Clinical trial results presented today at a prestigious cancer meeting in Chicago show substantial increased survival rates for pancreatic cancer patients who received a four-drug chemotherapy combination known as mFOLFIRINOX after surgery. Pancreatic cancer is typically very aggressive, with only approximately eight per cent of people surviving beyond five years after diagnosis, even after surgery and the standard chemotherapy treatment.

Co-led by Jim Biagi, Interim Head of the Department of Oncology at Queen's University and researcher with the Canadian Cancer Trials Group (CCTG) headquartered at Queen's, the PRODIGE 24/CCTG PA.6 randomized phase III clinical trial showed that the risks of cancer recurring in post-operative pancreatic cancer patients was reduced by almost 50 per cent with the new chemotherapy regimen.

"The distressing part of pancreatic cancer is that only a small proportion of patients are candidates for surgery and, even if surgery is successful, most will die of recurrent disease," says Dr. Biagi. "Our trial results demonstrate that patients who receive this treatment after surgery are almost twice as likely to survive. This is life changing for these patients and should impact how we treat pancreatic cancer around the world."

Following successful surgery, 493 patients with pancreatic cancer were randomly assigned to receive either the current standard treatment (Gemcitabine) or the trial mFOLFIRINOX treatment for six months. On average, patients who received mFOLFIRINOX lived almost 20 months longer and were cancer-free nine months longer than those who received the standard treatment.

"A few months after my cancer diagnosis, I had surgery and then elected to try this experimental treatment," says Kathleen Kennedy, a Kingston-area resident and one of the trial's more than 100 Canadian participants. "I knew that there could be risks, but I also knew that it would be helpful — if not immediately to me, then for other pancreatic cancer patients in the future. Now, three disease-free years later, I feel so blessed that this treatment has afforded me more time with my husband, children, and grandchildren."

The results suggest the new treatment regimen should become standard practice worldwide. There are also some next steps to explore, including experimenting with the timing of chemotherapy. Patients may benefit from receiving chemotherapy before surgery to shrink the tumor, to destroy undetectable micro-metastases, and increase the chance that the tumor can be completely removed through surgery. Another option is to give half the cycles of chemotherapy before, and the other half after surgery. Ongoing clinical trials are already testing both of these approaches.

"I have great respect for patients who volunteer to participate in clinical trial research like ours," says Dr. Biagi. "Despite the potential risks, they bravely step forward knowing that they could help not only themselves, but a great many people affected by the disease. It's been an honour to work alongside them, and the results should give us all a great many reasons to be hopeful and excited for longer, healthier lives."

The study's co-lead is Thierry Conroy, medical oncologist and director of the Institut de Cancérologie de Lorraine in Nancy — one of the UNICANCER hospital network's comprehensive cancer centres in France. Funding for the trial was provided by the Institut National du Cancer in France, the French national Ligue against cancer, cycling charity group 7 Days in May and the Canadian Cancer Society.

"Since 1980, more than 80,000 people have received excellent care at over 800 hospitals and cancer centres across the country in clinical trials that we funded. We're obviously thrilled when discoveries from these trials improve survival and change the way cancer is treated worldwide," says Judy Bray, Vice-President of Research at the
Canadian Cancer Society. "We are committed to helping Canadians through the entire cancer journey by investing in research on prevention, detection, diagnosis, treatment and the quality of life of those affected by cancer."

The PA.6 results were presented at the 2018 American Society of Clinical Oncology (ASCO) Annual Meeting.

Provided by Queen's University