THE CANCER LETTER INTERACTIVE

PO Box 9905 Washington DC 20016 Telephone 202-362-1809

Vol. 28 No. 9
March 1, 2002

New NCI Director Plans Greater Support For Translational Research, Collaboration

NCI Director Andrew von Eschenbach said he plans to enhance the Institute's support of translational research to promote the development of diagnostic, therapeutic, and preventive interventions.

By emphasizing translational research, NCI would build upon the programmatic infrastructure that former director Richard Klausner developed in cancer genetics, said von Eschenbach, who took office on Jan. 22.

"The knowledge and understanding that we are generating because of our investment in basic research is now beginning to give benefit with

(Continued to page 2)

In Brief:

HHS Names Crawford FDA Deputy Commissioner; Williams Appointed Deputy For Oncology Division

LESTER CRAWFORD JR., head of the Center for Food and Nutrition Policy at Virginia Tech, was named FDA Deputy Commissioner. Crawford will be the senior official at FDA, pending the installment of a permanent commissioner of food and drugs. "Lester Crawford has devoted his career to promoting safer products for the public, and he brings to the FDA valuable experience and leadership skills," said HHS Secretary **Tommy Thompson**. Crawford takes over from **Bernard Schwetz**, who will continue to work on public health and FDA issues within the agency. . . . **GRANT WILLIAMS,** oncology medical team leader at FDA, was appointed deputy director of the Division of Oncology Drug Products on Feb. 24. Williams joined FDA in 1989 as a medical officer. During his tenure at FDA, he has served as the primary reviewer of over 15 NDAs/efficacy supplements and as medical team leader for over 20 NDAs. He was the medical team leader of the Gleevec NDA that was completed in a record two-and-a-half months. Williams organized the FDA 17-course lecture series for new oncology reviewers last year and has chaired the CDER Oncology Coordinating Committee since its inception last year. "In making this selection, I was most impressed with Grant's willingness to approach difficult problems with enthusiasm and flexibility," said **Richard Padzur**, director of Division of Oncology Drug Products. "This characteristic will be requisite in the future as we face novel regulatory challenges posed by novel agents based on the genetic and molecular basis of cancer." . . . **GABRIEL HORTOBAGYI** of M.D. Anderson Cancer Center received

(Continued to page 7)

Click Here for Photocopying Guidelines

Translational Research Is Von Eschenbach's Priority

(Continued from page 1)

regard to intervention, but it is a process that is beginning to unfold," von Eschenbach said in his first remarks to the National Cancer Advisory Board Feb. 20. "It is a process that I as the next director, and we together, as the next phase in this story, the next chapter in this book, need to accentuate and promote."

The former urologic surgeon from M.D. Anderson Cancer Center said that does not mean NCI would reduce its support for basic research. "An enormous amount of discovery yet needs to occur," von Eschenbach said. "There is a critically important need for us to maintain our investment in investigator-initiated research—the promotion of creative discovery and ideas that can only occur in the minds of brilliant, committed, and supported basic scientists in the laboratory.

"But I think we have also reached a point where we can now begin to extrapolate knowledge that's already within our grasp and effectively translate that knowledge into interventions that will directly benefit patients with cancer," he said.

The NCAB is a Presidentially-appointed advisory council whose members are appointed for six-year terms. The NCAB gives final approval on NCI grants and advises the Institute director on programs and priorities.

THE CANCER LETTER

Member, Newsletter and Electronic Publishers Association

World Wide Web: http://www.cancerletter.com

Editor & Publisher: Kirsten Boyd Goldberg
Editor: Paul Goldberg
Editorial Assistant: Shelley Whitmore Wolfe

Editorial: 202-362-1809 Fax: 202-318-4030
PO Box 9905, Washington DC 20016
E-mail: news@cancerletter.com

Customer Service: 800-513-7042
PO Box 40724, Nashville TN 37204-0724
E-mail: info@cancerletter.com

Subscription $305 per year worldwide. ISSN 0096-3917. Published 46 times a year by The Cancer Letter Inc. Founded Dec. 21, 1973, by Jerry D. Boyd

Goal To Build On Cancer Genetics Infrastructure

NCI supports translational research through many grant programs, including its Cancer Centers Program, Specialized Programs of Research Excellence, Program Project grants, and targeted Requests for Applications.

NCI's growth of more than $2 billion from 1995 to 2002—a doubling of the Institute's budget—has fueled increases in most of the major grant programs.

In its annual report on recommendations for federal funding for biomedical research, the Federation of American Societies for Experimental Biology said NIH "must fully support the translation of genomic discoveries into clinical application through interdisciplinary collaborations."

The time is right, the FASEB report said, to seize scientific opportunities created by the advances in genomics and genetics, and support more research and training in patient-oriented translational research. (The report is available at http://www.faseb.org.)

"What has occurred prior to my arrival here has been extraordinary in creating an enormous base of investigation and basic research into our understanding of the fundamental nature of cancer," von Eschenbach said to the NCAB. "I think Rick [Klausner] in his great wisdom, in his great personal interest as a scientist, was able to bring an enormous amount of energy and vision to that effort, and I think he was extraordinarily effective at communicating that to the broader community in order to engender support. He rightfully deserves great compliment for his achievements.

"I'd like to further compliment it by building upon it," von Eschenbach said. "We have begun to understand cancer at the genetic and cellular level, and in many ways have come to appreciate that the origin of cancer is in fact a genetic disorder or disease. But the behavior of cancer—what happens once malignant transformation occurs—is very much related to what is post-genomic, if you will, proteomic, or the interaction of the cancer cell and its micro and macro environment."

Von Eschenbach said a few "actual interventions" are beginning to emerge from basic research in cancer genetics. He cited the example of Gleevec, the targeted therapy for leukemia and stromal tumors of the stomach. He also mentioned a paper published in a current issue of The Lancet describing work by NCI scientist Lance Liotta, in collaboration with scientists at FDA, to develop a noninvasive method for testing for the presence of ovarian cancer

by looking at proteins in blood.

"I will look forward to complementing what has gone on before by focusing specifically on the continued development of new knowledge and the translation of that knowledge into more effective interventions that will be directly applied to patients," von Eschenbach said.

Von Eschenbach said he attended the NCI Intramural Program's annual retreat for principal investigators, which he called an "impressive event" for its scientific quality.

"It is an intramural program which is very much on the rise," von Eschenbach said. "I have been impressed from the outset that it is a program that's making great strides. It's a program that I intend to pay a great deal of attention to, including being a part of."

Continuing to practice medicine was one condition von Eschenbach had upon accepting the director's position, he said. "That was not only agreed upon, but encouraged, by the [HHS] Secretary and the White House," he said. "I will do that in a very compartmentalized fashion. I will devote myself only to the issue of prostate cancer, from the perspective of early detection, diagnosis, and consultation, as well as being involved in investigational protocol development.

"I will no longer be able to do surgery, because that would not be in the patient's best interests," he said.

Collaboration With Others

The "second condition" von Eschenbach said he had for taking the director's job was to continue to participate "in things like the National Dialogue on Cancer," an effort funded by the American Cancer Society and aimed at creating an overarching cancer agenda.

