TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Texas Children's Hospital®

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Leading the fight against childhood cancer

As the largest pediatric cancer and hematology centers in the United States, we provide individualized state-of-the-art medical treatment for patients with childhood cancer and blood disorders. We are consistently rated one of the top programs for pediatric cancer treatment by U.S.News & World Report.

Experts in childhood cancer and blood disorders

With a staff of renowned experts in the treatment and research of pediatric and adolescent cancer as well as hematologic disorders, we have developed a wide array of programs aimed at curing children with diagnoses ranging from the most common to the very rare.

- *Pediatric and adolescent cancer and hematology programs include:*
  - Bone marrow failure
  - Bone marrow transplantation
  - Bone tumor
  - Brain tumor
  - Cancer genetics and genomics
  - Childhood cancer epidemiology and prevention
  - Developmental therapeutics
  - Ewing sarcoma
  - General hematology (anemias, thalassemia and others)
  - Hemostasis and thrombosis (bleeding and clotting)
  - Histiocytosis
  - Immune hematology
  - Leukemia
  - Liver tumor
  - Long term survivor
  - Lymphoma
  - Neuroblastoma
  - Palliative care
  - Precision oncology
  - Rare tumors
  - Retinoblastoma
  - Solid tumor
  - Thyroid cancer
  - Vascular anomalies

Working as a team to cure kids

Treatment is organized around diagnosis-specific multidisciplinary treatment teams comprised of physicians, nurse practitioners, nurses, social workers, pharmacists and child life specialists. All patients have their own primary physician who oversees their care. Patients are seen by the same doctors, nurses and social workers on an ongoing basis to provide a sense of trust, safety and comfort. Patients receive the highest standard of treatment for their disease because they are cared for by an entire team of experts rather than a single doctor. All our physicians are board-certified in pediatric oncology and hematology.

Groundbreaking research and innovative therapies

As a recognized research leader in the fields of pediatric hematology and oncology, we translate breakthrough findings from the laboratory into the clinic.

We are currently conducting over 200 clinical trials – more than any other center in the nation.

Our Developmental Therapeutics and Clinical Pharmacology Program has been a leader in the study of novel agents for the treatment of cancer and hematologic disorders. Our vast expertise in the development of new therapeutics means our patients have access to the most advanced and innovative therapies.

Our physicians employ evidence-based guidelines and the most advanced clinical trials in the delivery of hematology and oncology care. For example, recognizing that clinical trials are the standard of care for all children with cancer, every eligible patient is considered for entry on National Cancer Institute-approved clinical trials. Approximately 80 percent of our patients are registered in these studies. These treatment studies represent leading therapies in the field to provide the best treatments for children with cancer.

Working as a partner with community physicians

Our physicians and staff work extremely closely with referring physicians. We maintain excellent communications with patients' referring physicians to ensure that care delivery is seamless.

Continuity of care

Because we work so closely with our patients' referring physicians, we are able to maintain excellent continuity of care. This is well illustrated by our approach to cancer survivors. During the past 60 years, pediatric oncologists have made great strides in improving the overall cure rate of children with cancer. Approximately 80 percent of children diagnosed with cancer now survive – and this rate is likely to improve in the coming years. There are currently more than 350,000 childhood cancer survivors in the United States. Because child and young adult cancer survivors are at risk for serious medical problems that result from their illness or its treatment, Texas Children's Cancer Center is in contact with each of its survivors on a yearly basis.

In addition, we have developed on online application called Passport for Care®, which is an Internet-based decision support tool used in more than 125 children's cancer clinics in the U.S. and several

foreign countries. Passport for Care gives the survivors and their health care providers access to their treatment information and guidelines for screening for potential late effects of childhood cancer treatment in order to improve their long term health and quality of life.

Passport for Care is a major component of our Long Term Survivor Program, which monitors patients for delayed side effects and complications caused by previous cancer therapies. These late effects are potentially serious and often subtle and difficult to diagnose. Our Long Term Survivor Program has developed an international reputation as a leader in the field and has attracted a world-renowned faculty involved in local, national and international research that benefits today's pediatric cancer patients and future survivors.

Healing the whole child, supporting the family

Our commitment to the whole child and family starts at the time of diagnosis and continues throughout treatment and beyond. The diagnosis and treatment of a childhood cancer or blood disorder presents extraordinary psychological, emotional and social challenges to the entire family. Texas Children's Cancer and Hematology Centers offer a variety of services through our Psychosocial Support Program. This helps patients and families adapt and mobilize their resources in the battle against these diseases.

All patients and their families have access to personal counseling. In addition, each patient and family is assigned a social worker to help them navigate successfully through their disease experience.

At the heart of these services is the personal commitment of every multidisciplinary team member to understand each young patient as a unique individual. Team members also collaborate with parents at each step in the process to be attentive to the quality of life of all family members, including siblings.

We also offer a Supportive Help for Accessing Resources and Education (SHARE) Desk where families can obtain information or access resources that are available at Texas Children's Cancer and Hematology Centers as well as throughout the community. The SHARE Desk is located centrally within the registration area and is available to all patient families.

Texas Children's Cancer and Hematology Centers also offer palliative care for seriously ill children. Our Palliative Care Team helps patients feel more comfortable by intervening to improve their quality of life. The team addresses symptoms such as pain, fatigue and nausea as well as helps assuage feelings of anxiety or depression. Palliative care can be given in addition to current treatment for an illness or on its own, and has been shown to have positive physical and emotional benefits.

In addition to child life services, education programs, social workers, teen retreats, financial aid, hotels and housing, internet resources, pain management and palliative care, our programs for psychosocial support and education also

include an Arts in Medicine (AIM) Program that provides educational and artistic opportunities for patients designed to help heal the whole child. Activities of our AIM Program include dance and musical theatre productions, art projects, songwriting, cultural dance, acting, writing and more.

Another example of a novel supportive care program is Purple Songs Can Fly, which provides a unique opportunity for patients and their siblings to work with professional composers and musicians to write and record their own songs. Through a highly creative, musical environment many children are better able to express the many and varied thoughts and feelings that emerge during treatment. Through Purple Songs Can Fly, children are able to share their music with friends and family in the form of individual CD recordings of their songs.

Our patients may also have the opportunity to attend several activity camps. Camp Periwinkle is a week-long summer camp that allows time away from a hospital setting and gives patients the chance to experience the joys of childhood in a healthy environment. In addition, we support patients who go to Camp YOLO (You Only Live Once), a twice a year special weekend camp for teenage cancer patients to enjoy the outdoor lifestyle with their physicians, nurses and members of their support team. Selected patients also gather yearly at Grand Teton National Park in Jackson Hole, Wyoming for the Grand Adventure at Teton Science Camp, where they are educated and trained about nature in a beautiful landscape rich with wildlife and breathtaking views.

