NATIONAL CANCER INSTITUTE

NCI Cancer Bulletin

Celebrating Excellence in Cancer Research

December 4, 2007
Volume 4 | Number 31

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Going for the Gold

A Publication of the
National Cancer Institute
U.S. DEPARTMENT OF
HEALTH AND HUMAN SERVICES
National Institutes of Health
NIH Publication No. 05-5498
http://www.cancer.gov

Model More Accurately Estimates Breast-Cancer Risk in African Americans

A new model published online November 27 in the *Journal of the National Cancer Institute (JNCI)* more accurately estimates the risk of invasive breast cancer for African American women than the current NCI Breast Cancer Risk Assessment Tool.

The NCI tool is widely used for determining both risk for individual women and enrollment eligibility for clinical trials of breast cancer prevention agents, but was developed using data collected primarily from white women.

Researchers have long been concerned that the NCI tool may not be as precise in predicting risk for African American and other nonwhite women, and the online version of the tool currently conveys this concern in a disclaimer.

"A lot of the original work was done using white women and validated

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Director's Update

Communications and Education: A Critical Part of NCI's Mission

NCI has always placed a considerable premium on communication and education—a philosophy that grew in prominence following the passage of the National Cancer Act, which directed NCI to develop methods for ensuring important research findings were disseminated to researchers and to the public.

By reaching out to the public, researchers, policy makers, nonprofit organizations, and advocates, NCI can have a more robust conversation about our priorities, accomplishments, and challenges. We do it through state-of-the-science symposia, our award-winning Web site, the NCI Cancer Information Service, numerous publications, advocacy teleconferences, science writers' seminars, and much more.

But we also recognize two things. First, that as technologies and therapeutic options become more complex, we need to develop new communications and educational tools for translating research findings into venues where they might help improve cancer outcomes. Second, particularly in the current fiscal environment, we must more efficiently and effectively take advantage of the expertise and experience we have within and outside the institute.

As a result, earlier this year two NCI offices, the Office of Communications and the Office of Education and Special Initiatives (OESI), were

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using white women, and there is a need for studies of this type to either validate or develop specific models for other groups," says Dr. Mitchell Gail, from NCI's Division of Cancer Epidemiology and Genetics, lead author of the *JNCI* paper and developer of the original model behind the NCI risk-assessment tool, known as the Gail model.

Researchers based the new model on data collected for the Women's Contraceptive and Reproductive Experiences (CARE) study, from 1,607 African American women diagnosed with breast cancer and 1,647 African American women without breast cancer. Information was available for all participating women on the risk factors used to compute the Gail model: age at the start of menstruation; age at first live birth; number of previous benign breast biopsies; and number of first-degree relatives (mother or sisters) with breast cancer.

This information was combined with nationwide breast cancer incidence data from NCI's SEER program and with national mortality data. The researchers then validated the new CARE model using information from 14,059 African American women enrolled in the Women's Health Initiative. The CARE model predicted that 323 women in the group would develop invasive breast cancer. The actual number who developed cancer—350—was not statistically different, though the CARE model did underestimate risk among women with a previous benign breast biopsy.

Overall, the CARE model "tended to produce larger estimates of absolute invasive breast cancer risk than the NCI Breast Cancer Risk Assessment Tool in African

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(Director's Update continued from page 1)

merged into the new NCI Office of Communications and Education (OCE). And it's my privilege to announce that I have named Lenora Johnson as the new OCE director.

Lenora has served as acting OCE director since the office's formation, and previously was OESI director. Before joining NCI in 2002, Lenora was the program director for the Directors of Health Promotion and Education. There she led numerous initiatives focused on reducing health disparities, global surveillance of health risk behaviors, and capacity building for health promotion and public health education. Organizations such as the Lombardi Comprehensive Cancer Center, the American Public Health Association, Kaiser Permanente, and many community-based organizations have implemented programs Lenora helped develop.

Working closely with senior NCI leadership, Lenora and her staff have done an incredible job of shepherding this new office through a significant reorganization—an action that should have profound benefits for NCI and our key stakeholders.

