

## **Appendix 1: Transplant Recipient Cohort by State (1987-2009)**

Table A1 provides the cohort size by DSA for each of the study cohorts. The primary cohort includes all deceased donor kidney transplant recipients within each DSA from 1987-2009. The KDRI Controlled cohort includes all deceased donor kidney transplant recipients, adjusted for kidney quality using the kidney donor risk index during 1987-2009. The Additional Exclusions cohort includes all deceased donor kidney transplant recipients, excluding payback and zero-HLA mismatch kidneys as well as recipients under 18 years old during 1987-2009.

**Table A1: Additional Exclusions Cohort Population by DSA**

<b>Transplant DSA</b>	<b>Primary Cohort Population (N)</b>	<b>KDRI Controlled Population (N)</b>	<b>Additional Exclusions Population (N)</b>
CADN-OP1	6798	5167	5622
CAGS-OP1	1434	1016	1175
CAOP-OP1	9957	9660	8115
CASD-IO1	2392	2326	2023
FLFH-IO1	2156	693	1771
FLMP-OP1	2255	1962	1938
FLUF-IO1	3099	3065	2653
FLWC-OP1	3353	878	2847
NYAP-OP1	1299	970	1097
NYFL-IO1	1256	1041	1071
NYRT-OP1	7631	4915	6355
NYWN-OP1	1112	1031	932
OHLB-OP1	2654	2172	2045
OHLC-OP1	1509	231	1214
OHLP-OP1	2064	1340	1767
OHOV-OP1	1147	807	1016
NCCM-IO1	1370	601	1053
NCNC-OP1	3533	3330	2707
PADV-OP1	8967	8018	7502
PATF-OP1	5362	4852	4678
TNDS-OP1	3342	601	2590
TNMS-OP1	1316	970	1165
WIDN-OP1	1782	1294	1493
WIUW-IO1	2951	2453	2443
TXGC-OP1	5432	3328	4627
TXSA-OP1	3073	1756	2457

TXSB-OP1	5467	3883	4647
Total	92711	68365	77003

Cohort sizes by DSA.

Abbreviations: DSA: Donor Service Area

The first two letters in a DSA names are abbreviated as: TN: Tennessee, NC: North Carolina, PA: Pennsylvania, WI: Wisconsin, FL: Florida, CA: California, NY: New York, OH: Ohio, TX: Texas;

Primary cohort: All kidney transplant recipients during the study period (1987-2009). Controlled-KDRI: Cohort of all kidney transplant recipients, adjusted by KDRI. Additional Exclusions cohort: Cohort of all deceased donor kidney transplant recipients excluding zero HLA mismatch, payback, and < 18 year old recipients

#### ***KDRI-Controlled Cohort Construction***

We created four KDRI subgroups: [0, 0.75]; [0.75,1.5] [1.5, 2.25] [larger than 2.25] based on the primary cohort of kidney transplant recipients. The distribution among those subgroups was 9,978 (10.8%, 65,190 (70.3%), 15,537 (16.8%), and 2,006 (2.2%) patients in the four KDRI subgroups respectively. In order to control for KDRI, we created a matched cohort for each DSA, by matching the distribution per KDRI quartile (10.8%, 70.3%, 16.8% and 2.2%). For example, in the Florida OPO (FLMP-OP1) the primary cohort entailed 219, 1,655, 329 and 52 patients in each KDRI quartile respectively. The KDRI matched cohort entailed 211, 1,380, 329, and 42 patients respectively that were randomly selected (see Table A1). Similar procedure was repeated for all DSAs in the study to ensure that the number of patients selected to form the secondary cohort in each DSA was 10.76%, 70.31%, 16.76% and 2.16%.

**Table A2: Primary and KDRI-Controlled Cohort Populations by DSA and KDRI Range**

Transplant DSA	Primary Cohort Population (N)				KDRI Controlled Cohort Population (N)			
KDRI Range	0-0.75	0.75-1.5	1.5-2.25	2.25+	0-0.75	0.75-1.5	1.5-2.25	2.25+
CADN-OP1	556	5013	1112	117	556	3633	866	112
CAGS-OP1	154	1006	252	22	109	715	170	22
CAOP-OP1	1144	6874	1730	209	1040	6792	1619	209
CASD-IO1	299	1643	390	60	250	1636	390	50
FLFH-IO1	256	1640	245	15	75	487	116	15
FLMP-OP1	219	1655	329	52	211	1380	329	42
FLUF-IO1	341	2155	533	70	330	2155	514	66

FLWC-OP1	460	2509	365	19	95	617	147	19
NYAP-OP1	168	913	197	21	104	682	163	21
NYFL-IO1	112	912	201	31	112	732	174	23
NYRT-OP1	529	4806	1931	365	529	3456	824	106
NYWN-OP1	123	725	230	34	111	725	173	22
OHLB-OP1	279	1795	533	47	234	1527	364	47
OHLC-OP1	198	1124	182	5	25	162	39	5
OHLP-OP1	234	1507	294	29	144	942	225	29
OHOV-OP1	87	841	195	24	87	568	135	17
NCCM-IO1	168	1038	151	13	65	422	101	13
NCNC-OP1	422	2342	668	101	358	2342	558	72
PADV-OP1	863	5977	1772	355	863	5638	1344	173
PATF-OP1	532	3760	965	105	522	3412	813	105
TNDS-OP1	673	2366	290	13	65	422	101	13
TNMS-OP1	157	938	200	21	104	682	163	21
WIDN-OP1	205	1269	280	28	139	910	217	28
WIUW-IO1	264	2088	543	56	264	1725	411	53
TXGC-OP1	484	4187	689	72	358	2340	558	72
TXSA-OP1	438	2126	471	38	189	1235	294	38
TXSB-OP1	613	3981	789	84	418	2730	651	84
Total	9978	65190	15537	2006	7358	48071	11457	1479
%	10.8%	70.3%	16.8%	2.2%	10.8%	70.3%	16.8%	2.2%

Cohort sizes by DSA for primary and KDRI controlled cohort groups.

Abbreviations: DSA: Donor Service Area, KDRI: Kidney Donor Risk Index

The first two letters in a DSA names are abbreviated as: TN: Tennessee, NC: North Carolina, PA: Pennsylvania, WI: Wisconsin, FL: Florida, CA: California, NY: New York, OH: Ohio, TX: Texas;

Primary cohort: All kidney transplant recipients during the study period (1987-2009). Controlled-KDRI: Cohort of all waitlisted patients for kidney transplant, adjusted by KDRI.