Von Eschenbach was instrumental in the creation of the NDC, and served as ACS president-elect prior to his appointment as NCI director.

HHS Secretary Tommy Thompson, who also was an NDC member, last year said he was advised by HHS attorneys to end his formal participation in the NDC (**The Cancer Letter**, June 1, 2001, Vol. 27 No. 22).

"I believe that it's extremely important in my role to spend a great deal of my energy and effort networking, interacting, cooperating, and collaborating with the many other components that exist, not only within the federal community, but with regard to activities occurring at the state level, and with nongovernmental organizations, and survivor groups," von Eschenbach said to the NCAB.

"I will bring the energy and resources and the incredible talent of the National Cancer Institute effectively into that process as much as that possibly can be done," he said.

NCI should collaborate with other organizations "to be sure that the development of these interventions occurs and that they are applied to the populations at risk, and that they are available equally and equitably to all individuals, especially those that are most severely affected, in the minority community and the underserved populations who have often had problems with regard to access," von Eschenbach said.

"It is our responsibility as the National Cancer Institute to engage in and provide the leadership for that kind of national agenda," he said. "We cannot do everything, but we must contribute to making certain that everything gets done."

Organizational Issues: Communications, Centers

Over the next several weeks, von Eschenbach said he plans to "pay immediate attention to" internal organizational issues including the structure of his office, the Office of Communication, and the Centers, SPOREs, and Training Program.

The Office of Communication has gone through tremendous reorganization over the past two years, as well as changes in leadership. The office was directed by Susan Sieber, who died of breast cancer on Jan. 22. Acting director Mary McCabe, appointed last fall after Sieber retired, has indicated that she considers the post temporary and will be stepping down soon. Deputy Director Jill Bartholomew has been at NCI for less than a year.

"I think this is an extremely important issue for the Institute," von Eschenbach said. "There are critical components with regard to the Office of Communication, one of which is that there have been changes in personnel over time, and there are issues of clarification with regard to the very important parts of the mission for that office, being on the one hand, very effective state-of-the-art education and communication with regard to community and patients, the other being the process of relationships as it might relate to the press office and our ability to be responsive to the media in areas like mammography."

Von Eschenbach said he appointed "a small group of advisors who have expertise in various components of communications" to advise him on communications.

"It's important for the board to know that the OC will be receiving a great deal of my attention in the very immediate future with regard to supporting that office and helping with regard to its more effective organization," he said.

Complicating matters is the announced "One Department" plan of HHS Secretary Thompson to consolidate all offices that conduct public relations, personnel and facilities management.

"There are changes occurring at the departmental level that will have implications for NCI and NIH," von Eschenbach said. "Those are areas I will be paying close attention to."

The National Cancer Act of 1971 gives NCI the authority to disseminate cancer information to the public.

Von Eschenbach did not elaborate on plans for the Centers, SPOREs, and Training Program, led by Brian Kimes. "This is an extremely important area going forward with regard to the mission of NCI," he said. "Most of the SPOREs exist in cancer centers. They are configured and designed to be effective vehicles for translational research. This is an area that in the recent past has undergone a great deal of change with regard to enhancements of the budget."

Von Eschenbach said he would also look at "the most effective use of advisory committees."

The NCAB is akin to a board of directors, he said. "It is important for me to communicate with you on an ongoing basis, rather than a periodic one," he said.

Von Eschenbach said that his leadership style will be based on lessons he learned while a surgeon at M.D. Anderson for 25 years. "I learned very early on that no matter how committed, talented, what gifts I might bring to the care of the cancer patient, I would never individually, singly, be able to cure the problem myself," he said. "The best treatment would require multidisciplinary intervention.

"Second, I learned that you cannot solve a problem that you can't fundamentally understand," he said. "Discovery and research were the key, ultimately, to any successful intervention. Those lessons are the lessons I want to bring to the role of the director of the NCI. Collaborative, integration, a multidicisplinary approach, is in my view the most effective way the NCI can function and contribute.

"So it will be my goal every day to foster collaborations, to create that teamwork, to bring all the multiple talents that exist both within the organization and the outside together in an effective integration fashion. We must continue to drive our understanding of this disease and channel that into interventions, and be certain that's provided to all the patients who require it."

Von Eschenbach said that in his first four weeks as NCI director, he also has been keeping busy with the issue of mammography screening, upcoming budget hearings, and courtesy visits to members of Congress.

Conflict-of-interest rules prohibited von Eschenbach from discussing NCI business with the Institute's staff prior to his swearing-in, he said. "There wasn't any opportunity for briefings or exchange of any information," he said.

The staff put the new director through a series of briefing meetings and prepared written briefing books on NCI programs.

"It is very much like whitewater rafting," he said. "It is like getting dropped into a boat and there is no time to contemplate, to think, and to study. It is a journey that begins immediately, that requires at times paddling for your life, while at the same time trying to figure out where you're going."

Mammography: NCI Asks IOM To Follow Up

About 48 hours after von Eschenbach's arrival, the controversy over screening mammography re-emerged. "The immersion became submersion very quickly," von Eschenbach said.

"The Executive Committee quickly came together to assess the issue with regard to the re-emerging controversy over mammography as it was being portrayed in the press," von Eschenbach said. "We took the opportunity to rapidly poll, communicate with, and discuss with various experts who are involved in this process. I had the opportunity to personally speak on the phone to many of them. We began a deliberative process, both internally as well as on a consultative basis, and arrived at a decision that at the present time there was not sufficient information available to warrant a major change in the National Cancer Institute's recommendation regarding mammography."

Von Eschenbach has asked the Institute of Medicine to convene an expert panel on the early detection of breast cancer and follow up with a report released last year, Mammography and Beyond.

"NCI will not reconvene our own panels or other deliberation, but will depend on the IOM expert, independent process to provide us with guidance and input," von Eschenbach said.

"We are also making certain that within the message, we are emphasizing the need to look forward, rather than to continue to look backward," he said. "Our investment in newer strategies for early detection of breast cancer are critically important. We have a major commitment to the digital mammography vs. standard mammography trial. We will continue to accelerate and emphasize the development of other mechanisms for early detection of breast cancer, so that we are providing to patients at risk and the population not only guidance, but also increased opportunities. The mammography issue continues to unfold."

Professional Societies:

Mammography Summit Planned For June In Milan

Last week's announcement by the Department of Health and Human Services supporting screening mammography for women 40 and over has prompted cancer organizations world-wide to call for a meeting to discuss the recommendation and other current controversies in mammographic screening.

The European Institute of Oncology plans to host a Global Summit on Mammographic Screening, June 3-5, in Milan, Italy.

The meeting is being planned in collaboration with the World Health Organization, the European Commission, the American Cancer Society, Cancer Research UK, the American Italian Cancer Foundation, the American Association of Clinical Oncology and the Centers for Disease Control and Prevention.

"The current controversy regarding the efficacy of mammographic screening is clearly one of the most important issues in cancer control at the present time," the conference announcement said. "If recent conclusions questioning the efficacy of mammography are correct, then we may have been harming women. If these conclusions are incorrect, discouraging women not to be screened could cost lives. At very least the current situation will undoubtedly cause confusion in the minds of women world-wide, as well as in those of their doctors. Given the importance of breast cancer as an international public health problem, if there are truly such limitations to the available evidence on the efficacy of mammography, then we really need to know urgently and advise women accordingly."

