

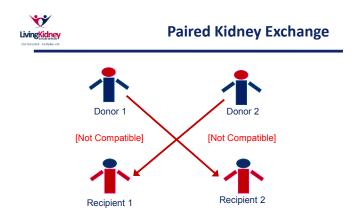
# Kidney Paired Donation Making Incompatible Donors Work

Kidney paired donations, (KPD) also called paired exchanges or swaps are becoming very common and an exciting option for kidney recipients and donors who are not compatible. Approximately one third of those tested who want to donate are not compatible with their intended recipient.

There's a growing trend of people who learn about the long waiting list and decide to donate a kidney even though they don't know someone in need. This type of donor is referred to as a non-directed donor. (NDD) Medical technology and paired exchanges results in NDD's being able to save the lives of not just one person but many. These transplants are called "domino paired exchanges or "ongoing paired exchanges." These paired exchanges will be described in more detail.

#### **How Does a Kidney Paired Donation Work?**

A KPD consists of two or more donor/recipient pairs who are not compatible with each other. KPD's are a major breakthrough in living donations and are revolutionizing living donor transplants by eliminating incompatibility as a barrier to donation and providing a way for recipients and their incompatible donor to be paired with another incompatible recipient and donor.



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In the above illustration, Donor 1 is not compatible with Recipient 1, and Donor 2 is not compatible with Recipient 2. However, Donor 1 is compatible with Recipient 2 and Donor 2 is compatible with Recipient 1. If you have a donor who is not compatible with you, and they are willing to participate in a KPD, the medical team will try and pair you up with another incompatible pair. This example used 2 pairs, but any number of pairs is possible.

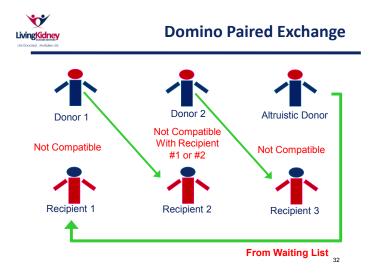
#### **Compatible Paired Exchanges**

In a compatible paired exchange the donor and recipient are compatible, but are interested in becoming part of a paired exchange. As an incentive for compatible pairs to get involved in a paired exchange the recipient of that pair will benefit by at least one of the following:

- 1. Their new donor will be younger than their current donor.
- 2. The new donor's kidney may be a better size for them. i.e. they may weigh 190 pounds and their donor weighs 110 pounds...the new donor may weigh 180 pounds.
- 3. The new donor may be a better HLA match. i.e. their current donor may be a zero out of 6 match and the new donor may be a 5 or 6 out of 6 match.

#### Domino Kidney Paired Donations – The Power of Non-Directed Donors (NDD)

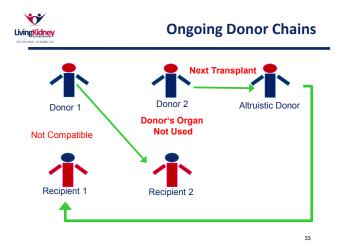
A Domino KPD starts with a NDD. Instead of just one person benefiting from the NDD gift, many recipients with an incompatible donor can benefit. The difference in the illustration shown below from the KPD from above is that Donor #2 is not compatible with either recipient #1 or #2. As such, the non-directed donor allows the other pairs to be exchanged, and have a "domino" effect. With the extra donor another recipient can benefit, that recipient can come from the national kidney transplant waiting list.



## **Ongoing Donor Chains (Also called Never Ending Donor Chains)**

Non-directed donors have begun initiating donor chains that have the potential of benefiting and an unlimited number of recipients.

In the example below, donor, #2 does not donate in this exchange. Donor #2 is referred to as the "bridge donor" for the next "chain" of transplants. Donor #2 functions in the same role as the non-directed donor in this example. This chain could continue, over and over again with a new bridge donor each time. This example uses 2 pairs and the non-directed donor, but any number of pairs could be transplanted in each chain.



### **Kidney Paired Exchange Programs**

Many hospitals have their own KPD program that they arrange within the incompatible pairs registered at their hospital. The nature of KPD's is that the likelihood of finding a compatible pair is increased when there are many incompatible pairs within a pool. There are organizations that "co-op" with other hospitals to increase the likelihood of being "matched" with another incompatible pair. To receive a list of organizations that facilitate KPD's contact the LKDN at: info@LKDN.org and request information about KPD programs.