When completed, this reorganization will ensure that OCE staff are more closely plugged in to the scientific work going on across NCI's divisions and centers, a significant challenge in an organization with approximately 4,000 full- and part-time staff, many of whom are conducting research or managing large research portfolios.

The reorganization has been informed by a complete systems review of how OCE departments conduct their business, consultations with experts to develop more efficient management systems, surveys of external stakeholders, and meetings with national leaders in health communications and education.

OCE's management approach will reflect teamwork and cross-functionality, streamlining work and eliminating redundancies by implementing knowledge management systems and using evidence-based techniques for developing and disseminating materials, as well as optimizing our existing information delivery channels.

These efforts will improve NCI's ability to work with outside partners, allowing for more coordinated efforts in critical areas such as enhancing clinical trial recruitment, addressing survivorship and disparities issues, improving cancer services at the community level, and ensuring that all patients, regardless of their language or literacy, have information that they can understand and use to meet their cancer information needs.

With these changes, senior NCI leadership is confident that we can enhance what are already formidable communication and education programs and activities to better support the efforts of the entire institute. ◆

Dr. John E. Niederhuber
Director, National Cancer Institute

Funding Opportunities

For a complete listing of current NCI funding opportunities, please go to the HTML version of today's *NCI Cancer Bulletin* at http://www.cancer.gov/ncicancerbulletin/NCI_Cancer_Bulletin_120407/page10. ◆

Cancer Research Highlights

Study Reveals Why Obese Men Have Lower PSA Readings

North American researchers conducting a retrospective multi-institution study have found what they consider the likely explanation for two anomalies: (1) the common observation that men with a higher body mass index (BMI) tend to have lower prostate specific antigen (PSA) readings; and (2) recent results linking obesity with more aggressive prostate disease.

New results conclude that the critical factor is "hemodilution"—a phenomena where the greater volume of blood in bigger men lowers PSA readings by diluting the concentration of the PSA protein, which is believed to enter the bloodstream when the prostate enlarges. Though the findings need to be confirmed in prospective studies, the researchers believe that hemodilution could also compromise evaluation of other circulating disease markers in high-BMI patients.

More than 13,600 patients had radical prostatectomies at Duke Prostate Center, Johns Hopkins Hospital, or 5 Veterans Administration medical centers between 1988 and 2006. All had reliable measurements taken of their BMI and PSA. Using statistical methods, researchers were able to calculate how much blood each patient had, how much actual PSA protein (mass) was present, and thus the PSA concentration. Men with a BMI over 35 (30 and above is obese) had 21–23 percent more blood and 11–21 percent lower PSA concentrations than men of normal weight, without, in most cases, statistically significant increases in the mass of circulating PSA protein.

The work was published in the November 21 *Journal of the American Medical Association* by Dr. Stephen Freedland of Duke University Medical Center and colleagues from more than a dozen participating centers and institutions. "For these other tests [looking for biomarkers of cancer and other diseases] just starting down the pipeline," he says, "we need to think of the total amount of a biological marker rather than concentration."

Lung Cancer Patients Report Chemo Side Effects Online

Researchers at Memorial Sloan-Kettering Cancer Center have tested a Web-based system that allows cancer patients to report chemotherapy side effects to their clinicians in real time. The results appear in the December 1 *Journal of Clinical Oncology.*

During a median 42-week period, 107 English-speaking patients, most of whom were over age 50, were able to use an online platform called Symptom Tracking and Reporting to log and grade physical, mental, and quality-of-life side effects while undergoing treatment for thoracic cancer, predominantly metastatic non-small-cell lung cancer. Patients typically entered their information at computer kiosks in the waiting area of their treatment clinic, though some used a home computer. Clinicians received these reports soon after and were free to follow up according to their judgment.

Patients adhered to the protocol fairly well throughout the study, regardless of age, sex, or disease severity. The only factor tied to adherence was previous experience with computers. Most often, reported barriers to using the system were insufficient time and not being reminded to use it. Nearly all of the patients said they found the system easy to use, wished to continue using it, and would recommend it to others.

If patients receive reminders and validation that the information they submit is truly useful to clinicians, then self-reporting programs such as these may improve efficiency in both clinical research and routine care settings by encouraging patients to follow their treatment regimens, improving the accuracy of toxicity data collection, expediting patient management, and decreasing avoidable hospitalizations, note the authors. The tradeoff, however, is that "between-visit reporting may increase work-burden by generating information that must be reviewed or acted upon."

