



User Guide

This report contains a wide range of useful information about the kidney transplant program at VA Portland Health Care System (ORVA). The report has three main sections:

- A. Program Summary
- B. Waiting List Information
- C. Transplant Information

The Program Summary is a one-page summary highlighting characteristics of the program, including the number of candidates on the waiting list, the number of transplants performed at the program, the number of patients being cared for by the program, and patient outcomes, including outcomes while on the waiting list (the transplant rate and the death rate while on the waiting list) and outcomes after transplant (patient and graft survival probabilities). If the program performed transplants in both adults and children, survival probabilities for adults and children (pediatrics) are provided separately. For each of the outcomes measures presented, a comparison is provided showing what would be expected at this program if it were performing as similar programs around the country perform when treating similar patients. More details regarding these outcome measures are provided in Sections B and C of the report.

The Waiting List Information section contains more detailed information on how many candidates are on the waiting list at the program, the types of candidates on the waiting list, how long candidates typically have to wait for a transplant at this program, how frequently candidates successfully receive a transplant, and how often candidates on the waiting list die before receiving a transplant.

Table B1 shows the activity on this program's waiting list during two recent 1-year periods and provides comparisons to all programs within this program's OPTN region (see <http://optn.transplant.hrsa.gov/members/regions.asp> for information on OPTN regions) and the nation as a whole. Tables B2 and B3 describe the candidates on the waiting list at this program, with comparisons to candidates waiting in the same donor service area (OPO/DSA) the OPTN region, and the nation as a whole.

Table B4 shows how many candidates were removed from the waiting list because they received a transplant. The program's transplant rate is calculated as the number of candidates who received a transplant divided by the person-years observed at the program (person-years is a combination of how many candidates were on the waiting list along with how long each candidate was followed since some candidates are not on the waiting list for the entire year). The transplant rate and comparisons to what would be expected at this program are presented in Figures B1 and B2. Figure B1 shows the transplant rate compared to what was expected at this program. The expected transplant rate is an estimate of what we would expect at this program if it were performing transplants at rates similar to other programs in the US with similar candidates on their waiting lists. The expected rate is only an estimate, and is made with a certain level of uncertainty. This uncertainty is shown in Figure B2. Figure B2 displays the ratio of the observed to the expected transplant rate. A ratio of 1 indicates that the observed transplant rate was equal to the expected transplant rate, while a ratio less than 1 indicates the observed rate was lower than expected rate and a ratio greater than 1 indicates the observed rate was higher than the expected rate. However, the level of uncertainty must be considered when interpreting these numbers. The 95% interval is also shown on Figure B2. This interval provides a range within which the true ratio of observed to expected transplant rates is likely to be. If this



User Guide

confidence interval includes (crosses) 1.0, then we cannot say that this program's observed transplant rate is different from what would be expected. The observed transplant rate at this program was 29.6 per 100 person-years. Transplant rates are also provided for adult and pediatric patients separately along with comparisons to adult and pediatric rates in the DSA, the OPTN region, and the nation. Transplant rates are also presented excluding transplants from a living donor (Table B4D and Figures B1D-B3D). Please refer to the PSR Technical Methods documentation available at <http://www.srtr.org> for more detail regarding how expected rates are calculated.

The death rate (also known as the mortality rate) for candidates on the waiting list is presented in Table B5 and Figures B4-B6. These data are presented in the same way as the transplant rate data in the previous section. The intent of this table and figures is to describe risk of death once candidates are listed rather than while they are listed, but before they are transplanted. Therefore, time at risk and deaths after removal from the waiting list for reasons other than transplant, transfer to another transplant program, or recovery (no longer needing a transplant), and before any subsequent transplant, are included. As with transplant rates, mortality rates should be interpreted carefully taking into consideration the interval displayed in Figure B5. For a complete description of how observed and expected mortality rates are calculated, please refer to the technical documentation available at <http://www.srtr.org>.

Survival from listing is presented in Table B6 and Figures B7-B9. These data are presented in the same way as the waiting list mortality rate data in the previous section. The intent of this table and figures is to describe risk of death once candidates are listed rather than while they are listed, including after a transplant. As with transplant rates, mortality rates should be interpreted carefully taking into consideration the interval displayed in Figure B8. For a complete description of how observed and expected mortality rates are calculated, please refer to the technical documentation available at <http://www.srtr.org>.

