

Liver Tumors

84

Liver transplants for patients with liver tumors since 1994



Over the last 10 years, our team has performed more transplants for pediatric patients with liver tumors than any other hospital in the country.



Cincinnati Children's is ranked #3 in Cancer, #1 in Gastroenterology & GI Surgery.

Cincinnati Children's is a national leader in treating patients with liver tumors, including those in the advanced stages of disease and those requiring liver transplants. Our specialists share a passion for acquiring and applying new discoveries in order to provide patients with the most innovative, effective care possible. Our liver team co-directors, Dr. Jim Geller (Oncology) and Dr. Gregory Tiao (Surgery) currently co-chair the Children's Oncology Group's international study of pediatric liver cancer (AHEP-1531) in collaboration with Europe and Japan.

HOW WE'RE DIFFERENT

The Liver Tumor Program at Cincinnati Children's is led by oncologists and surgeons who collaborate with other specialists from a variety of disciplines, including hepatology, radiology, gastroenterology, nutrition therapy, nursing and many others. Members of our program are recognized as international leaders in the field. Our team approach benefits patients in many ways, specifically by fostering early detection, accurate diagnosis, and appropriate, coordinated treatment.

- Specialists share their expertise and recommendations in a collegial atmosphere in which everyone's perspective is highly valued.
- Patients needing transplants are "fast-tracked" through the evaluation process, with a median time of 22 days between evaluation and listing on the transplant waiting list, and a median waiting time of 32 days between listing and transplant.
- Our family-centered care philosophy regards children and their families as integral to the care team. This results in more personalized, sensitive care for patients.
- Our integrated, focused liver tumor biology program advances the understanding of the biology behind liver cancer to develop new therapies.
- Currently developing a registry with parent advocates for relapsed liver cancer.
- Our team hosted and sponsored the first ever "Hepatoblastoma Family Day" where parents and patients collaborated with clinicians and researchers. Both the parent-led Hepatoblastoma Resource Network and the Relapsed/Refractory Hepatoblastoma Registry, housed by Cincinnati Children's, were directly formed from this partnership.
- Host, organizer and sponsor of the 3rd International Pediatric Liver Tumor Conference in February 2020 and 'Hepatoblastoma Community Day', a meeting integrating stakeholders (parents/patients) and clinicians/researchers to advance patient centered outcomes research specific to liver tumor patients and families.

CONDITIONS TREATED

Our specialists care for children and young adults with:

- Newly diagnosed hepatoblastoma, hepatocellular carcinoma, hemangioendothelioma, hepatic sarcoma and other forms of liver cancer
- Advanced, unresponsive or relapsed liver cancer
- Complex liver tumors that may require a liver transplant
- Benign liver tumors



TREATMENT TEAM

Oncology

James Geller, MD, FAAP
Medical Director, Liver Tumor Program

Pediatric and Liver Transplantation Surgery

Greg Tiao, MD
Director, Division of General and Thoracic Surgery
Alexander Bondoc, MD

Hepatology

Alexander Miethke, MD
Medical Director, Liver Transplant Program

Akihiro Asai, MD, PhD
William Balistreri, MD
Kathleen Campbell, MD

Anna Peters, MD, PhD
Amy Taylor, MD

Pathology

Anas Bernieh, MD
Sarangarajan Ranganathan, MD

Pediatric Oncology, Survivorship

Rajarajam Nagarajan, MD

Radiology

Manish Patel, DO
John Racadio, MD
Alexander Towbin, MD
Andrew Trout, MD

Tumor Biology

Alexander Bondoc, MD
Soona Shin, PhD
Nikolai Timchenko, PhD

TREATMENT APPROACH

Each patient in our Liver Tumor Program undergoes an extensive evaluation during which multiple specialists meet to discuss the child's medical needs. The team shares perspectives from the most up-to-date research and clinical practice to develop an individualized treatment plan. These specialists continue to collaborate throughout the child's course of treatment and provide referring physicians with regular updates.

Our program offers a broad range of therapies, including some innovative approaches not available at other children's hospitals. We lead the development of novel agent and interventional therapies, such as ICG, Indocyanine Green tumor localization for resection of metastases. Some of the many treatment options we offer include:

- Chemotherapy
- Radiation therapy, including hepatic arterial delivery of Yttrium 90 (Y90)
- Conventional surgery to resect tumors
- Radiofrequency and cryo ablation are image-guided techniques that heat, or freeze, and destroy cancer cells
- Liver transplantation
- New biologic therapies, some of which are designed to help the immune system fight cancer
- Transcatheter arterial chemoembolization, a procedure that delivers chemotherapy drugs directly to the tumor through blood vessels, sparing healthy tissue
- Targeted drug therapies
- Experimental therapeutics offered through clinical trials, both national and institutional

RESEARCH TO IMPROVE CLINICAL CARE

Cincinnati Children's is a major center for pediatric cancer research. Physicians and researchers in the Liver Tumor Program lead and participate in numerous clinical research studies, with the goal of improving the prognosis and quality of life for patients with liver tumors. Cincinnati Children's conducts research in the following areas:

- Tumor formation, development and biological characteristics
- Advanced diagnostics and classification
- Molecular target identification
- Personalized (precision medicine) therapy
- Predisposition and tumor-specific genetics
- Radiographic correlations to therapy
- Clinical therapy correlations and outcomes
- Development of biological targeted therapies specific to pediatric liver tumors

Some of these studies are sponsored by Cincinnati Children's, and some are offered at our site through national cooperative research organizations such as the Children's Oncology Group and the National Cancer Institute's Pediatric Phase I Consortium. Physicians and researchers at Cincinnati Children's play a leading role in many national and international clinical research studies including Liver Tumor program co-directors, Drs. Geller and Tiao, serving as co-chairs for the COG international study of pediatric liver cancer (AHEP-1531). Dr. Alex Towbin and Dr. S. Ranganathan serve as leads in radiology and pathology, respectively, for the same AHEP1531 trial. This level of engagement in research ensures that patients have access to the most innovative and effective cancer treatments.

For urgent issues, or to speak with the specialist on call 24/7, call the Physician Priority Link® at 1-888-987-7997.

For international inquiries, call +1-513-636-3100 or email international@cchmc.org.