Vaccine May Help Patients With Metastatic Melanoma Live Longer

A new study shows that patients who received a specialized treatment vaccine with interleukin-2 (IL-2; a standard treatment for advanced melanoma) for melanoma that has spread to other parts of the body lived almost five months longer than patients who received only IL-2. The vaccine used in this study is made from part of a protein (substance in the body that helps it to function) found on melanoma cells that helps the cancer grow. This study also showed that treatment caused the melanoma to stop growing or shrink for more than twice as many patients who received the vaccine and IL-2 than those who received only IL-2.

What this means for patients: “This study is one of the first to show positive, promising results for a cancer vaccine,” said lead author Douglas Schwartzzenruber, MD, Medical Director of the Center for Cancer Care at Goshen Health System in Indiana and Clinical Associate Professor of Surgery at Indiana University. “Metastatic melanoma is a very difficult disease to treat. These results show that we are making some progress against this disease.” This vaccine has few side effects, which include swelling and redness at the injection site. Follow-up testing for the patients in this study is ongoing so researchers can find out how long the vaccine can help to slow melanoma growth.

What to Ask Your Doctor

- What stage of melanoma do I have?
- What are my treatment options? What clinical trials are open to me?
- What are the risks and benefits of each treatment option?

For More Information: Personalized Medicine

- Facts About Personalized Cancer Medicine (www.cancer.net/features)
- Understanding Immunotherapy (www.cancer.net/features)
- Understanding Cancer Vaccines (www.cancer.net/features)
Dear Friends,

Welcome to the 2009 American Society of Clinical Oncology (ASCO) Annual Meeting. The theme, Personalizing Cancer Care, means bringing patient care to the next level of excellence by providing care and treatment that is tailored to each person's needs.

High-quality cancer care starts with good communication between doctors and patients and reliable, patient-friendly information. To help people learn about progress in cancer, ASCO publishes Cancer Advances, a series of consumer information newsletters. Cancer Advances: News for Patients from the 2009 ASCO Annual Meeting provides the latest information about the cancer research presented at the 45th ASCO Annual Meeting in Orlando, Florida from May 29-June 2, 2009.

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 additional information about cancer, please visit Cancer.Net (www.cancer.net), ASCO’s patient information website.

Sincerely,

Richard L. Schilsky, MD
ASCO President

PERSONALIZED MEDICINE

New Test Can Help Predict Patients That Benefit Most From Chemotherapy for Lung Cancer

Researchers found that patients with non-small cell lung cancer (NSCLC) whose tumors had no or low levels of a protein called MSH2, benefitted more from chemotherapy after surgery than patients with high levels of MSH2. Cancer cells use the MSH2 protein to repair damage from chemotherapy with cisplatin (Platinol). Patients with low MSH2 levels who received chemotherapy with cisplatin lived about 16 months longer than those who did not receive chemotherapy. Patients with high MSH2 levels who received chemotherapy lived for about 9 months less than those who did not receive chemotherapy.

This study also showed that measuring MSH2 levels and levels of another protein called ERCC1 was better able to predict which patients would benefit from chemotherapy after surgery. ERCC1 is a previously identified protein that also repairs damage to tumor cells. Patients with low levels of both proteins who received chemotherapy lived 21 months longer than those who did not receive chemotherapy.

What this means for patients: “Measuring MSH2 and ERCC1 levels is a new and easily performed test that can be used to predict the benefit of chemotherapy for patients with NSCLC,” said lead author Pierre Fouret, MD, PhD, Professor at Institut Gustave Roussy in Villejuif, France and Université Pierre et Marie Curie in Paris. “This is an important step toward more personalized treatment for patients who have had surgery for lung cancer.” Determining whether a patient will benefit from a treatment can help to spare patients from the side effects and costs of a treatment that is unlikely to help them. Talk with your doctor about the factors that may help determine the best treatment for you.

What to Ask Your Doctor

- What type of lung cancer do I have?
- What are my treatment options?
- Are there other tests that I may need to help find the best treatment for me?
- What treatment do you recommend?
Personalized Vaccine Slows Growth of Follicular Lymphoma

Researchers found that a vaccine called BiovaxID delayed the return of a type of B-cell lymphoma, called follicular lymphoma, by about 14 months for patients whose lymphoma was in remission (the temporary or permanent absence of disease) after treatment with prednisone (multiple brand names), doxorubicin (Adriamycin), cyclophosphamide (Cytoxan, Clafen, Neosar), and etoposide (VePesid, Toposar)—a combination called PACE. The BiovaxID vaccine is made for each patient using proteins that are found on the person’s lymphoma cells. It is made from the cells collected during removal of the lymph nodes (tiny, bean-shaped organs that help fight infection). These cells are then processed to create antibodies, which are substances made by the body to help fight infection. These antibodies are designed to kill the patient’s own lymphoma cells and are returned to the patient in the form of a vaccine.