Table B7 presents information on what happens to candidates on the waiting list by three different time points after listing: 6 months, 12 months, and 18 months. The table displays percentages of candidates who have died, been removed from the waiting list, been transplanted, or been transferred or lost-to-follow-up. Tables B8 and B9 provide more detail regarding how many candidates have received a deceased donor transplant by certain time points during the first 3 years after being put on the transplant waiting list. Each row of Tables B8 and B9 presents the percent of candidates who received a deceased donor transplant by each time point. Table B10 presents data on the time it took for different percentages of patients to be transplanted for candidates added to the list between 01/01/2014 and 06/30/2019. The time it took for 5% (the 5th percentile) of patients to receive a transplant at this program was 1.9 months. If "Not Observed" is displayed in the table, then too few candidates received transplants before 12/31/2019 to calculate a particular percentile of transplant times.

Table B11 contains a summary of the offer acceptance practices of the program. The offer acceptance ratio indicates whether the program is more or less likely to accept offers than the average program. If the offer acceptance ratio is greater than 1.0, then the program tends to accept more offers than average; if the offer acceptance ratio is less than 1.0, then the program tends to accept fewer offers than average. Figure B10 shows the distribution of program offer acceptance rates as well as the offer acceptance rate for this program. Figures B11 - B14 similarly show offer acceptance rates for subsets



User Guide

of offers.

The Transplant Information section begins with descriptions of transplant recipients in Tables C1 and C2. Data on recipients of deceased donor transplants are presented (Tables C1D and C2D); if applicable, data on recipients of living donor transplants are presented separately (Tables C1L and C2L). Comparisons to the region and the nation as a whole are provided. A description of the deceased donors used at this program is provided in Table C3D, along with characteristics of living donors in Table C3L, if applicable. Finally, information on the transplant procedure for deceased and living donor transplants is presented in Tables C4D and C4L, respectively.

Starting with Table C5, transplant outcomes are presented along with comparisons to what would be expected at this program and what happened in the nation as a whole. Tables C5-C10 present information on graft survival (survival of the transplanted organ), with data presented separately for adult and pediatric recipients. Patients are followed from the time of transplant until either failure of the transplanted organ or death, whichever comes first. Please refer to the technical methods for more information on these calculations (<http://www.srtr.org>).

While Tables C5-C10 present data on graft survival, Tables C11-C16 present information on patient survival. For these tables, patients are followed from the time of transplant until death, regardless of whether the transplant is functioning or the patient required another transplant to survive.

Tables C17 and C18 summarize the multiorgan transplant outcomes at this program. The summary statistics in these tables are descriptive and are not risk-adjusted for different donor and candidate characteristics.

Table D1 shows the rates of follow-up for living donors.

Additional information regarding the technical methods and the risk adjustment models used to estimate expected event rates is available on the SRTR website at <http://www.srtr.org>. We welcome and encourage feedback on these reports. Please feel free to share feedback with the SRTR at the following e-mail: srtr@srtr.org.



Table of Contents

Section	Page
User Guide	i
A. Program Summary	
Program Summary	1
B. Waiting List Information	
Waiting list activity	2
Demographic characteristics of waiting list candidates	3
Medical characteristics of waiting list candidates	4
Transplant rates	5
Deceased donor transplant rates	6
Waiting list mortality rates	7
Patient survival from listing	8
Waiting list candidate status after listing	9
Percent of candidates with deceased donor transplants: demographic characteristics	10
Percent of candidates with deceased donor transplants: medical characteristics	11
Time to transplant for waiting list candidates	12
Offer acceptance practices	13
C. Transplant Information	
Deceased donor transplant recipient demographic characteristics	15
Living donor transplant recipient demographic characteristics	16
Deceased donor transplant recipient medical characteristics	17
Living donor transplant recipient medical characteristics	18
Deceased donor characteristics	19
Living donor characteristics	20
Deceased donor transplant characteristics	21
Living donor transplant characteristics	22
Graft survival	23
Patient survival	41
Multi-organ transplant graft survival	59
Multi-organ transplant patient survival	59
D. Living Donor Information	
Living donor follow-up summary	60



A. Program Summary

Figure A1. Waiting list and transplant activity

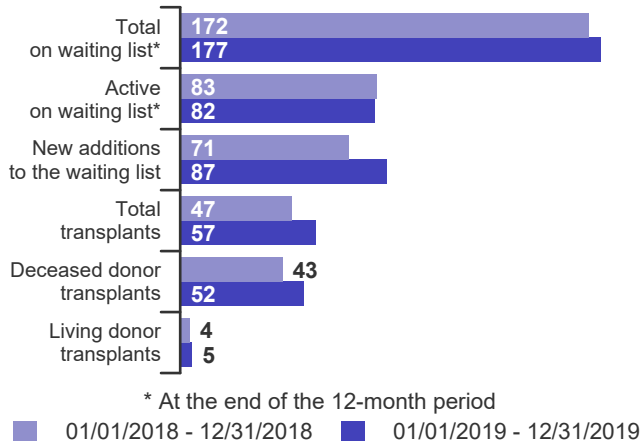


Table A1. Census of transplant recipients

Recipients	01/01/2018-12/31/2018	01/01/2019-12/31/2019
Transplanted at this center	47	57
Followed by this center*	347	373
...transplanted at this program	343	369
...transplanted elsewhere	4	4

* Recipients followed are transplant recipients for whom the center has submitted a post-transplant follow-up form for a transplant that took place before the 12-month interval for each column.