Elasticity of Cells Could Be a Marker for Cancer

Cancer cells tend to be much softer, or more elastic, than normal cells, and measuring this characteristic on the nanometer scale could be another way to diagnose cancer. Dr. James Gimzewski of the California NanoSystems Institute, collaborating with Dr. Jian Yu Rao of UCLA's Jonsson Comprehensive Cancer Center, profiled the elasticity of live metastatic cancer cells and normal cells from patients' body

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fluids using atomic force microscopy. The researchers could distinguish between normal and cancerous cells based on their physical characteristics, according to findings published online December 2 in *Nature Nanotechnology*.

"Measuring the physical features of cancer cells adds another dimension to the analysis of these cells and could help us diagnose the disease," says Dr. Rao. Unlike normal cells, cancer cells are more flexible and can move through holes and spaces easily, which is how they enter the bloodstream and spread to other organs, according to Dr. Rao. "This is a major reason cancer is so deadly," he adds.

The researchers tested fluids from patients with suspected metastatic lung, breast, or pancreatic cancer. Each patient sample contained both normal and cancerous cells, allowing the researchers to directly compare the physical characteristics of the cells. The cancerous cells were found to be more than 70 percent softer than the benign cells, based on measurements of cell stiffness at the nanometer scale. The cancerous cells showed a similar physical signature that was distinct from normal cells, even though the patients had different tumor types.

Intensive Quitline Counseling, Free NRT Help More Quit Smoking

The largest randomized trial of its kind has shown that offering more intensive tobacco quitline services, including longer phone counseling sessions and free nicotine replacement therapy (NRT), is a highly effective—and cost-effective—way to help smokers quit.

Published in a special supplement on quitlines in the December 2007 *Tobacco Control* and partially funded by NCI's Tobacco Research Initiative for State and Community Interventions, the trial was led by researchers from the Kaiser Permanente Center for Health Research in Portland, Oregon.

The trial included 4,600 smokers who called the Oregon tobacco quitline. Callers were randomly assigned to receive one of six types of services: three different types of phone counseling approaches (brief, moderate, or intensive), each with or without free NRT. The most effective approach was the intensive counseling plus free NRT, which helped more than 21 percent of the smokers quit. In comparison, less than 12 percent of smokers quit in the brief counseling with no free NRT arm. The research team defined quitting as no use of any form of tobacco for at least 30 days at the 12-month follow-up.

Callers' satisfaction with the quitline services were far higher in the intensive counseling/NRT arm compared with the brief counseling/no NRT arm (92.5 percent vs. 53.9 percent), although the cost per participant was nearly four times higher, $268 vs. $67, respectively.

"However, our results suggest that higher quit rates, greater client satisfaction, and the potential to attract more smokers to quitlines more than offset the modest additional costs," said the study's lead author, Dr. Jack Hollis. "Heavily addicted smokers, who have the highest health care costs over time, may benefit even more from intensive counseling and medication." ◆

FDA Update

FDA Approves Liver Cancer Drug; Cautions on Smoking Cessation Agent

The U.S. Food and Drug Administration (FDA) recently approved sorafenib (Nexavar) for use in patients with inoperable hepatocellular carcinoma.

Sorafenib was originally approved in 2005 for the treatment of patients with advanced renal cell carcinoma, a form of kidney cancer. A kinase inhibitor, it interferes with molecules thought to be involved in chemical messages sent within cancer cells, in the formation of blood vessels that supply tumors, and in cell death.

In a separate action, FDA recently issued an Early Communication about its ongoing safety review of varenicline (Chantix), a drug approved as an aid to smoking cessation treatment.

After receiving a case report citing erratic behavior in an individual who had used varenicline, FDA has asked Pfizer, the manufacturer, for any information on additional cases of suicidal ideation in patients who have taken the drug. A safety analysis is under way. In the meantime, FDA recommends that health care providers monitor patients taking varenicline for behavior and mood changes. ◆

Special Report

Moving Forward in Pancreatic Cancer

Experts on pancreatic cancer met last week to exchange ideas about how to make progress against this deadly disease. Much of the discussion focused on how to identify the most promising potential therapies and test them efficiently in the clinic. Many participants said that combinations of targeted therapies may prove effective against the disease, even though few patients have benefited from the targeted drugs tested to date.