The meeting is designed to be inclusive and to allow contrasting opinions to be voiced, the institute said. Umberto Veronesi, of the European Institute of Oncology in Milan; Sir Patrick Forrest, professor emeritus from Edinburgh; and William Wood, of Emory University, will serve as chairmen of the meeting.

For further information on the meeting, contact Peter Boyle, at the European Institute for Oncology, email peter.boyle@ieo.it.

Drug Development:

Urgent Need For New Drugs To Treat Pre-Cancers: AACR

Treatment and prevention of pre-cancer (also called intraepithelial neoplasia) can reduce the risk of progression to invasive cancer in many patients, yet very few drugs have been developed to treat these early lesions, according to a report of the American Association for Cancer Research Task Force on the Treatment and Prevention of Intraepithelial Neoplasia.

The report was released in the February 2002 issue of the AACR journal Clinical Cancer Research.

Only five drugs have been approved for treating pre-cancers; these include drugs for treatment of skin, bladder, breast, and colon pre-cancers, the report states. Though surgical treatments exist for many types of pre-cancers, the Task Force noted, eligible populations often do not want to have such invasive treatment. Only 15 percent of people at risk for colon cancer have colonoscopy to identify colon polyps.

Thus, increasing the number of new drugs that can be used to treat pre-cancers should result in more high-risk patients getting effective treatment at an early stage, the Task Force concluded.

Developing new drugs has been difficult, because their success has been measured by whether the subsequent occurrence of invasive cancer is reduced overall. This requires very large, long-term clinical trials with thousands of patients. The Task Force recommends that clinical trials of new drug treatments for pre-cancer be designed to target high-risk populations only—groups at risk for developing the most severe kinds of pre-cancers and for which there is a well-established link between the pre-cancer and invasive cancer.

Examples of such high-risk populations include persons with severe Barrett's esophagus, high-grade prostatic intraepithelial neoplasia, and women with abnormal breast cells who have been previously treated for breast cancer or have a family history of breast cancer. The endpoint of such trials of experimental

drugs should be the elimination of high-risk pre-cancers.

Researchers, members of industry, regulatory bodies, legislators, and the public need to understand the implications of pre-cancers and the urgent need for developing and approving new drug treatments, the Task Force concluded. The AACR plans to launch a national educational campaign over the next several months to reinforce the vital importance of the recommendations. The AACR noted that what is needed is a revolution in how scientists and the public think about preventing and curing cancer.

Funding Opportunities:
Program Announcements

PA-02-066: Translating Research into Practice—Joint Program Announcement

Translating Research into Practice (TRIP) PA is a collaborative effort between the Agency for Healthcare Research and Quality and the Health Services Research and Development Service within the Department of Veterans Affairs. Applicants are invited to conduct research and evaluation projects into measurable improvements in quality, patient safety, health care outcomes and cost, use, and access. The PA underscores the need for research that can bridge the chasm between promising prototypes (e.g., approaches for treating a specific disease in a particular setting or work system changes that improve quality or efficiency in a particular setting) and generalizable knowledge that can be used in multiple settings and lead to systematic improvement on a large scale. Research findings may be translated into evidence-based clinical or organizational, structural, and system interventions that then can be assessed for their ability to measure change in or improve access to health care, patient safety, the quality and/or cost-effectiveness of health care delivery, and health care outcomes.

Projects that focus on identified disparities in health status, health care quality, and access experienced by certain groups, notably racial and ethnic minorities as well as those with low-income, are encouraged. The PA sponsors also encourage projects that focus on women, and the elderly; individuals with special healthcare needs, including persons with disabilities, and those who need chronic care and end of life health care; and individuals living in inner-city, rural, and frontier areas. NIH: National Institute of Mental Health,

NCI, and National Institute of Alcohol Abuse and Alcoholism are interested in co-sponsorship of applications supported under the PA. The PA will use the R01 award mechanism for applicants applying for AHRQ. The PA is available at http://grants.nih.gov/grants/guide/pa-files/PA-02-066.html.

Inquiries: For NCI—Molla Sloane Donaldson, Outcomes Research Branch, ARP, DCCPS, NCI, 6130 Executive Blvd., MSC 7344, EPN Rm 4028, Bethesda, MD 20892-9631, for overnight delivery use: Rockville, MD 20852, phone 301-435-1638; fax 301-435-3710; e-mail Donaldsm@mail.nih.gov

PAR-02-068: Specialized Programs of Research Excellence (SPORES) in Pancreatic Cancer for the Year 2002

Letter of Intent Receipt Date: Sept. 1, 2002

Application Receipt Date: Oct. 1, 2002

Organ Systems Branch of the NCI Office of the Deputy Director for Extramural Science invites grant applications to: 1) build capacity for interdisciplinary translational research in pancreatic cancer; 2) establish consortia to ensure appropriate access to pancreatic cancer patients and tumor tissues and promote the development of pancreatic cancer family registries; 3) expand the research base in pancreatic cancer via development and improvement of animal and in vitro model systems that can be translated into human disease applications; 4) promote collaborations between basic and clinical or applied research scientists; 5) provide career development opportunities in translational pancreatic cancer research for both junior investigators and established scientists wishing to refocus their careers; and 6) develop extended collaborations in critical areas of research need with laboratory, clinical, and population scientists in the parent and other institutions.

The PA will use the NIH specialized center P50 grant mechanism. A SPORE is supported through the specialized center P50 grant mechanism. The PA is available at http://grants.nih.gov/grants/guide/pa-files/PAR-02-068.html.

Inquiries: Organ Systems Branch Office of Centers, Training, and Resources, Office of Deputy Director for Extramural Science, NCI, 6116 Executive Blvd., Suite 7013, MSC 8347, Rockville, MD 20852 (for express/courier service), Bethesda, MD 20892-7008 (for U.S. Postal Service, phone 301-496-8528; fax 301-402-5319; e-mail nciosb-r@mail.nih.gov.

NIH Regional Seminars in Program Funding and Grants Administration

NIH has scheduled two regional seminars on extramural program funding and grants administration: April 11-12 in East Lansing, MI, Michigan State University; and June 6-7 in Louisville, KY, University of Louisville. The two-day seminars feature sessions for research faculty and administrators on application preparation, funding opportunities, the review process and grants administration. Registration information and seminar programs are available at http://grants.nih.gov/grants/seminars.htm.

