

OPTN Policy Notice

Improving Dual Kidney Allocation

Sponsoring Committee: Kidney Transplantation
Policy/Bylaws Affected: Policies 5.3 (Additional Acceptance and Screening Criteria), 8.5 (Kidney Allocation Classifications and Rankings), and 8.6 (Double Kidney Allocation)
Public Comment: July 2017
Effective Date: Pending implementation and notice to OPTN members

Note: The Executive Committee of the OPTN approved two technical corrections on March 6, 2019.¹ These corrections are noted in corresponding footnotes. For more information regarding these technical corrections, please contact member.questions@unos.org.

Problem Statement

Among kidneys recovered for the purpose of transplantation, kidneys with a KDPI above 85% have particularly high discard rates, approaching and even exceeding 50%.

Research shows that dual transplantation of high KDPI deceased donor kidneys provides a substantial patient survival advantage over single high KDPI kidney transplantation; however, the number of dual kidney transplants have decreased since the new Kidney Allocation System (KAS) was implemented.

One strategy to increase the number of kidney transplants is to reduce the number of discards via dual kidney transplantation. While kidney allocation policy includes language pertaining to dual kidney allocation, members have indicated current policy is ambiguous, out of date, and does not allow you to quickly identify candidates and allocate kidneys to those suitable for dual transplantation.

Summary of Changes

This change explicitly directs which kidneys must be offered as duals, when an OPO is permitted to offer dual kidneys and how to place dual kidneys with accepting centers most efficiently. A designated allocation pathway for dual kidneys will allow OPOs to make pre-recovery offers more often given a match run with self-identified centers willing to accept dual kidneys for their patients. This change adds dual kidney allocation classifications to *Policy 8.5.J: Allocation of Kidneys from Deceased Donors with KDPI Scores Greater Than or Equal to 35% but Less Than or Equal to 85%* and *Policy 8.5.K: Allocation of Kidneys from Deceased Donors with KDPI scores Greater Than 85%*. As such, transplant hospitals may opt to decline a single kidney for a recipient but indicate interest for dual kidneys.

What Members Need to Do

This policy change impacts transplant hospitals and OPOs.

Transplant Hospitals:

Kidney transplant programs must indicate in UNetsm which patients would consider accepting dual kidneys. This change will allow programs to use listing defaults and Waitlistsm utilities to manage acceptance of dual kidneys at the candidate or center level. This option should reduce administrative

¹ Pursuant to OPTN bylaws, all corrections made by the Executive Committee must be non-substantive in nature.

burden and more effectively ensure that only those candidates and programs willing to consider accepting a dual kidney offer appear on the match run.

Accepting transplant programs must follow current practice when splitting dual kidneys and releasing the remaining kidney per *Policy 5.9: Released Organs*. If the surgeon at the receiving program determines that the dual kidneys can be split and transplanted into two recipients, that program must document why they did not transplant the kidneys as duals.

OPOs:

Since the volume of dual kidney cases is low, OPO operations will be minimally impacted. This change will increase how efficiently dual kidney transplants are allocated, since the match run will only show those candidates willing to accept these kidneys.

Affected Policy Language

Proposed new language is underlined (example) and language that is proposed for removal is struck through (~~example~~).

5.3.G Dual and En Bloc Kidney Acceptance Criteria

In order for a kidney candidate to receive offers of both kidneys from a single deceased donor, a transplant hospital must specify to the OPTN Contractor that the candidate is willing to accept these kidneys.

8.5.J Allocation of Kidneys from Deceased Donors with KDPI Scores Greater than or Equal to 35% but Less than or Equal to 85%

Kidneys from donors with KDPI scores greater than or equal to 35% but less than or equal to 85% are allocated to candidates according to *Table 8-7* below and the following:

- Classifications 1 through 47 for one deceased donor kidney
- Classification 48 through 50 for both kidneys from a single deceased donor

Table 8-7: Allocation of Kidneys from Deceased Donors with KDPI Greater Than or Equal To 35% and Less Than or Equal To 85%

Classification	Candidates that are within the:	And are:	And the donor is this blood type:
1	OPO's DSA	0-ABDR mismatch, CPRA equal to 100%, blood type permissible or identical	Any
2	OPO's DSA	CPRA equal to 100%, blood type permissible or identical	Any
3	OPO's region	0-ABDR mismatch, CPRA equal to 100%, blood type permissible or identical	Any
4	OPO's region	CPRA equal to 100%, blood type permissible or identical	Any
5	Nation	0-ABDR mismatch, CPRA equal to 100%, blood type permissible or identical	Any
6	Nation	CPRA equal to 100%, blood type permissible or identical	Any
7	OPO's DSA	0-ABDR mismatch, CPRA equal to 99%, blood type permissible or identical	Any