The International Center

Our International Center is dedicated to the care and treatment of pediatric hematology and cancer worldwide. In a world where 80% of children with cancer in industrialized countries are cured and 90% of children with cancer in sub-Saharan Africa die, we are making a difference. We provide direct care and treatment for children with cancer in Botswana, Malawi and Uganda. In the area of hematology, we are conducting neonatal sickle cell screening and providing care and treatment for sickle cell disease in Angola. Simultaneously, we train local nurses and doctors in these locations, building skills and leadership for pediatric hematology-oncology programs in these countries. We also provide consultation to local physicians in Lesotho, Swaziland and Tanzania for children with HIV-related cancer and blood disorders.

Outpatient facilities

Our child-friendly, state-of-the-art outpatient clinic is located on the 14th floor of the Clinical Care Center, the ambulatory care building of Texas Children's Hospital. To help patients feel at home, the clinic has waiting areas, play areas, The Johnny Klevenhagen Family Education Room and the Joan and Stanford Alexander Learning Center. Activities such as arts and crafts, videos and computer games are available.

The clinic conducts over 73,700 outpatient visits per year with patients that have traveled from more than 35 states and 26 countries.

Our facilities

Inpatient facilities

The Texas Children's Cancer and Hematology Centers' 36-bed unit is located on the 9th floor of Texas Children's Hospital's West Tower. The inpatient rooms are family-friendly and use the latest pediatric technological advances. Some of the other amenities of West Tower include a family services floor featuring pre-teen and teen activity rooms, a business center, library and classrooms; family rooms located on each patient-care floor designed as a respite for parents and families; and large patient rooms, approximately 330 square feet in size.

Bone Marrow and Stem Cell Transplant Unit

Our 15-bed Bone Marrow and Stem Cell Transplant Unit is located on the 8th floor of West Tower. It is the largest of its kind in the southwestern United States. The inpatient transplant unit is uniquely designed with children's needs in mind. A specialized high efficiency particulate air (HEPA) air-filtration system allows children to safely leave their rooms and roam freely in the unit.

Bone Marrow Transplant Outpatient Clinic

The Bone Marrow Transplant Outpatient Clinic is located adjacent to the Bone Marrow Transplant inpatient unit, and the service is accredited by the Foundation for the Accreditation of Cellular Therapy. The clinic provides diagnosis, treatment and follow-up care of patients who are in need of or have received a hematopoietic stem cell transplant. There are six exam rooms, two of which are equipped with negative pressure airflow and six infusion bays. The dedicated nursing staff is fully cross-trained for inpatient and outpatient services.

Texas Children's Hospital West Campus

In 2011, Texas Children's Hospital opened a community hospital located on 55 acres in Katy, Texas near I-10 and Barker Cypress. The 515,007-square-foot hospital houses the only 24/7 pediatric emergency room in the Greater West Houston area. Hematology and oncology services are available at Texas Children's Hospital West Campus. If you are interested, please follow our standard referral process and ask your attending physician about availability at West Campus.

The Feigin Center for Research

Texas Children's Cancer and Hematology Centers are national and international leaders in clinical and basic research. The centers are components of the Pediatric Hematology-Oncology Section of the Department of Pediatrics at Baylor College of Medicine. We have over 350 researchers and staff in 42 different research laboratories performing cutting-edge research. These laboratories are housed in the Feigin Center building at Texas Children's Hospital. This $40 million recently expanded and renovated state-of-the-art research facility now offers research and office space to our physicians and scientists who lead innovative pediatric cancer and hematology research initiatives.

Referrals

During business hours (Monday to Friday 8 a.m. to 5 p.m.):

Physicians referring **oncology** patients may call 832-822-4242 or 1-800-226-2379.

Physicians referring **hematology** patients may call 832-822-4362 or 1-855-824-2972.

The clinic coordinator will immediately transfer the referring physician to one of our attending physicians.

During non-business hours, weekends and holidays:

Referring physicians may call the Texas Children's Hospital operator at 832-824-1000 and ask for the oncology or hematology fellow on call.

Contact us

Texas Children's Hospital
Cancer and Hematology Centers
Clinical Care Center, 14th floor
6701 Fannin St.
Houston, TX 77030-2399

txch.org

Oncology

Physicians and families: 832-822-4242
1-800-CANCER9
(1-800-226-2379)

Hematology

Physicians and families: 832-822-4362
1-855-824-2972

International referrals

Appointments for patients from outside the United States are made through Texas Children's International Services. International Services will connect the referring provider with one of the physicians at Texas Children's Cancer or Hematology Centers. Next, the family will be asked to call Texas Children's International Services to make an appointment.

832-824-1138 or 1-888-240-8244
Toll-free number from Mexico: 01-866-643-5339

Para mayor información desde México, favor use nuestro numero de teléfono libre de costo: 01-866-643-5339

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Bone Marrow Failure Program

Texas Children's Hospital®

This award-winning program joins innovative research with top clinical care and support to address conditions contributing to bone marrow failure.

As part of Texas Children's Hematology Center, the Bone Marrow Failure Program diagnoses and treats patients for a variety of conditions contributing to bone marrow failure. Some of the conditions we treat include:

- Acquired aplastic anemia, including hepatitis-associated
- Barth syndrome
- Congenital amegakaryocytic thrombocytopenia
- Diamond Blackfan anemia
- Dyskeratosis congenita
- Fanconi anemia
- Myelodysplastic syndrome
- Myelofibrosis
- RUNX1 deficiency syndrome
- Severe congenital neutropenia (Kostmann syndrome)
- Shwachman Diamond syndrome
- Thrombocytopenia-absent radius syndrome

Our clinicians perform bone marrow aspirations and biopsies, make genetic and molecular diagnoses, offer immunosuppressive therapy for patients with acquired aplastic anemia, coordinate comprehensive expert multidisciplinary care for patients with inherited bone marrow failure syndromes and, if necessary, make referrals to our expert Bone Marrow and Stem Cell Transplant Program.

Research

Our program was recently awarded a Department of Defense Congressionally Directed Medical Research Program Exploration-Hypothesis Award in the area of bone marrow failure and received an award from the Cancer Prevention Research Institute of Texas. This research is part of our larger efforts to uncover new pathways and molecular mechanisms contributing to bone marrow failure in children.

Referrals

Physicians and families may call the Bone Marrow Failure Program at 832-822-4362 or 1-855-824-2972.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Bone Marrow and Stem Cell Transplant Program

Texas Children's Hospital®

Texas Children's Cancer Center is a premier bone marrow and stem cell transplantation program. Our state-of-the-art, 15-bed inpatient transplant unit is among the largest of its kind in the United States and focuses exclusively on transplantation.

Bone marrow transplantation as treatment

For some time, bone marrow transplantation has been the treatment of choice for relapsed leukemia patients. However, the role of bone marrow transplantation in the treatment of children with other forms of cancer, blood diseases and genetic disorders of immunology and metabolism has increased dramatically in the last few years. The Bone Marrow and Stem Cell Transplant Program is expanding the use of this technique for patients with solid tumors including neuroblastoma and brain tumors; a variety of high-risk hematologic diseases, such as thalassemia major and transfusion-dependent sickle cell disease; and other nonmalignant diseases.

