Combining Hormone Therapy and Radiation Therapy May Help Some Men With Prostate Cancer Live Longer

New research shows that men with locally advanced or high-risk prostate cancer who received hormone therapy combined with radiation therapy lived longer and were less likely to die from prostate cancer. Locally advanced prostate cancer has spread to the area surrounding the prostate, and high-risk prostate cancer is more likely to grow and spread. Men with locally advanced or high-risk prostate cancer are usually treated with hormone therapy after initial treatment with radiation therapy or surgery. Hormone therapy, also called androgen deprivation therapy (ADT), for prostate cancer involves stopping the body from producing hormones called androgens. Androgens can help prostate cancer cells grow, so lowering the levels in the body can make prostate cancers shrink or grow more slowly, but it does not cure prostate cancer.

After seven years, almost three-fourths of the men in the study who received hormone therapy plus radiation therapy were alive, compared with two-thirds of the men who received hormone therapy alone. In addition, the men who received hormone therapy alone were more than twice as likely as the men who received hormone therapy plus radiation therapy to die from prostate cancer.

What this means for patients
“We found that men who received hormone therapy and radiation therapy lived longer

Continued on page 2
A WORD FROM THE PRESIDENT

Dear Friends,

Welcome to the 2010 American Society of Clinical Oncology (ASCO) Annual Meeting. The theme, Advancing Quality Through Innovation, means developing creative new ways to prevent, detect, and treat cancer, as well as continually improving the quality of care that patients receive.


I am excited and encouraged by the progress made in the prevention, diagnosis, and treatment of cancer. Together, we are making a world of difference in cancer care. For more information about cancer, please visit Cancer.Net (www.cancer.net), ASCO’s patient information website.

Sincerely,

Douglas W. Blayney, MD
ASCO President

LUNG CANCER

Drug Combination Increases Survival for Older People With Advanced Lung Cancer

A new study shows that using the drugs paclitaxel (Taxol) and carboplatin (Paraplatin) increases survival and slows the growth of advanced non-small cell lung cancer (NSCLC) for patients age 70 or older. The combination of drugs is used mostly for younger patients, while the standard treatment for older patients with advanced lung cancer is usually one drug, not a combination. Patients in this study who received paclitaxel and carboplatin lived about four months longer than the patients who received only one drug, either gemcitabine (Gemzar) or vinorelbine (Navelbine). In addition, the time it took for the cancer to grow or spread for the patients taking two drugs was almost twice as long as for the patients

PROSTATE CANCER

Combining Hormone and Radiation Therapies May Help Some With Prostate Cancer Live Longer

Continued from page 1

and were less likely to die from prostate cancer than those who had only hormone therapy,” said researcher Padraig Warde, MBChB, Deputy Head of the Radiation Medicine Program at the University of Toronto’s Princess Margaret Hospital.

“These results suggest that adding radiation therapy to the treatment plan for these patients could become part of the standard therapy and should be considered.”

For More Information: Prostate Cancer

- Guide to Prostate Cancer (www.cancer.net/prostate)
- ASCO Answers Fact Sheet: Prostate Cancer (www.cancer.net/ascoanswers)
- What to Know: ASCO’s Guideline on Hormone Therapy for Advanced Prostate Cancer (www.cancer.net/whattoknow)
- After Treatment for Prostate Cancer: Managing Side Effects (www.cancer.net/features)
- Understanding Radiation Therapy (www.cancer.net/features)
Selenium Doesn’t Prevent a Second Tumor for Patients With Non-Small Cell Lung Cancer

Researchers found that selenium does not help prevent a second tumor for people with early-stage (stage I) non-small cell lung cancer (NSCLC). Selenium is a substance called a mineral that people get in very small amounts from food and water. Some research suggests that people who have lower levels of selenium in their bodies have a higher risk of cancer, but several studies that look specifically at giving selenium to prevent cancer have not shown that it can prevent cancer. This study is another that shows selenium may not help prevent a second cancer. In fact, the study was stopped early, after about four years, because the patients who were receiving selenium were more likely than patients not taking selenium to develop a new cancer or to have their lung cancer come back.