More than 90 researchers, clinicians, patient advocates, and pharmaceutical industry representatives discussed topics ranging from mouse models and cancer stem cells to the pitfalls of designing and interpreting clinical trials. The meeting was organized by the NCI Gastrointestinal Cancer Steering Committee and was the first in a series of state-of-the-science conferences sponsored by NCI's Coordinating Center for Clinical Trials.

"We are facing a bit of a crisis in pancreatic cancer clinical research," said Dr. Margaret Tempero of the University of California, San Francisco. "We seem to make progress in identifying potential therapies in isolated institutional clinical trials, yet when we test these agents in a broader population, they fail."

Failure may occur for several reasons, and they are not always clear. Patients in early-stage trials could be less sick than patients in the broader population and therefore fare better, for instance.

Many participants said that a single drug is unlikely to be effective against this genetically complex disease. Pancreatic tumors are notorious for resisting the antitumor effects of targeted drugs by activating alternative pathways.

Some of the molecules involved in transmitting cancer-promoting messages have been identified, but the most important players in these complex networks are not known. "The essential problem with pancreatic cancer is that we're trying to make progress in the face of biological uncertainties," said Dr. James Abbruzzese of University of Texas M.D. Anderson Cancer Center.

A recent study suggesting that multitargeted therapies may be required to treat glioblastoma brain cancer could apply to pancreatic cancer, said Dr. Abbruzzese. Both cancers are genetically and clinically diverse and resistant to therapies.

Pancreatic cancer is the fourth most deadly cancer in the U.S., though it is not among the 10 most common. The cancer is frequently diagnosed only after it has spread beyond the pancreas, and treatment options are limited. Surgery is the best hope for a cure among some patients with cancer localized to the pancreas.

The primary chemotherapy drug used to treat pancreatic cancer, gemcitabine (Gemzar), helps a minority of patients. With the exception of erlotinib (Tarceva), few of the targeted drugs tested to date have shown a benefit for patients.

Still, critical genes have been identified, and there was reason for optimism at the meeting. Mouse models have generated interest because the mice, like their human counterparts, develop tumors that spread easily and resist most treatments. In addition, recent studies suggest that some patients may benefit from adjuvant therapies following surgery.

"We have much more knowledge about the basic science of pancreatic cancer today than we did several years ago," said Dr. Philip A. Philip of Karmanos Cancer Center, Wayne State University. "We also have inventories of targeted drugs that we could use if only we can figure out how to test these drugs in patients in ways that provide us with informative results."

The group plans to report its findings and recommendations in 2008. In the meantime, there was a consensus to do more pilot clinical trials with smaller numbers of patients before embarking on large randomized trials, said Dr. Philip. This would ensure that the most promising treatments are taken to final-stage trials with a much better chance of success.

The need to develop experimental tools such as mouse models was also stressed. "There was general agreement on the importance of these tools in helping us to design trials and in choosing drugs and selecting patients to get the maximum benefit," said Dr. Philip. ◆

By Edward R. Winstead

Spotlight

Immune System Fights Cancer to a Draw

Researchers have shown in mice that the immune system can restrain the growth of cancer cells for extended periods, preventing dormant cancers from developing into life-threatening tumors. The findings raise the possibility that a new class of immune therapies could be developed to control rather than eliminate cancer cells.

Using the human immune system to keep dormant tumors in check may be a worthy goal of immune therapies, says Dr. Robert Schreiber of the Washington University School of Medicine, who co-led the study with Dr. Mark Smyth at the Peter MacCallum Cancer Centre in Victoria, Australia.

The immune system is often described as a double-edged sword for cancer because it appears to both prevent and promote the disease. For instance, acute inflammation may induce antitumor immunity that may eradicate cancer cells, while chronic inflammation may set the stage for cancer. The new results, published online in *Nature* last month, point to another role: maintaining tumors in a state of dormancy, or equilibrium.

