

Surgical Oncology Research at Mercy Medical Center

The department of surgical oncology at Mercy Medical Center, a peritoneal surface malignancy center, is led by Dr. Armando Sardi, who is regarded as a leader in the field of cytoreductive surgery with hyperthermic intraperitoneal chemotherapy (CRS/HIPEC). Peritoneal surface malignancies are tumors which have spread throughout the abdominal cavity. Cytoreductive surgery is the surgical removal of the tumors and HIPEC refers to the heated chemotherapy “wash” that is performed during the surgery. HIPEC is performed after the surgeon has removed all visible tumors. CRS/HIPEC is a proven surgical procedure to treat peritoneal carcinomatosis from peritoneal mesothelioma, appendiceal, colon, and advanced ovarian cancers.

Dr. Armando Sardi, Director of The Institute for Cancer Care at Mercy, and his colleague, Dr. Vadim Gushchin, Director of Gastrointestinal Cancer, perform CRS/HIPEC on a regular basis and work closely with a clinical team to provide the best possible care for patients. Our surgical team is widely recognized for their expertise in HIPEC at both national and international levels.

As a private hospital, without academic research support, we often do not qualify for large grants opportunities. We rely on patient and donor funding, along with the support of the annual Heat It to Beat It event. Heat It to Beat It www.heat-it.org is a patient-led walk to raise funding to support and advance research, awareness, and education for peritoneal carcinomatosis.

Philanthropic support helps to fund our major clinical trials, which include:

1) **Topic:** Ovarian, Fallopian Tube, and Primary Peritoneal Cancers

Short Name: Ovarian HIPEC Study

Study Name: A phase II randomized study: Outcomes after cytoreductive surgery (CRS) with or without carboplatin hyperthermic intraperitoneal chemotherapy (HIPEC) followed by systemic chemotherapy with carboplatin and paclitaxel as initial treatment of ovarian, fallopian tube, and primary peritoneal cancer

Summary: We are the first institution in the United States to study the role of cytoreductive surgery with hyperthermic intraperitoneal chemotherapy (CRS/HIPEC) for women newly diagnosed with ovarian, fallopian tube, or primary peritoneal cancers. There is literature involving CRS/HIPEC in the role of recurrent disease, however, there are no trials or data on its role as a primary treatment option. The purpose of this phase II trial is to determine the toxicity and post-operative complications related to cytoreductive surgery with hyperthermic intraperitoneal chemotherapy (CRS/HIPEC) as an initial treatment option for patients with ovarian, fallopian tube, or primary peritoneal cancers and its impact on quality of life.

Clinical Trials ID #: NCT02124421

2) **Topic:** Appendiceal Cancer

Short Name: Antibiotic Study

Study Name: Clinical Trial to Define the Effect of Perioperative H. Pylori Eradication with Antibiotic Treatment on the Long Term Outcomes of Patients with Pseudomyxoma Peritonei of appendiceal origin undergoing Cytoreductive Surgery with Hyperthermic Intraperitoneal Chemotherapy (CRS/HIPEC)

Summary: This study is a phase II, open label, historical controlled study to determine the impact of antibiotic therapy on disease progression and overall survival of the patients with Pseudomyxoma Peritonei (PMP). The study will examine the use of the antibiotic PREVPAC, in patients undergoing CRS/HIPEC for appendiceal neoplasms with peritoneal dissemination and its effect on patient outcomes and survival.

Clinical Trials ID #: NCT02387203

3) **Topic:** Appendiceal Cancer, Gastrointestinal Microbiome

Short Name: Microbiome Study

Study Name: A cohort study of the gastrointestinal microbiome in appendiceal cancer with peritoneal spread

Summary: The primary aim of the study is to determine whether the gastrointestinal microbiome of appendiceal cancer patients with peritoneal spread differs from a healthy, age-matched cohort of the American population. Patients scheduled to undergo cytoreductive surgery with hyperthermic intraperitoneal chemotherapy (CRS/HIPEC) will provide fecal samples pre and post-operatively. This is a collaborative study with the University of California, San Diego and Rob Knight, PhD who will perform the genetic analysis of samples provided.

Clinical Trials ID #: NCT02599116

Other areas of research interest include peritoneal mesothelioma, thyroid cancer, gynecologic malignancies, neuroendocrine tumors, and melanomas.

Research Scholar Program

Philanthropic support funds the research scholar program. It is a one year structured and experimental training program with rigorous activities that engages the scholar in the theoretical and practical aspects of research. The program uses a guided approach to help develop skills that promote a lifetime of learning, which is essential to balancing the science and practice of medicine. It fosters intellectual involvement in research problem solving and provides hands-on research experiences.

Our primary research focus is on increasing awareness of and reporting our experience with cytoreductive surgery with HIPEC. The scholar concentrates on data abstraction, analysis, and writing for the development of manuscripts for publication in major medical journals, as well as presentation at national/international symposiums. Over the past 3 years, we have presented in both the US and Europe with the publication of over 20 manuscripts in medical journals.