

Geisinger

2017 Annual Report

Geisinger Cancer Services



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Danville, Pennsylvania 17822

geisinger.org

Geisinger

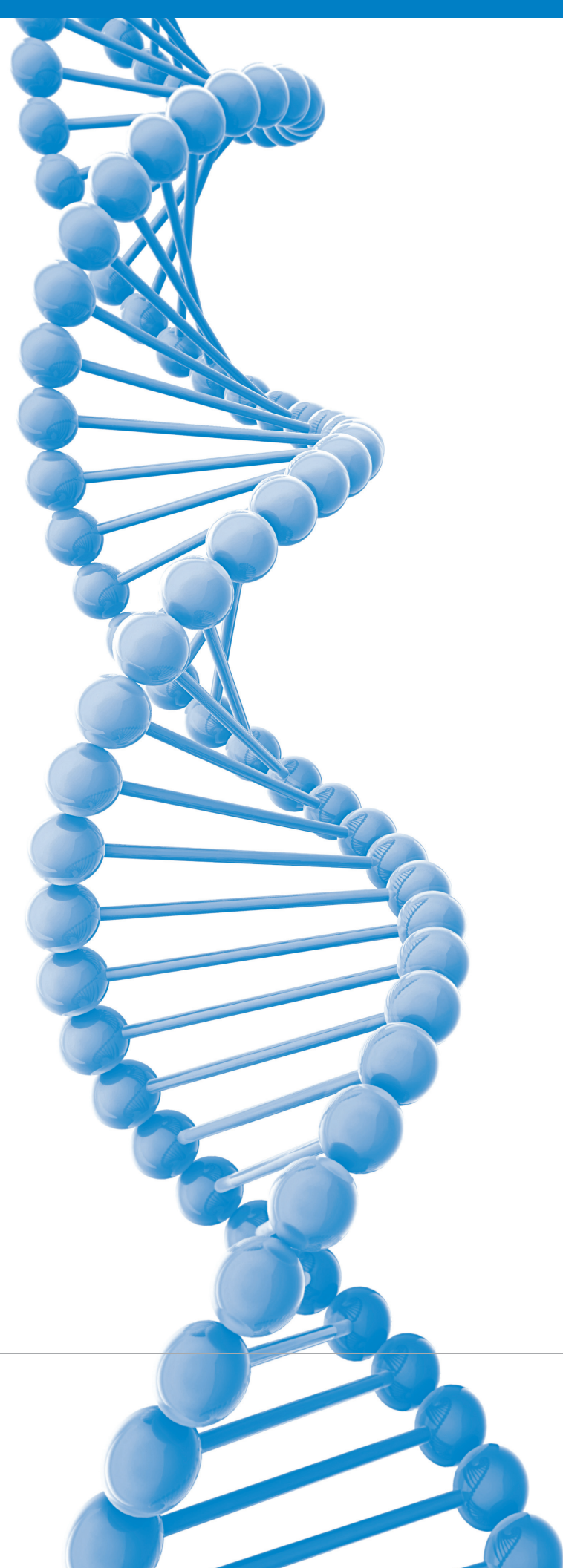


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Saving the tiniest lives

A patient story

A cancer diagnosis is always devastating, but perhaps never more so than when the patient is a newborn, like Averie Roote.

Little Averie was just 1 month old when her parents, Kristen Kempa and Shawn Roote, of Old Forge, Pa., noticed a lump on their daughter's back. Doctors at the local hospital where Averie was being treated knew she needed specialty care, so they referred the little girl to Geisinger Janet Weis Children's Hospital for surgery, where Ronald J. Scorpio, MD, director of Pediatric Surgery for the Geisinger Surgery Institute, performed a wide surgical resection of the mass.

"As a parent to newborn twins — Averie has a sister, Isabella — we were understandably shocked to find out that a child can be born with cancer," said Ms. Kempa. "But everyone at Geisinger jumped in to explain everything to us carefully and give us all the details we needed about what their plans were for her care."