"We hope that this work will open up a new appreciation of the many ways the immune system controls cancer," says Dr. Schreiber. The experiments were done in separate labs using different types of mice, but the results were the same. If they are generalizable to other tumors and extended to humans, the findings may help explain clinical observations about cancer, such as why the disease tends to occur late in life.

"It's possible that part of the reason the disease takes so long to develop is that tumors get held in an equilibrium state for a substantial period of time," notes Dr. Schreiber.

The findings lend support to recent studies showing that the presence or absence of certain immune cells in ovarian and colorectal tumors may predict the survival of patients with these diseases. The results may also shed light on why cancer cells are present in individuals who have no clinical signs of disease, such as some men with prostate cancer.

The findings could also help explain reports of melanoma skin cancer being transferred through organ transplantation. A letter to the *New England Journal of Medicine* in 2003 reported that two patients developed melanoma after each received a kidney from the same donor. The donor had been treated for melanoma 16 years earlier and was considered free of cancer, an investigation revealed. Evidently, the donor's melanoma had been under immune control for those years, but was awakened in the recipients, whose immune systems were suppressed to prevent organ rejection.

Dr. Schreiber and his colleagues are now studying the molecular basis of equilibrium. With the isolation of dormant tumors for the first time, researchers will be able to compare the genetic signatures of these lesions with those of lesions that became cancerous even in individuals with competent immune systems.

To isolate the dormant tumors, the researchers injected mice with low doses of methylcholanthrene, a carcinogen. A fifth of the mice developed fatal tumors. The surviving animals appeared healthy, but about half were found to have nodules near the injection sites that contained a mixture of tumors cells and immune cells. These were dormant tumors.

The tumors were held in a dormant state by the adaptive immune system, which involves immune cells such as T cells, the researchers found. When they blocked the critical immune cells, the tumors started to grow almost immediately.

"This study is the next step in our understanding of how the immune system interacts with cancer and influences the outcome of cancer," says co-author Dr. Lloyd Old of the Ludwig Institute for Cancer Research. "The challenge now is to understand the mechanisms that allow the immune system and the cancer to come to a state of dormancy, or equilibrium."

In theory, finding ways to augment a person's adaptive immune system could increase control over cancer. "We may be able to induce a chronic state of equilibrium that would render cancer into more of a controllable disease such as diabetes," Dr. Schreiber says. "If we currently cannot use the immune system to cure cancer, maybe we can use it to control the disease." ◆

By Edward R. Winstead

A Closer Look

Groups Issue Report on Diet, Weight, Exercise, and Cancer Risk

Maintain a healthy body weight. Fill your plate with vegetables and fruit and say no to sugary soft drinks. Get off the couch and take a walk. Public health advocates have long promoted such healthy lifestyle recommendations to prevent chronic conditions such as diabetes and heart disease. Now a report by the American Institute for Cancer Research and the World Cancer Research Fund, *Food, Nutrition, Physical Activity, and the Prevention of Cancer: A Global Perspective,* concludes that following the same advice is likely to significantly reduce cancer risk as well.

The report—a comprehensive review of the scientific evidence linking cancer to diet, physical activity, and weight—finds convincing evidence that obesity is a cause of colorectal, endometrial, esophageal, kidney, liver, pancreatic, and postmenopausal breast cancer; that abdominal obesity, in particular, causes colorectal cancer; and that consumption of red and processed meat such as bacon, ham, pastrami, and salami, also causes colorectal cancer.

Its recommendations for reducing cancer risk include avoiding weight gain and increases in waist size, getting at least 30 minutes of physical activity every day, limiting red meat consumption to 18 oz. of cooked meat per week (about 2.5 oz. per day), and eating very little, if any, processed meat.

"This is the largest, most systematic review of the role of diet in cancer prevention that has been conducted to date," says Dr. Arthur Schatzkin of NCI's Division of Cancer Epidemiology and Genetics, a member of the international expert panel that distilled the evidence and formulated the recommendations.

Five years in the making, the report is the outcome of a process that involved 9 teams of scientists from around the world, who evaluated more than 7,000 studies on diet, physical activity, weight management, and cancer.