What this means for patients: “With this vaccine, we can teach a patient’s immune system to recognize and fight follicular lymphoma and increase the time it takes for the lymphoma to return,” said lead author Stephen Schuster, MD, Associate Professor at the University of Pennsylvania School of Medicine. More research on this vaccine is needed to learn if it could be used to treat patients in remission after treatment with rituximab (Rituxan) or for patients with other types of B-cell lymphomas.

What to Ask Your Doctor

- What type of lymphoma do I have?
- What are my treatment options?
- What clinical trials are open to me?
- What are the risks and benefits of each treatment option?

BREAST CANCER

New Type of Drug Shows Promise for Difficult-to-Treat Breast Cancers

In two separate studies, researchers found that two new drugs belonging to a group of drugs called PARP inhibitors may help treat some types of breast cancer. PARP inhibitors stop cancer cells from repairing damage from chemotherapy, which may make cancer cells more sensitive to chemotherapy. These studies include:

- The use of a PARP inhibitor called BSI-201 to treat triple-negative breast cancer that has spread to other parts of the body. Triple-negative breast cancer cannot be treated with hormone therapy or drugs that block HER2 (a protein found on some types of breast cancers). This study showed that women with this type of breast cancer who received BSI-201 and chemotherapy lived about four months longer than women who received only chemotherapy. In addition, the time it took for the cancer to grow and spread was also more than four months longer for women who received BSI-201 and chemotherapy. Women who received BSI-201 were about twice as likely to have their tumors stop growing or shrink than women who did not receive the drug.

- The use of a PARP inhibitor, called olaparib, to treat persistent, advanced breast cancer with mutated (changed) BRCA genes. This study showed olaparib slowed tumor growth for 40% of patients who received the drug.

For More Information: Breast Cancer

- ASCO Answers Fact Sheet: Breast Cancer (www.cancer.net/ascoanswers)
- Clinical Trials (www.cancer.net/clinicaltrials)
**New Drugs Show Promise for Breast Cancers**

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What this means for patients:
These studies show that PARP inhibitors may be a new type of chemotherapy that could be used to treat breast cancer, particularly those that are difficult to treat. However, more research is needed to find out how they can be best used to treat breast cancer. Patients who received BSI-201 had few side effects. The most common side effects for olaparib were mild fatigue, nausea, and vomiting. These drugs are not available outside of a clinical trial.

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**Menopausal Hormone Therapy May Increase the Risk of Lung Cancer Death, Especially for Smokers**

This study showed that women who received hormone therapy with estrogen and progestin to help cope with the symptoms of menopause have a higher risk of dying from non-small cell lung cancer (NSCLC) if they develop the disease. They are not more likely to develop NSCLC than women who did not receive hormone therapy. The risk of dying from lung cancer was higher for women with NSCLC who received hormone therapy and smoke.

What this means for patients: “Many women entering menopause have symptoms that may make them consider taking hormone therapy,” said lead author Rowan Chlebowski, MD, PhD, medical oncologist at the Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center. “Other studies have shown that women taking hormone therapy have a higher risk of stroke and breast cancer. The results of this study show that women considering hormone therapy and their doctors should discuss the risks of hormone therapy, especially for women who smoke.”

Additional studies are needed to find out the degree of this risk for women and the effect of hormones on lung cancer.

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**Genetic Changes in Tumor Can Predict Treatment Benefit for Patients With Non-Small Cell Lung Cancer**

This study showed that for some people who have non-small cell lung cancer (NSCLC) with a mutation (change) to the epidermal growth factor receptor (EGFR) gene in the tumor, treatment with the drug gefitinib (Iressa) slowed cancer growth. The EGFR gene produces a protein that helps lung cancer cells grow and spread. Gefitinib is a type of targeted...
therapy that targets faulty genes and proteins that contribute to cancer growth and development.

For patients with NSCLC with EGFR gene mutations in the tumor who received gefitinib, the time it took for the cancer to grow and spread was three months longer than for those who received conventional chemotherapy with the drugs carboplatin (Paraplat, Paraplatin) and paclitaxel (Taxol). Treatment with conventional chemotherapy worked better to slow cancer growth and spread for patients with NSCLC without EGFR mutations. For these patients, the time it took for the cancer to grow and spread was about four months longer with carboplatin and paclitaxel than with gefitinib.