A difficult diagnosis

"Every time we do a surgical resection, we send the tissue to pathology," said Jagadeesh Ramdas, MD, director of Pediatric Hematology/Oncology at Geisinger Janet Weis Children's Hospital. "The initial diagnosis presented as a case of primitive myxoid mesenchymal sarcoma. We don't see much in the literature about cases like this, so we consulted an additional expert at Children's Hospital of Philadelphia, and based on the evidence, coupled with the patient's young age, we decided to observe her closely after surgery."

A few months after the initial surgery, Averie's parents became alarmed when they found a new lump. This one, said Dr. Ramdas, was found in the incision site, along with subcutaneous nodules and a lump in the left axillary region. A second surgery was scheduled quickly, and a biopsy was taken from the lymph nodes.

"While the pathology was the same, because the cancer had metastasized, we ordered extra tests and sent the slides to Dr. Christopher Fletcher, a well-known pathologist at Boston Children's Hospital who is an expert in the field of soft tissue sarcomas," said Dr. Ramdas.

Using immunostaining and biomarkers, the pathologist delivered a new diagnosis: extrarenal clear cell sarcoma.

"This diagnosis is extremely rare outside of the kidneys, and the way Averie progressed was highly unusual," Dr. Ramdas said. "There had never been a case reported in this age group before."



Getting help through the Children's Oncology Group

Dr. Ramdas was able to call on colleagues and review protocols through Geisinger's membership in the Children's Oncology Group, a global pediatric research consortium. He found a suggested treatment regimen that included 10 cycles of intense inpatient chemotherapy with 5 chemotherapy drugs, along with regular blood transfusions.

"She responded very well to the treatment," said Dr. Ramdas. "After just a few cycles, the lumps started to go away. We saw a drastic regression of the nodules and then complete disappearance. Based on her response, we decided not to do radiation, which would have been difficult on a patient of such a young age."

Averie continues to see Dr. Ramdas and receives regular scans, but according to her mother, she's a normal, healthy child. "You would never know she was sick," she said.

"Throughout the whole process, the entire Geisinger team kept us completely involved," said Ms. Kempa. "We could have gone anywhere, but we trusted Dr. Ramdas. He showed us that he really cared, and everyone at Geisinger was just lovely. They are so good with children. I wouldn't wish this experience on anybody, but if a parent is facing a difficult diagnosis for their child, I heartily recommend Geisinger."

Mammothon encourages breast cancer screenings

Mammograms can save lives. According to the National Cancer Institute, screening mammograms can help reduce the number of deaths from breast cancer among women ages 40 to 74, and especially among those over 50.

Not all women get an annual mammogram as advised, however. Whether it's an issue of scheduling, transportation problems, a fear of the test or simply the notion that a mammogram is not important, some women don't get regular breast cancer screenings.

In an effort to get more women to comply with the recommended annual procedure, Geisinger Health Plan (GHP) instituted an annual mammothon program. Held in September, the annual outreach event targets female GHP members who have not scheduled a mammogram in over a year. This year, the program focused on GHP's Medicare Gold members, about 15 percent of whom had not received an annual mammogram in the past year, according to Shea Good, quality programs coordinator for GHP.

"The idea of a mammothon came out of one of our monthly work group sessions, in which we brainstorm ways to make sure our members get regular health screenings to help them avoid more serious problems later on," said Ms. Good, who organized the event. "We asked staff in all our departments to volunteer for a two-hour shift to make calls to members stressing the importance of getting their screening completed."

According to Ms. Good, 90 GHP employees from all departments worked the phone lines, helping members make screening appointments at one of 109 locations in GHP's service area, offering information about transportation assistance, and answering questions. To meet the needs of GHP members who work during normal business hours of mammogram facilities, several locations extended their hours, with Saturday appointments available.

