Celebrating the Vision that has become a Reality

Baylor Regional Transplant Institute 2009 Annual Report

1985

1,000th Kidney Transplant

3,000th Liver Transplant

2009
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Twenty-five years ago, the trustees and medical staff of Baylor University Medical Center at Dallas delivered a new medical treatment option for the very sickest liver disease patients: transplantation.

The Baylor transplant program was conceived by visionary men and women who dedicated themselves to the idea that organ transplantation deserved wider application. They expected the Baylor transplant program to be innovative in developing the science of transplant medicine into a new and viable technology that would save thousands of lives every year.

This year, we celebrate the vision that has become reality. Currently, over 7,000 patients have received a solid organ transplant through the transplant centers at Baylor University Medical Center at Dallas (Baylor Dallas) and Baylor All Saints Medical Center at Fort Worth (Baylor Fort Worth). Many patients who have been treated at Baylor Dallas are now approaching 10-, 15-, 20- and even 25-year survival milestones.

Physicians and researchers on the medical staff at Baylor refined and implemented new transplant techniques and technologies and made it possible for patients to have access to treatments that simply were not available elsewhere. Organ failure patients around the world have more medical options today due to the observations and investigations conducted at Baylor. A multitude of textbooks and scientific papers have been published. Transplant surgeons and physicians who trained at Baylor Dallas and Baylor Fort Worth have taken their hard-earned knowledge and expertise to practice transplantation throughout the nation and around the world.

Solid organ transplantation has advanced dramatically since the first liver transplant in Dallas in 1984. When I first entered the field of transplantation in the 1970s, the long-term survival rate for liver transplant patients was 17 percent. Today, the national three-year patient survival rate reported by UNOS, the United Network for Organ Sharing, is 78 percent. Baylor Dallas exceeds that with an 80 percent survival rate.
As experience in the field of transplantation has increased and surgical techniques have progressed, the time to perform a typical transplant has dramatically decreased. Twenty-five years ago, a complex liver transplant would take up to 25 hours. Now a typical liver transplant can take as few as four hours.

One of the major keys to our program’s success is teamwork. Solid organ transplantation is so complex and multifaceted that the commitment to teamwork is essential to a successful transplantation program. As we look toward the future, the entire Baylor transplant team continues to identify ways to use existing and emerging tools to treat patients so they experience a more rapid recovery and fewer side effects.

Ideally, we’d like to decrease the need for solid organ transplants by improving ways to prevent and treat organ disease in the first place. A cure for hepatitis could eliminate the need for up to half of all liver transplants. Effective treatment for diabetes and disease prevention could impact the need for kidney transplants. Research is ongoing in these areas.

For many years, we have been on the forefront of developing new immunosuppressive drugs and the protocols dictating how they are used. Now, we hope our research ultimately leads to less dependence on immunosuppressive drugs. In the next few decades, I believe we will be able to almost or completely stop immunosuppressive drug use following transplant.

We take great pride in our significant role in the development and progress of transplant medicine. Our wealth of experience, combined with our progress in research and technology, move us closer every day to life-saving breakthroughs and better quality of life for our patients.

Göran Klintmalm, M.D., Ph.D., FACS
Chairman and Chief
Baylor Regional Transplant Institute
Over the last 25 years—a time that parallels the experience of Baylor University Medical Center at Dallas in thoracic organ transplantation—there has been remarkable improvement in expectations for successful heart or lung transplantation.

The discovery of effective immunosuppressive agents, safe and reasonable surveillance strategies to diagnose rejection, and the clinical experience to better understand the intricacies of post-transplant care and transplant medicine have led to a revolution in transplant outcomes. Where it was once newsworthy, heart or lung transplantation has become part of the standard armamentarium in the treatment of advanced heart and lung disease.

In 2009, the recipient of a heart transplant has a greater than 95 percent chance of surviving the first year and a greater than 75 or 80 percent chance of surviving five years.* Similar metrics can be expected for lung transplantation.

These efforts are further buoyed by the increasing use of mechanical means of support both as a bridge to heart transplantation and as destination therapy, i.e., as a permanent treatment for heart failure in lieu of transplantation. In concert with the advances seen in transplant medicine, there have been important advances in medical therapy for advanced heart and lung disease. Patients with heart failure now fare better with standard medical and device therapies and the indications for heart transplantation are changing.

Yet we cannot rest with the current state of patient care. As we look forward, we must acknowledge several significant circumstances that greatly impact heart and lung disease and its management in its end stages.

The first is the continued dilemma of limited donor organ supply. This will continue to keep the number of transplants performed at a very modest level unless major changes in organ preservation and public policy relating to donor mandates become evident.

* ISHLT registry
Secondly, we need further refinement in immunosuppressive strategies, specifically focused toward those agents that eliminate rejection without causing other toxicities, including the risk of infection and cancer.

Next, we envision an era where a mechanical alternative to heart transplant may exist, which will provide the same quality of life and similar longevity. The technology is not there yet but it is anticipated that over the next 25 years such will be the case.

Finally, we must not retreat from the commitment to prevent all forms of heart disease. The best way to move the field forward is to eliminate the need for heart and lung transplantation.

Clinicians and investigators at Baylor Regional Transplant Institute are actively involved in clinical trials with stem cells to biologically regenerate heart muscles, effectively engaged in the discovery of novel therapies for advanced heart disease and committed to the evolution of mechanical support strategies for patients with failing hearts. The potential yield from these efforts may dramatically address the future needs of patients with advanced heart and lung disease.

In closing, several lessons have been learned over the last two and a half decades. First, teamwork matters. A heart transplant cannot be successful without the full commitment of everyone on the team.

Second, all intervention and treatment strategies must be based on good science. Each member of the team must be a perpetual student willing to constantly study, learn, relearn, recalibrate and reapply.

Finally, the success of Baylor Regional Transplant Institute over the last 25 years has, in large part, been driven by a patient-centered approach—a caring, focused commitment to the needs of the individual patient with serious heart disease. It has always been and will always be the case that the patient matters most.

Clyde W. Yancy, M.D., FACC, FAHA, MACP
Chief of Cardiothoracic Transplantation
Baylor University Medical Center at Dallas
The first liver transplantation at Baylor University Medical Center at Dallas, December 21, 1984. The recipient was Amie Garrison, a 4-year-old from Peoria, Illinois. Amie is now an adult with a child of her own.
Baylor Regional Transplant Institute: 25 Years of Success

The vision of Baylor Regional Transplant Institute is to continually evolve as a recognized world leader in comprehensive transplant science and practice, while pioneering innovative disease management with quality, compassionate health care.