What this means for patients
“Older patients are often not given aggressive treatment out of concern that they will not be able to tolerate it. These results demonstrate that a more intensive treatment plan given to younger patients can be effective and tolerable for older patients,” said lead author Elisabeth Quoix, MD, Professor of Medicine at University Hospital in Strasbourg, France.

What to Ask Your Doctor
- What type of lung cancer do I have? What is the stage?
- What are my treatment options?
- What are the side effects of treatment? How can they be managed?

What to Ask Your Doctor
- What type of lung cancer do I have? What is the stage?
- What is the chance that I will develop a second tumor?
- What can I do to help reduce my risk of a second tumor?
- If I take supplements, what are the possible benefits or risks?

New Drug Helps Manage Advanced Non-Small Cell Lung Cancer for Some Patients

Researchers found that a drug called crizotinib helped shrink the tumor for patients with advanced lung cancer who have a specific genetic change. Crizotinib is an ALK inhibitor that stops cancer cells from producing ALK, a substance cancer cells use to grow and spread. Not all people with lung cancer have cells that produce ALK. It is only made by cells when one gene called ALK attaches to another gene, in a process called gene fusion. About one in 20 people with lung cancer have such a gene fusion. All patients who participated in this study had the ALK gene fusion. Researchers found that the ALK inhibitor helped shrink the tumors for more than half the patients and slowed or stopped tumor growth for most of the patients.

What to Ask Your Doctor
- What type of lung cancer do I have? What is the stage?
- What is the stage of my cancer?
- What are my treatment options?
- What is the chance that I will develop a second tumor?
- What can I do to help reduce my risk of a second tumor?
- If I take supplements, what are the possible benefits or risks?
New Drug Helps Manage Advanced NSCLC for Some Patients

Continued from page 3

What this means for patients

“For patients with advanced NSCLC, we would expect only about 1 out of 10 patients to have the tumor stop growing and spreading,” said lead author Yung-Jue Bang, MD, PhD, Professor in the Department of Internal Medicine at Seoul National University College of Medicine in Seoul, Korea. “These results are an improvement over what we would see with standard chemotherapy for patients with advanced lung cancer.”

This study is an example of personalized medicine, which looks to match treatments with the patients who will benefit the most. Research on ALK inhibitors is ongoing and tests to look for an ALK gene fusion may not be available outside of clinical trials. ■

What to Ask Your Doctor

- What type of lung cancer do I have?
- What is the stage?
- What are my treatment options?
- What clinical trials are open to me?
- What treatment do you recommend? Why?

For More Information: Lung Cancer

- Guide to Lung Cancer (www.cancer.net/lung)
- ASCO Answers Fact Sheet: Lung Cancer (www.cancer.net/ascoanswers)
- What to Know: ASCO’s Guideline on Chemotherapy for Stage IV Non-Small Cell Lung Cancer (www.cancer.net/whattoknow)
- Cancer in Older Adults (www.cancer.net/olderadults)
- Managing Side Effects (www.cancer.net/sideeffects)
- Chemoprevention (www.cancer.net/prevention)
- Vitamins and Minerals (www.cancer.net/prevention)
- Facts About Personalized Cancer Medicine (www.cancer.net/features)

FACT SHEETS

ASCO Answers is a series of fact sheets that provide an introduction to a specific type of cancer or cancer related topic. These fact sheets are available as free PDFs that can be downloaded at www.cancer.net/ascoanswers, or available to order at www.asco.org/store.

Targeted Therapy Drug Slows Growth of Advanced Ovarian Cancer

According to a new study, adding the targeted therapy drug bevacizumab (Avastin) to chemotherapy and keeping patients on the drug after chemotherapy ends increases the amount of time it takes for advanced epithelial ovarian cancer, primary peritoneal cancer, and Fallopian tube cancer to grow and spread. These are all cancers of a woman’s reproductive system that are treated similarly.

After surgery, the women in this study received one of three treatments: standard chemotherapy with paclitaxel and carboplatin, standard chemotherapy and bevacizumab, or standard chemotherapy and bevacizumab, followed by bevacizumab maintenance therapy (longer-term treatment after the main treatment ends) for up to 10 months.