In addition, the Cell and Gene Therapy (CAGT) Program at Texas Children's Hospital, Baylor College of Medicine and The Methodist Hospital helps rapidly translate novel cell and gene therapy protocols from the laboratory to the clinic. In particular, Texas Children's is able to make genetic and molecular diagnoses in conjunction with the CAGT Program, as well as administer cell-based therapies.

Patient comfort

As patient comfort is a priority, we employ new approaches to care that provide patients with more mobility and access to activities during their stay. A specialized high-efficiency particulate air (HEPA) filtration system allows patients to leave their rooms and participate in social functions on the unit.

High rate of donor matches

We have virtually 100 percent success finding a donor for every patient needing stem cell transplantation. If a perfect match is unavailable, we are able to perform cord blood transplants or use donors other than perfectly matched siblings, such as parents. One of our main goals is to consistently expand our donor pool in order to provide patients the best possible transplantation options.

Research

As one of the top programs for cell-based therapies, our research focuses on improving transplantation outcomes by reducing or avoiding infection or relapses. Another component of our research looks at viral-specific cells to see how we can ensure patients' cells have short and long term immunity.

Referrals

Referring physicians may call the Bone Marrow and Stem Cell Transplant Program at 832-822-4242 or 1-800-226-2379.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Bone Tumor Program

Texas Children's Hospital®

As one of the largest programs in the country, the Bone Tumor Program at Texas Children's Cancer Center offers multidisciplinary care to patients with bone tumors including osteosarcoma and Ewing sarcoma.

Our team of experts in pediatric bone tumors includes pediatric oncologists, orthopedic oncologic surgeons, physical therapists, pediatric pathologists, musculoskeletal radiologists, pediatric nurses, social workers and child life specialists. This team approach enables patients and families to receive the most comprehensive and innovative care in a single location over the full course of their treatment and follow-up.

Evaluation and treatment

Patients with bone lesions, whether suspected or known to be malignant, receive initial evaluation in our multidisciplinary Musculoskeletal Tumor Clinic, where they are seen by both a pediatric oncologist and an orthopedic oncology surgeon. Patients with malignant bone tumors will receive care and treatment from this unique team of providers at Texas Children's Cancer Center; patients with benign bone tumors receive follow-up care from the Orthopedic Division at Texas Children's Hospital. Modalities of treatment used to treat malignant bone tumors may include surgery, chemotherapy, radiation therapy and/or immunotherapy.

Research

Texas Children's Cancer Center has the largest and most comprehensive bone tumor research program in the United States. The program is designed to integrate the work of laboratory researchers and translational researchers with clinicians who are directly involved in the care of patients with bone tumors. The common goal is to discover more effective, less toxic treatments for bone tumor patients.

Bone tumor research investigators have ongoing studies focused on understanding the pathogenesis, biology and malignant determinants of bone tumors. A major aim is to develop novel approaches that will prevent the development of metastases.

Referrals

Physicians and families may call the Bone Tumor Program at 832-822-4242 or 1-800-226-2379.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Brain Tumor Program

Texas Children's Hospital®

Established in 1993, the Brain Tumor Program at Texas Children's Cancer Center is one of the largest of its kind in the country focused on children and adolescents.

We treat approximately 140 new pediatric brain tumor patients each year from all over the world, many of whom cannot be treated anywhere else.

Multidisciplinary care

Many physicians at Texas Children's Cancer Center contribute to the care of children with brain tumors. Neurosurgeons, medical and radiation oncologists, neuroradiologists, neuropathologists and neurologists discuss each newly diagnosed patient at a weekly conference in order to provide the most appropriate care for each child. Nurse practitioners, nurses, physical and rehabilitation personnel, neuropsychologists, endocrinologists, ophthalmologists, social workers and others work closely with the physicians as a team so that all aspects of care for a particular child and the family are addressed.

Innovative protocols and therapies

The Brain Tumor Program develops and participates in national and international research studies and clinical trials, allowing us to treat our patients with the latest and most innovative therapies. Our investigators are leaders in the development of new drugs, sophisticated radiotherapy approaches and the application of other novel approaches to brain tumor therapy. The Texas Children's Cancer Center Developmental Therapeutics Program actively investigates new agents and provides guidance to our physicians and families on the use of novel brain tumor therapies.

We have also embarked on an innovative journey involving the development of personalized medicine based on genome sequencing of each patient's tumor. This will enable us to deliver targeted therapies unique to the individual patient with the potential for greater efficacy and lessened side effects.

In addition, we are a founding member of the Pediatric Brain Tumor Consortium (PBTC) and also a member of the Children's Oncology Group (COG). Through PBTC, COG and our institutional clinical trials, our patients have broad access to the most advanced experimental protocols for treatment of their brain tumors.

Referrals

Physicians and families may call us at 832-824-4220 or 1-800-266-2379. We can also be reached by email at braintumorprogram@texaschildrenshospital.org.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Cancer Genetics Clinic and Childhood Cancer Prevention and Screening Clinic

Texas Children's Hospital®

Our goal is to help patients and their family members understand their diagnosis or predisposition for cancer, learn the risks of developing future cancers and recommend and provide screening services for cancer prevention and early detection.

Cancer Genetics Clinic

Founded in 1995, the Cancer Genetics Clinic offers DNA diagnostic studies, screening tests and counseling services to families at risk of childhood cancer. Led by internationally recognized geneticists working closely with genetic counselors, we provide comprehensive analysis, physical exams, risk assessments, counseling and risk minimization strategies and recommendations for future screenings regarding cancer.

Collaborating with departments across the hospital, the cancer genetics team provides the highest level of analysis and care to our patients and their families. Evaluation results are shared directly with the patient's physicians to best help guide ongoing care and management. Decisions about genetic testing for cancer susceptibility genes, when indicated, are made only after discussions with families.

Childhood Cancer Prevention and Screening Clinic

Established in July 2012, this clinic provides centralized cancer screening services for children with hereditary cancer predisposition syndromes and other conditions that increase the risk of childhood cancer. Our pediatric oncologist develops and implements screening regimens adapted for each child based on the latest medical literature. Screenings consist of longitudinal assessments including interviews, physical exams, laboratory testing and imaging. With a dedicated staff, we provide the most effective and up-to-date screening methods available.

Research

Our Cancer Genetics Clinic participates in most national clinical trials and has recently received sizeable grants from Cancer Prevention Research Institute of Texas and the National Institutes of Health to examine how we can use genome-scale sequencing in the care of childhood cancer patients to offer better treatments. Our program also includes research groups who study the basic science behind cancer development, constantly advancing cancer knowledge.

Referrals

We pride ourselves in partnering closely with referring physicians and families throughout the process to ensure they are fully informed about their patient's care. Physicians may call our clinic at 832-822-4242 or 1-800-226-2379. Families may contact the Cancer Genetics Clinic at 832-824-4685.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Developmental Therapeutics Program

Texas Children's Hospital®

Founded in 1994, the Developmental Therapeutics Program focuses on the preclinical and clinical development of new agents to treat pediatric malignancies.

As part of Texas Children's Cancer Center, the Developmental Therapeutics Program has achieved national recognition as a major leader in the development of novel chemotherapy approaches to pediatric cancer treatment.

