

How are expanded criteria donor kidneys used?

ECD kidneys are usually allocated to older recipients and the waiting time on dialysis for these kidneys may be shorter. An older patient may be better off accepting an ECD kidney than waiting for more years on dialysis for a SCD kidney transplant. Sometimes, both kidneys from an ECD donor are implanted into one recipient to ensure good kidney function after the transplant. This is called a dual kidney transplant.

What can you expect from a dual kidney transplant?

The surgery will take a longer time when two kidneys are transplanted into one recipient. The recipient will have either one large scar on one side of the abdomen, or two scars, one on each side of the

abdomen, depending on where the kidneys are placed. There may be a higher risk that the transplanted kidneys will not function immediately. Most dual kidney transplants will eventually function similarly to a SCD kidney.

What is the success rate for deceased donor kidney transplants?

The success rate of a deceased donor kidney transplant is lower than that of a living donor kidney transplant. However, over 90% of the deceased donor kidneys are able to function well a year after the transplant, and continue to function for an average of 15 years or more.

Over time, some kidney transplants are lost to rejection or recurrence of the original kidney disease. Patients can help themselves by taking their medications as prescribed, living healthily and following the transplant doctor's advice.

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Deceased Donor Kidney Transplant



Who can have a deceased donor kidney transplant?

Most people who are fit to undergo major surgery can undergo evaluation for deceased donor kidney transplant, *unless* they have the following conditions:

- + Severe heart disease
- + Cancer
- + Stroke
- + Active psychiatric problems
- + Significant peripheral vascular disease with below or above knee amputations
- + Any other condition where kidney transplantation may not be a suitable option

How can a dialysis patient join the national waiting list?

A dialysis patient will need to be seen by a transplant doctor and undergo special tests, including but not limited to blood tests and scans to ensure they are fit to receive a kidney transplant before they can be put on the waiting list.

Once they are on the waiting list, they will need regular reviews to ensure that they remain fit, and may need up-to-date tests every few years. In addition, a routine blood sample will be taken every four months for storage. When a kidney for transplant becomes available, this blood sample will be used to perform matching with the donor.

A patient who is on the waiting list must:

- + Adhere to their dialysis treatments and medications
- + Be contactable at any time of the day or night
- + Attend review and admission immediately at the National University Centre for Organ Transplantation (NUCOT) when a deceased donor kidney for transplant becomes available



Deceased Donor Kidney Transplant

What is a kidney transplant?

A kidney transplant is an operation in which a patient with kidney failure (the recipient) receives a kidney from another person (the donor). Immunosuppressive medicines prevent rejection of the transplanted kidney and allow it to function like a normal kidney, cleansing the recipient’s body of toxins, removing excess salt and water and producing hormones needed to maintain health. A kidney for transplant can be obtained from individuals who are alive (living donor) or those who have passed away in a hospital ICU (deceased donor).

Why should you have a kidney transplant?

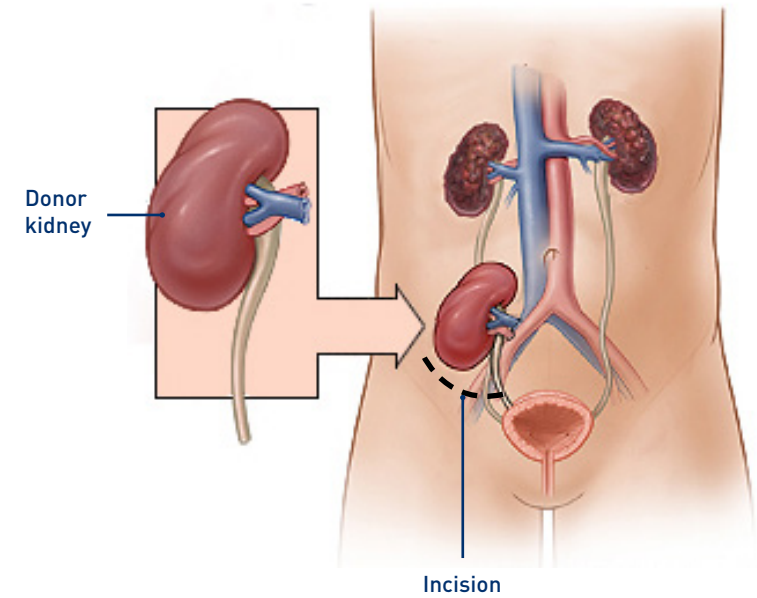
In comparison to dialysis, kidney transplant recipients:

- | | |
|---------------------------------------------------|-----------------------------------------------------------------|
| + Live longer | + Have better health |
| + Have better quality of life | + Have more energy and less restrictions on physical activities |
| + Have better ability to return to work | + Have improved sexual function and fertility |
| + Have less restrictions on diet and fluid intake | |

Although a living donor kidney transplant is the best option, deceased donor kidney transplantation remains a better option than dialysis. However, a recipient will have to wait several years in Singapore on the national waiting list before receiving the transplant as the demand is much higher than the supply of deceased donor organs. During this time, it is possible that new medical conditions may arise which may render a person no longer fit to receive a transplant. Hence, the best option is to obtain a living donor transplant as soon as possible after starting dialysis, or even before starting dialysis.

How is the surgery done?

An incision is made in the lower part of one side of the abdomen. The new kidney is stitched into place within the pelvis and the incision is closed. The recipient’s own kidneys are usually not removed. The surgery takes about three to four hours and the recipient will stay in the hospital for about seven to fourteen days.



What are the types of deceased donor kidney transplants available?

Deceased donor kidneys are most commonly obtained from people who have been certified as brain dead. Brain death is a medical definition of death whereby the donor’s brain has ceased to function, is unable to survive without artificial organ support, and has no possibility of recovery.

Standard criteria donors (SCD) are usually young donors or those who have passed away from an accident and have normal kidney function. These donors provide a kidney each for two recipients.

Some donors may have less than ideal kidney function due to older age, other medical problems or the cause of death and events surrounding death. These donors are called expanded criteria donors (ECD). In Singapore, the rate of accidents is very low, hence many deceased donors may be ECD.