



Team Progress Updates

Gastric Interception Research Team:

“SU2C Gastric Cancer Interception Research Team: Early Detection and Interception of Diffuse and Intestinal Gastric Cancer”



More than 11,000 Americans die from gastric cancer every year, and it is much more prevalent in other countries, particularly in Asia. African-Americans and Hispanics are also at increased risk for gastric cancer, and it is more common in men than in women. In the United States, the rate of survival for gastric cancer five years after diagnosis is only 32 percent. This is largely because the disease is not usually detected until it is far advanced. Better means of early detection would save many lives.

The SU2C Gastric Cancer Interception Research Team is developing new ways to spot the cancer early, when it can be more successfully treated. This includes identifying bits of DNA and cells that break off from the tumors and circulate in the blood. Biomarkers found in animal studies will then be validated in human blood and tissue samples collected in the United States and in South Korea, where gastric cancer is far more common. If these biomarkers can be definitely tied to gastric tumors, they can be used to help detect the disease at an early stage. Scientists on the team have also developed a new imaging agent and a tiny, pill-sized camera that could perform imaging of stomach tissue at risk of developing cancer.

The team will validate its new methods in a clinical trial. Once these methods are available at the clinical level, doctors could use them to screen people in populations at risk of developing gastric cancer—such as people with a hereditary predisposition—and catch the problem early.

In work to date, the SU2C-Gastric Cancer Interception Research Team has made the following progress:

July 2021

- The NALIRIFOX trial has been activated and has begun enrollment.
- The molecular imaging LUM015 trial for gastric cancer detection has been formally approved by the FDA and has begun enrollment.
- The international biobank has been accepting blood specimens from partner institutions for liquid biopsy studies.
- Initial studies indicate that proteins expressed in early stage gastric cancer cells can be detected in the feces of a gastric cancer mouse model.