Established in 1984, Baylor Regional Transplant Institute (BRTI) integrates the transplant services of Baylor University Medical Center at Dallas and Baylor All Saints Medical Center at Fort Worth. In terms of volume, the transplant programs at Baylor Dallas and Baylor Fort Worth are among the top programs in the United States.

When Baylor University Medical Center at Dallas made the commitment in the early 1980s to provide transplantation as a surgical option to patients, the service was novel, experimental and carried high risk for catastrophic outcomes. But the Baylor board of trustees and the medical staff forged ahead with the mandate that transplant services at Baylor would be scientifically based and instrumental in developing a new discipline of medicine.

Research protocols and scientifically sound data collection have been in place for 25 years. Chart and data organization, and a dedicated research staff of nurses, data collectors, quality assurance, computer and statistical experts were all part of the transplant program from the beginning. As a result, Baylor Regional Transplant Institute is known worldwide as a pioneer in transplantation. BRTI has been a core participant in defining the science and art of transplantation.

In the last 25 years, the transplant centers at Baylor Dallas and Baylor Fort Worth have performed over 7,000 solid organ transplants, including liver, kidney, pancreas, intestine, heart and lung. Physicians currently participate in more than 125 research protocols and, through Baylor’s transplant research program, many of the researched drugs now are used as standard therapy.

In addition to advancing the science of transplant medicine, transplant surgeons on the medical staffs
of Baylor Dallas and Baylor Fort Worth have trained more than 35 transplant fellows who now lead transplant programs around the world.

25th Anniversary Gala and Symposium

Baylor Regional Transplant Institute celebrated its 25th anniversary on Nov. 11, 2009, with a Scientific Symposium followed by a Gala at the Winspear Opera House in Dallas.

Hosted by Baylor Health Care System Foundation, the 25th anniversary celebration was co-chaired by former Baylor Health Care System president and chief executive officer Boone Powell, Jr., and John Fordtran, M.D., Ph.D. Both Mr. Powell and Dr. Fordtran were instrumental in the creation of the transplant program at Baylor.

Notable attendees included Thomas Starzl, M.D., Ph.D., who performed the world’s first successful liver transplant; Sir Roy Calne, M.D., who pioneered the use of the anti-rejection drug cyclosporine, significantly increasing transplant survival rates; and Ronald Busuttil, M.D., Ph.D., who co-edited the authoritative textbook on liver transplantation with Göran B. Klintmalm, M.D., Ph.D., the director of Baylor Regional Transplant Institute since its inception.

Celebrating BRTI’s 25th anniversary:
Carl G. Groth, M.D., Ph.D., Doris Taylor, Ph.D., Suzanne V. McDiarmid, M.D., Sir Roy Calne, M.D., Göran Klintmalm, M.D., Ph.D., Thomas E. Starzl, M.D., Ph.D., Ronald Busuttil, M.D., Ph.D., William Bennett, M.D., and Gary L. Davis, M.D.
Attendees also included transplant pioneers such as Carl Groth, M.D, Ph.D., of Sweden, Dr. Klintmalm’s mentor; Suzanne McDiarmid, M.D., considered a thought leader in pediatric liver transplantation; William Bennett, M.D., a leader in the use of cyclosporine; and Doris Taylor, Ph.D., a lead researcher in the use of stem cells, genes and devices to develop cardiac and vascular technologies. Many of BRTI’s former fellows from countries including Israel and Japan also attended to celebrate their alma mater’s anniversary.

A Premiere History
With a dedication and commitment to advancing the field of transplantation, Baylor has pioneered many first-time procedures. In 1985, transplant surgeons on the medical staff performed Texas’ first successful adult liver transplant followed by the world’s fifth combined heart/kidney transplant in 1988. In 1989, Baylor Dallas was responsible for Texas’ first domino heart/lung/heart transplant.

To begin to solve the shortage of donor organs, Baylor Dallas performed the world’s first successful use of genetically altered pig liver as bridge to liver transplant in 1997. In 1999, transplant surgeons on the medical staff performed North Texas’ first split liver transplant and North Texas’ first living donor liver transplant in 2000.

In 2005, physicians on the medical staff performed North Texas’ first islet cell transplant, an experimental procedure that shows great promise for treating patients with type 1 diabetes. That same year, surgeons on the medical staff were the first in Texas to perform a successful intestinal transplant. The patient, who once had to rely solely on intravenous fluids for nutrition, now enjoys solid food and lives a normal, healthy life.

Program Highlights
Liver, Kidney and Pancreas Transplantation
Baylor Dallas performs all types of abdominal transplants, most frequently liver and kidney transplants, as well as combined kidney/pancreas transplants. Baylor is one of the busiest adult liver transplant centers in the nation. In 2006, Baylor Dallas was the first in the Southwest to be approved by the American Society of Transplant Surgeons as a surgical training program in pancreas transplantation.

In July 2002, Baylor Regional Transplant Institute expanded its liver, kidney and pancreas transplant program to Baylor Fort Worth. The medical center is staffed with full-time transplant surgeons, hepatologists and nephrologists on its medical staff, along with transplant nurses and other multidisciplinary team members. Physicians have performed more than 800 transplants since the
“My family physician first sent me to Baylor Dallas for hepatitis treatment, everyone involved with the program kept me and my family well informed and answered any question we had.”

Richard Byron, 53, Tool, Texas
3,000th Liver Transplant Recipient
program’s inception. In 2003, Baylor Fort Worth launched Tarrant County’s first pancreas transplant program, and in 2006, the medical center recruited a renowned islet cell transplant researcher.

In October 2007, surgeons on the Baylor Dallas medical staff performed the 3,000th adult liver transplant. This accomplishment made Baylor Dallas only the third such program in the nation to reach this milestone.

**Heart and Lung Transplantation**

Baylor Dallas performs heart, single lung, double lung and a small number of combined heart/lung and heart/kidney transplants. Physicians on the medical staff at Baylor are using advanced technologies in ventricular assist devices as a bridge to transplant for patients who are critically ill with heart disease. Baylor continues to grow its clinical research program and protocols to improve treatment for patients and enhance their quality of life.

**Islet Cell Transplant**

*Allogeneic*

Allogeneic islet cell transplantation entails removing islet cells from a cadaver donor pancreas in a laboratory and injecting the cells into the liver of a type I diabetes patient who is otherwise healthy. Investigators observe that the islet cells anchor in the liver, where they receive blood and nutrients and can produce insulin. Currently, physicians on the medical staff at Baylor have performed 20 islet cell transplants. As a result of the transplant, all patients have shown improvements in their blood sugar control.