In Brief:

French Legion d'Honneur Bestowed On Hortobagyi

(Continued from page 1)

the Legion d'Honneur during a special ceremony at the French Senate on Feb. 7, for his accomplishments and contributions toward improving the treatment of cancer. The award was presented by the Vice-President of the Senate, **Adrien Gouteyron**, on behalf of President of the Senate **Christian Poncelet**. The Legion d'Honneur is given to few French citizens, and rarely to a non-citizen. . . . **AVICE MEEHAN**, vice president of public affairs at Memorial Sloan-Kettering Cancer Center since 1994, was elected vice president for communications and public affairs for the Howard Hughes Medical Institute in Chevy Chase, MD, by the institute's trustees. Meehan will join the institute on March 4 and will be one of seven vice presidents advising HHMI President **Thomas Cech**. She succeeds **Robert Potter**, who established the institute's office of communications in 1987 and is retiring. "HHMI wants to build upon the reputation that it has established with its news service, its excellent science publications for the public, and its website, and begin to play a more substantive role in science policy and other important areas that affect the conduct of biomedical science in the U.S.," Cech said. Before joining MSKCC, Meehan served as press secretary to Connecticut Gov. Lowell Weicker Jr. and communications director for his gubernatorial campaign. . . . **HELEN F. GRAHAM CANCER CENTER** of the Christiana Care Health System will open in May in Delaware. The 60,000-square-foot state-of-the-art outpatient center coordinates all outpatient treatment and quality-of-life services for cancer patients. "When patients come to the center, they will see a medical oncologist, surgeon, and radiation oncologist all in one visit," said **Nicholas Petrelli**, MBNA medical director of the cancer program. "More importantly, experts from these three disciplines will meet in a mini cancer conference to determine how best to treat each patient they see. The streamlined, multidisciplinary approach is designed to save time and help give them peace of mind." **Alan Guttmacher**, senior clinical advisor to the director of the National Human Genome Research Institute at NIH will be a featured speaker at the May 9 dedication ceremony. . . . **ASHA DAS** was named director of the Cedars-Sinai Maxine Dunitz Neurosurgical Institute neuro-oncology program, said **Keith Black**, director of the institute and holder of the Ruth and Lawrence Harvey Chair in Neuroscience, along with **Stefan-Pulst**, Carmen and Louis Warschaw Chair in Neurology at Cedars-Sinai Medical Center. Before joining the institute in 1996, Das was a clinical teacher at the National University of Singapore. While there, she also served as a consulting neurologist for the National Neuroscience Institute, the National University Hospital, the National Cancer Centre, and Changi General Hospital. . . . **VANDERBILT-INGRAM CANCER CENTER** made two appointments. **Jennifer Pietenpol,** associate professor of biochemistry and a member of the faculty since 1994, was named associate director for basic science programs. Her research has focused on the tumor suppressor p53 and the role of cell cycle checkpoint pathways in cancer development and treatment. Pientenpol succeeds **Lawrence Marnett**, who remains as Mary Geddes Stahlman Professor of Cancer Research and director of the A.B. Hancock Jr. Research Center. **Scott Hiebert**, professor of biochemistry, was appointed to succeed Pietenpol as leader of the Cancer Center Research Program in Signal Transduction and Cell Proliferation. . . . **DOLLY ASHTON O'NEAL**, a cancer survivor and a co-founder of the Breast Cancer Research Foundation of Alabama, was appointed director of development for the University of Alabama at Birmingham comprehensive Cancer Center, succeeding **Julia Green**, who resigned. . . . **CHRISTOPHER GARRETT**, assistant professor in the Medical Oncology/Hematology Program at the H. Lee Moffitt Cancer Center & Research Institute, was named medical director of the Clinical Trials Office. . . . **NIH** has begun work on the **John Edward Porter** Neuroscience Research Center, named in honor of the retired Illinois Congressman who was an ardent NIH advocate during his tenure as chairman on the House Subcommittee on Health and Human Services and Education. The design of the 60,000-square foot open floor plan is based on the philosophy of promoting an environment of collaboration among scientists by giving them places to gather. The design of the building was written into a Congressional bill, in recognition of Porter's support for NIH funding increases, which rose 80% during his time as subcommittee chairman, said **Steven Hyman**, provost at Harvard University and former director of NIMH during development of the building project. "The building encompasses a vision of how the neuroscience community should work," said Hyman. . . . **ONCOLOGY NURSING**

SOCIETY presented several awards to its members. **Yeur-Hur Lai,** associate professor and acting dean in the College of Nursing at the Taipei Medical University in Taiwan, is the 2002 recipient of the ONS International Award for Contributions to Cancer Care; **Barbara Damron**, president of Damron Oncology Consulting in Santa Fe, NM, was presented with the ONS Distinguished Service Award; **Karen Stanley,** palliative care nursing consultant in Claremont, CA, will present the 2002 ONS Mara Mogensen Flaherty Memorial Lectureship, at the ONS 27th Annual Congress in Washington, DC, in April. . . . **REP. JOSEPH MOAKLEY** (D-MA) was given a posthumous award by the National Capital Chapter of the Leukemia & Lymphoma Society. Moakley died of leukemia in 2001. His family accepted the award during the society's annual ball on Feb. 23 which raised $2.5 million for research and patient services. "We hope that a major company or foundation will endow a $200,000 annual grant in conjunction with the Congressman Oakley Memorial Award, with the funds applied to a translational research grantee," said **David Timbo**, the society's executive director. The society's Translational Research Program supports clinical research on leukemia, lymphoma and myeloma. . . .

NATIONAL COMPREHENSIVE CANCER NETWORK said its Complete Library of Practice Guidelines in Oncology is available online and on CD-ROM. The guidelines are the result of a rigorous consensus approach that integrates annual review and evaluation of available scientific evidence with the opinion of leading clinicians. The guidelines address the management of over 98 percent of all cancers encountered in oncology practices. "Physicians and other medical professionals now have immediate access to the most current guidelines for oncology treatment, limited only by the time required for review by the NCCN panels," said **Rodger Winn**, chairman of the NCCN Guidelines Steering Committee. The new version includes guidelines for cancer diagnosis and treatment, supportive care, cancer prevention, and early detection. Over 600 oncologists participated in the 44 panels that developed the more than 100 guidelines. "We provide the entire professional oncology community with treatment recommendations based on a blend of evidence-based medicine and the expert medical opinion of our member institutions," said **William McGivney**, NCCN chief executive officer. Copies of the CD-ROM can be ordered online at http://www.nccn.org or by phone at 215-728-4788.

THE CANCER LETTER

Vol. 17 No. 2
February 2002

Business & Regulatory Report

Clinical Trials:

Pharmacia Says SU5416 Doesn't Benefit Colorectal Cancer Patients, Closes Trial

Pharmacia Corp. (NYSE: PHA) of Peapack, NJ, said the company is closing its SU5416 clinical trial program in colorectal cancer under development by its subsidiary, **Sugen Inc**.

The decision is based on the results from a planned interim efficacy and safety analysis of a large phase III study of standard chemotherapy with or without SU5416 advanced stage colorectal cancer, the company

(Continued to page 2)

Product Approvals & Applications:

FDA Approves Novartis Drug Zometa For Multiple Myeloma And Bone Mets

FDA has approved the **Novartis** drug Zometa (zoledronic acid for injection) for multiple myeloma and documented bone metastases from solid tumors, in conjunction with standard antineoplastic therapy. The drug can be used to treat solid tumors, including prostate, breast and lung cancers.

In prostate cancer, patients should have progressed after treatment with at least one hormonal therapy, the company said.

"With this approval, Zometa offers to physicians and patients a new, broadly effective and convenient treatment for the debilitating bone complications of cancer," said David Epstein, president of Novartis Oncology of East Hanover, NJ.

