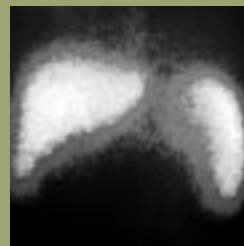


# liver

NewYork-Presbyterian Transplant Institute



A Resource Guide for  
Healthcare Practitioners





### **The NewYork-Presbyterian Transplant Institute**

The NewYork-Presbyterian Transplant Institute is one of the country's leading transplantation centers for adults and children. Its Center for Liver Disease and Transplantation has become a leading provider of comprehensive treatment and care for patients in the most critical stages of liver disease. Our world-renowned physicians are on the faculty of Columbia University College of Physicians & Surgeons and Weill Medical College of Cornell University.

The Center has achieved its national and international pre-eminence by continually building on the excellence and innovation of its transplantation surgery, breakthrough research, and its multidisciplinary approach to providing convenient, seamless care. Key to the successful delivery of this care at all levels is our sensitivity to the individual needs of each patient and a recognition of the importance of the referring physician to the entire treatment process. At the Center, the referring physician is an integral and valued member of the medical team, and all treatment provided is viewed as an extension of that physician's initial care.

If your patient requires treatment for a disorder of the liver or biliary system, if he or she needs inpatient or outpatient attention, transplantation, access to clinical trials of promising new therapeutics, hepatobiliary cancer care, or other kinds of treatment — we at NewYork-Presbyterian Hospital are ready to join with you to provide the best in care.



### A Multidisciplinary Approach

The Center for Liver Disease and Transplantation is one of the first liver programs built from its inception as a multidisciplinary unit. Patients and their referring physicians benefit from having all care and expertise available “under one roof.” The Center’s highly collaborative staff includes:

- Hepatologists
- Gastroenterologists
- Oncologists
- Interventional radiologists
- Hepatobiliary surgeons
- Diagnostic and pathology experts
- Advanced-care nurses
- Social workers
- Patient support staff

To treat and cure liver disease, the Center employs the following modalities, including:

- Open surgery
- Surgical and non-surgical minimally invasive techniques
- Interventional radiology
- Chemoembolization
- Percutaneous ablation
- Novel chemotherapeutic regimens

### Partnering With The Center

Referring physicians working with the Center can tailor their own level of participation in the treatment process, selecting a collaborative model that matches the needs of the particular patient and the capabilities of their practice and local hospital.

Throughout the entire treatment process, the Center is committed to maintaining regular communication with the referring physician. Records are automatically shared, and updates are provided on all consultation and patient visits. At every decision point in the course of care, the referring physician is consulted. Specialists and staff are available on a 24-hour basis, seven days a week, to assist physicians with their patients.

Because we recognize how essential a referring physician is to a successful outcome, we require patients to continue their relationship with their doctors while receiving the best in collaborative care through the Center.

### Outpatient Care Options

Patients have a wide array of options for pre- and after-care. Our team includes transplant surgeons and hepatologists based at both NewYork Weill Cornell Medical Center and Columbia Presbyterian Medical Center. We also serve our satellite clinics at NewYork-Presbyterian Healthcare System affiliated hospitals in Brooklyn and Queens, New Jersey, and Connecticut.

This regional network allows patients to receive conveniently located pre- and post-operative outpatient care in coordination with their referring physician. Outpatient centers are set up in collaboration with the local gastroenterology community, offering transplant evaluations and post-transplant follow-up, as well as second opinions and participation in clinical trials.

Referring physicians can participate in the Liver Clinical Trials Network, composed of gastroenterologists, hepatologists, and NewYork-Presbyterian Healthcare System affiliated hospitals. Members of this network participate in clinical studies, extending access to new drugs for hepatitis. Led by joint medical directors Drs. Ira Jacobson and Robert S. Brown, Jr., the Network provides members and their research staff with training and support. Meetings are held regularly, providing physicians with an opportunity for collegial collaboration in an academic environment.

Network membership enables a patient to enter a clinical trial through the referring physician’s own office, rather than through one of our satellite clinics. Patients whose referring

Network membership enables a patient to enter a clinical trial through the referring physician's own office, rather than through one of our satellite clinics.

physicians do not belong to the Network can still have access to clinical studies close to home, but they will be cared for under the Center's supervision for trial-related issues. Currently all liver transplant procedures are performed at Columbia Presbyterian Medical Center.