The cancer took about four months longer to grow and spread for women who received standard chemotherapy and bevacizumab with bevacizumab maintenance therapy than women who received only standard chemotherapy.

What this means for patients

“This is the first time a large study has shown that a drug like bevacizumab slows the growth and spread of ovarian cancer.”
Promising Screening Method for Ovarian Cancer Found

Researchers have developed a way to screen women who don’t have a high risk of ovarian cancer and who have been through menopause. There are currently no screening methods for women who don’t have a high risk of ovarian cancer. Women at high risk for ovarian cancer may receive regular screening or reduce their risk of cancer in other ways, such as surgery to remove the ovaries. This new method estimates a woman’s risk of ovarian cancer by using her age and the results of a yearly CA-125 blood test. CA-125 is a substance called a tumor marker that is found in higher levels in women with ovarian cancer. In this study, women who had increasing CA-125 levels received transvaginal sonography (TVS), an imaging test that uses sound waves to create a picture of the ovaries and look for any tumors, and were referred to a gynecologic oncologist to decide if surgery was needed. A gynecologic oncologist is a doctor who specializes in treating cancer in a woman’s reproductive organs.

Over eight years, less than 1% of the 3,238 women in the study needed TVS. Eight women were referred to a gynecologic oncologist for surgery, and of those women, three had early-stage invasive ovarian cancer that is likely to grow and spread.

What this means for patients
"More than 70% of ovarian cancers are diagnosed when they have already grown to an advanced stage. This study is one step forward in finding a reliable screening test for early-stage disease," said lead author Karen Lu, MD, Professor of Gynecologic Oncology at the University of Texas M.D. Anderson Cancer Center in Houston. "This approach could be a useful and inexpensive tool for detecting ovarian cancer in its early, more curable stages, including the types of ovarian cancer that are the most aggressive." A larger study of this screening method is underway to further determine its effectiveness. If there are similar results, this screening method may be recommended in the future for women who don’t have a high risk of ovarian cancer.

For More Information: Ovarian Cancer
- Guide to Ovarian Cancer (www.cancer.net/ovarian)
- Guide to Fallopian Tube Cancer (www.cancer.net/fallopian)
- Understanding Targeted Treatments (www.cancer.net/features)
- Understanding Tumor Markers (www.cancer.net/features)
- Angiogenesis and Angiogenesis Inhibitors to Treat Cancer (www.cancer.net/features)

What to Ask Your Doctor
- What type of cancer do I have? What is the stage?
- What are my treatment options?
- Do you recommend targeted therapy?
- What clinical trials are open to me?

VIDEOS AND PODCASTS
Watch videos and listen to podcasts from ASCO experts discussing the recent advances highlighted at the 2010 ASCO Annual Meeting at www.cancer.net/ascoannualmeeting.
ER, PR, and HER2 Status May Change in Breast Cancer Tumors That Have Spread

In a new study, researchers discovered that breast cancer tumors that have spread to the liver can have different features than the original tumor. As part of diagnosing breast cancer, several features of the tumor are measured, including estrogen receptors (ER), progesterone receptors (PR), and HER2. Estrogen and progesterone receptors are found in breast cancer cells that depend on estrogen and related hormones to grow. HER2 is a specialized protein found on breast cancer cells that controls cancer growth and spread.

In cancer that has spread, ER, PR, and HER2 are often not tested for the areas where the cancer has spread—it is assumed that these features are the same. However, this study shows that the ER, PR, and HER2 status changed, requiring a change in treatment for 30 of 255 women in the study.

What this means for patients “These results indicate that tumor features, such as ER, PR, and HER2 status, often change between primary tumors and metastases, and suggest that biopsies of these secondary tumors should be performed when possible,” said co-author Giuseppe Curigliano, MD, PhD, Senior Deputy Director in the Division of Medical Oncology at the European Institute of Oncology in Milan, Italy. “Traditionally, we start therapy according to the features of the primary tumor, and these results can influence treatment choices as many as 10 years later. Retesting secondary tumors will help ensure that patients get the most effective treatment possible.” However, breast cancer may spread to areas that are difficult to take the sample of tissue needed for these tests.