**What this means for patients:** This study shows that the genetics of a person’s tumor can affect which treatment will best slow the growth and spread of NSCLC. “Doctors should consider testing patients similar to those in this study for the EGFR mutation,” said lead author Masahiro Fukuoka, MD, PhD, Professor of Medicine at Kinki University School of Medicine in Osaka, Japan. “These findings are also good news for patients because gefitinib tends to have fewer side effects than conventional chemotherapy, and is given by mouth instead of in a vein, which could provide a higher quality of life for patients.”

Because this study was done only in Asian countries, all patients who participated in the study were Asian. The patients who benefited from gefitinib were also nonsmokers or light smokers. Researchers do not know if the benefits would be the same for patients of other races or for patients who smoke more heavily.

**What to Ask Your Doctor**

- What type of lung cancer do I have?
- Is EGFR gene testing recommended?
- What treatment options are available?
- What clinical trials are open to me?

**For More Information: Lung Cancer**

- ASCO Answers Fact Sheet: Lung Cancer (www.cancer.net/ascoanswers)
- ASCO Expert Corner: A Decision Aid Tool for Lung Cancer (www.cancer.net/features)
- Cancer Screening (www.cancer.net/prevention)
- Computed Tomography Scan—What to Expect (www.cancer.net/features)
- ASCO Expert Corner: Finishing Treatment—What Comes Next? (www.cancer.net/features)
- Lung Cancer Treatment Plans and Summaries (www.cancer.net/treatmentsummaries)
- Understanding Targeted Treatments (www.cancer.net/features)

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**New Standard of Care for Patients With Advanced Non-Small Cell Lung Cancer**

Patients with advanced non-small cell lung cancer (NSCLC) who received the drug pemetrexed (Alimta) as maintenance therapy (treatment given after chemotherapy to keep the cancer from growing and spreading) lived three to five months longer than patients who did not receive the drug, according to a new study. This study also confirmed that the benefit of maintenance therapy is greater for patients with the nonsquamous type of NSCLC.

**What this means for patients:** “This study will change the standard of care,” said lead author Chandra P. Belani, MD, Deputy Director of the Penn State Cancer Institute. “Maintenance therapy with pemetrexed provides a new option for patients who have advanced lung cancer, because it has a low risk of side effects and can be given for a longer time to extend patients’ lives.” Pemetrexed is currently approved by the U.S. Food and Drug Administration (FDA) for the initial treatment of advanced nonsquamous NSCLC in combination with the drug cisplatin and as a single treatment for patients whose cancer has returned.
Lung Cancer Screening With Low-Dose Computed Tomography Has High Rate of False Positives

Patients screened for lung cancer recurrence (return of cancer after treatment) with low-dose computed tomography (LDCT) showed more false-positive results (meaning that the test shows that cancer is present when follow-up testing finds no cancer) than a chest x-ray, according to a new study. LDCT scans and chest x-rays are procedures that create a picture of the inside of the body. After one scan, the false positive rate was 21% for LDCT and 9% for chest x-ray. After two scans, the rates of false-positive results increased to 33% with LDCT and 15% for a chest x-ray.

What this means for patients: “All medical tests, including screening tests, have benefits and risks,” said lead author Jennifer M. Croswell, MD, Acting Director of the National Institutes of Health Office of Medical Applications of Research. “We want to give people who are considering lung cancer screening the information they need to make informed decisions about the tests they choose.” False-positive test results can lead to additional follow-up testing, invasive procedures, or surgery for the patient. In addition, false-positive results may also cause more anxiety for the patient.

What to Ask Your Doctor

- What type of follow-up care do you recommend?
- What type of screening do you recommend to look for a lung cancer recurrence?
- If a suspected recurrence is found, what follow-up tests are needed?

New Standard of Care for Patients with NSCLC

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Although the risk of side effects was low, some patients who received pemetrexed experienced fatigue and low white blood cell counts. The side effects did not increase for patients who received pemetrexed for a longer time.

What to Ask Your Doctor

- What type and stage of lung cancer do I have?
- What is my current treatment plan?
- Do you recommend maintenance therapy?

Other Advances in Lung Cancer

Two studies showed that treatment with targeted therapy drugs (drugs that target the faulty genes and proteins that contribute to cancer growth) slowed the growth and spread of advanced NSCLC. These studies include:

- Adding the drug erlotinib (Tarceva) to follow-up treatment with the drug bevacizumab (Avastin)
- Adding the drug vandetanib (Zactima) to standard chemotherapy with docetaxel (Taxotere)

Go to www.cancer.net/ascoannualmeetings for additional information on these studies.
Childhood Cancer Survivors Have Low, but Increased Risk of Post-Traumatic Stress Disorder

A new report from the Childhood Cancer Survivor Study (CCSS) showed that childhood cancer survivors were almost five times more likely to have post-traumatic stress disorder (PTSD) than their siblings who did not have cancer as children. However, the risk of PTSD for childhood cancer survivors was low, with 9% experiencing PTSD as adults. PTSD was more common for people who were diagnosed with cancer between ages 15 and 20 and for those who had longer and more intensive chemotherapy.