Among the report's conclusions is that cancer risk increases by 15 percent for every 1.7 oz. of red meat consumed per day beyond the recommended limit of 18 oz. per week. Dr. Schatzkin notes that, for an individual, this is a relatively modest increase in risk. By contrast, a person who smokes two packs of cigarettes a day may increase their cancer risk by as much as 2,000 percent compared with that of a nonsmoker.

"At the population level, however, these apparently modest risks have substantial health effects," Dr. Schatzkin explains. "Because many people eat red and processed meat and many are obese, the burden of cancer attributable to these nutritional factors may be substantial. If we could reduce the incidence of, say, breast cancer or colorectal cancer by 15 percent, that would mean preventing a significant amount of disease and death."

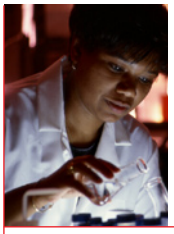
The report finds convincing evidence that having children and breastfeeding them reduces a woman's lifetime risk of developing breast cancer. Additionally, breastfed infants may have a lower risk of becoming obese and thus a reduced risk of cancer. It recommends that infants be exclusively breastfed for up to 6 months.

Dr. John Milner of NCI's Division of Cancer Prevention was an observer on the expert panel and chair of a working group that evaluated the scientific evidence for mechanisms by which dietary components may cause cancer. He notes that individual susceptibility to cancer from dietary causes varies widely because of genetic and other factors, but researchers don't yet know enough to craft dietary recommendations based on individual risk levels.

The report's dietary recommendations are consistent with current scientific knowledge and with dietary guidance promoted by the U.S. government through the *Dietary Guidelines for Americans*, the "Fruit and Veggies—More Matters" campaign (formerly "5 A Day for Better Health"), and other programs, Dr. Milner says.

The report recommends against consumption of dietary supplements to prevent cancer. Although some studies, usually in high-risk groups, have suggested that supplements can reduce cancer risk, these findings may not apply to the general population. The panel concludes that "the best source of nourishment is food and drinks." ◆

By Eleanor Mayfield



Featured Clinical Trial

New Drug Combination for Ovarian and Primary Peritoneal Cancers

Name of the Trial
Phase II Study of Cisplatin and Flavopiridol in Patients with Advanced Ovarian Epithelial or Primary Peritoneal Cancer (MAYO-MC0261). See the protocol summary at http://cancer.gov/clinicaltrials/MAYO-MC0261.

Principal Investigator
Dr. Keith Bible, Mayo Clinic Cancer Center

Dr. Keith Bible

Why This Trial Is Important
Ovarian epithelial cancer is one of the most common gynecologic cancers in the United States. Because it is difficult to detect early, most cases of ovarian epithelial cancer are not identified until the disease has reached an advanced stage, and the long-term prognosis for patients with such disease is poor. Primary peritoneal cancer is a related but less common type of cancer that usually responds similarly to treatment.

Systemic chemotherapy with a platinum-containing drug, such as cisplatin or carboplatin, is a commonly used treatment for advanced ovarian epithelial cancer. Although this type of treatment frequently results in tumor shrinkage, most patients ultimately become resistant to platinum-based chemotherapy.

In this trial, women with ovarian epithelial or primary peritoneal cancer whose disease has relapsed less than 6 months after treatment with initial chemotherapy will receive cisplatin and a drug called flavopiridol. Flavopiridol blocks the activity of a number of proteins that help cancer cells grow and spread, and it may also make cancer cells more sensitive to cisplatin.

"Women with platinum-resistant ovarian cancer have very few effective treatment options," said Dr. Bible. "Our laboratory studies have shown that flavopiridol can increase the platinum concentrations in cells when administered with cisplatin, and we believe that this may lead to a reversal of platinum resistance."

"An early analysis of patients currently on the trial has revealed a better than expected response rate, including one patient with a complete remission," he added.

Who Can Join This Trial
Researchers will recruit 79 women aged 18 or over with advanced ovarian epithelial or primary peritoneal cancer treated with one prior chemotherapy regimen. See the list of eligibility criteria at http://cancer.gov/clinicaltrials/MAYO-MC0261.