What to Ask Your Doctor

- Has the breast cancer spread outside of the breast?
- What stage of breast cancer do I have?
- What is the ER, PR, and HER2 status of the tumor? What does this mean?
- If my cancer has spread, do you recommend testing the ER, PR, and HER2 status again?

For More Information: Breast Cancer

- Guide to Breast Cancer (www.cancer.net/breast)
- ASCO Answers Fact Sheet: Breast Cancer (www.cancer.net/ascoanswers)
- What to Know: ASCO’s Guideline on Sentinel Lymph Node Biopsy for Early Breast Cancer (www.cancer.net/whattoknow)
- What to Know: ASCO’s Guideline on Tumor Markers for Breast Cancer (www.cancer.net/whattoknow)
- What to Know: The ASCO and CAP Guideline on Estrogen and Progesterone Testing for Breast Cancer (www.cancer.net/whattoknow)
- What to Know: ASCO’s Guideline on HER2 Testing for Breast Cancer (www.cancer.net/whattoknow)
- After Treatment for Breast Cancer: Preventing Lymphedema (www.cancer.net/features)
- Understanding Radiation Therapy (www.cancer.net/features)

Other Advances in Breast Cancer

- Women with breast cancer that has spread lived about two and a half months longer when they received a new drug called eribulin mesylate compared with patients who received other treatments recommended by their doctors. Currently, there is no standard treatment for advanced breast cancer and this is the first study to look at this drug. Side effects included a low white blood cell count, fatigue, and nerve problems.
Removing More Lymph Nodes May Not Increase Survival for Women With Breast Cancer

Researchers found that women with breast cancer who had additional underarm lymph nodes removed after cancer was found in the sentinel lymph node did not live longer than women who had no additional lymph nodes removed. Lymph nodes are the tiny, bean-shaped organs that help fight infection. Doctors examine lymph nodes to learn whether the breast cancer has spread using a sentinel lymph node biopsy. In a sentinel lymph node biopsy, one or a few lymph nodes are removed from under the arm, which is where breast cancer is most likely to spread first. If the sentinel node is cancer-free, then it is likely that the other lymph nodes do not have cancer either. However, if the sentinel lymph node shows evidence of cancer, then doctors often examine additional lymph nodes for cancer in a process called an axillary lymph node dissection. The advantage of a sentinel lymph node biopsy is that it avoids the side effects of an axillary lymph node dissection, such as pain and discomfort and swelling of the arm.

In this study, doctors wanted to find out whether axillary lymph node dissection was necessary for women with small amounts of cancer (called micrometastases) in the sentinel node by comparing the five-year survival rates for women who had additional lymph nodes removed with those who did not. All women who participated in this study had a lumpectomy (removal of the tumor and a small cancer-free margin of tissue), radiation therapy, and a sentinel lymph node biopsy that showed cancer cells in the underarm lymph nodes.

What this means for patients
“Axillary lymph node removal has been the standard approach for women with micrometastases in the sentinel lymph node,” said lead author Armando E. Giuliano, MD, Director of the John Wayne Cancer Institute Breast Center in Santa Monica, California. “Our findings suggest that there may not be a benefit to removing more lymph nodes than only the sentinel node, and that women can avoid the risk of additional side effects that come with more extensive lymph node removal. Axillary lymph node dissection may still be needed for some women, but these findings show it may be necessary for far fewer women.”

Older Women With Early Breast Cancer May Not Need Radiation Therapy

Recent research shows that some women age 70 or older with early-stage breast cancer may not need radiation therapy after lumpectomy if they receive tamoxifen (Nolvadex). A lumpectomy is the removal of the tumor and a small cancer-free margin of tissue around the tumor.