*Autologous*

Autologous islet cell transplant may be an option for some patients who undergo total pancreatectomy to relieve the pain of chronic pancreatitis. After surgical removal of the patient’s pancreas, islet cells are extracted from the diseased organ. These cells are then re-infused into the patient’s liver. This reduces the severity of diabetes and often provides substantial pain relief. In addition, there is no need for immunosuppression. Baylor is the first institution in the Southwest offering this treatment.

**Transplant Immunology Research**

Investigators at Baylor are studying the manipulation of the immune system to improve the acceptance of transplanted organs. By reducing rejection and developing better and safer techniques to fight rejection, organs may last longer, quality of life for the recipient may improve and the high cost of transplantation may decrease. Investigators also hope to precondition a potential organ recipient to fully tolerate the transplanted organ before it is surgically placed in the recipient’s body.
Microarray Technology
To recognize which patients have developed immunotolerance, Baylor scientists are using microarray technology, which was developed through Baylor’s research on cancer and autoimmunity. Using a single drop of blood from a patient, the microarray machine scans 50,000 different genes and shows their activity. Through microarrays, scientists may be able to identify infections before they develop, recognize certain cancers before symptoms arise and determine whether a patient is rejecting a transplanted organ or is tolerating it. This may enable scientists to identify those patients who will probably not need immunosuppressive drugs.
“I’m free! I’m no longer diabetic, and I love being able to be active with my kids.”

Melissa Smith, 39, Mabank, Texas

A diabetic for 24 years, Melissa’s kidneys ultimately began to fail. She underwent a combined kidney and pancreas transplant in January 2007. She no longer takes insulin and enjoys golf, fishing and other activities with her husband, 15-year-old daughter and 12-year-old son.
Although there are some process differences depending on the type of transplanted organ, patients at Baylor Regional Transplant Institute undergo the following phases of care.

**Phase 1—Referral and Evaluation**
Patients can be referred for transplant evaluations at Baylor Regional Transplant Institute by calling 800.774.2487 or 214.820.6896. At the time of referral, a member of the team collects demographics, insurance information and a referral diagnosis. Medical records are requested to obtain the patient’s current clinical condition, medical history, and results of recent labs and diagnostic studies.

Once the evaluation is complete, the candidate’s case is reviewed by the multidisciplinary transplant selection committee, at which time a decision is made regarding the patient’s candidacy for placement on the transplant waiting list.

**Phase 2—Ongoing Medical Therapy Review**
The medical transplant team monitors and assists with management of patients who are on a transplant waiting list. For those individuals not approved for transplantation, continuing medical therapy by a specialist is available.

**Phase 3—Transplantation**
When an organ becomes available for transplantation, the patient is notified by one of the transplant coordinators. The patient then reports to the hospital and is admitted to the transplant floor. Immediately following transplantation, patients will be in the intensive care unit, and then transferred to the transplant floor when stable. The transplant recipient’s care is jointly managed by the multidisciplinary transplant team.

Patient and family education begins during the transplant hospitalization and is viewed as a key ingredient in a patient’s successful recovery.

**Phase 4—Follow-up**
After discharge, the patient’s progress is monitored during regular outpatient visits with the transplant team. The patient is seen in the transplant clinic, where the patient is assessed, medications are reviewed and adjusted, and further additional diagnostic studies are scheduled as needed. All patients are asked to return to Baylor annually for follow-up. The transplant team communicates regularly with the patient’s referring physicians throughout all phases of care.
“I’m working 40 hours a week. I’m back to enjoying cooking and singing first soprano in my church choir.”

Darlene Clayton, 46, Carrollton, Texas

Heart failure left Darlene with just 7 percent heart function. In December 2008, she underwent a heart transplant. Now she has the same energy she had in her early 30s and plans to return to teaching 3- and 4-year-olds in Sunday school.
The dedication of Baylor Health Care System to the field of transplantation has helped make Baylor University Medical Center at Dallas a leading center for heart and lung transplantation.

The strength of the Baylor Dallas program, a collaboration with the University of Texas Southwestern Medical Center, rests in part on its team approach of transplant coordinators in regular contact with patients, knowledgeable cardiologists and technically expert surgeons on the medical staff.

While immunosuppressive strategies have remained fairly standard over the last 20 years, Baylor is working to optimize immunosuppression while decreasing the side effects from the medication. Cardiologists on the medical staff of Baylor Dallas have been early adopters of novel genomic studies (blood tests) that allows for more optimal immunosuppression, i.e. not overly suppressed to risk infection and cancers, but not under suppressed to risk rejection. The team hopes these sophisticated diagnostic techniques will decrease the amount of immunosuppressive medications a patient has to take. While endomyocardial biopsies are still performed, in the future these new studies may limit or possibly eliminate the more invasive tests.

A key advance in heart transplantation has been the use of left ventricular assist devices (LVADs). Today, patients are in optimal condition when they go to transplant. Once used exclusively as a bridge to transplant, LVADs can now be an alternative to transplant, either temporarily or long term. Baylor Dallas was the first hospital in the nation to receive the Gold Seal of Approval from The Joint Commission for its LVAD program.

Due to the shortage of donor organs, many patients survive with an LVAD for years. This allows transplant surgeons to be more selective in obtaining the best organ possible for the patient. Also, once a patient is on the LVAD, his or her other organs, such as kidneys, may improve in functioning.
Transplant surgeons are working with interventional cardiologists on the medical staff to insert temporary percutaneous LVADs into patients who are seriously ill. These devices act as a “bridge to decision” in that they keep the patient alive so a transplant evaluation can be made.

In the future, physicians hope the LVAD may be a platform to let patients with advanced heart failure participate in other advanced therapies. One example is Baylor Dallas’ participation in an FDA-sponsored, multicenter trial that seeks to improve cardiac function in patients with severe congestive heart failure by injecting adult stem cells into the damaged heart tissue. The LVAD may keep the patient alive long enough for the stem cells to generate new blood vessels or heart muscle tissue.
Outcomes for the comprehensive lung transplant program at Baylor University Medical Center at Dallas exceed the national average, according to the United Network for Organ Sharing.

From January 1, 2006 through June 30, 2008, one-year survival for patients who underwent a lung transplant at Baylor Dallas was 88.73 percent, compared to 83.59 percent for the nation. In addition, Baylor Dallas’ observed results were 7.81 percent better than the expected results.

Over the last 10 years, Baylor Dallas has refined the program, making changes in the selection process, protocols and monitoring processes that are reflected in the improved survival rates. The multidisciplinary team continues to reevaluate protocols to further improve survival rates above the national norms.