### **Research and Clinical Trials**

Research activities range from basic laboratory science — such as studying how the liver regenerates, how hepatitis C infects the liver, and how the rejection of transplanted livers occurs — to a broad range of clinical trials studying the latest treatments for hepatitis C and other liver disorders. At present, we are conducting more than 25 clinical trials of new antiviral therapies.

The Center for Liver Disease and Transplantation is one of eight centers nationally (and the only one in New York City) conducting a multi-center clinical trial of peginterferon and ribavirin therapy in a cohort of patients that would include an adequate number of African-Americans to establish an accurate estimation of the response rate in this group and to initiate basic research studies of the reasons for non-response and antiviral resistance.

Entitled "Study of Viral Resistance to Antiviral Therapy of Chronic Hepatitis C (Virahep-C)," the study will enroll 200 African-American and 200 Caucasian-American adult patients with chronic hepatitis C of genotype 1 who have never been treated with interferon. All will receive a course of the combination of peginterferon alfa-2a and ribavirin and be followed rigorously for response rates, side effects, studies of immune function, interferon signaling, and genetic analyses. The elucidation of the nature and determinants of a response to antiviral therapy and a more clear delineation of the efficacy of combination therapy in all groups of patients with hepatitis C are areas of high priority for the National Institutes of Health in the long-term initiative on prevention and control of hepatitis C.

In addition, the Center is one of eight centers selected by the NIH to study living donor liver transplantations. (NewYork-Presbyterian Hospital is the only center so chosen in New York state and only one of two in the Northeast.) Both the science and outcomes for donors and recipients are being extensively analyzed by the Center. The Center is also carrying out an NIH-funded trial on the prevention of recurrent hepatitis B after liver transplantation.

Phase II clinical trials are under way using two artificial liver devices to bridge patients with acute liver failure to either recovery or transplantation. The Center is one of a select number of centers in the nation involved in these FDA-approved trials.



### Candidate Evaluation and Selection

During the evaluation process, the Center provides thorough education for transplant candidates and their families about what to expect before, during, and after the transplantation. (Guides providing a full explanation of the process are provided to the patient and available to physicians on request.) The Center's comprehensive evaluation process determines whether transplantation is the right choice for each individual's particular medical, emotional, and social support situation.

The Center is closely associated with the Center for the Study of Hepatitis C, which is a cooperative endeavor of Rockefeller University, Weill Medical College of Cornell University, and NewYork-Presbyterian Hospital. The Center for the Study of Hepatitis C is a translational medicine program, bridging the gap between basic research and patient care by combining cutting-edge efforts in research and treatment for hepatitis C and seeking to provide new insights into the liver disease caused by this common infection.

Hepatitis C virus (HCV)-associated end-stage liver disease is the leading indication for liver transplantation in the United States. The Center for Liver Disease and Transplantation works collaboratively with the Center for the Study of Hepatitis C's scientists and clinicians in its efforts to improve current treatment and develop new, more effective therapies for HCV.

Ira Jacobson, MD, a recognized expert in hepatology and liver disease, serves as the Medical Director of the Center for the Study of Hepatitis C. Charles Rice, PhD, one of the world's most accomplished virologists and a prominent figure in research on hepatitis C, is the Center's Executive/Scientific Director.

### A History of Excellence

The Center for Liver Disease and Transplantation has one of the largest liver transplantation programs in the Northeast. Over the past five years, the number of surgeries performed has grown to more than 100 a year. The survival rate for our program is among the very best in the field, including adult living donor transplants and pediatric donor transplants, which are the most technically challenging of these complex operations.

These achievements are driven by a tradition of surgical innovation — in particular, our clinicians' work in pioneering and perfecting the use of living donor transplantation, first in children and now in adult patients with serious liver disease

The Center performs the three types of transplantations available today — Cadaveric Donor Transplantation, the oldest and by now most established procedure; Split Cadaveric Liver Transplantation, a more recent procedure, in which a divided liver provides transplants to two recipients; and Living Donor Transplantation, which holds the most promise and possibilities for growth.

