



iuscc research news

December 2008

IUSCC researchers lead novel ovarian cancer clinical trial

Ovarian cancer patients over time become resistant to the drug carboplatin, which currently represents the best treatment option.

Researchers at the IU Simon Cancer Center are conducting a clinical trial that may reverse that resistance.

Daniela Matei, MD, is looking into ways to make patients with recurrent ovarian cancer that have developed a resistance to the platinum-based carboplatin sensitive again to platinum.



Matei

In a novel phase 2 clinical trial sponsored by the National Cancer Institute, Matei, Kenneth Nephew, PhD, and colleagues will treat patients with recurrent ovarian cancer with a combination of carboplatin and decitabine.

"The idea behind the trial is to try to make tumors that are resistant to carboplatin sensitive to platinum again by using an additional drug, decitabine," Dr. Matei said. "Decitabine works directly on the DNA and causes demethylation, a chemical modification, of the DNA," Dr. Matei said. "We hope this process makes the tumors sensitive again to platinum."



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Farag is PI for multiple myeloma study

Sherif Farag is the PI of a phase I study of a novel kinase inhibitor, ENMD-2076, in refractory multiple myeloma patients.

The primary objectives for the dose escalation study include determining the maximum tolerated dose and dose limiting toxicity of ENMD-2076 when administered orally once a day in patients with multiple myeloma who are refractory to other drug therapy. The study will also assess the safety, tolerability, pharmacodynamic effects, and activity of ENMD-2076.

Dr. Farag presented preclinical data supporting the clinical evaluation of ENMD-2076 alone and in combination in multiple myeloma at the American Society of Hematology Annual Meeting in San Francisco in early December. ENMD-2076 was shown to induce rapid apoptosis (cell death) in multiple myeloma cell lines *in vitro*. Significant dose-dependent antitumor activity with minimal toxicity was also induced *in vivo* when ENMD-2076 was administered as a single agent in multiple myeloma models.



Farag

Combination studies with ENMD-2076 and lenalidomide (Revlimid) *in vitro* indicated synergistic cytotoxic activity towards several human multiple myeloma cell lines.

ENMD-2076 was shown, both *in vitro* and *in vivo*, to have minimal toxicity towards human and murine hematopoietic progenitor cells, which are essential for maintenance of an active immune system.

The study was initiated by EntreMed, a clinical-stage pharmaceutical company developing therapeutics for the treatment of cancer and inflammatory diseases.

Mark R. Bray, PhD, EntreMed vice president of research, said, "With our ongoing study in solid tumors progressing well, coupled with the initiation of the multiple myeloma study, our ENMD-2076 program is gaining substantial momentum. The work of Dr. Farag and his colleagues has provided important insights into the mechanism of action of ENMD-2076 and has strongly supported the rationale for clinical investigation of the drug candidate in hematologic malignancies such as multiple myeloma."



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News Briefs

New IUSCC building wins another award

The new patient building of the IU Simon Cancer Center has earned another award. At the recent International Interior Design Association's IDEA Celebration, Maregatti Interiors took the overall best of show award and first place in the healthcare and assisted living category. "Beautiful, healing, uplifting spaces which are appealing and welcoming to the family, patient, and medical staff," the judges said of the building. Last month, the new building captured the coveted Monumental Award, presented by Keep Indianapolis Beautiful Inc., as the most significant project of the year in Marion County.



Volunteer's watercolor wins Oncology on Canvas prize

John Gianfagna -- a volunteer with [Creating Hope](#) who is at the cancer center each Tuesday and Thursday with his wife, Tina -- recently won a cash prize in the third biennial Oncology on Canvas: Expressions of a Cancer Journey Art Competition and Exhibition presented by Eli Lilly and Co. in partnership with the National Coalition for Cancer Survivorship. Gianfagna's entry (below), which was designated "Best Watercolor by a Family Member, Friend or Caregiver," depicts three stages: pain, diminishing the pain, and replacing the pain. Gianfagna donated his prize to Creating Hope. Gianfagna's daughter Jeanette died of breast cancer in 2003. In all, Lilly Oncology on Canvas awarded 26 prizes to 22 cancer charities selected by the 19 winners in various categories. Oncology on Canvas was created by Lilly in 2004 to honor the journeys people face when confronted by a cancer diagnosis. The competition invites people diagnosed with any type of cancer -- and their families, friends, caregivers and health care providers -- to express, through art and narrative, the life-affirming changes that give their cancer journey meaning.



Gianfagna's winning entry

IUSCC members in the news

- **Nasser Hanna, MD**, writes in the Dec. 10 issue of the *Journal of Clinical Oncology* (JCO) that he and his colleagues found that patients with stage 3 non-small lung cancer who have been treated with chemotherapy and radiation (given concomitantly) do not experience longer survival with the addition of subsequent chemotherapy immediately after the completion of their radiation. A 2001 phase II study with 83 patients conducted by the Southwest Oncology Group suggested that the additional chemotherapy did improve outcomes. In 2003, the Hoosier Oncology Group (HOG), of which Dr. Hanna serves as chair, in collaboration with U.S. Oncology, initiated a phase III clinical trial to test whether the additional chemotherapy was responsible for the improved outcomes. The trial enrolled 243 patients and found "absolutely no improvement in cure rates or survival," Dr. Hanna said. "The additional treatment resulted in more patients requiring hospitalization, increased pulmonary toxicity, and febrile neutropenia, and, unfortunately, more premature deaths." [Read](#) the JCO article.
- **Lisa Hess, PhD**, has been appointed a member of the Quality of Life Committee with the Philadelphia-based Gynecologic Oncology Group. Also, a book -- "Fundamentals of Cancer Care" -- she co-edited was published in October.
- **David Haggstrom, MD**, received a grant from the Lance Armstrong Foundation (LAF) on Dec. 16 for "Disparities in Access to Cancer Follow-up Care and Personal Health Records." Studies show that large disparities exist in follow-up care among cancer survivors, especially among rural, low socioeconomic and other vulnerable survivor populations. Haggstrom's study aims to develop a Web-based treatment summary and survivorship care plan for survivors of colorectal cancer to improve follow-up care outcomes and reduce disparities. The LAF awarded nearly \$2 million with 11 grants to leading research institutions in the United States and Australia. The foundation, which has invested \$21 million in research grants in its 10-year history, aims to fund research that meets the needs of underserved populations and encourages and supports the efforts of both established professionals in the field

and young investigators in the early stages of their research careers.

New Grants

Wade Clapp

Fanconi Anemia Stem Cells Allow Molecular Characterization of Acute Leukemia
NIH-NCI

Susan Clare

Delivery of Nanovectors to Hypoxic Areas of Breast Tumors Using a "Trojan Horse"
Breast Cancer Research Foundation

Brittney-Shea Herbert

Inhibition of Ovarian Cancer by microRNA-mediated Regulation of Telomerase
U.S. Department of Defense