The primary indications for lung transplant are pulmonary fibrosis, cystic fibrosis, COPD/emphysema and pulmonary hypertension, as well as other lung diseases. At Baylor Dallas, each disease process has well-defined criteria for listing a patient for transplant. Evaluation includes lung function tests, oxygen requirements and overall functional ability. Patients are generally listed for transplant if the criteria predict a poor prognosis for long-term survival.

For patients with advanced lung disease, there are unique therapies that require expertise in selecting the appropriate one for the individual patient. In 2009, Baylor Regional Transplant Institute established an advanced lung disease clinic to care for patients with pulmonary hypertension, interstitial lung disease and other types of advanced lung disease.

The clinic brings together the expertise of numerous physicians on the medical staff of Baylor Dallas to determine the type of lung disease and the etiology, if possible, and choose from the available treatment options. In addition to pulmonary specialists, the advanced lung disease clinic utilizes the expertise of pathologists, radiologists and rheumatologists on the medical staff of Baylor Dallas.
“I’m breathing better than I ever have in my life. My five grandkids are so excited that I can take them to the park and have fun.”  Inez Eaden, 61, Midland, Texas

In 2009, five years after she was diagnosed with idiopathic pulmonary fibrosis with secondary pulmonary hypertension, Inez Eaden received a double-lung transplant. She plans to educate and encourage other people on the importance of being an organ donor.
One example of the treatment options outside of transplantation that can be offered to select patients at Baylor includes lung volume reduction surgery (LVRS), a procedure designed to help patients with severe emphysema. While not a cure, the procedure has shown improvements in spirometry, respiratory muscle function, gas exchange, breathlessness and exercise capacity, all leading to improved quality of life in patients who meet a set of strict criteria.

The ultimate goal of the advanced lung disease clinic is to make available to patients a broad range of therapies offered by a multidisciplinary team of physicians and other health care professionals.
“I have so much energy now. I play softball, I exercise daily, and ride my motorcycle in groups to help promote organ donation. It has changed my life.”

Brenda Hensley, 49, Wylie, Texas

Brenda received a diagnosis of primary sclerosing cholangitis in 2001. After six years on the transplant list, she underwent a liver transplant in August 2007 through a designated donation. “My donor enabled me to carry on a life that I otherwise would not have.”
Baylor Regional Transplant Institute is truly a pioneer in the field of liver transplantation. In 1984, surgeons on the medical staff performed the first liver transplant in the Southwest. North Texas’ first split liver transplant was performed at Baylor in 1999, followed by North Texas’ first living donor liver transplant in 2000.

Surgeons on the medical staff at Baylor Dallas have performed more than 3,271 liver transplants, making Baylor Dallas one of a few transplant centers in the United States to reach this milestone.

In considering a patient for transplant at Baylor, potential transplant recipients undergo a rigorous evaluation process. Considerations include whether a liver transplant offers a patient the best chance for long-term survival, co-morbidities or psychosocial conditions that outweigh the benefit of transplantation or would preclude successful recovery from the procedure, and the urgency of proceeding with transplantation.

As drugs and disease management progress, many patients with liver disease improve without a liver transplant. At Baylor Regional Transplant Institute, a team of hepatologists on the medical staff evaluates and treats highly complex cases. These physicians are internationally recognized in the areas of hepatitis B and hepatitis C. In addition, nurses with specialized hepatology training help patients stay on course with new therapies.

Patients have access to both established and new anti-viral therapies like protease and polymerase inhibitors, immune modulators and anti-fibrotic agents. Baylor is participating in several studies to identify new regimens for managing viral hepatitis B and C that could make therapy both more effective and tolerable.

Because liver cancer is one of the fastest-growing cancers, Baylor is pioneering and providing a number of treatments, including minimally invasive laparoscopic resection of part of the liver and chemoembolization, which allow more cancer patients to avoid a transplant. For more details on these techniques, please see page 31.
Since many patients with liver disease may find it difficult to travel to Dallas or Fort Worth to see a specialist, Liver Health Clinics bring the specialist to them. Monthly, hepatologists on the medical staff travel to different communities in Texas to see patients. Clinics are held in Amarillo, El Paso, Frisco, Grand Prairie, Keller, Lubbock, McKinney, Midlothian, Odessa and Waxahachie.

Since the first Liver Health Clinic opened in 2006, approximately 1,000 patients have been seen in the clinics.

The Liver Health Clinics allow the delivery of more personalized care, and patients feel empowered knowing physicians with extensive liver disease training are in their community. The hepatologists work hand in hand with local primary care doctors and gastroenterologists in caring for patients.

These physicians see patients with chronic viral hepatitis, cirrhosis, liver masses and other general liver conditions, such as fatty liver disease. Through the Liver Health Clinics, patients have access to quality hepatology care and a wider range of treatment options. In addition, patients with advanced liver disease can be seen to optimize their management and determine if they might benefit from liver transplantation. Transplant recipients can receive follow-up care, sometimes avoiding an extra trip to Dallas or Fort Worth.
Over the last 10 years, the rate of pancreas transplants as treatment for type 1 or type 2 diabetes has increased significantly. Technical expertise and immunosuppression are much improved, and selection criteria for candidates are more refined.

At Baylor, most pancreas transplants are performed in combination with a kidney transplant. The combined kidney-pancreas transplant has greater functionality than a kidney transplant alone. Its beneficial effect is demonstrated long after the patient has been rendered free of diabetes after transplant. Kidney-pancreas recipients also report a higher quality of life than kidney-alone recipients.

When a patient is diabetes free, the effects on the kidneys, vascular disease and nerve disease have been slowed or stopped due to the functioning pancreas transplant. It also has been shown that the pancreas transplant protects the kidney transplant from the effects of diabetes. Therefore, kidney transplants last longer when performed in combination with a pancreas transplant.

Pancreas transplants do have a higher complication rate within the first year when compared to kidney transplantation alone. However, after the first year of a successful pancreas transplant, the benefits of a pancreas transplant exceed that of a kidney transplant alone.

Source: SRTR/UNOS semi-annual program specific report released January 14, 2009, based on data available 10/31/2009. This work was supported in part by Health Resources and Services Administration contract 234-2005-37001C. The content is the responsibility of the authors alone and does not necessarily reflect the view or policies of the Department of Health and Human Services, nor does mention of trade names, commercial products or organizations imply endorsement by the U.S. Government.
“I got my energy back, my mind back, my family back. It’s like a new beginning.”
Aaron Wiley, 44, Forney, Texas

When Aaron was diagnosed with chronic kidney failure, he thought he had few options. But after learning he was a transplant candidate, he received a kidney with his wife as the donor. “She gave me a kidney for Valentine’s Day. How can I top that?”
Since the first kidney transplant was performed in 1985, the kidney transplant programs at Baylor Dallas and Baylor Fort Worth have grown significantly. As of Sept. 1, 2009, more than 2,800 total kidney transplants have been performed.