The trials that resulted in FDA approval mark the first time any bisphosphonate has demonstrated efficacy in treating bone complications in patients with prostate cancer, lung cancer and other solid tumors, the company said.

The company said it sponsored the largest set of clinical trials ever conducted to evaluate the efficacy and tolerability of a bisphosphonate in treating the complications associated with cancerous bone lesions. The three trials enrolled more than 3,000 patients.

In two placebo-controlled clinical studies in patients with bone metastases from prostate cancer or from other solid tumors, both the number of patients with skeletal events and the time to first skeletal related event were decreased relative to placebo.

"There is an unmet clinical need to address [bone metastases], especially in patients with prostate cancer, which makes Zometa an important addition to the current standard treatments for men with

(Continued to page 8)

PO Box 9905
Washington DC 20016
Telephone 202-362-1809

Pharmacia Closes Phase III Trial Of Sugen's SU5416

(Continued from page 1)

said. The analysis shows that the study will not achieve the defined trial endpoints due to a lack of clinical benefit.

"We remain confident in the vascular endothelial growth factor receptor (VEGF-R) target and anti-angiogenic therapy for cancer," said Laura Shawver, president of Sugen Inc.

SU5416, a small molecule angiogenesis signaling inhibitor, was designed to block the VEGF-R in the blood vessels, the company said.

Based on research validating the role of VEGF-R in cancer development, additional studies have evaluated SU5416 in solid tumors and hematologic cancers, including trials sponsored by NCI, the company said.

"Angiogenesis inhibitors remain a promising new way to attack cancer," said Lee Rosen, of the Jonsson Cancer Center at UCLA and lead investigator for the SU5416 trial. "It is critical to recognize that the results of these trials do not invalidate the VEGF-R target or the entire angiogenesis field. Instead, we will take what we have learned from SU5416 in order to develop the next generation of compounds and studies."

* * *

BioStratum Inc. of Research Triangle Park, NC, said it has filed an Investigational New Drug application for the cancer drug candidate, Angiocol, and has received clearance by FDA to proceed to phase I trials.

Angiocol is a recombinant protein derived from the non-collagenous domain of type IV collagen. In preclinical studies, it has been shown to inhibit new blood vessel growth, as well as tumor growth, in in vitro and in vivo models by targeting the assembly and organization of the vascular basal lamina, the company said.

* * *

Merck KgaA of Darmstadt, Germany, said its European studies for the cancer treatment C225 (cetuximab, Erbitux) are continuing as planned.

Merck has licensed the rights for C225 outside North America, except for Japan, where Merck KGaA, **Bristol-Myers Squibb** and **ImClone Systems Inc.** (Nasdaq: IMCL) have development and commercialization rights.

In December, ImClone received a Refusal to File letter from FDA for C225 for advanced colorectal cancer. The Merck application for C225 in Switzerland, expected to be its first in Europe, may be delayed, since the filing was based on ImClone's U.S. application, the company said.

"Merck KGaA is conducting its own multi-center, controlled studies with C225 in Europe," said Matthew Emmens, head of Ethical Pharmaceuticals at Merck. "The studies are designed to determine the safety and efficacy of the drug in both head-and-neck and colorectal cancer. We continue to feel that C225 is a promising agent that may offer a valuable therapeutic option for patients with certain types of cancer. Our studies and the application process generally remain on schedule."

Merck KGaA is conducting multi-center European trials that include pivotal clinical trials in patients refractory to cisplatinum in head-and-neck cancer, and irinotecan in colorectal cancer.

The pivotal trial in head-and-neck cancer (Merck 001) evaluates C225 added to cisplatin or carboplatin in patients who have shown disease progression on the same dose and schedule of platinum, the company said. The trial requires that patients have documentation of progression either by computerized tomography or magnetic resonance imaging prior to inclusion.

Pre-study CTs and MRIs are collected and are independently reviewed to assure appropriateness of patient selection. Imaging studies documenting benefit are collected and reviewed by an independent panel.

THE CANCER LETTER

Member, Newsletter and Electronic Publishers Association

World Wide Web: http://www.cancerletter.com

Business & Regulatory Report

Publisher: Kirsten Boyd Goldberg
Editor: Paul Goldberg
Editorial Assistant: Shelley Whitmore Wolfe

Editorial: 202-362-1809 Fax: 202-318-4030
PO Box 9905, Washington DC 20016
E-mail: paul@cancerletter.com

Customer Service: 800-513-7042
PO Box 40724, Nashville TN 37204-0724

Business & Regulatory Report is a supplement to The Cancer Letter and available separately for $185 per year. ISSN 1053-9611.

The trial has completed recruitment. The company is also sponsoring a trial of C225 as a single agent in platinum-refractory head-and-neck cancer. The trial (Merck 016) uses the same strict inclusion criteria and quality control measures as trial 001, the company said.

To support the filing for colorectal cancer, Merck KGaA initiated enrollment in a large randomized multi-center trial for irinotecan-refractory colorectal cancer during July 2001, the company said.

Strict inclusion criteria, including collection and review of all pre-study CTs or MRIs, are used for this trial. Patients are randomized to receive either single agent C225 or C225 plus the same dose and schedule of irinotecan to which the patient was refractory. A total of 225 patients will be recruited for this trial.

Additional data from two ongoing phase I/II studies in colorectal cancer are being conducted using C225 as first-line therapy (combined with irinotecan/folinic acid and 5-FU), the company said. There also are data from an ongoing pharmacokinetic study, which specifically investigates possible pharmacokinetic interaction between C225 with the activation of irinotecan to SN38.

* * *

MGI Pharma Inc. (Nasdaq:MOGN) of Minneapolis and **MethylGene Inc.** of Montreal said they have begun a clinical trial of MG98, a second-generation antisense inhibitor of DNA methyltransferase, for advanced myelodysplasia or relapsed/refractory acute myeloid leukemia.

The trial will assess the safety and pharmacokinetic profiles of MG98, define the optimal effective dose of MG98, and document both the biological and clinical effects of MG98 for advanced MDS and relapsed or refractory AML, the company said.

Up to 50 patients will participate, with the enrollment period lasting 12 months.

MG98 is an oligonucleotide that targets mRNA for the enzyme DNA methyltransferase, which is responsible for silencing tumor suppressor genes, the company said. The companies said they are developing MG98 to block production of DNA methyltransferase.

Preventing DNA methyltransferase production may allow tumor suppressor genes that have been silenced by hypermethylation to be re-activated, the companies said. Re-activation of tumor suppressor genes is intended to stop or slow tumor growth by restoring growth control mechanisms. MG98 is well tolerated and has demonstrated anti-cancer activity in phase I trials, the company said.

"Patients with advanced MDS or AML may be ideal candidates to benefit from this novel new agent," said John Byrd, D. Warren Brown Professor in Leukemia Research and director of Hematologic Malignancies, Division of Hematology-Oncology at the Arthur James Comprehensive Cancer Center. "Hypermethylation of tumor suppressor genes is common in many cancers, and has been particularly associated with the clinical progression from MDS to AML. More specifically, hypermethylation of the p15 tumor suppressor gene has been found in the majority of patients with advanced MDS, and in nearly all of the patients with AML arising from MDS.