Researchers also found that PTSD was more common for women from minority groups, unmarried people, people without a college education, and people who earn less.

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Childhood Cancer Survivors Have Low, but Increased Risk of PTSD

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than $20,000 per year or are unemployed. However, the researchers were unsure how these factors and PTSD are connected.

What this means for patients:
“The good news is that more than 90% of survivors of childhood cancer don’t have PTSD, even though they went through a very difficult experience,” said lead author Margaret Stuber, MD, Jane and Marc Nathanson Professor of Psychiatry at the University of California, Los Angeles David Geffen School of Medicine.

“However, some do have long-term functional difficulties that require attention. Screening for PTSD should be considered part of long-term health care for childhood cancer survivors.”

Childhood Cancer Survivors May Not Receive Recommended Cancer Screenings

A second report from the CCSS found that not enough survivors of childhood cancer receive screening for colon, skin, and breast cancers. Cancer treatment, especially radiation therapy, may increase the risk of a second cancer. Among the childhood cancer survivors with a higher risk of developing a second cancer, almost 12% received a colonoscopy as recommended, about 46% had a mammogram within two years of treatment, and almost 27% had a skin exam. The study also showed that childhood cancer survivors who had a higher risk of a second cancer were more likely to be screened for breast and skin cancer if they were being cared for at a cancer center.

What this means for patients:
“We were surprised to find that many survivors of childhood cancer are not following screening guidelines that may detect cancers during their earlier, more curable stages,” said lead author Paul Nathan, MD, MSc, oncologist at the Hospital for Sick Children in Toronto, Canada. “Survivors and their physicians should be aware of what cancer they had, what treatments they received, their risk of second cancers, and the screening tests they should be getting.”

What to Ask Your Doctor

What are the risk factors for PTSD?
What are the symptoms of PTSD?
If I am concerned about my risk of PTSD, what screening do you recommend?
Study Shows That Ginger Can Reduce Nausea From Chemotherapy

People with cancer who received ginger supplements along with drugs that lower nausea and vomiting, called antiemetics, reported less nausea from chemotherapy than patients who did not receive a ginger supplement. Patients took the ginger supplements three days before starting chemotherapy. In this study, the 0.5 gram (g) and 1.0 g doses reduced nausea the most.

What this means for patients: “As many as 70% of patients who receive chemotherapy have nausea and vomiting. We found that patients who received traditional antiemesis along with ginger supplements before chemotherapy had less nausea associated with their chemotherapy,” said lead author Julie Ryan, MD, PhD, Assistant Professor of Dermatology and Radiation Oncology at the University of Rochester in New York. “However, as with all supplements, patients should speak with their doctors before taking ginger.”

Gene Test May Predict the Risk of Return of Colon Cancer

Researchers have developed and verified the first test that can predict the risk of recurrence (return of the cancer after treatment) for patients with stage II colon cancer. The test, called the Oncotype DX colon assay, evaluates several genes to learn whether a patient could be helped with chemotherapy after surgery. Another version of the Oncotype DX test is used to predict the risk of recurrence for women with breast cancer.

What this means for patients: About 25% to 30% of people with colon cancer have stage II disease. For these patients, chemotherapy may improve their survival, but it is difficult for doctors to know which patients may need chemotherapy and

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Gene Test May Predict the Risk of Return of Colon Cancer
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which could be spared from the side effects of treatment. A person with a greater risk of the cancer returning is more likely to benefit from chemotherapy.

“Having this test to predict risk of colon cancer recurrence will have a great impact on the way we treat patients with this disease,” said David Kerr, MD, DSc, Professor of Cancer Medicine at the University of Oxford in the United Kingdom. “It gives doctors important information that will help them to choose the right treatment for patients at the right time.” Researchers believe that this test may be available by 2010. Talk with your doctor about the stage of your cancer, the treatment available, and any tests you may need to help determine the best treatment for you.

What to Ask Your Doctor

- What stage of colon cancer do I have?
- What treatment options are available?
- Do you recommend chemotherapy?
- What is the risk that the cancer will come back after treatment?