Members of the program include physicians board-certified in pediatric hematology-oncology, clinical pharmacology, hospice and palliative medicine, as well as post-doctoral fellows, clinical research nurses, nurse practitioners, data managers and laboratory research associates. Program investigators have developed and led numerous national early phase and pharmacokinetic studies, and they also have expertise in pharmacokinetic-pharmacodynamic modeling including population pharmacokinetics.

We view referring physicians as partners in care, and keep them informed throughout the entire process of referral, evaluation, diagnosis, treatment and follow-up.

Clinical trials

We participate in every major pediatric oncology and pharmacology cooperative group, providing our patients access to cutting-edge therapy for pediatric malignancies. Our program is a major contributor to the Children's Oncology Group (COG) Phase I Consortium and is the only COG Phase I institution in the southwestern United States. In addition, we are one of only three Alex's Lemonade Stand Developmental Therapeutics Centers of Excellence in the nation. As leading researchers, our physicians develop nationwide studies for the COG and the Pediatric Brain Tumor Consortium. We also work closely with industry to make important new agents available for children with cancer.

The Developmental Therapeutics Program offers phase I and other early phase clinical trials for a wide range of children's cancers. We work closely with referring physicians and families to identify appropriate options for each individual child and to support the child and the whole family through the entire treatment process.

Referrals

Referring physicians and families may contact the Developmental Therapeutics Program by calling 832-824-4570 or 1-800-226-2379.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Faris D. Virani Ewing Sarcoma Center

Texas Children's Hospital®

Part of the Solid Tumor Program, our center is dedicated to research, advancement and treatment of Ewing sarcoma, the second most common bone tumor in children.

Evaluation and treatment

As one of the most challenging forms of cancer to treat, Ewing sarcoma tumors often originate in large bones such as the hip, shin, chest and arm bones. Approximately 250 new cases are diagnosed in the United States per year. As members of the Children's Oncology Group, Texas Children's Cancer Center uses several treatment options for children diagnosed with Ewing sarcoma, including chemotherapy, surgery and radiation therapy.

All patients are managed by a multidisciplinary musculoskeletal team that includes pediatric oncologists, surgeons, pathologists, radiation oncologists, interventional radiologists, physical and occupational therapists, nurses, social workers, child life specialists and more, who provide care tailored to each patient.

Our experienced orthopedic surgeon uses innovative techniques to preserve the affected limbs and thereby retain maximal function. One such procedure is a non-invasive limb-lengthening technique, which can be very beneficial to the growing child.

Research

The Faris D. Virani Ewing Sarcoma Center has a strong emphasis on research.

Our team has several targeted research goals, including developing a greater understanding of:

- Mechanisms that cause cancer cells to travel throughout the body
- Stem cells involved in the initiation and development of the tumor
- Nutritional and energy requirements for the tumor cell's metabolism
- Blood-based biomarkers, monitoring the presence of the disease, response to therapy and even prognosis
- The use of immune cells to specifically target and destroy Ewing sarcoma cells

We perform state-of-the-art basic, translational and clinical research in order to provide transformative and effective treatment approaches for the care and management of all patients diagnosed with Ewing sarcoma.

Referrals

Physicians and families may call the Faris D. Virani Ewing Sarcoma Center at 1-844-EWINGS1 (394-6471) or 1-800-226-2379.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

General Hematology

Texas Children's Hospital®

Our team-based approach provides treatment for a broad range of blood disorders.

Renowned for innovative research and therapies for blood disorders, Texas Children's Hematology Center physicians conduct clinical and scientific research aimed at understanding, preventing and curing blood diseases in children and adolescents.

The Hematology Center offers comprehensive services for the evaluation and treatment of children and adolescents with acute and chronic blood diseases.

The state-of-the-art, team-based program provides treatment for a broad range of clinical ailments including:

- Anemias, thrombocytopenias and neutropenias
- Congenital and acquired bleeding disorders
- Hemoglobin disorders, including sickle cell anemia and thalassemia
- Aplastic anemia and other bone marrow failure syndromes
- Hypercoagulation syndromes and thrombotic disorders

The hematology team has developed and implemented a comprehensive series of clinical practice guidelines to ensure patients receive the best possible care for conditions that include immune thrombocytopenic purpura, hemophilia and bleeding disorders, sickle hemoglobinopathies and lead poisoning.

Texas Children's Hematology Center is dedicated to the integration of laboratory and clinical research to increase our understanding of blood disorders and to develop new, more effective therapies for children who suffer from hematologic malignancies.

Referrals

Physicians and families may contact the General Hematology Program by calling 832-822-4362 or 1-855-824-2972.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Hemostasis and Thrombosis Program

Texas Children's Hospital®

As one of 134 federally funded hemophilia treatment programs across the country, Texas Children's Hemostasis and Thrombosis Program is part of a national network designed to provide state-of-the-art care to children with congenital bleeding and thrombotic disorders.

We provide comprehensive diagnostic and treatment programs, social services and psychological, dental and orthopedic specialty support for the long term evaluation and treatment of children with many conditions, including:

- Heavy menstrual bleeding
- Hemophilia
- Platelet disorders
- Stroke
- Thrombosis
- Von Willebrand disease
- Other bleeding or clotting disorders

Our dedicated, multidisciplinary team follows patients both in the clinic and in the hospital setting. Our Anticoagulation Program, staffed with pediatric hematologists and hematology nurses, helps patients monitor their often complicated drug therapy, both in and out of the hospital.

Collaborations

Our team works closely with other leading experts throughout Texas Children's Hospital to optimize care of patients with bleeding and clotting disorders. These collaborative efforts incorporate advanced interventional technologies to treat complicated cases of thrombosis and life-threatening bleeding.

Young Women's Bleeding Disorder Clinic

In collaboration with the Pediatric and Adolescent Gynecology Division, the Young Women's Bleeding Disorder Clinic follows and treats patients with heavy menstrual bleeding and bleeding disorders in a comprehensive and coordinated manner. Our clinic provides "one-stop" care for gynecologic, hematologic and psychosocial issues for teenagers.

Research

Renowned for our research and therapies for blood disorders, we conduct state-of-the-art clinical and scientific research aimed at increasing our understanding of bleeding and clotting disorders and developing new, more effective therapies for children who suffer from them. Our clinical research is focused on novel agents that increase safety, convenience and effectiveness of therapy for patients.

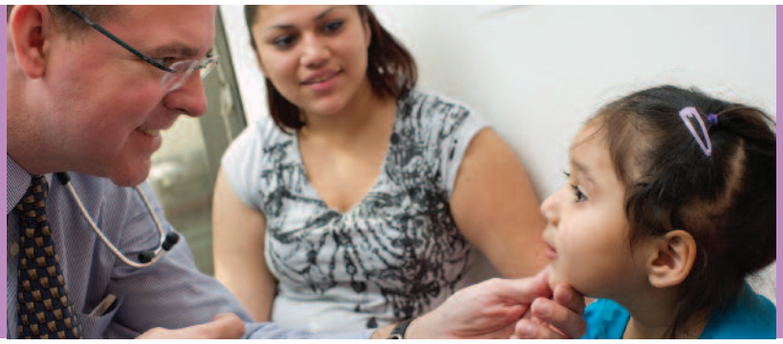
Referrals

Physicians and families may refer patients to the Hemostasis and Thrombosis Program at 832-822-4362 or 1-855-824-2972.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Histiocytosis Program

Texas Children's Hospital®



One of the largest programs of its kind in the world, the Histiocytosis Program at Texas Children's Cancer Center treats more than 150 new patients each year and follows more than 700 additional patients.