The women who participated in this study were 70 or older and had stage I, estrogen receptor-positive breast cancer that had not spread to the lymph nodes (the tiny, bean-shaped organs that help fight infection). After lumpectomy, they received either tamoxifen or tamoxifen and radiation therapy. Women who received tamoxifen and radiation therapy were slightly less likely to have the cancer return. However, the women who received tamoxifen and the women who received tamoxifen plus radiation therapy lived a similar amount of time after treatment and were unlikely to die from breast cancer in the 10 years after treatment.

What to Ask Your Doctor

- What are the results of the sentinel lymph node biopsy? What does this mean?
- Do you recommend an axillary lymph node dissection?
- What are the side effects of these procedures? Can they be prevented or minimized?
- What is the benefit of having more lymph nodes removed?
- What is the chance that the breast cancer will spread?
- What are my treatment options?
Older Women With Early Breast Cancer May Not Need Radiation Therapy
Continued from page 7

What this means for patients
“The standard of care for women age 70 or older with very small tumors that are estrogen-positive and have not spread to the lymph nodes has been lumpectomy and radiation therapy,” said lead author Kevin Hughes, MD, Surgical Director, Breast Screening, and Co-Director of the Avon Comprehensive Breast Evaluation Center at the Massachusetts General Hospital in Boston. “This study confirms that for older women with early-stage breast cancer, lumpectomy without radiation therapy is a good alternative, and tamoxifen may replace the need for radiation therapy.”

What to Ask Your Doctor
- What type and stage of breast cancer do I have? What does this mean?
- What is the chance that the cancer will return?
- What are my treatment options?
- What treatment do you recommend? What are the side effects?

BREAST CANCER

Cetuximab Does Not Increase Survival for Some People With Advanced Colon Cancer

In this study, patients with stage III colon cancer and a normal KRAS gene who received the targeted therapy drug cetuximab (Erbitux) and standard chemotherapy did not live longer than patients who received only standard chemotherapy.

In addition, patients who received cetuximab had more side effects. KRAS is a gene that controls tumor growth and spread. A previous study showed that cetuximab improves the effectiveness of chemotherapy for patients with metastatic colon cancer (colon cancer that has spread to other parts of the body) and a normal KRAS gene but not for patients with a mutated (changed) KRAS gene.

What this means for patients
“This is a disappointing result. Given past success for people with more advanced colon cancer, we had expected cetuximab to work for patients with stage III colon cancer. This study shows that it didn’t, and that this treatment should not be used for these patients,” said lead researcher Steven Alberts, MD, Professor of Oncology at the Mayo Clinic College of Medicine in Rochester, Minnesota.

What to Ask Your Doctor
- What stage of colon cancer do I have? What does this mean?
- Will the KRAS gene of the tumor be tested? If so, how will the results affect treatment?
- What are my treatment options?
- What clinical trials are open to me?

Colorectal Cancer

Cetuximab Does Not Increase Survival for Some People With Advanced Colon Cancer

In this study, patients with stage III colon cancer and a normal KRAS gene who received the targeted therapy drug cetuximab (Erbitux) and standard chemotherapy did not live longer than patients who received only standard chemotherapy.

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What this means for patients
“This is a disappointing result. Given past success for people with more advanced colon cancer, we had expected cetuximab to work for patients with stage III colon cancer. This study shows that it didn’t, and that this treatment should not be used for these patients,” said lead researcher Steven Alberts, MD, Professor of Oncology at the Mayo Clinic College of Medicine in Rochester, Minnesota.

What to Ask Your Doctor
- What stage of colon cancer do I have? What does this mean?
- Will the KRAS gene of the tumor be tested? If so, how will the results affect treatment?
- What are my treatment options?
- What clinical trials are open to me?

For More Information: Colorectal Cancer
- Guide to Colorectal Cancer (www.cancer.net/colorectal)
- Understanding Targeted Treatments (www.cancer.net/features)
- KRAS Testing in People with Colorectal Cancer (www.cancer.net/features)
In this study, cancer survivors participated in a four-week, twice-weekly yoga program called YOCAS® (Yoga for Cancer Survivors) developed by the University of Rochester Cancer Center Community Clinical Oncology Program.