"We are eager to test the hypothesis that reversal of methylation of these tumor suppressor genes may slow or halt the progression of MDS, or in the case of AML, render the disease more susceptible to standard treatments," Byrd said. "It's an exciting experimental approach to cancer therapy."

* * *

Northwest Biotherapeutics Inc. (Nasdaq: NWBT) of Bothell, WA, said FDA has reviewed the company's Investigational New Drug application for a dendritic cell-based immunotherapy, allowing the company to begin a phase II trial in glioblastoma multiforme.

Deals & Collaborations:

American Home Products Changes Name To Wyeth

American Home Products of Madison, WI, is changing its name to **Wyeth** (NYSE: WYE). Starting in March, the company will be known as Wyeth, for its biggest division, Wyeth-Ayerst Laboratories, based in St. Davids, PA.

* * *

Beyond Genomics Inc. of Waltham, MA and **diaDexus Inc.** of South San Francisco said they have entered into an agreement to apply the Beyond Genomics systems biology approach to the diaDexus cancer diagnostic and drug discovery research.

The research program will identify biomarkers and drug targets for the diagnosis and treatment of colon, breast and ovarian cancers, the companies said.

Under the agreement, diaDexus made an equity investment in BG, and will provide research funding

for the program, the companies said. The agreement also provides for milestone and royalty payments on products resulting from the research.

The research agreement calls for BG to analyze normal and cancerous samples using a combination of high-throughput, next-generation proteomic technologies to identify and characterize new cancer targets, the companies said. diaDexus will provide genomic analyses related to the new targets. BG will also use proprietary pattern recognition, clustering and data mining software to integrate and analyze the data.

"We believe that Beyond Genomics' unique platform for protein expression profiling complements our genomic profiling techniques, and has the potential to identify, directly at the protein level, new markers and targets that may ultimately lead to earlier diagnosis and better treatment of major cancers," said Ronald Lindsay, vice president, research and development and chief science officer of diaDexus.

* * *

British Biotech plc (LSE: BBG, Nasdaq: BBIOY) of Oxford, England, and **MethylGene Inc.** of Montreal said they have entered into a collaboration granting British Biotech the European development and commercialization rights for MG98, the MethylGene experimental anti-cancer drug, in phase II development in North America.

British Biotech said it has been granted an exclusive one-year option, renewable for a second year, to license preclinical compounds from the MethylGene complementary small molecule DNA Methyltransferase inhibitor program for cancer.

MG98 is a second-generation, antisense compound, the company said. It is designed to disrupt the production of DNA MT, an enzyme that is implicated in uncontrolled tumor growth, by inhibiting its expression.

MG98 is in two phase II trials in North America, in head and neck cancer and renal cell carcinoma, and one phase I trial in advanced myelodysplasia and relapsed/refractory acute myeloid leukemia, the company said.

The trials are being conducted by MethylGene and MGI Pharma Inc. to whom the North American development and commercialization rights for MG98 were granted by MethylGene in August 2000. MG98 is one of the first second-generation antisense compounds to advance into phase II trials, the company said.

MG98 was well tolerated in phase I, dose-escalation trials in a variety of solid tumors and a partial response and prolonged stable disease were observed.

In another development, British Biotech said it is conducting a phase II trial of E21R in the UK for acute myeloid leukemia. In addition, BresaGen is conducting a phase II efficacy trial in Australia for chronic myelomonocytic leukemia, the company said.

A phase II study into the treatment of Rheumatoid Arthritis has also been approved and is expected to begin in Australia in the first quarter of 2002, the company said.

Under the arrangement with British Biotech, BresaGen is responsible for the manufacture of materials for clinical trials and commercial supply, the company said. British Biotech has a worldwide license to commercialize E21R for all indications.

E21R, which was discovered at the Hanson Centre for Cancer Research in Adelaide, is a modified version of the cytokine GM-CSF, the company said. It has been shown to be active against leukemia cells expressing GM-CSF receptors such as AML, CMML and juvenile myelomonocytic leukemia, the company said.

* * *

ComGenex Inc. of Budapest and **Echelon Research** of Salt Lake City said they have entered into a drug discovery alliance for inhibitors of lipid kinases and phosphatases.

ComGenex will provide its drug discovery chemistry capabilities, including high throughput synthesis, analysis, ADME/Tox predictions, chemo-informatics and chemogenomics technologies, the companies said. Echelon will employ proprietary high-throughput screening assays to identify compounds that inhibit lipid kinase and phosphatase enzyme targets.

Under the agreement, the companies will jointly own the commercialization rights to any drug candidates that emerge.

"This discovery alliance is part of our long-term strategy to apply our in house drug discovery expertise in order to move downstream and to create an IP portfolio for potential products", said Laszlo Urge, CEO of ComGenex. "During the years we have built drug discovery capabilities that address the key factors for productivity in discovery. We are using this capability in a variety of business models that range from fee-for-service to shared risk and revenues, like this collaboration with Echelon. We think that there is a strong synergy between Echelon's biology and our chemistry expertise."

* * *

Cytyc Corp. (Nasdaq:CYTC) of Boxborough, MA, and **Digene Corp.** (Nasdaq:DIGE) of Gaithersburg, MD, said they have signed a definitive agreement for Cytyc to acquire Digene in a stock and cash tender offer transaction.

The transaction furthers the Cytyc mission to become the leading developer and manufacturer of products for the diagnosis of women's cancers and infectious diseases, the company said.

Cytyc said it would issue 23 million shares of common stock and pay $76.9 million in cash for all outstanding equity of Digene Corp. (calculated on a fully diluted basis using the treasury stock method). Each Digene shareholder will receive $4 per share in cash, plus 1.1969 shares of Cytyc common stock for every share of Digene common stock.

The transaction is expected to be $0.04 to $0.05 per share dilutive to the Cytyc 2002 earnings and accretive in 2003 and beyond, the companies said. In addition, the transaction is expected to result in a one-time charge of up to $65 million, largely for in-process R&D. The acquisition is subject to the tender of over 50 percent of the Digene stock, regulatory approval and other customary closing conditions, and is expected to close during the second quarter of this year. The acquisition will be structured as a tax-free reorganization.

"The Cytyc ThinPrep Pap Test is fast becoming the method of choice for cervical cancer screening and the Digene Hybrid Capture 2 HPV Test is the clear standard for the identification of human papillomavirus, which is the cause of greater than 99 percent of cervical cancer cases," said Patrick Sullivan, CEO, vice chairman, and chairman-elect and CEO of Cytyc.

* * *

Immuno-Designed Molecules S.A. and **Sanofi-Synthelabo S.A.** said Sanofi is exercising its first option to develop and market the IDM cell drug known as IDD3 for melanoma.

The Sanofi-Synthelabo decision to exercise the option triggers the payment of milestones, the reimbursement of clinical development costs incurred by IDM for the cell drug as well as the reimbursement of the clinical development program as it moves forward, the company said.

"Sanofi-Synthelabo's first selection of one advanced cell drug in such a short period of time following the conclusion of our agreement clearly demonstrates its commitment to making a number of our cell drugs part of its therapeutic portfolio," said Jean-Loup Romet-Lemonne, president and CEO of IDM. "At IDM we have already launched an organized program that should bring this cell drug to the marketplace in a competitive time-frame."

