

The Liver Tumor Program

AT TEMPLE UNIVERSITY HOSPITAL



The Liver Tumor Program at Temple gives patients direct access to liver specialists who are highly experienced in using the most advanced technologies and therapies for aggressive management of primary biliary and hepatic tumors as well as metastatic cancers. The Temple team combines expertise in diagnostic imaging, pathology, surgical treatment, radiologic interventions, and chemotherapy to create a comprehensive treatment plan for every patient. Based on a careful evaluation of clinical, radiologic, pathologic and—increasingly—molecular characteristics, the Temple team works with the patient, the family, and the referring physician to individualize a treatment plan that maximizes effectiveness and quality of life. In many cases, patients at Temple benefit from access to innovative combination therapies, less invasive surgeries or radiologic procedures, and enrollment in national clinical trials. At every step in the workup, treatment, and follow-through, the patient will be supported by Temple’s large staff of specialized nurses, diagnostic imaging and surgical/procedural technicians, researchers, educators, and other care support specialists.

LIVER TUMOR PROGRAM



Temple University
Hospital

What types of patients are referred to Temple?

Over the past 5 years, Temple's volume has consistently ranked among the top centers in Pennsylvania in managing hepatitis B and C; cancers of the liver, gallbladder or pancreas; cirrhosis and alcoholic hepatitis; and other noncancerous pancreatic and liver diseases. (PA Healthcare Cost Containment Council, Hospital Performance Report 2006)

Indications for referral to the Temple Liver Tumor Program commonly include:

LIVER

- Primary tumors
(e.g., hepatocellular carcinoma, intrahepatic cholangiocarcinoma, fibrolamellar carcinoma)
- Metastatic tumors of other origins
- Benign tumors
(e.g., hemangioma, adenoma, focal nodular hyperplasia)
- Cystic lesions, abscesses

BILE DUCTS

- Biliary cysts
- Tumors and iatrogenic injuries
(after cholecystectomy or endoscopy)

PANCREAS

- Pancreatic adenocarcinoma
- Evaluation of cystic lesions
- Chronic pancreatitis

Treatment Options and Interventions for Liver Tumors

The Temple team is committed to tailoring therapy to each patient based on the extent of disease, the underlying cause, the level of residual liver function, concomitant diseases and therapies, and of course the patient's unique history and preferences. As early diagnosis becomes more common and as new options for nonsurgical therapies multiply, Temple physicians are increasingly providing patients with therapies that are minimally invasive and far less toxic than the standard therapeutic options of just a few years ago. In many cases, a combination of approaches now provide the safest and more effective treatment. The array of treatment options considered at Temple today include:

- Open liver resection
- Open pancreatic resection
- Laparoscopic hepatobiliary procedures
(e.g., liver wedge resection, liver lobectomy, liver cyst removal, pancreatectomy, splenectomy, adrenalectomy)
- Radiofrequency ablation
(percutaneous, open and laparoscopic)
- Surgical repair of bile duct injuries
- Full spectrum of interventional radiology procedures
(e.g., liver biopsy, biliary drainage, portal vein embolization, arterial chemoembolization, TIPS)
- Use of SIR-Spheres[®], an innovative treatment directed to liver tumors that uses radioactive embedded micro-particles injected directly into the tumor via its arterial supply
- Therapeutic endoscopies
(stent placement in the pancreatic duct, endoscopic drainage of pseudocysts)

For immediate assistance in scheduling a patient appointment or to receive additional information about the Liver Tumor Program, call 215-707-3626.

Faculty

In addition to their clinical practice in the Liver Tumor Program, all Temple faculty also participate in clinical research aimed at improving the diagnosis or treatment of hepatobiliary tract malignancies. For a complete description of Temple faculty research interests and recent publications, please go to www.temple.edu/medicine.



GARY S. COHEN, MD is Co-Director of the Liver Tumor Program. As Chief of Vascular/Interventional Radiology he has been consistently selected as a "Top Doctor" by *Philadelphia Magazine*, is Professor and Vice Chair of Radiology, and is nationally recognized for his interventional expertise. His interests include all facets of liver diagnosis and intervention from percutaneous biliary drainage and stenting to cutting edge TIPS endografts, percutaneous portal vein embolization en route to tumor resection, and percutaneous interventional oncology including chemoembolization, Yttrium therapies, radio frequency ablation, and microwave ablation.



ANDREAS KARACHRISTOS, MD, PhD is Co-Director of the Liver Tumor Program. He brings advanced surgical techniques to our team. Through the combination of open and laparoscopic approaches Dr. Karachristos conducts the gamut of interventional tumor therapies from benign to malignant, primary and metastatic liver tumors, as well as liver transplantation. His research and clinical interests revolve around cutting edge molecular analysis of liver lesions.



MARTIN BLACK, MD is Director of the Liver Unit in Temple's Gastroenterology Section. He is nationally renowned and has been recognized as Practitioner of the Year by the Philadelphia County Medical Society. He is one of the leading hepatologists in Philadelphia. Dr. Black is known for his commitment and devotion to his patients and for his diagnostic and therapeutic expertise in all aspects of liver disease with special interest in viral hepatitis, chronic active hepatitis, non-alcoholic steatohepatitis, and other serious hepatobiliary disorders.



SANTIAGO J. MUNOZ, MD is Medical Director of the Liver Transplant Program and Director of Clinical Hepatology. Dr. Munoz is the one of the area's most experienced physicians in management of end stage liver disease and medical complications after surgery. He is highly respected for his expertise in chronic and acute liver failure, medical aspects of liver transplantation, chronic hepatitis C and B, primary liver cancer (hepatoma), and fatty liver. In addition to many other honors, Dr. Munoz has consistently been selected as a "Top Doctor" by *Philadelphia Magazine*.



ASHOKKUMAR JAIN, MD is Director of Liver Transplant Program. He is internationally known as one of the most experienced liver transplant and hepatobiliary surgeons. Over the last two decades he has published over 250 manuscripts and presented almost 600 scientific papers in national and international meetings. Dr. Jain brings unparalleled experience and valuable knowledge to the Liver Tumor Program.



SHEFALI AGRAWAL, MD is a hepatobiliary and pancreatic surgeon trained at the world-renowned program at Johns Hopkins Hospital. She specializes in the surgical management of benign and malignant diseases of the liver, gall bladder, bile ducts and pancreas. In addition to surgical excellence, Dr. Agrawal has numerous scientific publications. Her research focuses on the proteomic analysis and genetic mechanisms of cell cycle regulation of liver cancer for the development of novel liver-directed therapies.



ASIM ALI, MD is a medical oncologist and Director of Gastrointestinal Oncology. His research is developing new techniques for improving patient supportive care during intensive chemotherapy.



JOHN A. DALLER, MD is Director of the Abdominal Organ Transplant Program. He is a highly experienced surgeon with a focus on pancreatic, kidney, and liver transplantation. His special interests in hepatic physiology, regeneration, and pretransplant preservation are supported by his research into the mechanisms of immunosuppression, T-cell apoptosis, hormonal stimulation, and signal transduction.



JOHN DALY, MD is an internationally renowned surgical oncologist. He is Dean of the Temple University School of Medicine and he has published widely on the relation of surgical skills and experience to outcomes as well as on molecular and immunologic aspects of cancer patho-physiology and therapy.