What this means for patients
“Very few, if any, treatments for the sleep problems and fatigue that cancer survivors experience work well for very long, if at all,” said lead author Karen Mustian, PhD, MPH, Assistant Professor of Radiation Oncology and Community and Preventive Medicine at the University of Rochester Medical Center. “The study results point to a simple method that doctors can recommend to help patients with several very common cancer-related problems.” This study looked at a specific yoga program that included mindfulness exercises such as breathing, meditation, visualization, and various poses. A different yoga program may not have the same effect on sleep or fatigue problems.

What to Ask Your Doctor
- What are my treatment options for fatigue and sleeping problems?
- What treatment do you recommend? Why?
- Could you recommend a yoga program for people with cancer or cancer survivors?

LEUKEMIA

Dasatinib More Effective than Imatinib for People Newly Diagnosed With Chronic CML

Researchers found that the drug dasatinib (Sprycel) is more effective than imatinib (Gleevec), a drug that works similarly to dasatinib, for people newly diagnosed with chronic myeloid leukemia (CML). Previous studies have shown that dasatinib can be an effective treatment for patients who stop imatinib because of side effects or because the drug stopped working (called drug resistance).

This study looked at a measure called complete cytogenetic response (CCyR) that is used to determine how well the treatment is working. After a year of treatment, more than three-quarters of patients receiving dasatinib had a complete cytogenetic response, compared with two-thirds of patients receiving imatinib. Patients receiving dasatinib also were more likely to have a major molecular response, another measure of how well the treatment is working, more quickly than patients receiving imatinib.

What this means for patients
“We’ve been seeing more patients with CML develop imatinib resistance, so these results are very exciting,” said lead author Hagop Kantarjian, MD, Professor and Chair of the Leukemia Department at the University of Texas M.D. Anderson Cancer Center in Houston. “Our findings suggest that by using dasatinib first for patients newly diagnosed with CML, we can improve outcomes.”

What to Ask Your Doctor
- What type of leukemia do I have?
- What are the treatment options?
- What treatment do you recommend? Why?
- What is the strategy if this treatment stops working?
- What clinical trials are open to me?
**MELANOMA**

**Drug Improves Survival for Patients With Advanced Melanoma**

Researchers found that patients with advanced melanoma who received the drug ipilimumab, either with or without a specialized vaccine that stimulates the immune system, lived almost four months longer than patients who did not receive this drug. Ipilimumab is a type of drug called a monoclonal antibody that uses the body's immune system to help fight cancer. In this study, patients received ipilimumab, a specialized vaccine, or a combination of ipilimumab and the vaccine. All of the patients in the study had received previous treatment for melanoma.

**What this means for patients**

“Over the last 30 years, studies haven’t shown an increase in survival for patients with advanced melanoma. It’s an extremely difficult disease to treat,” said lead researcher Steven O’Day, MD, Chief of Research and Director of the Melanoma Program at The Angeles Clinic and Research Institute in Los Angeles, and Clinical Professor of Medicine at the University of Southern California Keck School of Medicine. “These results are an important advance for patients with advanced melanoma.”

**For More Information: Melanoma**

- Guide to Melanoma (www.cancer.net/melanoma)
- Understanding Targeted Treatments (www.cancer.net/features)
- Understanding Cancer Vaccines (www.cancer.net/features)
- Understanding Immunotherapy (www.cancer.net/features)

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**LEUKEMIA**

**Dasatinib More Effective for People With Newly Diagnosed Chronic CML**

Continued from page 9

Complete cytogenetic response can be a way to predict a patient’s survival, dasatinib may lengthen the lives of patients with CML. However, this study is ongoing and researchers will not know if dasatinib increases survival until the study is completed.

**For More Information: Leukemia**

- Guide to CML (www.cancer.net/cml)
- Understanding Targeted Treatments (www.cancer.net/features)

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**For comprehensive patient information about cancer clinical trials**

[www.cancer.net/clinicaltrials](http://www.cancer.net/clinicaltrials)

**What to Ask Your Doctor**

- What stage of melanoma do I have?
- What is my prognosis (chance of recovery)?
- What are my treatment options?
- What clinical trials are open to me?