Classification	Candidates that are within the:	And are:	And the donor is this blood type:
8	OPO's DSA	CPRA equal to 99%, blood type permissible or identical	Any
9	OPO's region	0-ABDR mismatch, CPRA equal to 99%, blood type permissible or identical	Any
10	OPO's region	CPRA equal to 99%, blood type permissible or identical	Any
11	OPO's DSA	0-ABDR mismatch, CPRA equal to 98%, blood type permissible or identical	Any
12	OPO's DSA	CPRA equal to 98%, blood type permissible or identical	Any
13	OPO's DSA	0-ABDR mismatch, blood type identical	Any
14	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 80%, and blood type identical	Any
15	Nation	0-ABDR mismatch, CPRA greater than or equal to 80%, and blood type identical	Any
16	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, less than 18 at time of match, and blood type identical	Any
17	Nation	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, less than 18 at time of match, and blood type identical	Any
18	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 0% but less than or equal to 20%, less than 18 at time of match, and blood type identical	Any
19	Nation	0-ABDR mismatch, CPRA greater than or equal to 0% but less than or equal to 20%, less than 18 at time of match, and blood type identical	Any
20	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, and blood type identical	Any
21	Nation	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, and blood type identical	Any
22	OPO's DSA	0-ABDR mismatch, and blood type B	O
23	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 80%, and blood type B	O
24	Nation	0-ABDR mismatch, CPRA greater than or equal to 80%, and blood type B	O
25	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, less than 18 at time of match, and blood type B	O

Classification	Candidates that are within the:	And are:	And the donor is this blood type:
26	Nation	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, less than 18 at time of match, and blood type B	O
27	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 0% but less than or equal to 20%, less than 18 at time of match, and blood type B	O
28	Nation	0-ABDR mismatch, CPRA greater than or equal to 0% but less than or equal to 20%, less than 18 at time of match, and blood type B	O
29	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, and blood type B	O
30	Nation	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, and blood type B	O
31	OPO's DSA	0-ABDR mismatch, blood type permissible	Any
32	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 80%, and blood type permissible	Any
33	Nation	0-ABDR mismatch, CPRA greater than or equal to 80%, and blood type permissible	Any
34	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, less than 18 years old at time of match, and blood type permissible	Any
35	Nation	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, less than 18 years old at time of match, and blood type permissible	Any
36	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 0% but less than or equal to 20%, less than 18 years old at time of match, and blood type permissible	Any
37	Nation	0-ABDR mismatch, CPRA greater than or equal to 0% but less than or equal to 20%, less than 18 years old at time of match, and blood type permissible	Any
38	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, and blood type permissible	Any
39	Nation	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, and blood type permissible	Any
40	OPO's DSA	Prior living donor, blood type permissible or identical	Any

Classification	Candidates that are within the:	And are:	And the donor is this blood type:
41	OPO's DSA	Prior liver recipients that meet the qualifying criteria according to <i>Policy 8.5.G: Prioritization for Liver Recipients on the Kidney Waiting List</i> , blood type permissible or identical	Any
42	OPO's DSA	Blood type B	A2 or A2B
43	OPO's DSA	All remaining candidates, blood type permissible or identical	Any
44	OPO's region	Blood type B	A2 or A2B
45	OPO's region	All remaining candidates, blood type permissible or identical	Any
46	Nation	Blood type B	A2 or A2B
47	Nation	All remaining candidates, blood type permissible or identical	Any
48	<u>OPO's DSA</u>	<u>Candidates who have specified they are willing to accept both kidneys from a single deceased donor, blood type permissible or identical</u>	<u>Any</u>
49	<u>OPO's region</u>	<u>Candidates who have specified they are willing to accept both kidneys from a single deceased donor, blood type permissible or identical</u>	<u>Any</u>
50	<u>Nation</u>	<u>Candidates who have specified they are willing to accept both kidneys from a single deceased donor, blood type permissible or identical</u>	<u>Any</u>

8.5.K Allocation of Kidneys from Deceased Donors with KDPI Scores Greater than 85%

With the exception of 0-ABDR mismatches, kidneys from donors with KDPI scores greater than 85% ~~will~~ are allocated to adult candidates ~~only~~ according to Table 8-8 below and the following:

~~Kidneys from deceased donors with KDPI scores greater than 85% are allocated to candidates according to Table 8-8 below.~~

- Classifications 1 through 30, 32, 33, 35 and 36 for one deceased donor kidney
- Classifications 31, 34, and 37 for both kidneys from a single deceased donor

Table 8-8: Allocation of Kidneys from Deceased Donors with KDPI Scores Greater Than 85%

Classification	Candidates that are within the:	And are:	And the donor is this blood type:
1	OPO's DSA	0-ABDR mismatch, CPRA equal to 100%, blood type permissible or identical	Any
2	OPO's DSA	CPRA equal to 100%, blood type permissible or identical	Any
3	OPO's region	0-ABDR mismatch, CPRA equal to 100%, blood type permissible or identical	Any