Incorporating a large multidisciplinary team, we treat children and adults with the following histiocytic disorders:

- Erdheim Chester disease
- Hemophagocytic lymphohistiocytosis
- Juvenile xanthogranuloma
- Langerhans cell histiocytosis (LCH)
- Multifocal reticulohistiocytosis
- Rosai Dorfman disease

Multidisciplinary care

In addition to our team of specialists focused on histiocytosis, patients may see neurologists, radiologists, endocrinologists, orthopedic surgeons, pathologists and many other clinical and social specialists in order to receive the best possible care.

Research

With the dramatic growth of the Histiocytosis Program, we have developed and expanded the number of clinical trials of innovative therapies to treat histiocytosis conditions. Our extensive clinical experience, coupled with the basic research studies we design with biopsy and other tissue samples, provides the opportunity for us to establish clinical and biologic correlations that no other center in the world can. Our research focuses on genetic changes in cells of the immune system that lead to LCH and related disorders. We have built a program to discover the causes of these conditions in order to expedite development of more effective and innovative therapies.

The Histiocytosis Program has several active grants from the National Cancer Institute, the Histiocytosis Association of America, the American Society of Hematology and the American Society for Clinical Oncology.

Referrals

Physicians and families may make referrals by calling 832-822-4242 or 1-800-226-2379.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Immune Hematology Program

Texas Children's Hospital®

As one of the only pediatric immune hematology clinics in the country, we treat immune-related blood cell abnormalities through comprehensive, multidisciplinary care.

One of the newest programs within the Hematology Center at Texas Children's Hospital, the Immune Hematology Program specializes in the treatment of disorders caused by immune destruction of blood cells.

The Immune Hematology Program offers comprehensive, state-of-the-art care, thorough evaluation and diagnosis and access to all standard treatments as well as novel therapies in clinical trials.

Some of the conditions we treat include:

- Autoimmune hemolytic anemia (AIHA)
- Immune thrombocytopenia (ITP) including chronic ITP
- Neonatal alloimmune thrombocytopenia
- Neonatal hemolytic anemia
- Thrombotic thrombocytopenic purpura

Our program is unique in that it focuses solely on pediatric immune hematology. Our hematologists are experts in immune hematology and aim to provide the highest level of care available. We regularly provide consultations for local pediatricians and work closely with patients and families to ensure understanding of the diagnosis and treatment options. We have a comprehensive support staff to help with understanding and coping with symptoms.

Multidisciplinary care

Following the latest guidelines, we offer a full scope of care through the experts at Texas Children's Hematology Center as well as throughout the 40 subspecialties at Texas Children's Hospital. Working closely with Rheumatology, Immunology, Genetics, Texas Children's Newborn Center and Pathology, we carefully monitor patients for development of other immune problems now as well as throughout their lives.

Research

We are actively researching the causes and treatments of these disorders as well as collaborating with leading centers around the country to offer our patients the best treatments available. We are also researching various aspects of ITP diagnosis and therapy. Upcoming projects include development of ITP and AIHA registries to understand the natural history of these disorders in children.

Referrals

Physicians and families may call the Immune Hematology Program at 832-822-4362 or 1-855-824-2972.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Leukemia Program

Texas Children's Hospital®

As one of the largest and most comprehensive pediatric leukemia treatment programs in the country, we provide diagnosis, evaluation and ongoing management to over 500 pediatric patients with suspected or diagnosed acute lymphoblastic leukemia, acute myeloid leukemia and chronic leukemias each year.

Our multidisciplinary team of physicians and staff sees patients for initial treatment and ongoing care. Experts in pediatric oncology, pediatric surgery, cell and gene therapy including stem cell transplant, radiation oncology, pediatric anesthesia, pharmacology, social work, child life and the full complement of pediatric subspecialty services, we put a strong focus on family-centered care and emotional support for both the child and the family.

Treatment options include chemotherapy, Phase I investigational therapies, radiation therapy (both conventional and proton), bone marrow transplantation and immunotherapy. Each patient receives individualized treatment according to his or her diagnosis.

In addition, we have dedicated, state-of-the-art hematology, cytogenetics, flow cytometry and molecular pathology laboratories which conduct comprehensive testing and provide timely and accurate patient results.

Clinical trials

The Leukemia Program conducts numerous clinical trials for children with newly diagnosed leukemias and for children with recurrent and resistant disease. All patients are considered for eligibility to participate in clinical trials, which are the standard of care for our patients. The program is unique in its concentration of nationally and internationally recognized leaders in the areas of new drug development and cell and gene therapy. We design and conduct both local and national clinical trials through the Children's Oncology Group (COG).

Texas Children's Cancer Center is a member of the COG Phase I Consortium, a small and select group of institutions that administer Phase I clinical trials of drugs in early development.

Research

Research in the Leukemia Program spans from basic molecular studies of leukemia biology and immunotherapy to the development of novel agents, as well as mitigating the late effects of treatment in long-term survivors. The Leukemia Program is dedicated to integrating laboratory and clinical research to increase our understanding of leukemia and to develop new, more effective therapies for the disease.

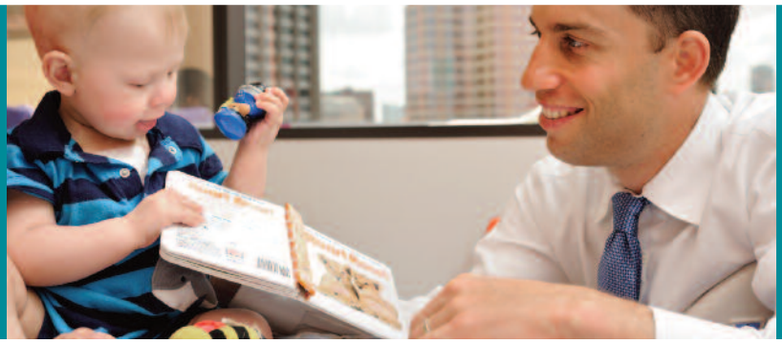
Referrals

Physicians and families may call the Leukemia Program at 832-822-4242 or 1-800-226-2379.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Liver Tumor Program

Texas Children's Hospital®



The Liver Tumor Program at Texas Children's Cancer Center provides expert diagnosis and treatment of pediatric liver tumors within a state-of-the-art clinical setting.

The Liver Tumor Program offers comprehensive, multidisciplinary care to children with any liver tumor including hepatoblastoma, hepatocellular carcinoma, hepatic adenoma, sarcoma of the liver and vascular malformations of the liver. Our center is comprised of expert pediatric oncologists, liver surgeons, pathologists, radiologists, interventional radiologists, liver transplantation specialists, pharmacologists and geneticists who provide optimal care to our patients.