NewYork-Presbyterian Hospital was one of the first medical institutions in the world to perform adult living donor transplantations, and currently the Center has one of the largest and most successful living donor programs. Developed

We were one of the first medical institutions in the world to perform adult living donor transplantations, and currently the Center has one of the largest and most successful living donor programs.

in 1989 by a team of surgeons including Jean C. Emond, MD, Vice Chairman of our Transplantation Service, living donor transplantation allows a healthy family member, spouse, or other emotionally significant contact to donate a portion of his or her healthy liver to a recipient. (Upon successful transplantation, the apportioned liver soon regenerates to normal size in both the donor and the recipient.)

The advantage to living donor transplantation is that it frees a patient from the anxieties and risks of the long wait for a cadaveric donor organ, enabling transplantation to become a more elective procedure. Decreasing a patient's waiting time is often critical for some patients, such as those with liver cancer. Data indicates this newer transplantation procedure can be performed with success equal to that of cadaver transplantation.

### **Waiting for a Liver Transplant**

Waiting for a suitable donor organ to become available may be the most difficult part of the transplant process for patients. Fear and anxiety are normal during this period. Because this can be a frustrating and difficult time, patients and their families are encouraged to attend support group sessions provided by the Center. In addition, our psychiatrists and social workers are available to help and provide counseling during the entire pre- to post-transplantation period.

During this period, both patient and referring physician are reminded that any change in the patient's health must be reported immediately to the Center to ensure appropriate care and so that we can inform the United Network for Organ Sharing (UNOS) of any clinical changes that impact the patient's waiting-list status.

### **What to Expect After Transplantation**

After transplantation, most patients remain in the hospital for approximately two weeks, although some are discharged as early as a week. By the time of discharge, after careful preparation by the transplant team, patients are capable of caring for themselves, with some minor restrictions.

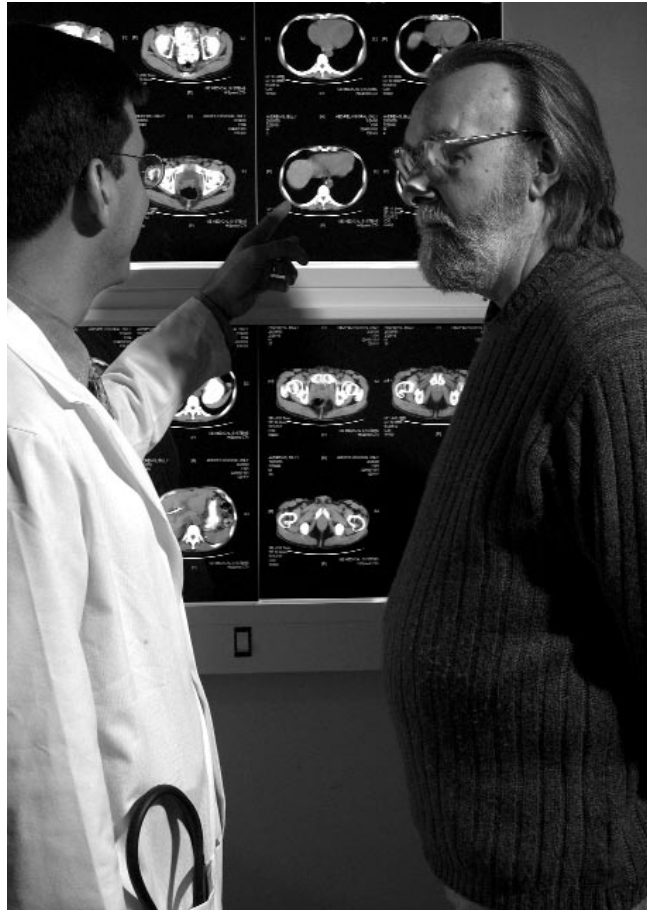
The majority of patients are able to return to work within three to six months after a transplant. According to our experience, after transplantation, recipients are able to lead normal, full lives. However, in partnership with their referring physicians, the Center maintains lifelong monitoring of the health of all recipients. A patient may be examined regularly by our team or see us less frequently as we confer with his or her physician.

