The aim of the Kidney for Life initiative is to improve transplant outcomes while providing an opportunity to minimize immunosuppression medications.
What is the Kidney for Life Initiative?
The Kidney for Life (KFL) initiative utilizes the latest generation DNA sequencing technology to assess the molecular (eplet) mismatch between a patient and their potential donors. This eplet matching technology allows the KFL participating centers to find the best possible genetic matches for patients from the large pool of NKR donors. Research indicates that the better the genetic match between donor and recipient, the better the transplant outcome and the lower the immunosuppression requirements.

What is an Eplet?
Similar to how atoms are made of many smaller components such as protons and neutrons, HLA antigens are made of many smaller components called eplets.

Why Is Eplet Matching Important?
All HLA antigens are made up of eplets. While patients and donors may have similar/same HLA antigens, the eplets within those antigens may differ to varying degrees. Following a transplant, those eplet differences, or mismatches, can cause the recipient’s immune system to develop antibodies against the donor’s eplets, resulting in a possible rejection episode, which can also result in graft failure. The fewer the eplet mismatches, the lower the chance of rejection and the longer potential lifespan of the transplanted kidney.

What Type of Eplet Mismatch is Best?
In general, research has shown that the lower the eplet mismatch, the better the transplant outcome. Your transplant center can help answer this question more specifically, as they must consider many factors to determine the best medical option for your specific case.

Why Kidney for Life?
The Kidney for Life program seeks to find donors with the best (or highest) immunological compatibility, which can lead to:
- Reduced risk of rejection
- Lower risk of kidney failure
- Opportunity for the safe reduction of immunosuppressive medications
- Decreased side-effects related to immunosuppressive medications

How Long Will it Take to Get a Kidney Through the Kidney for Life Initiative?
The typical patient with a compatible donor is matched and transplanted with a low eplet mismatched donor within 1 – 3 months.
How Do I Get Started?

If your transplant center participates in the Kidney for Life initiative, they will work with you to find the best matched donor. An at-home cheek swab kit (returned by mail) or a traditional transplant workup process, which includes a swab or blood test, will be used for high-resolution tissue typing. Once your tissue typing is uploaded into the NKR system, your center will begin the process to find the best possible donor or donors for your specific genetic and medical profile.

Note: A small percentage of patients who participate in the Kidney for Life initiative will not get a low eplet mismatched donor. Participation in the Kidney for Life initiative does not guarantee a better match or that immunosuppression will be reduced.

The National Kidney Registry encourages patients, donors, families and anyone affected by kidney donation to learn more about eplet matching and the science and research behind this initiative.

Visit kidneyforlife.org for more information on eplet mismatch research including recent academic publications, video resources and the commitments made by the KFL participating centers.