We see patients with liver tumors ranging from relatively common to the extremely rare, making us one of the largest liver tumor programs in the nation.

Treatment

Our multidisciplinary team of physicians meets regularly to establish the optimal treatment plan for each individual child with a liver tumor. If a liver transplant is the best course of action, our world-renowned pediatric liver transplant team is immediately available. Ours is one of the few pediatric liver tumor centers in the country to offer transplantation within the same facility. We also offer advanced interventional radiology techniques such as transarterial chemoablation and radiofrequency ablation to treat liver lesions, procedures commonly used in adult patients but relatively new in pediatrics.

Research

The Liver Tumor Program's principal areas of research span from basic science to clinical research, with particular emphasis on tumor biology and the identification of new targets for therapies.

Scientists at Texas Children's Cancer Center have ongoing studies focused on understanding the pathogenesis, biology and malignant determinants of liver tumors, developing novel targeted therapies and immunotherapeutic approaches. These investigations range from molecular genetic studies to novel clinical trials for treatment of recurrent or refractory disease.

We are working with the Children's Oncology Group and the Childhood Liver Tumors Strategy Group of the International Society of Pediatric Oncology on an upfront trial for hepatoblastoma as well as new drug trials with the ultimate goal of curing 100 percent of children with liver tumors.

Referrals

Physicians and families may call the Liver Tumor Program at 832-822-4242 or 1-800-226-2379.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Long Term Survivor Program

Texas Children's Hospital®

The Long Term Survivor Program, which currently follows approximately 1,800 long term survivors, has an international reputation as a leader in assisting pediatric cancer patients and survivors.

The Long Term Survivor Program has attracted a world-renowned faculty involved in local, national and international research that benefits today's pediatric cancer patients and future survivors. The program sees patients with any childhood cancer diagnosis who are at least two years after the completion of therapy.

A critically important focus of the Long Term Survivor Program is to provide patient education about diagnosis, treatment and potential risks (late effects) of prior cancer therapy. There is a strong emphasis on ways to maintain and maximize good health through discussions of diet, exercise, environmental exposure and stress.

Comprehensive appointments include evaluation of the patient's physical health as well as academic and social development. Additionally, survivors are offered opportunities for enrollment into clinical research trials if interested.

Passport for Care®

Texas Children's Cancer Center, through collaboration with other researchers at Baylor College of Medicine, The Center for Collaborative and Interactive Technologies and the Children's Oncology Group, has developed the Passport for Care (PFC).

PFC is an innovative and interactive internet-based tool for survivors and their care providers that allows increased access to the survivor's medical information as well as accurate and timely individualized health care guidelines for following long term survivors.

PFC was developed in 2007 to address the health care needs of the estimated 350,000 long term survivors of childhood cancer in the United States. Individualized survivor educational resources are customized to the needs of each patient based on his or her disease and its treatment.

Referrals

To make an appointment with the Long Term Survivor Program, please call 832-822-4242. Appointments are made approximately six to eight weeks in advance to provide ample time for a care plan to be developed and appropriate screening appointments. Patients and families can self-refer to the Long Term Survivor Program directly.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Lymphoma Program

Texas Children's Hospital®

As the only stand-alone pediatric lymphoma program in the country, the Lymphoma Program at Texas Children's Cancer Center offers unparalleled care, access to clinical trials and innovative therapies for children with lymphoma and lymphoproliferative disorders.

A multidisciplinary team of experts in pediatric oncology, surgery, pharmacology, stem cell transplant, molecular oncology, and cell and gene therapy works together to research and provide new means of diagnosing, monitoring, treating, preventing and predicting the behavior of lymphoma.

Our mission is to develop targeted therapies and protocols for the majority of patients using an individualized approach. While we participate in Children's Oncology Group (COG) trials, we also assist patients who do not qualify for these trials. Ultimately, we want to design ways to minimize side effects from treatment so that children can have healthier lives.

Some of the many conditions we treat include:

- Anaplastic large cell lymphoma
- Auto-immune lymphoproliferative disease
- B cell lymphomas including diffuse large B cell lymphoma
- Burkitt's lymphoma
- Chronic active EBV
- Epstein-Barr virus-related lymphoma and lymphoproliferative disorders
- Hodgkin's lymphoma (Hodgkin's disease)
- Lymphadenopathy (enlarged lymph nodes)
- T cell and NK/T cell lymphomas

Clinical trials

The Lymphoma Program conducts numerous clinical trials for children with newly diagnosed lymphomas and for children with recurrent or resistant lymphoma.

Research

The Lymphoma Program is dedicated to the integration of laboratory and clinical research to increase our understanding of lymphoma and to develop new, more effective therapies for these conditions. The principal areas of research focus on understanding the genetic determinants of tumor biology, exploiting the relationship of lymphoma with the immune system to develop immunotherapy and developing new drugs. We are part of a National Cancer Institute-funded Specialized Programs of Research Excellence grant and participate in COG and internal lymphoma studies within Texas Children's Cancer Center and the Cell and Gene Therapy Program.

Referrals

Physicians and families may call the Lymphoma Program at 832-822-4242 or 1-800-226-2379.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Neuroblastoma Program

Texas Children's Hospital®

Founded in 2007, the Neuroblastoma Program at Texas Children's Hospital has grown to become one of the top referral centers in the country for treating this condition.

Our multidisciplinary team includes dedicated physicians, nurses and research coordinators who focus solely on neuroblastoma. We work closely with our Surgical Oncology Group (all of whom are neuroblastoma researchers), the Solid Tumor Program, the Pathology Section, the Center for Cell and Gene Therapy (Bone Marrow Transplant and Immunotherapy research group) and a wealth of social support services provided by Texas Children's Hospital.

Treatment

Neuroblastoma is one of the most common solid tumors in children, and approximately 700 patients are diagnosed each year in the United States. We care for patients of all ages diagnosed with neuroblastic lesions, from benign masses to highly aggressive, malignant tumors.

Our program is focused not only on methods to improve our current care platform, but also to incorporate additional non-toxic treatment options to improve cure rates. Our comprehensive treatment options include surgery, radiation therapy, high-dose chemotherapy with stem cell rescue and immunotherapy with antibody, T cells and/or vaccines.

Research

Neuroblastoma remains a therapeutic challenge and there is an urgent need for additional research to develop more effective and less toxic treatment options for children with this disease.

Clinically, our program offers novel treatment options including Investigational New Drug trials, Children's Oncology Group studies and local pilot clinical studies. Over the past decade, our translational program has become nationally recognized for the development and use of immunotherapy in patients with relapsed or refractory disease. We recently completed and published the largest trial using chimeric antigen receptor T cells designed specifically for children with neuroblastoma.

We recognize that standard treatment options will not work for all children. Therefore, we are actively investigating new sequencing and genomic approaches to better characterize neuroblastoma tumors.

Referrals

Physicians and families may call the Neuroblastoma Program at 832-822-4242 or 1-800-226-2379.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Palliative Care Program

Texas Children's Hospital®

With physicians specifically board-certified in palliative care, our program addresses the psychological, emotional and social challenges of cancer on an entire family.