Learn more about the recent advances highlighted at the 2009 ASCO Annual Meeting in Cancer.Net’s question and answer article with Richard L. Schilsky, MD, at www.cancer.net/features.

Preventive Skin Treatments Reduce Rash From Colon Cancer Drug

A new study showed that patients who received moisturizers, sunscreen, topical steroids, and antibiotics before treatment with panitumumab (Vectibix) were less likely to have a rash from treatment than patients who did not receive the skin treatments until the rash developed. About 90% of people taking panitumumab and 75% of those taking a related drug called cetuximab (Erbitux) develop this rash.

Of the patients who received preventive treatment, 29% had a rash, compared with 62% who did not receive preventive treatment. These patients also reported feeling better about their appearance and being more physically comfortable. Patients in this study received the skin treatment for six weeks, starting 24 hours before taking panitumumab.

What this means for patients:
“The rash caused by panitumumab and cetuximab may prevent many patients from agreeing to take these drugs and either delays or interrupts treatment for many others, reducing the effectiveness of treatment,” said lead author Edith Mitchell, MD, Clinical Professor of Medicine and Medical Oncology at Thomas Jefferson University in Philadelphia, Pennsylvania. “Preventive skin treatment is likely to become a new standard of care for patients taking these drugs.”

What to Ask Your Doctor

- What treatment do you recommend?
- What are the side effects?
- What can be done before and during treatment to help me cope with any side effects?

Advances in anal, pancreatic, and rectal cancer

New research also shows advances in the treatment of anal, pancreatic, and rectal cancer. These include:

- The largest study on anal cancer confirms that the current standard of care should remain the same. The current standard of care is treatment with radiation therapy combined with fluorouracil (5-FU, Adrucil) and mitomycin-C (Mitozytrex, Mutamycin).
- In another study, researchers found no difference in survival when patients were given treatment with the drug gemcitabine (Gemzar) after surgery for pancreatic cancer when compared with fluorouracil (5-FU) treatment.
- Another study showed that adding the drug oxaliplatin (Eloxatin) to standard radiation therapy and chemotherapy for locally advanced rectal cancer before surgery does not reduce tumor size, but it may reduce the number of areas where the cancer spreads.

Go to www.cancer.net/ascoannualmeetings for additional information on these studies.
What to Ask Your Doctor

- What stage is my colorectal cancer? Has it spread to other parts of the body?
- What are my treatment options?
- Will I need surgery?
- What treatment do you recommend? Why?

Most Patients With Metastatic Colorectal Cancer Do Not Need Surgery

Researchers found that most patients with metastatic colorectal cancer (cancer that has spread outside of the colon or rectum) do not need surgery to remove the primary tumor unless it is causing problems. Removing the primary tumor when a person is diagnosed with metastatic colorectal cancer was once the standard treatment and is still common. Surgery has been used to prevent the tumor from blocking the intestines, creating a hole in the wall of the intestine, or causing bleeding. Chemotherapy is an effective treatment for metastatic colorectal cancer because it can often shrink both the primary tumor and the cancer that has spread to other areas.

This study looked at patients who received chemotherapy for metastatic colorectal cancer between 2000 and 2006 but did not need immediate surgery. According to the researchers, 93% of the patients never developed problems that required surgery to remove the primary tumor. For the 7% who did eventually need surgery, most did not have any problems caused by surgery.

What this means for patients: “In this era of modern chemotherapy, surgery to remove the primary tumor for patients with metastatic colorectal cancer may not be needed,” said lead author Philip Paty, MD, Attending Surgeon and Vice Chairman of Clinical Research at Memorial Sloan-Kettering Cancer Center in New York City. “In addition to being an unnecessary procedure that has risks, surgery delays the start of chemotherapy by at least four to six weeks. Unless there is an immediate need for surgery, patients should begin chemotherapy first.”

First Standard Treatment Improves Survival for People With Advanced Biliary Tract Cancer

Treatment with the drugs cisplatin (Platinol) and gemcitabine (Gemzar) increased survival and slowed cancer growth for people with biliary tract cancers (gallbladder and bile duct cancers) that could not be removed with surgery. Patients who received these two drugs were 32% less likely to die from the disease and 30% less likely to have the cancer grow than the patients who received only gemcitabine.

What this means for patients: “Based on these findings, we can now establish the first-ever standard of care for advanced biliary tract cancers. We found treatment with gemcitabine and cisplatin greatly slowed cancer growth and increased survival,” said lead author Juan Valle, MD, Senior Lecturer and Medical Oncologist at the University of Manchester and the Christie National Health Service Foundation Trust in the United Kingdom.

The most common side effect that people in this study experienced was low white blood cell count, although it did not cause symptoms for most people.