Classification	Candidates that are within the:	And are:	And the donor is this blood type:
4	OPO's region	CPRA equal to 100%, blood type permissible or identical	Any
5	Nation	0-ABDR mismatch, CPRA equal to 100%, blood type permissible or identical	Any
6	Nation	CPRA equal to 100%, blood type permissible or identical	Any
7	OPO's DSA	0-ABDR mismatch, CPRA equal to 99%, blood type permissible or identical	Any
8	OPO's DSA	CPRA equal to 99%, blood type permissible or identical	Any
9	OPO's region	0-ABDR mismatch, CPRA equal to 99%, blood type permissible or identical	Any
10	OPO's region	CPRA equal to 99%, blood type permissible or identical	Any
11	OPO's DSA	0-ABDR mismatch, CPRA equal to 98%, blood type permissible or identical	Any
12	OPO's DSA	CPRA equal to 98%, blood type permissible or identical	Any
13	OPO's DSA	0-ABDR mismatch, blood type permissible or identical	Any
14	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 80%, and blood type identical	Any
15	Nation	0-ABDR mismatch, CPRA greater than or equal to 80%, and blood type identical	Any
16	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, and blood type identical	Any
17	Nation	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, and blood type identical	Any
18	OPO's DSA	0-ABDR mismatch, blood type B	O
19	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 80%, and blood type B	O
20	Nation	0-ABDR mismatch, CPRA greater than or equal to 80%, and blood type B	O
21	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, and blood type B	O
22	Nation	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, and blood type B	O
23	OPO's DSA	0-ABDR mismatch, blood type permissible	Any

Classification	Candidates that are within the:	And are:	And the donor is this blood type:
24	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 80%, and blood type permissible	Any
25	Nation	0-ABDR mismatch, CPRA greater than or equal to 80% , and blood type permissible	Any
26	OPO's region	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, and blood type permissible	Any
27	Nation	0-ABDR mismatch, CPRA greater than or equal to 21% but no greater than 79%, and blood type permissible	Any
28	OPO's DSA	Prior liver recipients that meet the qualifying criteria according to <i>Policy 8.5.G: Prioritization for Liver Recipients on the Kidney Waiting List</i> , blood type permissible or identical	Any
29	OPO's region <u>DSA</u> ²	Blood type B	A2 or A2B
30	<u>OPO's DSA</u>	<u>All remaining candidates, blood type permissible or identical</u>	<u>Any</u>
31	<u>OPO's DSA</u>	<u>Candidates who have specified they are willing to accept both kidneys from a single deceased donor, blood type permissible or identical</u>	<u>Any</u>
32 ³	<u>OPO's region</u>	<u>Blood type B</u>	<u>A2 or A2B</u>
303	OPO's region	All remaining candidates, blood type permissible or identical	Any
34	<u>OPO's region</u>	<u>Candidates who have specified they are willing to accept both kidneys from a single deceased donor, blood type permissible or identical</u>	<u>Any</u>
315	Nation	Blood type B	A2 or A2B
326	Nation	All remaining candidates, blood type permissible or identical	Any
37	<u>Nation</u>	<u>Candidates who have specified they are willing to accept both kidneys from a single deceased donor, blood type permissible or identical</u>	<u>Any</u>

² Correction approved by Executive Committee action on March 6, 2019.

³ Correction approved by Executive Committee action on March 6, 2019.

8.6 Double Kidney Allocation of Both Kidneys from a Single Deceased Donor to a Single Candidate

An OPO must offer kidneys individually through one of the allocation sequences in *Policy 8.5: Kidney Allocation Classifications and Rankings* before offering both kidneys to a single candidate unless the OPO reports to the OPTN Contractor prior to allocation that the deceased donor meets *at least two* of the following criteria:

- Age is greater than 60 years
- Estimated creatinine clearance is less than 65 mL/min based upon serum creatinine at admission
- Rising serum creatinine (greater than 2.5 mg/dL) at time of organ recovery
- History of longstanding hypertension or diabetes mellitus
- Glomerulosclerosis greater than 15% and less than 50%

The kidneys will be allocated according to sequence of the deceased donor's KDPI.

8.6.A Allocation of Dual Kidneys

If a host OPO procures both kidneys with a KDPI score greater than or equal to 35% from a single deceased donor who weighs greater than or equal to 18 kg, those kidneys will be offered to candidates according to *Policy 8.5.J: Allocation of Kidneys from Deceased Donors with KDPI Scores Greater than or Equal to 35% but Less than or Equal to 85%* or *Policy 8.5.K: Allocation of Kidneys from Deceased Donors with KDPI Scores Greater Than 85%*.

8.6.C Transplanting Kidneys Individually after Allocation of Both Kidneys from a Single Deceased Donor to a Single Candidate

If the transplanting surgeon determines, based on medical judgment, that kidneys procured together from a single donor should instead be transplanted individually, then the receiving transplant program must do *one* of the following:

- Transplant one of the kidneys into the originally designated recipient and document the reason for not transplanting the kidneys together. The receiving transplant program will decide which of the two kidneys to transplant into the originally designated recipient, and release the other kidney according to *Policy 5.9: Released Organs*.
- Release both kidneys according to *Policy 5.9: Released Organs*.