Palliative care is an area of medicine that focuses on reducing suffering and improving quality of life for people with life-threatening illnesses. Palliative care focuses not only on the patient's physical symptoms but also on psychological, emotional and social distress.

Texas Children's Cancer and Hematology Centers' Palliative Care Team includes board-certified physicians, nurse practitioners and others who help patients feel more comfortable and improve their quality of life. The team addresses symptoms such as pain, fatigue and nausea as well as feelings like anxiety or depression. Palliative care can be integrated into any phase of treatment and has positive physical and emotional benefits for patients and families.

At Texas Children's Cancer and Hematology Centers, we encourage patients and families to talk to caregivers about palliative care. Our commitment to the whole child and family starts at the time of diagnosis and continues throughout treatment and beyond.

Referrals

For more information on palliative care, please call 832-824-4588 or 832-822-1317.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Precision Oncology Consultation Service

Texas Children's Hospital®

One of the only centers in the United States providing individualized care for pediatric patients with relapsed, refractory and high-risk cancers by analyzing patient tumor samples with state-of-the-art genomic sequencing.

Pediatric cancer researchers have learned that each child's tumor is unique, with different underlying genetic mutations and sequences. Investigators at Texas Children's Cancer Center are leading cutting-edge studies to understand how genome sequencing can be used to identify these mutations and implement more precisely-targeted, patient-specific treatments to improve outcomes for each childhood cancer patient. Now they are also incorporating these technologies into the pediatric cancer clinic.

The clinical Precision Oncology Consultation Service will use state-of-the-art genomic testing to comprehensively analyze patient tumor samples and make the most informed decisions possible for the care of each child evaluated and treated at Texas Children's Cancer Center. In addition, the Precision Oncology team will be available to help interpret results of testing performed outside of Texas Children's and to advise families (and their oncologists) about what sequencing tests, if any, might be the most useful for their child's cancer care.

Texas Children's Cancer Center is a leader in the use of precision oncology strategies for the care of children with rare, relapsed, refractory and high-risk cancers – patients with limited treatment options who are most in need of novel therapeutic approaches.

Our Team

The multidisciplinary precision oncology team includes experts in personalized medicine including oncologists, pathologists, surgeons and geneticists who work together to identify the best treatment and clinical trial options for each individual patient. Importantly, this team has expertise in the genetics and treatment of each type of childhood cancer and extensive experience with the development and evaluation of innovative new cancer therapies.

Contact Us

Physicians and families may contact the Precision Oncology Consultation Service by calling 1-800-226-2379 or emailing precisiononcology@txch.org.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Rare Tumors Program

Texas Children's Hospital®

The only pediatric rare tumors program in the southwestern United States, providing care and new treatment options to children and adolescents with rare malignancies.

As part of the largest pediatric cancer center in the United States, Texas Children's Rare Tumors Program cares for a substantial number of children with rare tumors. Our multidisciplinary team of pediatric oncologists, pathologists, surgeons, radiologists, geneticists and researchers work together to achieve the best outcome for every patient.

Treatment

Rare tumors in children range from cancers that occur only during childhood, such as pleuropulmonary blastoma, to cancers that primarily occur in adults but can rarely occur in children, such as melanoma and colorectal cancer. Often, no standard diagnostic or treatment protocols exist for rare childhood tumors. We have developed standardized treatment regimens for multiple rare childhood tumors, and, when applicable, we use advanced molecular diagnostic techniques to facilitate timely and accurate diagnoses.

Research

Our research is focused on understanding the genetic basis of rare tumors and identifying novel treatment targets. We collaborate with other pediatric cancer programs, both nationally and internationally, to improve the diagnosis and treatment of rare tumors. We also actively participate in national registries for individual tumors and are developing registries for tumors that do not have a dedicated registry.

Referrals

Physicians may make referrals or inquire about second opinions by calling 832-822-4242 or 1-800-226-2379. They may also email us at raretumors@txch.org. Families may contact us at 832-822-1564.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

The Retinoblastoma Center of Houston

Texas Children's Hospital®

The Retinoblastoma Center of Houston provides multidisciplinary care and innovative treatment for children from around the world.

The Retinoblastoma Center of Houston is a consortium of physicians and scientists from some of the premier medical institutions in Houston: Texas Children's Cancer Center and Baylor College of Medicine, the Children's Cancer Hospital at The University of Texas and MD Anderson Cancer Center and The Methodist Hospital. We provide comprehensive treatment for children with retinoblastoma, education for patients, families and the medical community and cutting-edge basic and clinical research.

As the only center of its kind in the southwestern United States, patients are provided the highest quality of care for their condition. Our team includes specialists in pediatric oncology, ophthalmology, radiation therapy, cell and gene therapy, ocular pathology and cancer genetics. We offer counseling, psychosocial support and a wealth of other services for patients and families.

Treatment

Our multidisciplinary approach results in an individualized treatment plan for each patient. We perform genetic testing on tumor tissue and peripheral blood in all patients who undergo enucleation, and we offer appropriate genetic counseling once we have the testing results.

Depending on the kind and stage of retinoblastoma, the Retinoblastoma Center of Houston offers treatment using ophthalmic surgery, cryosurgery, photocoagulation, proton beam radiation therapy, intrathecal chemotherapy and systemic chemotherapy with or without autologous bone marrow transplant for patients whose disease has spread beyond the eye to other parts of the body. The goal is to use the least invasive treatment necessary to save the child's life, eye and vision.

Research

At Texas Children's Cancer Center, retinoblastoma research is currently focused on ocular gene therapy. The Ocular Gene Therapy Group is investigating various gene transfer approaches to treat and prevent eye diseases. It has also developed a novel approach to treating retinoblastoma with the ultimate goal not only of curing the disease, but also saving vision. We are also studying the mechanisms that spread the disease beyond the eye in children with retinoblastoma with the goal of developing treatments for this debilitating complication of the disease.

Referrals

Physicians and families may call the Retinoblastoma Center of Houston at 877-730-3927 or 1-800-226-2379.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Sickle Cell Center

Texas Children's Hospital®

The Sickle Cell Center at Texas Children's Hematology Center offers comprehensive family-centered care for children with this complex blood disorder.

Our individualized course of treatment includes patient care, education, psychosocial support services, screening and counseling for children and their families. Serving over 1,000 children each year, our program is one of the largest in Texas. The Sickle Cell Center offers the latest treatments including hydroxyurea, transfusions and stem cell transplantation.

Multidisciplinary care

Our multidisciplinary team is made up of board-certified pediatric hematologists, hematology-trained nurse practitioners and physician assistants, research staff and social workers. In addition, we offer psychological support and counseling services to help families cope with difficult social, emotional and financial issues brought on by the disease's medical complications, especially debilitating pain crises. Texas Children's Sickle Cell Center offers excellent ambulatory services, including outpatient blood transfusion and pain treatment programs, a sickle cell pulmonary clinic, sickle cell stroke clinic and genetic counseling, all in one location.