Study Site and Contact Information
Study sites in the United States are recruiting patients for this trial. See the list of study sites at http://cancer.gov/clinicaltrials/MAYO-MC0261 or call the NCI's Cancer Information Service at 1-800-4-CANCER (1-800-422-6237) for more information. The toll-free call is confidential. ◆

An archive of "Featured Clinical Trial" columns is available at http://cancer.gov/clinicaltrials/ft-all-featured-trials.

(Breast-Cancer Risk continued from page 2)

American women aged 45 years or older," state the authors.

To see how this increased estimation of risk would affect enrollment into breast cancer prevention clinical trials, the investigators compared how many African American women would have been eligible to enroll in the STAR trial using the CARE model versus the number actually enrolled using the NCI Breast Cancer Risk Assessment Tool. Enrollment in the STAR trial required a 5-year projected risk of at least 1.66 percent.

They found that while 14.5 percent of African American women screened using the NCI tool were eligible, this number rose to 30.3 percent using the CARE model. "While the average increase in 5-year risk found with the CARE model compared to the NCI tool is less than one-half percent, the proportion eligible increased by more than twofold," said Dr. Joseph Costantino, director of the National Surgical Adjuvant Breast and Bowel Project Biostatistical Center and co-author of the CARE model.

Like the NCI tool, the CARE model would not be accurate in certain subpopulations, such as women with a prior history of breast cancer or with mutations in genes such as *BRCA1* or *BRCA2*, which greatly increase the risk of breast cancer.

But while the CARE model would still benefit from further validation, especially in women under the age of 50, the authors recommend that clinicians adopt the CARE model "for counseling African American women and for determining their eligibility for breast cancer prevention trials." The CARE model will be included in a revision of the online NCI tool. ◆

By Sharon Reynolds

Notes

Hawk to Join M.D. Anderson

Dr. Ernest T. Hawk, director of NCI's Office of Centers, Training and Resources (OCTR), has been named vice president and division head for Cancer Prevention and Population Sciences at the University of Texas M.D. Anderson Cancer Center in Houston. Dr. Hawk joined NCI's Division of Cancer Prevention (DCP) in 1993.

Since 2004, Dr. Hawk has served as director of OCTR. Prior to this, he was chief of the Gastrointestinal and Other Cancers Research Group in DCP. Dr. Hawk's work in the area of nonsteroidal anti-inflammatory drugs for cancer prevention was recognized with the NCI Research Award for Distinguished Achievement in Cancer Prevention.

Dr. Hawk also co-chaired NCI's Translational Research Working Group, which drafted a plan approved by the NCAB in June 2007 proposing a series of major initiatives for the NCI to consider in the area of translational research.

Dr. Jaye L. Viner has been appointed acting director of OCTR, where she has served as the deputy director since 2006.

Mitsuya Receives Keio Medical Science Prize

Dr. Hiroaki Mitsuya, head of the Experimental Retrovirology Section in the HIV and AIDS Malignancy Branch in NCI's Center for Cancer Research, has been awarded the 2007 Keio Medical Science Prize. The award is presented by the Keio University Medical Science Fund and recognizes major projects that contribute to the advancement of life sciences and medicine and encourage the expansion of researcher networks.

Dr. Mitsuya's work is highly regarded as a clinical breakthrough in the treatment of AIDS. He discovered that AZT inhibits HIV activity, and subsequently developed it as the first drug to treat AIDS. He also later developed the drugs ddI and ddC. The drugs have been used in clinics around the world and have dramatically improved the prognosis of HIV-infected individuals.

Dr. Hiroaki Mitsuya

Teleconference Focuses on Cancer Survivorship Research

"Cancer Survivorship Research: A Dialogue with Advocates, Survivors, and Caregivers," the final teleconference for the fall 2007 Understanding NCI series, sponsored by NCI's Office of Advocacy Relations (OAR), will take place December 11 from 1:00–2:00 p.m., ET.

Dr. Julia Rowland, director of NCI's Office of Cancer Survivorship (OCS), will highlight cancer survivorship research and Lourie Campos, a member of the NCI Director's Consumer Liaison Group, will discuss her role in working with OCS to plan the annual cancer survivorship conference. The teleconference can be accessed toll free within the U.S. at 800-857-6584; the passcode is OCS. Toll-free playback will be available through January 11 at 800-253-1052. For more information contact OAR at 301-594-3194 or liaison@od.nci.nih.gov.