* * *

MDS Pharma Services Inc. (Toronto: MDS; NYSE: MDZ) of Montreal and **Iconix Pharmaceuticals Inc.** announced achievement of the initial milestone in product development for the commercial launch of DrugMatrix, a research tool in the emerging field of chemogenomics that enables researchers to select the leads and drug candidates at the earliest, most cost-effective stages of drug discovery and development.

DrugMatrix is the result of a collaboration between Iconix and MDS Pharma Services, together with commercialization partner Incyte Genomics Inc. (Nasdaq: INCY). The three DrugMatrix collaborators have brought together the previously isolated fields of chemistry, genomics, toxicology and pharmacology in a single, integrated research tool.

DrugMatrix profiles the interactions between chemicals and the genome, linked with probable pharmacologic outcomes and integrates the pharmacopoeia of approved pharmaceuticals and failed drug molecules by profiling them in tens of thousands of standardized expression array and molecular pharmacology experiments. The system is supported with extensive scientific literature annotation on known drug pharmacology, toxicology, and pathway interactions.

Iconix and MDS Pharma Services are collaborating in the generation of the DrugMatrix experimental data sets, leveraging Iconix's expression array profiling and informatics expertise and MDS Pharma Services library of pharmacology assays and pharmacology consultants, the companies said.

The first commercially available version of the DrugMatrix product to be released this month includes extensive chemogenomic profiles on over 300 pharmaceutical drugs, failed drugs, known toxicants and standard biochemicals. This DrugMatrix content is made available through a web-based user interface enhanced by sophisticated data mining tools.

"The future of drug discovery lies in the broader and more complete analysis of a drug candidate's potential biological effects before expensive animal and human clinical testing takes place," said Doug Squires, president and CEO of MDS Pharma Services. "We have applied our molecular pharmacology and

screening expertise in an entirely new way in helping to develop DrugMatrix — to create a body of experimental knowledge across drug diversity that bridges chemistry, genomics, toxicology and pharmacology."

Oncology Management:

Three Institutes To Test BioMicro's Microarray Product

BioMicro of Salt Lake City announced an agreements with NCI, Huntsman Cancer Institute, and the Buck Institute for Age Research to evaluate its Microarray User Interface hybridization product.

The three sites will test BioMicro's MAUI, micro fluid analysis product used to expedite the drug discovery process by obtaining reliable, consistent and sensitive results from microarray hybridization, the company said.

MAUI revolutionizes a critical step in widely-used gene expression experiments by mixing very low volume, highly concentrated solutions on the surface of a microarray. Pharmaceutical companies and academic institutions run experiments on microarrays to discover the nature of diseases and the efficacy of therapeutic regimes under investigation. MAUI has shown a dramatic three-fold improvement in sensitivity for low abundance genes compared to traditional cover slip hybridization methods of gene expression analysis, the company said.

"Until MAUI, typical problems with other microarray hybridization systems include unreliability, inconsistency and poor sensitivity," said Michael McNeely, president and CEO of BioMicro Systems. "These problems are caused by leaking, poor sample distribution, out gassing, contamination and scratches from cover slip movement."

McNeely said the company expects to have data from the alpha evaluators within the next two months.

* * *

Impac Medical Systems Inc. of Mountain View, CA, said it has launched its multi-access application service provider and the installation of its first ASP client, **Elmhurst Hospital Center / Mount Sinai Radiation Oncology Services** in Elmhurst, NY.

Multi-access ASP allows Elmhurst Hospital Center / Mount Sinai Radiation Oncology Services to operate the Impac practice management and integrated medical billing service over the Internet from the central data center, the company said.

The integrated management system, includes full-featured registration, scheduling, and charge-capture without having to worry about server hardware installation or maintenance. Impac said it also offers an integrated electronic medical record system with MA ASP.

"The service enables us to utilize our existing Internet PC desktops without having to invest in additional IT capital or build additional infrastructure," said Jenneta Walsh-Earle, practice manager, Elmhurst Hospital Center / Mount Sinai Radiation Oncology. "Plus, the service allows our staff to perform and function without noticeable differences to utilizing a traditional internally hosted system."

The Impac ASP services include server hardware maintenance, daily data backups and off-site tape storage, as well as software upgrades, the company said. With upcoming HIPAA legislation requiring stringent standards of data security, MA ASP services also include the maintenance of state-of-the-art firewalls to prevent unauthorized data access, plus 128-bit data encryption on all electronic data communications.

* * *

Siemens Medical Solutions of Mountain View, CA, a subsidiary of **Siemens AG** (NYSE: SI) of Iselin, NJ, and Erlangen, Germany, said it has been awarded a two-year, $1.98 million research contract from NCI to develop and evaluate a research interface to give researchers more access to imaging options and to the raw data gathered by ultrasound systems.

The interface will be developed for SONOLINE Antares, an ultrasound platform introduced by the company in mid-2001, and may be applied to other products, the company said.

"By funding contracts such as this one, it is clear that NCI recognizes the importance of giving researchers the tools they need to investigate new diagnostic imaging methods," said John Pavlidis, president of the Siemens Medical Solutions Ultrasound Division. "This research interface will put advanced capabilities—previously only available to corporate R&D groups—in the hands of ultrasound researchers worldwide. This could lead to a new wave of valuable ultrasound innovations, similar to what happened in MRI, when such research tools became widespread more than a decade ago."

"We intend to create an alternate user interface that will make it easier for researchers to control the ultrasound system as a research tool, while maintaining its full capabilities as a clinical machine," said Levin Nock, project manager. "In addition, we will include

functionality to allow raw data to be taken from the machine after the image data is acquired, but prior to regular processing, so that the researchers can conduct their own processing and extract new information that would be unavailable via regular channels."

"The interface will allow researchers and scientists in a broad range of areas—from cancer research to animal fertility to space biomedicine—to use the exquisite image quality and sensitivity of an ultrasound scanner like the Antares in a myriad of flexible ways, even those unanticipated by the system's designers," said Gregg Trahey, professor of Biomedical Engineering at Duke University, who also will lead the evaluation team. "The creation of this ultrasound user interface is motivated by goals and ideals similar to those leading to public distribution of the human genome: broad distribution and open sharing of scientific tools and knowledge will lead to technical innovation and scientific progress in ways unimaginable to the creators of those tools."

For the first 12 to 18 months of the contract, Siemens will develop software for the interface and generate user manuals to support its distribution to the research community, the company said.

During the final months, Siemens will partner with Duke University and the University of Rochester to evaluate and polish the final software package.

The NCI-funded research project is expected to result in a commercially available package.

* * *

Sutter Health, a not-for-profit healthcare system based in Northern California, has selected Sunrise Clinical Manager and its Knowledge-Based Orders capabilities from **Eclipsys Corp.** (Nasdaq:ECLP), as Sutter Health's system-wide computerized physician order-entry (CPOE) solution and the foundation of its longitudinal patient record.

Clinical Manager was selected as a critical component of the Sutter to reduce the potential for avoidable medical errors.