Figure A2. Transplant rates
01/01/2018 - 12/31/2019

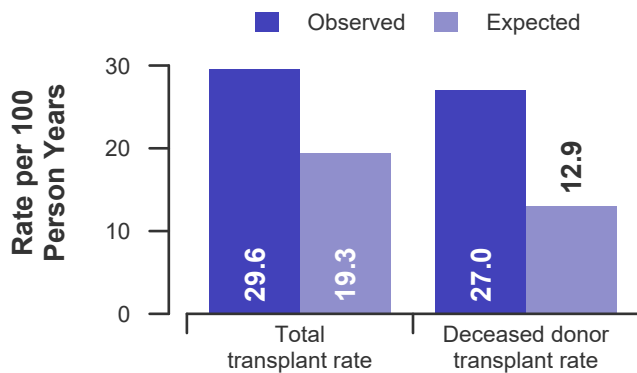


Figure A3. Waiting list mortality rates
01/01/2018 - 12/31/2019

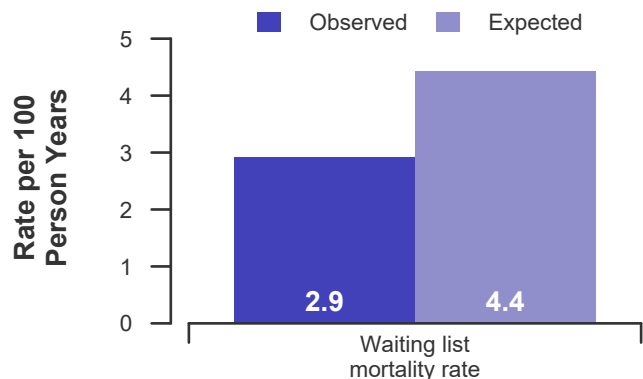


Figure A4. First-year adult graft and patient survival: 01/01/2017 - 06/30/2019

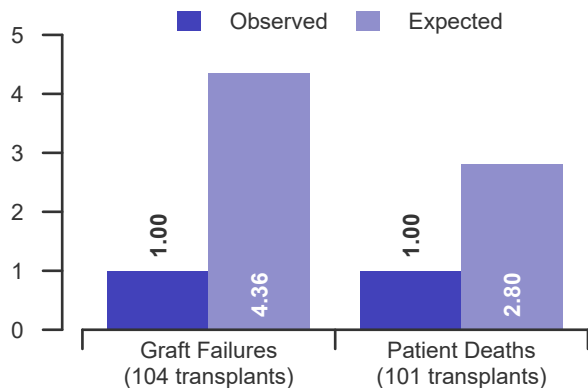


Figure A5. First-year pediatric graft and patient survival: 01/01/2017 - 06/30/2019

This center did not perform any transplants relevant to this figure during 01/01/2017-06/30/2019



B. Waiting List Information

Table B1. Waiting list activity summary: 01/01/2018 - 12/31/2019

Waiting List Registrations	Counts for this center		Activity for 01/01/2019 to 12/31/2019 as percent of registrants on waiting list on 01/01/2019		
	01/01/2018-12/31/2018	01/01/2019-12/31/2019	This Center (%)	OPTN Region (%)	U.S. (%)
On waiting list at start	168	172	100.0	100.0	100.0
Additions					
New listings at this center	71	87	50.6	49.0	42.2
Removals					
Transferred to another center	1	0	0.0	1.5	1.4
Received living donor transplant*	4	5	2.9	7.9	6.7
Received deceased donor transplant*	43	52	30.2	24.5	16.3
Died	3	5	2.9	2.0	3.8
Transplanted at another center	3	5	2.9	1.1	3.9
Deteriorated	10	12	7.0	6.4	4.2
Recovered	0	0	0.0	0.4	0.2
Other reasons	3	3	1.7	5.0	5.4
On waiting list at end of period	172	177	102.9	100.1	100.2

* These patients were removed from waiting list with removal code indicating transplant; this may not equal the number of transplants performed at this center during the specified period.