NCAB Meeting Held

The National Cancer Advisory Board (NCAB) met on November 27 in Bethesda, MD. The meeting agenda and videocast are available online.

NCI and AACR Sponsor Meeting on Cancer Health Disparities

NCI's Center to Reduce Cancer Health Disparities joined the American Association for Cancer Research (AACR) in Atlanta on November 27–30 for a meeting on the "Science of Cancer Health Disparities." The meeting was cosponsored by NCI and AACR and is the first time that the organizations have collaborated on a national meeting to address this issue. Additional information about the meeting is available at http://www.aacr.org/home/scientists/meetings--workshops/cancer-health-disparities.aspx. ◆

70 YEARS OF EXCELLENCE IN CANCER RESEARCH

If Memory Serves…

NIH had two personnel systems when NCI was created: the Commissioned Corps of the Public Health Service and the Federal Civil Service. Most of the NCI scientific staff were in the Federal Civil Service, as were research fellows, though a few of the physicians chose to enter the Commissioned Corps. ◆

For more information about the birth of NCI, go to http://www.cancer.gov/aboutnci/ncia.

Guest Commentary by Dr. John Mendelsohn

Going for the Gold

When the *NCI Cancer Bulletin* announced the CEO Cancer Gold Standard a few years ago, it was a new initiative of the CEO Roundtable on Cancer, a nonprofit organization of corporate executives who have pledged to fight cancer in workplaces. NCI Director Dr. John Niederhuber has offered me this opportunity to provide additional firsthand insight on this initiative that is helping involve business leaders in a meaningful way in the fight against cancer.

Earlier this year, the University of Texas M.D. Anderson Cancer Center became the first NCI-designated comprehensive cancer center to be accredited as a Gold Standard employer. I am proud of the effort our employees put forth to help us earn accreditation, and even more pleased by the potential life-saving and life-lengthening impact the Gold Standard can have on our employees and their families. I also realize the synergy that can be created when cancer centers stand together with business leaders in this effort. That is why I encourage the directors of all NCI-designated cancer centers to embrace this unique opportunity on behalf of their employees and their institutions.

Today, I am delighted to report that under the leadership of Dr. Victor Dzau, Duke Medicine, which includes the Duke University Health System, Comprehensive Cancer Center, School of Medicine, and School of Nursing, recently received Gold Standard accreditation.

At the heart of the Gold Standard are three goals: prevention, early detection, and quality care. At M.D. Anderson, wellness is more than just activities and programming—it is part of our culture. Our 17,000 employees are our most important resource and we take pride in our employee benefits, wellness programs, and work-life balance opportunities that blend to create a "wellness-friendly" culture. The "Place…*of wellness*" at M.D. Anderson provides complementary services such as yoga, nutrition classes, tai chi, meditation, and aromatherapy to patients, their caregivers, and family members. Our Employee Health & Well-being Department provides programming and activities for employees and their families that build the knowledge, skills, and commitment it takes to be healthy.

As you walk around M.D. Anderson, you immediately feel the wellness culture. Throughout the institution, many of our waiting areas have aquariums that can help reduce stress levels. We have 12 "stress buster" stations with elliptical trainers, stretch trainers, and strength chairs that staff use to re-energize their day. Good nutrition, daily physical activity, and support for tobacco cessation are all core components of the Gold Standard. With more than 10,000 meals served each day, we work to provide nutritious choices for all who come to our campus. The Pyramid Plate program offers a selection of foods that have been found to decrease cancer risks. And our new Healthy Balance vending areas offer fruit, whole grain, low-fat, and low-calorie snack options. M.D. Anderson's campus is growing, and we use the old and new sky bridges linking our major buildings to provide miles of indoor walking opportunities.

The Gold Standard has also helped us remove many of the barriers for our cancer screening programs offered to employees. In January of 2008 we will launch a Health Risk Assessment to help employees better understand their health risk and the steps they can take to be healthy.

I am proud of our CEO Cancer Gold Standard effort and hope that by sharing a little of our story, others will be encouraged to "go for the gold." ◆

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