Baylor Regional Transplant Institute is active in numerous multicenter trials that are studying new immunosuppressive medications that are less toxic and will improve overall outcomes for both patient and graft survival.

In recent years, Baylor has expanded the donor kidney pool by developing stringent criteria for acceptance of organs that were previously not used for transplant without compromising results. Baylor also is increasing its stake in a living donor kidney program, another way of expanding the donor pool.

Almost 80,000 people in the United States are on the waiting list for a kidney transplant. With living donation, the waiting time for a transplant recipient can be significantly reduced. In addition, the quality of the donated kidney is generally better than one from a deceased donor.

With living donation, the half-life of the allograft may increase by five to seven years. The numbers are variable, depending on the age of the donor, the health of the recipient and, most especially, the recipient’s compliance with the post-transplant medical regimen.

Baylor Regional Transplant Institute participates in a paired donation network. Approximately one-third of all willing living kidney donors have an incompatible blood type with their intended recipient. Paired donor transplantation allows incompatible living donor/recipient pairs to still donate and receive kidney transplants despite the original incompatibility.

To achieve paired donor transplantation, two incompatible donor/recipient pairs (A and B) must be identified. The donor of pair “A” must be identified to be compatible with the recipient of pair “B.” Additionally, the donor of pair “B” must be identified to be compatible with the recipient of pair “A.” This allows each paired recipient to receive a kidney transplant.
Baylor also expects to optimize outcomes with the existing deceased donor kidney pool through the use of kidney preservation machines. First introduced approximately five years ago, kidney pumps are becoming the standard preservation technique.

Current data shows that kidney pumps lower the rate of delayed function of the graft, possibly avoiding the temporary hemodialysis some patients must undergo before the new kidney starts functioning. Early studies also indicate that this preservation technique may increase graft survival overall.
Pancreas Transplantation

Pancreas transplantation as a treatment for type 1 or type 2 diabetes mellitus is increasing in the United States, as well as throughout the world. In the past 10 years, technical advances, as well as the effectiveness of immunosuppressive medications, have greatly improved.

At Baylor, most pancreas transplants are performed in combination with a kidney transplant. Due to the functioning pancreas, the effects of diabetes on the kidneys, vascular disease and nerve disease is slowed or stopped. It also has been shown that the pancreas transplant protects the kidney transplant from the effects of diabetes. Therefore, kidney transplants last longer when performed in combination with a pancreas transplant.

Islet Cell Auto-Transplant

When a patient with long-term chronic pancreatitis has run out of treatment options, a complete pancreatectomy may be recommended. While the digestive enzymes the pancreas produces can be replaced, the procedure immediately makes someone a severely brittle diabetic.

Through the Pancreatic Islet Cell Processing Laboratory, a joint project of Baylor University Medical Center at Dallas, Baylor All Saints Medical Center at Fort Worth and Baylor Research Institute, a patient may receive an auto-transplant of his or her own islet cells. Baylor Dallas is the first institution in the Southwest that has a cellular laboratory approved by the FDA to produce islet cells for therapy.

After surgical removal, the pancreas is taken to the lab where the islet cells are extracted from the diseased organ. These cells are then re-infused into the patient’s portal vein where they are taken up into the liver. The islet cell transplant greatly reduces the amount of insulin the patient may need to take and provides them with a better quality of life. In addition to relieving the patient’s extreme pain, there is no need for immunosuppression because the patient is given its own tissue.
Alleviating the Pancreas Donor Shortage

More than 1 million patients in the United States have type 1 diabetes, but only about 6,000 donor pancreases become available each year. Researchers at Baylor have begun a study of bioartificial islets, specifically porcine islets, as a potential solution for the donor shortage.

“While this approach is promising, there are major challenges to overcome,” says Shinichi Matsumoto, M.D., Ph.D., director of the Islet Cell Laboratory at Baylor All Saints Medical Center at Fort Worth (Baylor Fort Worth) and the team’s lead scientist. “These include overcoming the immunological hurdles, establishing reliable islet isolation methods and controlling infection from porcine endogenous retrovirus or PERV.”

To overcome some of these hurdles, Baylor has teamed with The University of North Texas (UNT) and Texas Christian University (TCU) on grant applications. Baylor researchers theorize that encapsulating pig islets with collagen will minimize immunogenicity. Scientists at UNT have experience using unique materials for encapsulation, especially collagen tissues. TCU provides bio-reactors that can provide ideal circumstances for cell culture.

Baylor has developed a novel clinical islet isolation method that minimizes stress on the islets. This method is even more important for pig islet isolation because pig islets are more fragile than human islets.

### Baylor Dallas Pancreas Graft Survival Rates

<table>
<thead>
<tr>
<th>Time Period</th>
<th>1 Mo. Survival</th>
<th>1 Yr. Survival</th>
<th>3 Yr. Survival</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed</td>
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<tr>
<td>Expected</td>
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</tr>
<tr>
<td>National</td>
<td>88.26</td>
<td>78.40</td>
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### Baylor Fort Worth Pancreas Graft Survival Rates

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<thead>
<tr>
<th>Time Period</th>
<th>1 Mo. Survival</th>
<th>1 Yr. Survival</th>
<th>3 Yr. Survival</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed</td>
<td>100.00</td>
<td>100.00</td>
<td>—</td>
</tr>
<tr>
<td>Expected</td>
<td>—</td>
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</tr>
<tr>
<td>National</td>
<td>98.26</td>
<td>78.40</td>
<td>63.49</td>
</tr>
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### Baylor Dallas Pancreas Patient Survival Rates

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<tr>
<th>Time Period</th>
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<th>1 Yr. Survival</th>
<th>3 Yr. Survival</th>
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<tbody>
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<td>100.00</td>
<td>75.00</td>
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<tr>
<td>Expected</td>
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<tr>
<td>National</td>
<td>98.96</td>
<td>96.67</td>
<td>91.79</td>
</tr>
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### Baylor Fort Worth Pancreas Patient Survival Rates

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Source: SRTR/UNOS semi-annual program specific report released January 14, 2010, based on data available 10/31/2009. This work was supported in part by Health Resources and Services Administration contract 234-2005-37001C. The content is the responsibility of the authors alone and does not necessarily reflect the view or policies of the Department of Health and Human Services, nor does mention of trade names, commercial products or organizations imply endorsement by the U.S. Government.
Baylor also has more than a decade’s experience in controlling PERV. Dr. Marlon Levy, surgical director for liver and kidney transplantation at Baylor Fort Worth, a transplant surgeon on the medical staffs of Baylor Fort Worth and Baylor University Medical Center at Dallas, and principal investigator of islet cell transplantation at Baylor, has performed successful extracorporeal hepatic support using transgenic pig livers at Baylor. He established a method for monitoring PERV, which showed no infections for patients or health care workers.