"Sunrise Clinical Manager was the clear choice of our physicians, nurses, pharmacists and other members of the Sutter Health team," said John Hummel, vice president of information systems and chief information officer. "As we evaluated the system against others on the market, it was the one that stood apart for being well designed for clinicians with a workflow that made sense from their perspective."

In the project's first phases, Clinical Manager will be installed in seven Sutter Health facilities, replacing a variety of existing systems.

Patents:

GlycoDesign Allowed Patent For Cancer Drug GD0039

GlycoDesign Inc. (TSE:GD) of Toronto said it has received a notice of allowance from the U.S. Patent and Trademark Office for its GD0039 patent application for cancer.

The allowed application includes claims to GD0039 per se; compositions comprising GD0039; a method for preparing GD0039; and, methods of treatment using GD0039, the company said. GlycoDesign said it has received acceptances for the corresponding Europe and Australian applications, and it has pending applications in other key countries.

GlycoDesign said it has U.S. patents and pending applications covering methods for preparing GD0039.

GD0039 is an orally administered drug whose mechanism of action blocks the production of specific carbohydrates that are important for cancer metastasis, the company said. The drug also stimulates the immune system and offers effectiveness with fewer side effects.

In November 2001, expanded phase II clinical trials for GD0039 were initiated for metastatic renal cancer, the company said. Patients are being enrolled at the Institut Gustave Roussy in Paris, and at the University of Chicago and the Cleveland Clinic in the U.S.. Recently released survival data from 18 metastatic renal cancer patients enrolled in the first phase II trial indicate that current median survival is 17.2 months, the company said. The expected median survival for patients with metastatic renal cancer is often cited at less than 12 months.

GlycoDesign said it would continue to monitor the nine surviving patients, the company said.

Product Approvals:

Zometa Cleared For Marketing For Myeloma, Bone Mets

(Continued from page 1)

advanced prostate cancer," said Matthew Smith, Assistant Professor of Medicine at Harvard Medical School, Massachusetts General Hospital.

Novartis initially received marketing clearance for Zometa in the treatment of hypercalcemia of malignancy in the European Union and more than 60 countries, including the US.

The most commonly reported adverse events include flu-like syndrome (fever, arthralgias, myalgias,

skeletal pain), fatigue, gastrointestinal reactions, anemia, weakness, cough, dyspnea, and edema, the company said.

Occasionally, patients experienced electrolyte and mineral disturbances, such as low serum phosphate, calcium, magnesium and potassium. Also, the drug has been associated with renal insufficiency.

Additional information is available at www.novartisoncology.com

* * *

Amgen (Nasdaq:AMGN) said that FDA has approved Neulasta (pegfilgrastim) in non-myeloid malignancies receiving myelosuppressive anticancer drugs.

Neulasta is administered as a single fixed dose per chemotherapy cycle, for decreasing the incidence of infection, as manifested by febrile neutropenia, the company said.

Neulasta will be available in early April, the company said.

"The less frequent dosing of Neulasta means that patients will require fewer painful injections, fewer office visits for those injections and fewer disruptions to their lives at a time when they are overwhelmed with a serious disease," said Frankie Ann Holmes, lead trial investigator and associate director of research at U.S. Oncology in Houston. "This approval means that hundreds of thousands of chemotherapy patients at risk for infection may now receive Neulasta as protection at the onset of each treatment cycle before complications arise."

Data from two pivotal phase III studies in breast cancer patients (n=310 with 100 mcg/kg dose; n=157 with fixed 6 mg dose) demonstrated a single dose of Neulasta provided protection from infection comparable to a mean of 11 daily injections of NEUPOGEN (5 mcg/kg/day), reducing both the duration of severe neutropenia and the frequency of neutropenia with fever, the company said.

The randomized, double-blind trials were conducted in breast cancer patients undergoing up to 4 cycles of chemotherapy with doxorubicin and docetaxel. D

Data from phase II studies for various malignancies undergoing a variety of chemotherapy regimens further support the safety and efficacy of Neulasta, the company said.

The studies for with breast cancer, thoracic tumors (including lung cancer), non-Hodgkin's lymphoma and Hodgkin's disease showed efficacy of a single injection of Neulasta (100 mcg/kg) that was similar to daily injections of Neupogen (5 mcg/kg/day).

* * *

Howtek Inc. (Nasdaq: HOWT) of Hudson, NH, said **CADx Medical Systems**, a subsidiary of **Shire Pharmaceuticals Group plc** (LSE: SHP.L, Nasdaq: SHPGY, TSE: SHQ), has received screening and diagnostic use approval from FDA for its second look computer-aided detection system for mammography.

A high-resolution MultiRAD medical film digitizer manufactured by Howtek for CADx is included as a component of the system, the company said.

"Second look helps radiologists identify subtle changes in tissue that may indicate the presence of cancer," said Greg Arnsdorff, president of CADx Medical Systems. "The system easily integrates with existing radiology practices, and is highly effective at boosting detection rates."

The data were generated from a large, multicenter trial of 9,000 patients performed at 18 medical institutions across the U.S, the company said. In the clinical trials, 26.2 percent of breast cancers missed would be detected with the use of Second Look.

"The key to effective treatment for many women with breast cancer often relies on finding cancerous tumors early, before they spread to other parts of the body," said Rachel Brem, director of Breast Imaging and Intervention at George Washington Medical Center. "Since mammography is the most powerful tool we have to detect breast cancer early, every improvement in accuracy and sensitivity has important ramifications for our patients and medical practice. Taking a 'second look' at suspicious tissue means more lives could be saved."

The system provides radiologists with a computerized second review of mammograms by using software to highlight areas of concern on a Mammagraph report, the company said.

After viewing a mammogram, the radiologist refers to the Mammagraph to assist in the course of treatment.

The Second Look system does not require patients to undergo any additional procedures nor does it significantly increase work for radiologists, the company said.

The second look computer-aided detection technology is reimbursable, and 2002 Federal Medicare levels will provide $17.74 per patient, the company said.

Copying Policy for The Cancer Letter Interactive

The software that comes with your issue allows you to make a printout, intended for your own personal use. Because we cannot control what you do with the printout, we would like to remind you that routine cover-to-cover photocopying of The Cancer Letter Interactive is theft of intellectual property and is a crime under U.S. and international law.

Here are guidelines we advise our subscribers to follow regarding photocopying or distribution of the copyrighted material in The Cancer Letter Inc. publications in compliance with the U.S. Copyright Act:

What you can do:

--Route the printout of the newsletter to anyone in your office.

--Copy, on an occasional basis, a single story or article and send it to colleagues.

--Consider purchasing multiple subscriptions. Contact us for information on multiple subscription discounts.

What you can't do without prior permission:

--Make copies of an entire issue of the newsletter. The law forbids cover-to-cover photocopying.

--Routinely copy and distribute portions of the newsletter.

--Republish or repackage the contents of the newsletter.

We can provide reprints for nominal fees. If you have any questions or comments regarding photocopying, please contact Publisher Kirsten Boyd Goldberg, phone: 202-362-1809, email: kirsten@cancerletter.com

We welcome the opportunity to speak to you regarding your information needs.

Click Here for
Photocopying Guidelines