"For each of the 166 mammograms we scheduled during the mammothon, GHP pledged \$10 to the American Cancer Society," she said. "That incentive appealed to many members we called."

Mammography has helped reduce breast cancer mortality in the U.S. by nearly 40 percent since 1990, according to the American College of Radiology (ACR), which notes that annual mammograms can detect cancer early, when it is most treatable. The ACR says mammograms can show changes in the breast up to two years before a patient or physician can feel them. They can prevent the need for extensive treatment for advanced cancers and improve chances of breast conservation.



Improving breast cancer detection and treatment

Traditional two-dimensional mammograms can pose a challenge when patients have dense breasts. Although there is a small increased risk of breast cancer in dense breasts, dense breast tissue may give a false appearance of an abnormality when none exists. Dense tissue also can hide breast cancer or make it more difficult to visualize.

Recognizing this challenge, Geisinger offers its patients the option of a new three-dimensional mammography technology called digital breast tomosynthesis (DBT). DBT improves the detection of architectural distortions which can be a sign of breast cancer. It has been proven to increase breast cancer detection rates by 29 percent and has reduced callback rates by 15 percent.

"DBT helps us better see changes in the breast that might indicate cancer," said Anne P. Dunne, MD, section chief of Breast Imaging. "It allows us to detect cancer earlier, which means we can treat it earlier. It also reduces the need for additional tests, which can help ease patient anxiety."

Some of Geisinger's DBT units allow stereotactic mammographically guided breast biopsies to be performed with the patient sitting upright, an advantage for patients who are unable to lie in a prone position. The biopsies are performed with tomographic guidance, which allows for more precise needle placement.

"DBT is an important complement to the traditional two-dimensional imaging that we continue to offer," said Dr. Dunne. "It reduces the need for surgery when results are benign and lets us plan the proper treatment when cancer is detected."

DBT is currently available at Geisinger Medical Center in Danville, at Geisinger Wyoming Valley Medical Center in Wilkes-Barre, at Geisinger Gray's Woods in State College, and at Geisinger Mt. Pleasant and Viewmont in Scranton. Plans for 2018 call for it to be available at Geisinger Bloomsburg Hospital, Geisinger Shamokin Area Community Hospital*, Geisinger Susquehanna Valley Imaging in Lewisburg, and Geisinger Lewistown Hospital.

*a campus of Geisinger Medical Center

Accreditation recognizes commitment to quality

In October 2017, less than a year after its opening, the Geisinger Community Medical Center (GCMC) Cancer Center in Scranton was awarded a three-year accreditation by the Commission on Cancer (CoC), a program of the American College of Surgeons. To receive the designation, the Cancer Center met 34 quality care standards and demonstrated consistent excellence in the delivery of comprehensive patient care, from prevention, early diagnosis and staging to treatment, rehabilitation and end-of-life care. GCMC joins a network of more than 1,500 CoC-accredited cancer treatment centers across the country that provide access to excellent care.

“Our CoC accreditation is a reflection of the extreme effort of our physicians and staff,” said Rajiv Panikkar, MD, a hematologist-oncologist at Geisinger. “We are all committed to serving people with cancer, and to making sure they have the very best patient experience possible.”

The CoC designation also recognizes GCMC’s high level of engagement in cancer research and data analysis. The center is a member of the National Cancer Institute’s Community Oncology Research Program (NCORP), an organization devoted to research and clinical cancer trials. Through its membership, the GCMC Cancer Center can offer its patients participation in national clinical cancer trials normally only available at larger medical centers.

In addition, GCMC’s cancer registry contributes patient data to the National Cancer Database, a joint program of the American College of Surgeons and the American Cancer Society. The largest clinical database in the world, it tracks information on all types of cancers. Through its CoC accreditation, the GCMC Cancer Center has access to the ongoing analysis of this important data, as well as to national, state and regional information on quality improvement.



Community cancer care for 25 years

The Frank M. and Dorothea Henry Cancer Center celebrated 25 years of service to its community in 2017.