### When to Refer a Patient

Patients should be referred who have either acute or chronic liver disease with evidence of clinical decompensation.

Patients with cirrhosis who are Child-Turcotte-Pugh Class B or C are typically considered candidates for transplantation. Selected patients who are Child Class A may also be candidates for transplant if there is suspicion of a hepatocellular cancer or other complications.

A patient with acute liver failure, such as acetaminophen overdose or acute viral hepatitis, should be discussed with the Center faculty as soon as the patient presents with symptoms in order to expedite transplantation if it becomes necessary.



As with any other surgical procedure, in rare instances, complications may arise after liver transplantation. These may include: bleeding, minimized by monitoring clotting factors; hepatic artery thrombosis, monitored by abdominal ultrasound; and leaks from the bile duct, usually managed with a catheter for drainage. Surgical repair or damage to the transplanted organ can usually be avoided.

Despite their participation in a regimen of immunosuppressive medications for life, many patients nevertheless experience some degree of rejection after transplantation. Most patients require readmission to the hospital in the first three months after transplant for diagnosis and treatment for possible rejection episodes, infections, or other changes in liver function. A biopsy of the liver is usually necessary to diagnose the extent of rejection and to rule out any other problems. Although rejection occurs in up to 30 percent of patients, most such episodes are easily treated by medications alone and do not cause failure of the transplant.

Although rejection occurs in up to 30% of patients, most such episodes are easily treated by medications alone and do not cause failure of the transplant.

With the longest known liver transplant survivor continuing to live a normal life more than 30 years after the operation, recipients can expect to enjoy an overall healthy post-operative life, despite some periodic setbacks. If all goes well, a liver transplant will last as long as the patient.

### **Financing Liver Transplantation**

Most major health insurance plans (including private indemnity, HMO, Medicare, and Medicaid plans) are accepted, and the Center provides extensive financial counseling services for all liver transplant candidates. Our financial counselors are trained to investigate the depth of each patient's insurance coverage, negotiate with the insurance company, and make every effort to filter out potential problems before costs are incurred. If coverage is limited, our financial counselors will work individually with the patient to seek new or additional insurance. In addition, our counselors may collaborate with social workers to assist the patient in exploring alternative sources for financing their post-operative care.

The Institute understands how chronic illness can lead to financial stress. In response, we have a long history of discovering innovative solutions and working around obstacles to help patients finance their treatment.

The Institute is committed to caring for all patients regardless of financial status and participates with many insurance plans. Regional and national insurers recognize our program both for its excellence and cost effectiveness. While the Hospital's contracting professionals continually add new insurance carriers, the program's financial counselor works one-on-one with families to negotiate coverage with their insurers or to develop case rates for those who must go out of network for our services.

### **Join With Us**

Our first concern at the Center for Liver Disease and Transplantation is always for the improved health and well-being of the individual patient. To achieve this goal, we at the Center for Liver Disease and Transplantation, with our combined expertise and resources, are entirely at your service.

As a referring physician of a patient with serious liver disease, you are invited to join with us to provide the finest care and to make the most positive difference in your patient's life.



## **Making a Referral**

There are several ways to arrange for a referral or consultation.

**877-LIVER-MD** (877-548-3763) or 212-305-0914

**24/7 Referral Hotline:** 800-227-2762

**Fax:** 212-305-4343 or **Email:** [info@livermd.org](mailto:info@livermd.org)

Include pertinent information and records concerning your patient. Please note as to whether you prefer that the Center for Liver Disease and Transplantation respond directly to your patient or contact the referring physician first.

**Internet:** [www.livermd.org](http://www.livermd.org)

Make an online referral by going to the website, clicking on “Online Referral,” and completing the brief form. Referred outpatients are scheduled promptly for evaluation. For inpatients in acute situations, the Center determines with the referring physicians as to whether they are stable enough to be transferred. If so, the Center confers with referring physicians on the timing and other particulars of the transfer.

At any time during the entire transplantation process, physician members of the transplant team are always available to answer physicians’ questions or provide information.

**Columbia Presbyterian Medical Center**  
622 West 168th Street, New York, NY 10032  
212-305-0914

**NewYork Weill Cornell Medical Center**  
525 East 68th Street, New York, NY 10021  
212-746-4129

