



Duke University Health System  
Duke Transplant Center

Kidney-Pancreas Transplant Fact Sheet

**What is a Kidney-Pancreas Transplant?**

Combined transplantation of the kidney and the pancreas is done for those who have kidney failure as a problem of insulin-dependent diabetes mellitus (also, called Type I diabetes). Patients in need of a kidney and pancreas transplant may be on dialysis or will need dialysis in the near future.

After the kidney and pancreas transplant surgery, the new kidney will clean your blood, removing waste products so dialysis will not be needed. The new pancreas makes insulin to control the diabetes.

**What is the first step to get a Kidney-Pancreas Transplant?**

If you have Type I diabetes and kidney failure, or your doctor thinks that kidney failure is starting, a combined kidney and pancreas transplant may be a treatment option to consider. If your doctor refers you to Duke University Medical Center (DUMC) for a transplant evaluation, we will determine if the combined transplant is needed based on your medical condition, and overall health. A pre-transplant evaluation includes, but is not limited to:

- A complete physical exam
- A discussion and class with a Transplant Nurse
- A clinic visit with a Transplant Nephrologist (kidney doctor)
- A clinic visit with a Transplant Surgeon
- A talk with a Social Worker (about post procedural needs)
- A class with a Dietitian (about your diet)
- A talk with a Financial Counselor (about your insurance)
- A clinic visit with a Urologist (a kidney and bladder doctor)
- A clinic visit with a Cardiologist (a heart doctor)
- Various X-rays, Lab work and the possibility of a cardiac catheterization

**How do I prepare for my clinic visit?**

You can help us decide if getting a transplant will be in your best interest by:

- If you are smoking cigarettes, you need to stop now. If you need help with this, you may see one of our counselors.
- If you are a female, you will need to have a recent mammogram and Pap smear done, within the last year.
- If you are 50 years of age or older, male or female, you will need to have a recent colonoscopy done, within the last 5 years.

**Where does my new kidney and pancreas come from?**

Combined kidney and pancreas transplants and single pancreas transplants are only done with deceased (non-living) donor organs.

Sometimes patients may have a kidney transplant because of kidney failure due to Type I diabetes. Those kidneys come from the following sources:



## Duke University Health System Duke Transplant Center

### Kidney-Pancreas Transplant Fact Sheet

- Living donors (related or not related, such as a spouse or friend)
- Deceased donor kidneys come from people whose families give permission for organ donation at the time of death.

All donors are carefully screened to prevent transmittable diseases. The donor is also carefully evaluated to make sure they are a suitable match to your tissue and blood type.

#### What is the procedure for receiving a deceased donor transplant?

After the transplant team has determined that combined transplant is needed, you will be placed on a waiting list. Your name and blood test results are entered on the United Network for Organ Sharing's (UNOS) national list.

- You will be seen at Duke, at least once a year, until you receive your transplant.
- The clinic visits are needed to make sure you are still healthy enough to undergo the surgery.
- When a possible donor is identified, the Transplant Nurse will call you.

#### How long will I have to wait to receive my transplant?

- It is impossible to know how long a wait there will be before a kidney and a pancreas will be offered to you.
- The average wait is about three (3) years. However, it is possible the wait could be from a few days to many years. Some patients may have to wait longer than others for their transplant because their blood and tissue types may be less common, so it takes longer to find a well-matched donor.

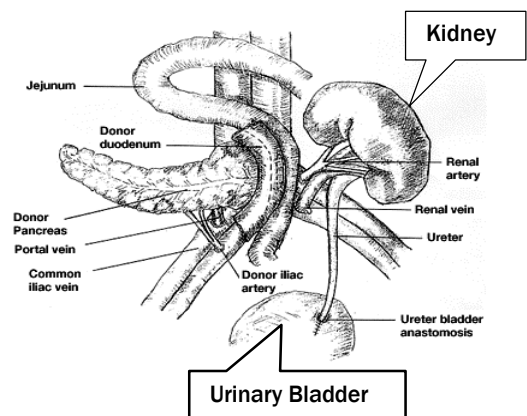
#### What is the success rate of the Kidney-Pancreas Transplant?