Baylor has developed a novel clinical islet isolation method that minimizes stress on the islets.
At the Baylor Liver and Pancreas Disease Center, a broad spectrum of treatment options is available for patients with benign or malignant liver tumors, bile duct cancer, bile duct injury, pancreatic tumors or chronic pancreatitis. For qualified patients CyberKnife® therapy can eradicate hard-to reach or inoperable liver tumors with robotically directed, high-dose, pinpointed beams of radiation.
At the Baylor Liver and Pancreas Disease Center, a broad spectrum of treatment options is available for patients with benign or malignant liver tumors, bile duct cancer, bile duct injury, pancreatic tumors or chronic pancreatitis. Physicians on the medical staff at Baylor University Medical Center at Dallas and Baylor All Saints Medical Center at Fort Worth comprise a multidisciplinary team of specialists that work together to develop the appropriate treatment plan to prolong and enhance the patient’s quality of life.

Available treatment options for liver cancer include:

**CyberKnife®**: For qualified patients, this therapy can eradicate hard-to-reach or inoperable liver tumors with robotically directed, high-dose, pinpointed beams of radiation. The targeted radiation treatment is possible due to a computerized respiratory tracking program that correlates the rise and fall of the chest with the actual location of the tumor. Radiation is delivered precisely to the tumor. Radiation exposure to healthy tissue is minimized. This minimally invasive procedure takes three to five days instead of the six to eight weeks of typical radiation treatment. Patients treated with CyberKnife, an outpatient procedure, generally do not experience the usual radiation side effects.

**Radiofrequency Ablation**: For non-resectable patients, radiofrequency ablation may be an option to treat primary or metastatic liver cancer. During the innovative therapy, radiofrequency current is passed through a needle electrode into the tumor, heating the surrounding area and essentially “cooking” the tumor. The average temperature during treatment is 105˚ Celsius.

**TheraSphere®**: This advanced technology is offered to qualified patients with primary or secondary liver cancer. The physician accesses the blood vessels supplying the tumor and then uses a syringe to deliver millions of tiny glass beads loaded with radioactive yttrium-90 directly into the tumor, effectively blocking the tumor’s blood supply. TheraSphere is a potentially less toxic treatment option compared to traditional radiation.
Chemoembolization: In chemoembolization, chemotherapy is injected into a tumor through the artery that supplies the tumor’s blood flow. Physicians on the medical staff at Baylor use microscopic beads, coated with chemotherapeutic agents, to deliver a local killing dose to the tumor without the systemic side effects associated with the traditional technologies of chemoembolization. In the liver, this method has been found to effectively “downsize” many tumors that are too large to meet transplant criteria. The chemobeads may shrink the tumor to a size that allows the patient to undergo a liver transplant. In some cases, the beads may actually kill the treated cancer.

Resection: Despite all the technological advances in the treatment of liver and pancreatic cancer, surgical resection remains the preferred treatment. The advanced expertise of the surgeons on the medical staff of the Baylor Liver and Pancreas Disease Center means many cases can be done using laparoscopic techniques. In most cases, these major resections are done without blood transfusions, and rarely do they require ICU management.

Choloangiocarcinoma: Bile duct cancer patients may be eligible for a protocol that combines chemotherapy and radiation and qualify for listing for transplantation. The criteria are very selective and patients must be identified at the earliest stages of the disease. Baylor is one of the few centers in the United States offering liver transplantation for bile duct cancer.

Bile Duct Injury: Bile duct injuries can be devastating and difficult to treat. The combined efforts of the surgeons and interventional radiologists on the medical staff of Baylor Dallas and Baylor Fort Worth work together to achieve successful treatment. This collaboration, along with their many years of experience, provides patients a good chance for a positive long-term outcome.

Transplantation for Chronic Pancreatitis: Patients with chronic pancreatitis often experience intractable pain. A select group of patients, who exhaust traditional therapeutic options, may be eligible for auto-islet cell transplantation following total pancreatectomy. Baylor is the first institution in the southwestern United States with a cellular laboratory approved by the FDA to produce islet cells for therapy. After surgically removing the pancreas, islet cells are extracted.
from the diseased organ. These cells are then re-infused into the patient’s liver. This reduces the risk of brittle diabetes and often provides substantial pain relief. In some cases, the patients become insulin free.

Transplantation

Baylor’s liver transplant program is an essential component of a multimodality management strategy that helps all types of liver disease patients receive the most appropriate treatment. The first liver transplant in the Southwest was performed at Baylor University Medical Center at Dallas in 1984. Since that time, the transplant program has grown into one of the busiest in the nation, performing more than 7,000 solid organ transplants to date.

As a result of our history, longevity and sustained growth, Baylor is one of the biggest contributors to new ideas and research in the field of liver disease and liver transplantation. Our clinical experience combined with a committed focus to research has led to the development of innovative therapies and techniques that benefit Baylor liver patients and ultimately all others who seek treatment for liver disease.
“Besides working a full-time job, I show quarter horses, and I’m at a horse show every weekend. It’s really nice to not worry about the swings in blood sugar I couldn’t control.”

Annabelle Salomon, 39, Yukon, Oklahoma

Diabetic since she was three years old, Annabelle experienced periods of low blood sugar when she would simply lose consciousness. An islet cell transplant in September 2007 followed by a second transplant in June 2009 has allowed Annabelle to reduce the amount of insulin she takes and stay more in control of her blood sugar.
Baylor’s strong and vibrant islet cell transplantation program is growing in terms of the breadth and depth of the science, as well as in geography. Baylor offers participation in islet cell transplantation research trials at Baylor Dallas and Baylor Fort Worth. Baylor is the first islet cell transplantation research program for diabetes in the southwestern United States.

Baylor’s islet cell transplantation research program has two primary goals:

• To improve the lives of people with type 1 (juvenile) diabetes
• Reduce the risk of brittle diabetes in patients with chronic pancreatitis who undergo total pancreatectomy

**Allogeneic Islet Cell Transplantation Research**

Allogeneic islet cell transplant—an experimental protocol—aims specifically at patients with long-term disease who have difficulty controlling their blood sugar, either manifested by hypoglycemic unawareness (no symptoms) or no hypoglycemia but high hemoglobinA1cs despite intensive medical therapy.