When it's time for patients to transition to adult sickle cell care, we continue to provide support through our affiliation with Baylor College of Medicine.

Research

The Sickle Cell Center conducts state-of-the-art clinical and laboratory research aimed at gaining a better understanding of the disease, preventing its complications and ultimately finding a cure. The center's research funding is provided by government grants and the philanthropic support of a variety of community-based organizations. Children receiving care at Texas Children's Sickle Cell Center have the opportunity to participate in several National Institutes of Health-funded research studies led by physician scientists, providing the latest treatments for this disease. This partnership allows us to offer even more novel therapies to our sickle cell patients.

Referrals

Physicians and families may call the Sickle Cell Center at 832-822-4362 or 1-855-824-2972.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Solid Tumor Program

Texas Children's Hospital®

The Solid Tumor Program at Texas Children's Cancer Center provides cutting-edge clinical care for children with tumors of the bone, soft tissue, kidney, liver and other organs.

Our program provides a multidisciplinary team of experts who collaborate in the care of each patient and in the development and execution of cutting-edge clinical trials to improve outcomes for these patients. We treat patients with a wide variety of solid tumors and cancers, including:

- Ewing sarcoma
- Germ cell tumor
- Kidney tumors
- Liver tumor
- Melanoma
- Neuroblastoma
- Osteosarcoma
- Rhabdomyosarcoma
- Thyroid tumor

Our physicians have extensive expertise in the treatment of rare tumors such as hepatoblastoma and hepatocellular carcinoma (liver tumors), germ cell tumors (tumors of the reproductive organs), sarcomas of the soft tissues and many other cancers. In addition, the Solid Tumor Program has a special interest in the study of vascular tumors (hemangiomas, vascular malformations and malignancies). Seeing over 150 new patients a year, we are one of the largest pediatric solid tumor programs in the country.

Research

Our investigators play leadership roles at the national level through participation in the solid tumor clinical research efforts of the National Cancer Institute-sponsored Children's Oncology Group. We use translational research to initiate clinical trials. Examples of these include promising phase I vaccine trials in the management of neuroblastoma and engineered T cell therapy for osteosarcoma. Our comprehensive program also focuses on the genetic composition of osteosarcoma and potential of osteosarcoma cells to spread to distant organs. We are also examining how genome sequencing can eventually lead to better outcomes for children with solid tumors.

Referrals

Physicians and families may call the Solid Tumor Program at 832-822-4242 or 1-800-226-2379.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Thyroid Cancer Program

Texas Children's Hospital®

Each year approximately 1,000 children and adolescents are diagnosed with thyroid cancer in the United States. The Thyroid Cancer Program at Texas Children's Cancer Center offers multidisciplinary care to patients with thyroid cancer.

There are three main types of thyroid cancer: Papillary, Follicular and Medullary. Children who are at increased risk for thyroid cancer include:

- Childhood cancer survivors who received radiation therapy to the neck as part of their initial treatment
- Children with Hashimoto Thyroiditis
- Children with Gardner's Syndrome, MEN 2A or 2B

Evaluation and Treatment

Cancer of the thyroid gland often presents as a swelling in front of the neck. Sometimes, patients can present with difficulty swallowing or enlargement of lymph glands in the neck. At Texas Children's Cancer and Hematology Centers, children are initially evaluated using ultrasound examination and laboratory tests. When indicated, we perform a fine needle aspiration of the suspicious thyroid swelling and confirm the diagnosis of thyroid cancer using the latest molecular diagnostic testing. Thyroid cancer in children is generally treated with surgery and radioactive iodine. For children refractory to these modalities, we are able to offer medical therapy using targeted agents.

Our team of experts includes pediatric oncologists, surgeons, endocrinologists, pathologists, radiologists, cancer geneticists, pediatric nurses, social workers and child life specialists. This team approach enables patients and families to receive the most comprehensive and innovative care in a single location over the full course of their treatment and for long term follow-up care.

Research and Clinical Trials

In order to understand the biology of thyroid cancer, with the goal of offering more successful therapies for pediatric patients, we have established the North American Pediatric Thyroid Cancer registry to collect information on children with thyroid cancers. You can email raretumors@txch.org to get information on how to enroll in the registry.

We are the first and only center in North America to open a clinical trial of Lenvatinib in children, a drug currently approved for use in adults. We are currently testing the safety and efficacy of this medication in children with thyroid cancers. More information on this clinical trial can be obtained by emailing raretumors@txch.org or visiting clinicaltrials.gov.

Referrals

Physicians and families may make referrals by calling the Rare Tumors Program at 832-822-4242 or 1-800-226-2379. They may also email us at raretumors@txch.org. We welcome oncologists to contact us for second opinion consultations about the care and management of individual patients.

TEXAS CHILDREN'S CANCER AND HEMATOLOGY CENTERS

Vascular Anomalies Program

Texas Children's Hospital®

The Vascular Anomalies Program at Texas Children's Cancer and Hematology Centers specializes in providing comprehensive management of vascular tumors and malformations in pediatric patients.

Vascular tumors managed in the Vascular Anomalies Program include:

- Kaposiform Hemangioendothelioma (KHE)
- Hepatic Angiosarcoma
- Epitheloid Hemangioendothelioma
- Hepatic Hemangiomas (congenital and infantile)

Vascular malformations managed in the Vascular Anomalies Program include:

- Capillary-Venous-Lymphatic Malformation (Klippel-Trenaunay Syndrome)
- CLOVES Syndrome
- Blue Rubber Bleb Nevus Malformations
- Parkes-Weber Syndrome
- PTEN Hamartoma Tumor Syndrome
- Hereditary Hemorrhagic Telangiectasia
- Generalized Lymphatic Anomaly
- Gorham-Stout Disease

The complete team includes expert pediatric hematology-oncology specialists, physical therapists, a nutritionist, wound care specialists, social workers and child life specialists who work together to cover all aspects of comprehensive management in the context of the most advanced medical therapies.

We initiate or participate in almost all national clinical trials dedicated to vascular anomalies. Treatment is available either as part of a clinical trial or as standard of care, ranging from intense supportive medical care to anticoagulants, sirolimus (Rapamycin), thalidomide or chemotherapy.

Treatment

Texas Children's Hospital has experts in all pediatric subspecialties involved in the treatment of vascular anomalies. The medical team works closely with Interventional Radiology, Plastic Surgery, Dermatology, Otolaryngology (Ear, Nose and Throat), Pulmonary Medicine, Liver Transplant, Gastroenterology, Hepatology and Nutrition, and more, to provide integration of care, peri-procedural supportive management and a unified treatment plan for the patients.

The whole spectrum of advanced surgical interventions, endovascular procedures (sclerotherapy) and laser therapy are available at Texas Children's Hospital. We provide inpatient and outpatient services at two Texas Children's Hospital locations: Main Campus and West Campus.

Referrals

Physicians and families may contact the Vascular Anomalies Program at 832-822-4242 or 1-800-226-2379.

TEXAS CHILDREN'S CANCER AND
HEMATOLOGY CENTERS

TEXASCHILDRENS.ORG/CANCER