When it opened its doors in 1992, the Henry Cancer Center (HCC) was run by a single medical oncologist and a staff of six. By 2007, the center was overflowing with cancer patients from Luzerne County and beyond, all seeking access to high-quality care close to home. A much-needed expansion was completed in 2009, providing 20 treatment chairs, 4 private treatment rooms and 20 clinical exam rooms. The Healing Garden, a lush green space with two waterfalls visible from the wall of windows in the infusion room, was also unveiled.

The HCC has since grown to include an on-site laboratory and two infusion rooms. It offers a complete list of leading-edge patient care technologies and its newly renovated Center for Women’s Imaging provides a full range of diagnostic services designed exclusively for women, including digital mammography, stereotactic breast biopsy and ultrasound.

The center’s multidisciplinary staff — hematologists and oncologists, oncology nurses, genetic counselors, nutrition specialists, pathologists, patient navigators, radiation oncologists, radiologists, surgical oncologists and technologists — ensures comprehensive care that rivals treatment at much larger urban cancer centers, says Kyo Chu, MD, medical director of the center.

“I am very proud of the way our team works together with a common goal: to care for patients and their families,” says Dr. Chu.

The HCC is accredited by the Commission on Cancer (a branch of the American College of Surgery that recognizes quality and clinical expertise), the Quality Oncology Practice Initiative of the American Society of Clinical Oncology and the National Accreditation Program for Breast Centers.



A team approach to battling a rare cancer

A patient story

A lot can happen in a year. Karen Hoffman, 67, of Jermyn, Pa., knows this better than most people.

In November 2016, on Election Day, Ms. Hoffman went to see her primary care physician. She had been experiencing pain and pressure under her ribcage, and thought it might be bronchitis or a gallbladder attack. She also remembers feeling “really tired and lethargic,” not typical for the retired grandmother of four who counts gardening, painting, crafts, knitting and music among her hobbies.

After reviewing her bloodwork, Ms. Hoffman’s doctor was concerned enough to admit her to Geisinger Community Medical Center (GCMC) in Scranton that same day. There, she was introduced to oncologist Namita Sharma, MD, and realized her problem was far more serious than she had imagined. Dr. Sharma soon diagnosed her with plasma cell leukemia, a rare and aggressive form of multiple myeloma in which high levels of abnormal plasma cells flood the bloodstream.

“It was so completely unexpected,” Ms. Hoffman remembered. “I asked Dr. Sharma what she would do if I were her mother, and she said she would begin treatment immediately.”

Coordinated, compassionate care

The treatment Dr. Sharma proposed was a two-pronged attack of chemotherapy and stem cell transplantation. It was a daunting prospect, but Dr. Sharma’s warm, confident manner helped Ms. Hoffman feel at ease.

“I love Dr. Sharma,” she said. “She is compassionate, but so professional at the same time. She really listens and explains everything thoroughly.”

Dr. Sharma recommended that Ms. Hoffman start chemo that same night, and transferred her to Geisinger Medical Center (GMC) in Danville for her first treatment. She was able to return to GCMC for subsequent chemo treatments until April, when she traveled to GMC again for her autologous stem cell transplant. Under the direction of hematologist-oncologist Leonard Gitter, MD, Ms. Hoffman’s own stem cells were harvested, then re-injected after chemo to help rebuild her supply of healthy blood cells.

“Dr. Gitter was very honest with me, and I appreciated that,” she said. “I was also happy that he was working so closely with Dr. Sharma, and also reaching out to colleagues at other cancer hospitals to confirm the best treatment for me. That doesn’t always happen in healthcare, and it was impressive.”

A valuable journey

In all, Ms. Hoffman spent over a month in Danville, with her husband John staying in a hotel nearby. Their adult children, Holly, Michael, Christa and Traci, all came to visit and lend their support.

“They were absolutely wonderful,” she said. “The experience brought us all closer together.”