In patients with type 1 diabetes, islet cells from a deceased donor are extracted and then infused into the patient’s liver, where they may be able to produce insulin.

Baylor’s islet program began in 2001 with Dr. Marlon Levy as the medical director. Dr. Bashoo Naziruddin joined the team in 2004 as the director of the cGMP Islet Processing Laboratory. The first allogeneic islet transplant was performed in March 2005. Baylor received FDA approval for the islet processing facility in February 2006, the only such facility in Texas. The first autologous islet transplant was performed in October 2006. In 2007, Shinichi Matsumoto, M.D., Ph.D., was recruited as director of the scientific team. To date, 20 allogeneic transplants and 17 autologous transplants have been performed at Baylor University Medical Center at Dallas and Baylor All Saints Medical Center at Fort Worth.

As the scientific team has increased its experience and knowledge over the last several years, they have revised the immunosuppressive protocols used in islet cell transplantation research. Researchers have recognized that the immune system has a stronger rejection response than what was previously understood.
Increased measures to block inflammation in the liver at the time of islet infusion also are being taken. The goal is to allow the islet cells to anchor or stabilize in the liver with as little disruption as possible.

One challenge the researchers are encountering is that the islet or beta cells do not seem to grow and divide very much after transplant. Beta cells constitute the predominant type of cell within the islets and are the most important cells to maintain blood glucose control.

Dr. Matsumoto, along with Hirofumi Noguchi M.D., Ph.D., an associate investigator for Baylor Institute for Immunology Research, Baylor Research Institute, are looking at two potential solutions. The first is to understand the mechanism by which beta cells can be encouraged to grow and divide after transplant.

The second is to find a source for pancreatic stem cells—precursor cells that will develop into islet cells when needed. Researchers theorize that the cells of the bile duct—the treelike network that drains into the intestine—may be the source for pancreatic precursor cells. They also are trying to make beta cells from IPS skin cells, similar to embryonic stem cells.

Another challenge researchers face is the shortage of donor pancreases. More than 1 million patients in the United States have type 1 diabetes, but only about 6,000 donor pancreases become available each year.

Researchers at Baylor have begun a study of bioartificial islets, specifically porcine islets, as a potential solution. While this approach is promising, the issues to be resolved include overcoming the immunological hurdles, establishing reliable islet isolation methods and controlling infection from porcine endogenous retrovirus or PERV.

As part of their research, a novel islet isolation method that minimizes stress on the islets has been developed. This method is even more important for pig islet isolation because pig islets are more fragile than human islets.

Surgeons who are familiar with islet isolation are part of the team that procures the donor pancreas, helping to maintain it in good condition. In addition, a new pancreas preservation solution effectively protects the islet cells.

Baylor also has more than a decade’s experience in studying PERV. Baylor has performed successful extracorporeal hepatic support using transgenic pig livers. A method for monitoring PERV showed no infections for patients or health care workers.
**Autologous Islet Cell Transplantation**

Patients who have long-term chronic pancreatitis experience severe pain. When all other therapeutic options have been exhausted, a total pancreatectomy may be recommended. This procedure relieves the pain, but the patient is left with brittle diabetes.

Through the Pancreatic Islet Cell Processing Laboratory, a joint project of Baylor University Medical Center at Dallas, Baylor All Saints Medical Center at Fort Worth and Baylor Research Institute, a patient may receive an autotransplant of his or her own islet cells, a procedure that is not considered experimental.

After surgical removal, the pancreas is taken to the lab where the islet cells are extracted from the diseased organ. These cells are then re-infused into the patient’s portal vein where they are taken up into the liver for possible insulin production.

As a result, the risk of brittle diabetes is greatly reduced. The islet cell transplant also reduces the amount of insulin a patient may need to take and provides them with a better quality of life. No immunosuppressant medication is necessary because in an auto-transplant the patient’s body receives its own tissue.
Milestones

1983  North Texas’ first marrow transplant
1985  Texas’ first successful adult liver transplant
1988  World’s fifth combined heart/kidney transplant
1988  North Texas’ first UNOS-certified, Texas Medicaid-approved cardiac transplant program
1988  Nation’s first bridge to heart transplant using ABIOMED™ assist device
1988  Texas’ first matched unrelated donor marrow transplant
1989  Texas’ first domino heart/lung/heart transplant
1990  North Texas’ first Medicare-approved heart transplant program
1990  Dallas’ first single lung transplant
1993  Dallas’ first double lung transplant
1997  World’s first successful use of genetically altered pig liver as bridge to liver transplant
1998  Texas’ first Medicare-approved lung transplant program
1999  North Texas’ first split liver transplant
2000  Dallas’ first Thoratec® BIVAD implantation
2000  North Texas’ first living donor liver transplant
2002  2,000th liver transplant performed at Baylor Dallas
2002  Tarrant County’s first liver transplant at Baylor Fort Worth
2003  Baylor Fort Worth launches first pancreas transplant program in Tarrant County
2004  Baylor Fort Worth liver transplant program receives Medicare approval
2005  North Texas’ first islet cell transplant; Texas’ first successful intestinal transplant
2006  Baylor’s islet cell laboratory, one of only a few in the United States and the first one in the Southwest, processed cells for transplantation
2007  3,000th liver transplant performed through BRTI
2009  3,000th liver transplant performed at Baylor Dallas

Transplant Research

Baylor Regional Transplant Institute, in concert with Baylor Research Institute, is actively engaged in research studies aimed at improving outcomes and quality of life for patients.
Described in detail on page 35 of this report, Baylor’s ongoing islet cell transplantation research program gives patients with diabetes who are insulin dependent an opportunity to participate in a study of a procedure that may decrease or eliminate the need for insulin.

BRTI also participates in several clinical trials of new drugs, including a study of new anti-rejection drugs, more effective treatments for hepatitis B and C, and agents to treat early cognitive changes associated with cirrhosis.

Two different trials are under way studying whether newly developed drugs can prevent rejection of a transplanted kidney or liver with fewer side effects. The goal is to decrease damage to the transplanted organ caused by the immunosuppressant medication, as well as enhance acceptance of the graft. A third trial is aimed at inducing tolerance, meaning that patients will be eventually taken off all immunosuppressive medications.

BRTI also currently participates in a Phase 1 clinical trial of a newly designed drug—siRNA (small interfering RNA)—aimed at preserving the transplanted organ. The drug blocks the message to the cells of the donor organ to die. Therefore, the donor organ has time to recover from any damage or trauma.

