

SYNERGY

2017 TRANSPLANT MEDICINE REPORT

LIVER

The liver transplant process is composed of multiple phases, each of which is part of a synergetic program of care focused on a single, overall goal: the delivery of exceptional outcomes to patients, their families, and referring physicians.

Liver Transplant Program's attributes drive continued growth

A comprehensive approach to liver disease, easy accessibility, and a focus on research remain hallmarks of the Liver Transplant Program, which continued to grow in 2017. Surgeons performed 57 transplants during the year.

Though the program has increased its number of transplants for eight consecutive years, it's the totality of care in all aspects of liver disease that truly distinguishes it.

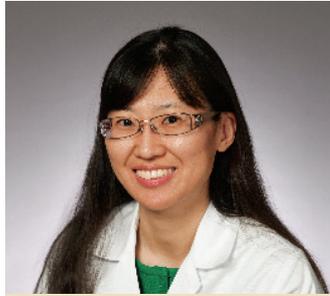


Jorge Marrero, M.D.
Medical Director

"We do transplants well, but we're really leaders in liver disease as well," says Jorge Marrero, M.D., Medical Director of Liver Transplantation and Chief of Clinical Hepatology. "Whether it's alcoholic liver disease, viral hepatitis, or liver cancer – we have national experts in all these areas. And if someone needs a transplant, we have the facilities, surgeons, and team to take care of that. We are a comprehensive liver center."

The "comprehensive" label extends to the team itself, which includes surgeons, hepatologists, radiologists, anesthesiologists, nurses, and a pharmacist. "We have a multidisciplinary approach to evaluating and managing our transplant patients," says Interim Surgical Director Christine Hwang, M.D. "The hepatology and transplant surgery teams work very well together and are in constant contact regarding patient care."

Dr. Marrero concurs. "The multidisciplinary aspect is something that a lot of programs claim, but we live it here," he says. "When we discuss patients, in or outside of the hospital, all disciplines have input in the care and selection process. We practice freely together, and that's unique in North Texas."



Christine Hwang, M.D.
Interim Surgical Director

'Willing to do very difficult cases'

Accessibility is another important differentiator in the Liver Transplant Program's ongoing success and steady growth. The program routinely considers patients who might not be ideal candidates for transplant – an advantage that being an academic medical center offers patients and referring physicians. About 15 percent of the Liver Transplant Program's patients come to UT Southwestern after being turned down elsewhere due to the severity of their condition. "We're willing to do very difficult cases that no one else is doing," Dr. Marrero says.

The presence of five satellite centers across Texas offers another entry point into UT Southwestern's program. The centers, located in Austin, El Paso, Fort Worth, Lubbock,

and a new clinic in Plano, allow liver transplant patients to conveniently receive pre- and postoperative care close to home while having their surgery done at UTSW's William P. Clements Jr. University Hospital in Dallas. The state-of-the-art hospital itself has also helped fuel the program's growth by offering increased space and the ability to handle sicker patients.

In 2018, patient convenience will be further enhanced when separate UT Southwestern liver disease and liver transplant clinics are combined into one expanded facility. "It will be a single location for liver disease care and services," says Dr. Marrero. "That's going to be better for patients."

Research that makes a difference

Along with comprehensive care and easy accessibility, clinical and academic research in both liver disease and liver transplants continues to be a key component of the Liver Transplant Program.

"We do basic science research but also bench-to-bedside research that impacts how we care for patients now," Dr. Marrero says. For instance, he notes that UT Southwestern research has determined that liver transplant for liver cancer is a "great option."

Clinical trials at UT Southwestern are also helping move the field forward. The OCS Liver PROTECT trial now underway at UTSW and a handful of other locations in the U.S. is a randomized study designed to compare cold static liver preservation – the method used for the last 50 years – with a warm perfusion method achieved with a machine called the Organ Care System. If successful, the device could not only improve organ assessment but also perhaps improve an organ itself before it's ever transplanted.

CASE STUDY

Patients with liver tumors require a multidisciplinary approach to the management of their care. The following case is an example of the team approach at UT Southwestern for patients with liver tumors.

A healthy 23-year-old female came to the emergency room with acute onset abdominal pain. She appeared well but was in distress with significant abdominal distention and diffuse abdominal pain. She had anemia, but other laboratory data were stable.

A CT scan showed a large mass in the liver with active bleeding. Interventional radiologists performed an emergent embolization of the liver tumor. However, a repeat CT scan showed an increase in the size of the mass and persistent bleeding. The decision was made to proceed with surgery.

An exploratory laparotomy showed that the tumor was split into two pieces. Transplant surgeons performed a total hepatectomy, and the patient, now without a liver, remained in the intensive care unit. The patient was immediately listed on the liver transplant waitlist. She was supported with mechanical ventilation, dialysis, and blood products while waiting for a new liver. A liver transplant was successfully performed 12 hours later, and the patient recovered and is doing well.



“My liver ruptured, and UT Southwestern was the only hospital in the area with the technology to save my life. UTSW surgeons and the ICU team kept me alive without a liver for several hours until my transplant could take place.”

— Clarke Williams
Liver Transplant Patient

Liver Transplant Volume	2008	16
	2009	9
	2010	14
	2011	22
	2012	29
	2013	34
	2014	42
	2015	44
	2016	45
	2017	57

RESEARCH SPOTLIGHT

UT Southwestern’s Liver Disease and Transplant Program is one of the leading liver disease research programs in the United States. With more than \$1.7 million a year in industry-sponsored clinical trials and \$7.5 million in federal- and state-sponsored clinical studies, our liver program is at the forefront of creating new knowledge. A total of 19 studies at UT Southwestern are evaluating novel therapies in hepatitis C, hepatitis B, alcoholic hepatitis, non-alcoholic fatty liver disease, primary sclerosing cholangitis, primary biliary cholangitis, and primary liver tumors.

The liver faculty published more than 25 scientific articles in 2017, showing the breadth of expertise in liver disease and liver transplantation.

An example of one study that has made important contributions to liver disease is the NIH Acute Liver Failure Study Group, created and led by UT Southwestern’s William Lee, M.D. Since its inception in 1999, the study has led to the knowledge of the causes of this deadly disease in the United States, the factors that predict poor outcomes, and the development of new treatments.

Additional noteworthy research is the NIH Alcoholic Hepatitis Study, led at UT Southwestern by Mack Mitchell, M.D. It is a national multicenter study evaluating a novel treatment for this condition involving a new anti-inflammatory medication. UT Southwestern is the leading enroller of patients in this study.

The breadth of UT Southwestern’s portfolio in liver disease research offers our patients more options, and these studies are integrated into their multidisciplinary care.

UTSW Transplants by the Numbers

185



Heart transplants in the past five years (16th nationally in volume)

346



Lung transplants in the past five years (9th nationally in volume)

36%



Percentage of kidney transplants in 2017 with living donors (highest in North Texas)

13.5%



Liver program compounded adjusted growth rate over the past 10 years (among the top 10 nationally)

To refer a patient to UT Southwestern for transplant, call **877-391-1528** (Heart, Lung) or

877-392-1528 (Kidney, Liver).

Answered 24/7 by a registered nurse.

Solid Organ Transplant Program

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UT Southwestern
Medical Center™