Though the stem cell transplant left her feeling exhausted and sick, she was thrilled to be able to return home. In the next several months she will undergo a second stem cell transplant — this time from a donor — to rebuild her immune system, which has been seriously compromised by chemotherapy.

Although her ongoing twice-weekly chemo schedule can be grueling, the staff at the GCMC infusion room makes it bearable, and even pleasant.

“The nurses there are like family to me,” she said. “If they are ever stressed out or impatient, I have never see a single one of them show it. They make me feel like I am part of something important, and the other patients there support each other, too. It’s very uplifting.”

“I’ve had the ‘Why me?’ moments, but then I look at all of the wonderful people I’ve met,” she added. “This isn’t a journey I would have chosen, but it’s been a valuable one nonetheless.”

Almost a year to the day after her diagnosis, in November 2017, a biopsy showed that her bone marrow was free of cancer cells. Encouraged, Ms. Hoffman is ready to keep fighting.

“I’m here today to continue the journey because of the care and treatment I have received at Geisinger.”

In the pink (zone)

For the sixth year in a row, Geisinger Lewistown Hospital (GLH) was one of six beneficiaries of funding from the Pennsylvania Pink Zone, a nonprofit organization that promotes breast cancer awareness and empowers survivors. GLH received \$40,000 in funding on Feb. 26, 2017, at a special home game of the Penn State Lady Lions basketball team, a Pink Zone fundraising partner. The 2017 funds will be used to purchase cancer-related equipment and sponsor community education programs in 2018.

In May of 2017, GLH used its Pink Zone funds from 2016 to purchase a breast coil for its new MRI machine. A breast coil is a signal receiver that surrounds the breast during an MRI and helps to create 2-D and 3-D images that can provide more detail than mammograms. Pink Zone funds were also used to sponsor a women's wellness workshop in Lewistown that featured health-related speakers, free screenings and a breast cancer workshop.

"We're proud of our partnership with Pennsylvania Pink Zone," said Lauren Hassinger, a Corporate Communications specialist and physician liaison at GLH. "It's a real community effort, with a shared goal of helping women get the treatment they need while having the best patient experience possible."



Cancer delivery research: Joining the TrACER study

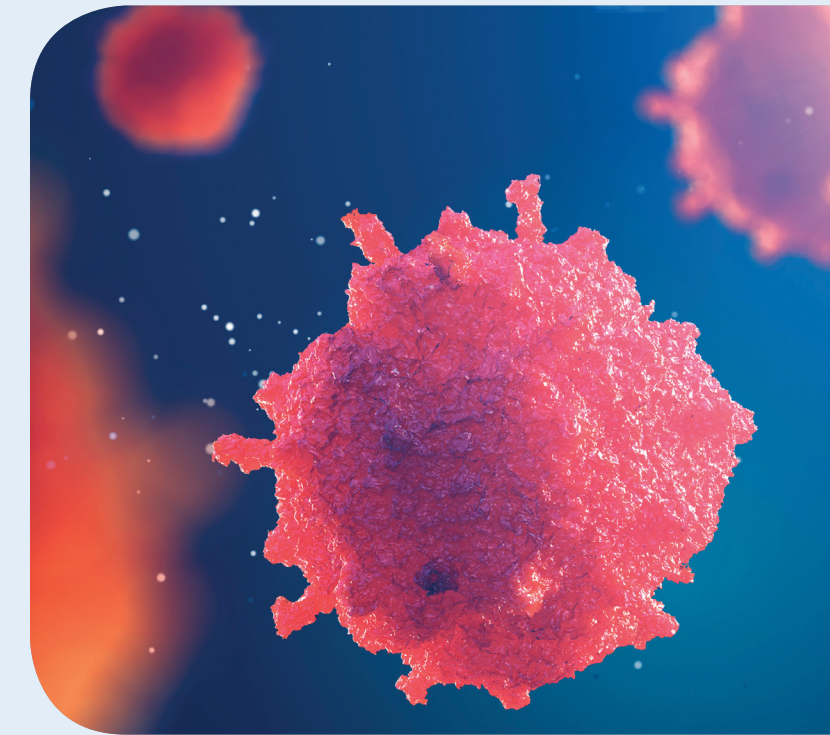
In 2017, Geisinger became part of a nationwide study of a new treatment expected to help cancer patients recover from the effects of chemotherapy and radiation. The treatment is called colony-stimulating factor (CSF), and it helps to stimulate the production of certain white blood cells called neutrophils, which are crucial to resisting infection.