After the transplant, there is an 80 to 85 percent chance that the patient will not require insulin or dialysis for one year. In addition, there is a 70 percent chance that this success will continue over the next 10 years.

#### What happens during the Kidney Pancreas Transplant surgery?

Kidney and pancreas transplantation involves placing a healthy kidney and pancreas into the body. They will do all of the functions that a failing kidney and pancreas cannot.

The new kidney is put in the lower left side of the abdomen where it is surgically connected to nearby blood vessels. Placing the kidney in this position allows it to be easily connected to blood vessels and the urinary bladder. The vein and artery of the new kidney are connected to your vein and artery. The new kidney's ureter is connected to your bladder to allow urine to pass out of your body.



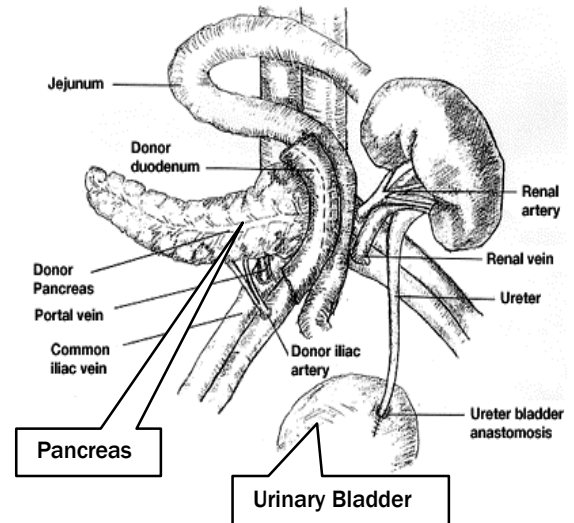


## Kidney-Pancreas Transplant Fact Sheet

The new pancreas is placed on the lower right side of your abdomen where it is surgically connected to nearby blood vessels. The vein and artery of the new pancreas are attached to your vein and artery. The insulin made by the pancreas is released into the bloodstream. In addition, a part of the donor intestine will be attached to your intestine to allow digestive juices to leave the new pancreas and enter your intestine.

- The kidney/pancreas transplant surgery takes about 6 - 8 hours.
- Transplant patients generally stay in the hospital 7 - 10 days.

More information is given upon admission.



### What are the benefits of a Kidney-Pancreas Transplant?

- A successful kidney/pancreas transplant gives you increased strength, and energy.
- You should be able to return to a more normal lifestyle and have more control over your daily living.
- You can have a normal diet and more normal fluid intake.

If you were on dialysis before the transplant, you will have more freedom because you will not be bound to your dialysis schedules. The pancreas transplant will keep your blood sugar normal. Frequently after transplantation, your blood sugar level before eating will be 90 or less; after a meal it may reach 140 or so — all without insulin injections. Further complications of diabetes may be delayed with better blood sugar control.

### What are the risks of a Kidney-Pancreas Transplant?

- Since two organs are transplanted, the risk of surgical complications is about twice that of a single transplant (such as a kidney-only transplant).
- Since the pancreas is also attached to your intestines there may be problems with infection.
- There is a risk of rejection after any transplant surgery. Rejection is your body's way of not accepting the new kidney or pancreas. Since your body will know the new organs are foreign objects, it will normally try to get rid of them or "reject" them.
- However, to prevent rejection you will be asked to take medicine.
- You will have to take these medicines for the rest of your life.
- In order to become aware of possible rejection, you will have blood work done each clinic visit and between clinic visits as needed.



Duke University Health System  
Duke Transplant Center

Kidney-Pancreas Transplant Fact Sheet

**Are pancreas transplants done without a kidney transplant?**

- In some circumstances a pancreas transplant can be done without a kidney transplant.
- At DUMC, a pancreas transplant may be done on a person who already has a good working kidney transplant.
- Currently, DUMC performs:
  - (1) Kidney transplant,
  - (2) Combined kidney and pancreas transplant and
  - (3) Kidney transplant followed 6 months later by a pancreas transplant

Duke University does not perform pancreas transplants alone.

If you are interested in this procedure, please contact the Transplant Office (919-684-5859) and we will be glad to give you a list of Transplant Centers that performs this procedure.