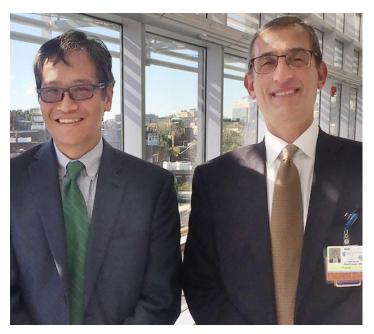
A Grim Diagnosis, Followed by Hope and Success

Ray Angelone remembers the day in January 2019 when he was told he had stage III pancreatic cancer. The Norfolk resident also remembers the precise moment when he was given hope that he might survive the devastating diagnosis. Not long ago, fewer than 5% of individuals with advanced pancreatic cancer were cured.

"I WAS LYING IN BED at Newton-Wellesley Hospital, and I saw two doctors hovering at my door," recalls Mr. Angelone, who is 52. "After looking at my chart, Dr. Blaszkowsky and Dr. Hong came in. That's when Dr. Blaszkowsky told me they wanted to begin treatment as soon as possible, and Dr. Hong said I was a good candidate for a clinical trial. He also said the goal wasn't just to treat advanced pancreatic cancer, but *to cure it.*"

Lawrence Blaszkowsky, MD, Chief of the Division of Hematology and Oncology (below right), and Theodore Hong, MD, Director of Gastrointestinal Radiation Oncology at Mass General (below left), agreed that he was a good candidate for the required treatment regimen. "Ray was otherwise healthy but had a bad cancer," Dr. Hong explains. "This clinical trial represents cutting-edge research. It's a game-changer."

When Dr. Blaszkowsky began in his new role at the Mass General Cancer Center at Newton-Wellesley in 2018, he envisioned the kind of scene that occurred in Mr. Angelone's room: an expert subspecialist, such as Dr. Hong, on-site at NWH regularly to see patients and



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- Lawrence Blaszkowsky, MD

collaborate with colleagues. It would mean greater access to clinical trials like the one in which Mr. Angelone was able to participate. The trial, sponsored by Stand Up To Cancer, is offered at seven institutions. Newton-Wellesley is the only community hospital participating.

"During the past year, the number of accruals [full participation by patients] in our clinical trials doubled," Dr. Blaszkowsky notes. "We are offering many new treatments—in some cases, years before they are generally available. Clinical research has led to impressive progress in treating colon cancer, melanoma and lung cancer. Now we are making progress in treating pancreatic cancer."

The number of cases has increased during the past decade. "You shouldn't ignore GI symptoms, such as stomach pain, nausea or vomiting, especially if they don't improve or get worse," cautions Dr. Blaszkowsky. "Also watch for jaundice, where the eyes or skin turn yellow, and weight loss."

One step at a time—and success

Mr. Angelone met with Dr. Blaszkowsky, who explained the entire treatment plan—chemotherapy with the addition of Losartan, a blood pressure medication—

radiation and, if the tumor shrunk in size, surgery. "Dr. Blaszkowsky was honest," says Mr. Angelone, who admits he felt overwhelmed. "He told me it would be an uphill battle, and he suggested I take it one step at a time. I started working on my mindset." As someone who runs, hikes and has participated in three triathlons, Mr. Angelone knew that exercise would help him during and after treatment.

He got through the chemotherapy, which was followed by five courses of stereotactic body radiation therapy (SBRT)—treatment that is precisely directed at the tumor. "We developed a customized radiation plan that paid attention to where the tumor came close to Ray's blood vessels," says Dr. Hong, noting that radiation is becoming a more versatile tool. "Radiation can function a bit like a scalpel, but today we also use it as more of a drug."

There was soon good news. Mr. Angelone's tumor had decreased in size more than 50%, and he was scheduled for surgery at Mass General. A pancreatoduodenectomy, known as a Whipple procedure, would remove part of the pancreas, small intestine, stomach and other structures. "What we have on our side at MGH is a

backup plan in case we aren't able to remove the tumor," notes Dr. Blaszkowsky. "We can provide patients with booster treatment in the form of intraoperative radiation—right in the operating room. This can be quite effective."

The successful surgery was performed by Motaz Qadan, MD, PhD. "The surgery took a lot out of me," says Mr. Angelone. But he bounced right back: within six weeks, Mr. Angelone, a software consultant, had scheduled his first business trip since learning of his diagnosis.

The experience of facing a serious cancer diagnosis has changed him. "Living large is not the goal now," says Mr. Angelone, who is 52 and married with two children. "I understand that recurrence is a possibility, but I've learned to live with uncertainty. Today's a good day."

He knows that, with Dr. Blaszkowsky and Dr. Hong, he was in the best possible hands. "They gave me hope and a path," says Mr. Angelone. "Dr. Blaszkowsky focused on the tactics throughout my treatment, while Dr. Hong provided optimism. They make a great pair. I call them The Avengers.

"As for Newton-Wellesley, I picked a great hospital."

Clinical Trial Will Produce New Insights

The clinical trial that rescued Ray Angelone from a grim diagnosis demonstrates how medical research combines data, observation and insight to produce new treatments that extend and save lives.

Once the chemotherapy drug, FOLFIRINOX, was found to be effective in treating pancreatic cancer, oncology investigators hoped to address a unique aspect of the disease. "Pancreatic cancer is known to include a lot of connective tissue, something seen in Marfan syndrome," notes Dr. Hong in reference to an inherited disorder. "We know that Losartan, a well-known medication for high blood pressure, can decrease the degree of connective tissue. In the process, it increases the delivery of chemotherapy to tumors."

An MGH study published in 2018 showed that the addition of Losartan resulted in survival of 61% among patients with advanced pancreatic cancer. "That represented a tenfold increase," notes Dr. Hong. "We took our data to Stand Up To Cancer, and they provided funding for a seven-center study that includes the major Boston teaching hospitals, as well as Johns Hopkins Hospital and the MD Anderson Cancer Center."

Mr. Angelone knows that he directly benefited from Newton-Wellesley's participation in the clinical trial to study treatment for advanced pancreatic cancer. "I'm just one in a long line of people taking chances and advancing the knowledge," he says.

Dr. Blaszkowsky appreciates every patient who participates in clinical research. "With this clinical trial, we're gathering a tremendous amount of knowledge," says Dr. Blaszkowsky.