"Chemotherapy and radiation can destroy neutrophils, leading to a condition called febrile neutropenia," said Heather Albertson, RN, BSN, CCRP, associate director of Oncology Research Operations. "Having a low number of neutrophils puts patients at risk of infection. CSFs help to prevent or treat febrile neutropenia."

The study, titled *Trial Assessing CSF Prescribing Effectiveness and Risk* (TrACER), will enroll 3,960 patients across the country, including 90 patients at Geisinger. It is part of a grant from the National Cancer Institute's Community Oncology Research Program (NCORP), a national network of cancer care investigators, providers, academia and other organizations that care for diverse populations in health systems.

"The goal of this Cancer Care Delivery Research (CCDR) is to generate evidence that can be used to improve clinical practice patterns as well as develop and test promising interventions within the national healthcare delivery system," Ms. Albertson said. "Participating in CCDR studies helps improve clinical outcomes, enhance the patient experience and reduce health disparities in cancer care."

The study will focus on patients with breast, colorectal and non-small-cell lung cancer. Patients in the study will be prescribed CSFs within the first cycle of chemotherapy to reduce



the risk of infection. The study also will look at patient adherence to CSF use, antibiotic use (both as prophylaxis and as treatments for febrile neutropenia), rate of febrile neutropenia emergency department visits and hospitalizations, health-related quality of life and overall survival.

"TrACER is a unique opportunity for Geisinger to partner with the NCI and our patients to improve the management of symptoms caused by cancer and its treatment," concluded Ms. Albertson. "It will provide new knowledge on how we can better care for patients while they are receiving treatments."

Geisinger is deeply committed to pursuing research in the treatment of cancer and ultimately reducing the burden that cancer places on individuals, families and our community.

Cancer treatment locations

Geisinger Medical Center

100 N. Academy Ave.
Danville, PA 17822

Frank M. and Dorothea Henry Cancer Center

Geisinger Wyoming Valley Medical Center

1000 East Mountain Blvd.
Wilkes-Barre, PA 18711

Geisinger Hazleton Cancer Center

(medical oncology)
1740 E. Broad St.
Hazleton, PA 18201

Geisinger Medical Oncology Pottsville

700 E. Norwegian St.
Pottsville, PA 17901

Geisinger Radiation Oncology Pottsville

100 One Norwegian Plaza
Pottsville, PA 17901

Geisinger Mt. Pocono

(medical oncology)
126 Market Way
Mt. Pocono, PA 18344

Geisinger Tunkhannock

(medical oncology)
10 Trieble Drive, Suite 3
Tunkhannock, PA 18657

Geisinger Scenery Park

(medical oncology)
200 Scenery Drive
State College, PA 16801

Geisinger Cancer Center Lewisburg

(medical and radiation oncology)
75 Medical Park Drive
Lewisburg, PA 17837

Geisinger Medical Oncology Selinsgrove

1575 N. Old Trail
Selinsgrove, PA 17870

Geisinger Lewistown Hospital Community Cancer Treatment Center

(radiation oncology)
211 Third St.
Lewistown, PA 17044

Geisinger Lewistown Hospital

(medical oncology)
400 Highland Ave.
Lewistown, PA 17044

Geisinger Community Medical Center Cancer Center

1800 Mulberry St.
Scranton, PA 18510