



Leaders' Update

A message from Charles Geyer, associate director for clinical research

Dear colleagues,

Massey Cancer Center has a well-established history of translating our basic science research in hematologic malignancies into successful investigator-initiated trials (IITs). Over the past four years, our experienced Hematology IIT team has worked with the talented members of our developing Solid Tumor IIT team to provide a high-quality and productive solid tumor IIT infrastructure to support moving Massey basic research into successful IITs in the more common malignancies. In fact, the Solid Tumor IIT research team has become one of the top patient accruing teams in the Massey Clinical Trials Office (CTO) over the past few years. Additionally, we are conducting and developing some exciting Massey IITs for solid tumors, and I would like to highlight a few examples.

We enjoyed great success in a phase 1 study for solid tumor malignancies, and the activity seen in a number of breast cancer patients with triple negative breast cancer led to an ongoing phase 2 trial for patients with this difficult cancer. Led by Massey physician-researcher Dr. Andrew Poklepovic, the trials are based on the collaborative laboratory work of Drs. Richard Moran and Paul Dent, who together discovered that the combination of sorafenib and pemetrexed leads to cancer cell death through toxic autophagy. The results of the phase 1 study were published in *Oncotarget* and showed that over half of patients appeared to experience some degree of tumor growth delay, with a number of them with partial responses and even one with a complete response. [Learn more about this research on the Massey news blog.](#)

Another innovative solid tumor IIT led by Dr. Poklepovic and based on Dr. Dent's research is a phase 1 study of combined modality neoadjuvant therapy for patients with initially unresectable pancreatic cancer to attempt to make them operable. After first receiving standard chemotherapy, which provides tumor reduction for some patients, trial participants then receive a treatment course consisting of standard gemcitabine and radiation therapy with the addition of the study drugs sorafenib and vorinostat. After treatment, patients undergo surgery to remove the cancer, if possible. Dent's preclinical research showed that sorafenib and vorinostat synergize with radiation to improve killing of cancer cells. Preliminary results of the trial are very promising, and one patient was found to have a complete response at surgery. If results continue on this trajectory, we hope to eventually open a phase 2 multicenter trial through a cooperative group. [Learn more about this trial on the Massey news blog.](#)

Massey physician-researchers Drs. Sosipatros Boikos, Sarah Gordon and Geoffrey Krystal are currently working with Dr. Anthony Faber to translate his exciting laboratory research into another Massey IIT. Supported by a Massey pilot project grant in 2016, Faber's research found surprising activity of venetoclax, a BCL-2 inhibitor approved to treat chronic lymphocytic leukemia, against small-cell lung cancer cells, in which BCL-2 is often amplified. There hasn't been a new drug for SCLC in a long time, so we are hoping to activate by next fall the initial study, which Dr. Boikos would lead as PI, combining a standard chemotherapy drug, irinotecan, with venetoclax.

Another phase 1 study Massey researchers are working to develop is for gliomas and will test a novel ATM kinase inhibitor in combination with radiation therapy. With sponsorship from AstraZeneca, Massey physician-researchers Drs. Mark Malkin, Alicia Zukas and Timothy Harris are collaborating with researchers from Memorial Sloan Kettering Cancer Center, Dana-Farber Cancer Institute and University of Pittsburgh to translate research from Dr. Kristoffer Valerie's lab, which provided the first preclinical evidence demonstrating that an ATM kinase inhibitor radiosensitizes gliomas. Our hope is to activate the trial by next spring, and Dr. Alicia Zukas will serve as the site PI at Massey. [Learn more about the science behind this trial on Massey's news blog.](#)

Thanks to all of our Massey researchers who are working to advance our IIT program and bring the exciting discoveries occurring in the labs of our basic researchers into the clinics at Massey and other collaborating cancer centers. I look forward to continuing to collaborate with you to build on our translational science successes.

Sincerely,

Charles E. Geyer, Jr., M.D., F.A.C.P.
Associate director for clinical research