Because the organ pool is so limited, the drug is designed for use on high-risk kidneys from deceased donors. Researchers hope the drug will prevent further damage and improve patient outcomes. Baylor Fort Worth is one of the first transplant centers in the nation to participate in the clinical trial of the new drug.

Viral hepatitis is the most common cause of liver disease in the world. BRTI is very active in investigating new drugs for managing viral hepatitis B and C. Several studies are under way to identify new regimens that could make therapy both more effective and tolerable. Such drugs may open therapy to many patients who have failed to respond to currently available drugs or were not candidates.

BRTI is working with Baylor Institute for Immunology Research to develop a therapeutic vaccine for hepatitis C by identifying and stimulating the specific cells of a patient’s immune system that attack the virus. The first step in this process involves comparing the immune cells in the blood of patients who have been cleared of their viral infection to those who failed to respond to treatment.
“If I hadn’t landed at Baylor, I wouldn’t be here today.”

Mike Malouff, 55, Albuquerque, New Mexico

After a diagnosis of liver cancer, Mike received a liver transplant. He says it was like entering another world. “It’s quite a process to go through,” he says. “My transplant coordinator guided me the whole way. It made me feel that this was the place to be. Every person in every department cared.”
Baylor Health Care System Foundation

As part of a non-profit health care system, Baylor Regional Transplant Institute’s success depends on philanthropic support.

Through numerous fundraising efforts, Baylor Health Care System Foundation supports BRTI’s work in innovative disease management, reducing the risks of transplantation, and enhancing the quality of life for all transplant recipients.

In 2011, BRTI will move to new facilities on the Baylor Dallas campus. The new facilities will provide advanced treatment areas and will facilitate coordinated patient care services. It will also set the stage for BRTI’s launch into the next 25 years as a world leader in transplantation.

The BHCS Foundation focuses its efforts for BRTI on three program components—transplant research, medical education and leadership.

Research
BRTI has been at the forefront of transplant research for a quarter of a century. By funding clinical trials and translational—“bench to bedside”—research, philanthropy helps BRTI researchers and physicians focus on advancements in organ preservation, minimizing organ rejection and increasing the number of people eligible for transplantation.

Education
Graduate medical education helps BRTI improve patient care, address the nationwide shortage of hepatologists and attract some of the best and brightest in the field to Dallas. The efforts of the foundation support fellows in the surgical transplant and transplant hepatology programs, as well as funding a new transplant hepatology fellowship.

Leadership
The competition among transplant centers, teaching hospitals and medical schools for top-ranking specialists is fierce. Philanthropy can have a significant impact by helping BRTI attract and retain future leaders—specialists with exceptional surgical, research and teaching skills.
All Saints Health Foundation

The All Saints Health Foundation supports Baylor Fort Worth and Baylor Medical Center at Southwest Fort Worth in its mission to provide exemplary care to patients in Fort Worth and throughout North Texas.

The community, including many physicians and staff, has been tremendously supportive of the kidney, liver and pancreas transplant program at Baylor Fort Worth. A $6 million capital campaign led by All Saints Health Foundation provided for the 2006 construction of a dedicated transplant operating suite, as well as the 27-bed transplant unit located on the 8th floor of Martin Tower.

Baylor Regional Transplant Institute is expanding its Diabetes Research Program on the campus of Baylor Fort Worth with the goal of conducting pioneering research in diabetes care and advancing the field of pancreatic islet cell transplantation. Cell-based therapies represent the next frontier in transplantation.

Continued advancement of this program requires increased laboratory space and an advanced level of laboratory to support Phase II and Phase III clinical trials and enable Baylor to produce islet cells for use at transplant centers throughout the Southwest.

In 2008, the All Saints Foundation launched a campaign to raise $9.8 million to support operational needs, as well as funds to build a new research facility that will be the home of the program here on the Baylor Fort Worth campus. To date, more than $4.7 million has been raised toward the goal.

Baylor Fort Worth plans to renovate an existing medical arts building on the campus to become a technologically advanced research facility. The 8,300-square-foot facility will include two sterile clean rooms for islet isolations, an islet processing lab, two microbiology laboratories, digital imaging and microscope rooms, and research offices.

The Diabetes Research Program at Baylor Fort Worth represents a major expansion into Fort Worth of Dallas-based Baylor Research Institute. Baylor Research Institute in Fort Worth will be one of only 14 active islet centers in the United States, directly serving patients in Texas, Oklahoma, New Mexico, Louisiana, Arkansas, Mississippi, Colorado and Missouri.
Planned Baylor Research Institute Islet Cell Research Facility on the Baylor Fort Worth campus
Baylor Regional Transplant Institute Move to Baylor Charles A. Sammons Outpatient Cancer Center Will Allow Program Expansion

In 2011, the abdominal transplant clinic and the administrative offices of Baylor Regional Transplant Institute will move into the new cancer center, currently under construction on the Baylor Dallas campus. The administrative offices will occupy space on the ninth floor of the center, and the abdominal transplant clinic will be in a spacious area on the second floor. These moves will give all transplant programs an opportunity for growth and expansion.

Offices for hepatologists on the medical staff of Baylor Dallas and the hepatology clinic will both be located within the cancer center. The heart/lung transplant clinic will stay on the first floor of Baylor Jack and Jane Hamilton Heart and Vascular Hospital, near the offices of physicians on the medical staff associated with that program.

In addition to creating room for growth, the cancer center is designed as a patient-centered facility, making it a very customer-friendly and accessible space for transplant patients.
Baylor Regional Transplant Institute is the integration of transplant services at Baylor University Medical Center at Dallas and Baylor All Saints Medical Center at Fort Worth. Together, Baylor Dallas and Baylor Fort Worth are one of the largest multi-specialty transplant centers in the country.

For More Information, Please Call 1.800.774.2487.
With one phone call, a physician can request additional information, an appointment for a patient, or a consult. Call 1.800.774.2487 and a Baylor Regional Transplant Institute representative will assist you.
Valet parking and self parking are available in convenient locations around the campus.
Baylor All Saints Medical Center at Fort Worth

Valet parking is available at the main entrance off Magnolia Avenue (★) and between the Professional Pavilion and Pavilion garage. The fee for valet parking is $5. Patient drop-off and pickup are located at both valet areas. Covered self parking is located off Enderly Place (★).
Baylor University Medical Center at Dallas

Baylor Dallas is accessible from U.S. 75 (North Central Expressway)/I-45 and 1-30.

Baylor All Saints Medical Center at Fort Worth

Baylor Fort Worth is located south of downtown Fort Worth in the hospital district and is accessible via the Fort Worth freeway system.