deliver the radiation to a targeted area, there is a risk of damaging normal tissue. Patients may also experience skin changes, fatigue and other side effects.

“We use advanced external-beam equipment to target tumors and spare normal tissues,” Dr. Konski says. “The radiation oncologists work very closely with our radiation physicists to minimize side effects and improve outcomes.”

It takes great skill and knowledge to handle complex radiation therapy equipment. The Radiation Oncology Department at Karmanos includes a highly trained team of physicists, dosimetrists, therapists and nurses. They calibrate the machines, handle various technology issues and collaborate with the physicians on patient care.

“Accuracy is extremely critical to our work,” says Jay Burmeister, Ph.D., chief of Physics at Karmanos and director of the Medical Physics Graduate Program at Wayne State University School of Medicine. “That’s why our team members not only obtain individual certification, but also participate in external validation as a team from organizations such as the Radiological Physics Center, which monitors consistency in radiation therapy delivery. Certification and external peer review are very important when it comes to high-quality care and patient safety.”



RADIATION THERAPY FACTS

- ✓ Radiation therapy kills cancer cells by damaging their DNA.
- ✓ Since radiation therapy can also damage normal cells, physicians carefully plan treatments to minimize side effects.
- ✓ A patient may receive radiation therapy before, during or after surgery, depending on the type of cancer treated.
- ✓ Some patients receive radiation therapy alone, while others receive radiation therapy in combination with chemotherapy.

Source: National Cancer Institute



CONTACT US

Karmanos provides radiation therapy at its main campus in midtown Detroit; at its Weisberg Cancer Treatment Center in Farmington Hills; and at the Monroe Cancer Center.

To make an appointment at any of these facilities, call **1-800-KARMANOS** (1-800-527-6266).

Oral Chemotherapy:

THE FUTURE OF CANCER CARE

Thanks to recent medical advances, chemotherapy patients now have a convenient way to quickly, safely and effectively fight cancer.

Instead of receiving chemotherapy intravenously, patients can simply take a chemotherapy pill. These oral medications reduce chemotherapy side effects and eliminate the need for infusion appointments. Patients can continue their regular activities while the medication destroys cancer cells.

“Infusion chemotherapy appointments take at least two hours, and many patients miss an entire day of work,” says Gerold Bepler, M.D., Ph.D, president and CEO of the Karmanos Cancer Institute. “With oral chemotherapy, a patient literally swallows a pill. That’s it.”

Chemotherapy works by inhibiting or altering cellular pathways that allow cancer cells to grow and survive. In 2001, the Food and Drug Administration approved Gleevec, one of the first oral chemotherapy medications. Doctors typically prescribe it to treat chronic myelogenous leukemia (CML).

“Since Gleevec was introduced, the CML five-year survival rate has increased from 25 percent to 90 percent,” Dr. Bepler says. “Compared to infusion chemotherapy, oral medications can act more quickly and be more effective.”

More recently, researchers have developed other oral chemotherapy medications to treat melanoma as well as lung, colorectal and breast cancer.

“We’ve made substantial progress in developing new treatments that are more effective and have fewer side effects,” Dr. Bepler says. “Oral chemotherapy drugs fight cancer while helping patients maintain quality of life.”

ORAL CHEMOTHERAPY AGENTS:

- Mitotane (Lysodren)
- Busulfan (Myelara®)
- Chlorambucil (Leukeran®)
- Cyclophosphamide (Cytosan®)
- Lomustine (Ceenu®)
- Melphalan (Alkeran®)
- Procarbazine (Matulane®)
- Temozolomide (Temodar®)
- Testolactone (Tesclac®)
- Bicalutamide (Casodex®)
- Flutamide (Eulexin®)
- Nilutamide (Nilandron®)
- Tamoxifen Citrate (Nolvadex®, Soltamox®)
- Toremifene Citrate (Foreston®)
- Capecitabine (Xeloda®)
- Hydroxyurea (Droxia®, Hydrea®)
- Mercaptopurine (Purinethol®)
- Methotrexate (Trexall®, Rheumatrex Dose Pack®)
- Thioguanine
- Anastrezole (Arimidex®)
- Exemestane (Aromasin®)
- Letrozole (Femara®)
- Vorinostat
- Etoposide (Vepesid®)
- Bexarotene (Targretin®)
- Trenitoin
- Aminoglutethimide (Cytadren®)
- Crizotinib (Xalkori®)
- Dasatinib (Sprycel®)
- Erlotinib (Tarceva®)
- Imatinib (Gleevec®)
- Lapatinib (Tykerb®)
- Nilotinib (Tasigna®)
- Pazopanib (Votrient®)
- Sunitinib (Sutrent®)
- Gefitinib (Iressa®)
- Vorinostat (Zolinza®)
- Thalidomide (Thalomid®)
- Lenalidomide (Revlimid®)
- Sorafenib (Naxavar®)
- Everolimus (Affinitor®)

THE CASE FOR EQUAL COVERAGE

Oral chemotherapy medications are quickly becoming part of standard cancer care. Yet, many health plans don't cover these drugs at the same level as infusion chemotherapy treatments.

This disparity means patients have to pay large out-of-pocket costs for oral chemotherapy medications, which can cost between \$2,000 and \$20,000 per month. Infusion appointments are typically covered by an office visit co-pay.

“We support legislation that gives patients access to all anti-cancer medications, regardless of how they're delivered,” says Carol Christner, director of Government Relations for the Karmanos Cancer Institute.

Michigan residents can contact their state legislators and ask them to pass the Oral Chemotherapy Access bills (Senate Bills 540 and 541 and House Bills 5132 and 5133). If passed, Michigan will join 15 other states and the District of Columbia in requiring health plans to provide access to all chemotherapy, including oral medications.

“We're actively meeting with state legislators to explain the need for coverage of modern cancer medications,” Christner says. “Passing the Oral Chemotherapy Access bills is the right thing to do.”

For more information about the Oral Chemotherapy Access bills, please visit www.karmanos.org.

Web site for more information about oral chemotherapy agents: <http://www.ncbi.nlm.nih.gov/pubmedhealth/>

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Test Your Knowledge

Take part in our interactive question.

September is Prostate Cancer Awareness Month.
At what age should a man at average risk be considered for prostate cancer screening?

- A. 65
- B. 55
- C. 35
- D. 50



Scan this code with your smart phone to respond to the question and to get the answer.

Visit www.karmanos.org/testyourknowledge to see the answer if you don't have a smart phone.

Hear cancer. THINK KARMANOS.

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You may also reach us by emailing:
info@karmanos.org.

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KARMANOS PRIMARY TREATMENT LOCATIONS



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FARMINGTON HILLS

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