B. Waiting List Information

Table B2. Demographic characteristics of waiting list candidates
Candidates registered on the waiting list between 01/01/2019 and 12/31/2019

Demographic Characteristic	New Waiting List Registrations 01/01/2019 to 12/31/2019 (%)			All Waiting List Registrations on 12/31/2019 (%)		
	This Center (N=87)	OPTN Region (N=1,210)	U.S. (N=42,665)	This Center (N=177)	OPTN Region (N=2,472)	U.S. (N=101,433)
All (%)	100.0	100.0	100.0	100.0	100.0	100.0
Ethnicity/Race (%)*						
White	46.0	52.8	42.0	45.8	50.5	35.3
African-American	32.2	9.8	29.0	32.8	10.0	32.2
Hispanic/Latino	4.6	12.9	19.1	5.1	11.5	20.9
Asian	17.2	20.9	8.0	15.3	23.6	9.8
Other	0.0	3.6	1.9	1.1	4.5	1.8
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Age (%)						
<2 years	0.0	0.1	0.1	0.0	0.1	0.1
2-11 years	0.0	1.3	0.9	0.0	1.0	0.5
12-17 years	0.0	1.3	1.4	0.0	1.5	0.9
18-34 years	3.4	11.4	10.8	4.0	10.3	10.5
35-49 years	20.7	22.7	24.6	19.2	23.1	27.3
50-64 years	46.0	41.5	41.0	46.3	43.6	43.4
65-69 years	18.4	13.1	13.3	19.8	13.5	12.0
70+ years	11.5	8.5	7.9	10.7	6.8	5.4
Gender (%)						
Male	93.1	60.3	61.8	93.8	60.8	62.0
Female	6.9	39.7	38.2	6.2	39.2	38.0

* Race and ethnicity are reported together as a single data element, reflecting their data collection (either race or ethnicity is required, but not both). Patients formerly coded as white and Hispanic are coded as Hispanic. Race and ethnicity sum to 100%.



B. Waiting List Information

Table B3. Medical characteristics of waiting list candidates
Candidates registered on the waiting list between 01/01/2019 and 12/31/2019

Medical Characteristic	New Waiting List Registrations 01/01/2019 to 12/31/2019 (%)			All Waiting List Registrations on 12/31/2019 (%)		
	This Center (N=87)	OPTN Region (N=1,210)	U.S. (N=42,665)	This Center (N=177)	OPTN Region (N=2,472)	U.S. (N=101,433)
All (%)	100.0	100.0	100.0	100.0	100.0	100.0
Blood Type (%)						
O	46.0	45.5	49.1	62.1	51.7	53.6
A	28.7	34.5	32.3	20.3	30.4	27.3
B	24.1	15.0	14.8	16.9	14.8	16.6
AB	1.1	5.0	3.8	0.6	3.1	2.5
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Previous Transplant (%)						
Yes	8.0	11.2	12.7	9.0	14.2	13.6
No	92.0	88.8	87.3	91.0	85.8	86.4
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Initial CPRA (%)						
0-9%	74.7	77.9	79.9	79.1	78.0	80.2
10-79%	18.4	13.9	12.8	14.1	14.2	12.5
80+%	6.9	8.3	7.2	6.8	7.8	7.2
Unknown	0.0	0.0	0.1	0.0	0.0	0.1
Primary Disease (%)*						
Glomerular Diseases	20.7	25.2	19.2	18.1	25.3	19.0
Tubular and Interstitial Diseases	3.4	5.3	3.9	4.5	5.6	3.6
Polycystic Kidneys	4.6	10.4	7.5	6.2	9.8	6.8
Congenital, Familial, Metabolic	0.0	2.3	2.0	0.6	2.7	1.7
Diabetes	44.8	30.9	35.2	38.4	31.7	36.8
Renovascular & Vascular Diseases	0.0	0.0	0.2	0.0	0.1	0.2
Neoplasms	0.0	0.5	0.4	0.6	0.6	0.3
Hypertensive Nephrosclerosis	20.7	11.8	19.7	23.2	12.6	21.4
Other	5.7	13.0	11.5	8.5	11.0	9.8
Missing*	0.0	0.6	0.4	0.0	0.6	0.4

* When "retransplant" is indicated, the primary disease is passed forward from the prior transplant in order to indicate the initial primary disease causing organ failure. "Missing" may include some patients for whom retransplant is indicated but no prior diagnosis can be found.



B. Waiting List Information

Table B4. Transplant rates: 01/01/2018 - 12/31/2019

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	168	641	2,615	101,257
Person Years**	351.5	1,380.7	5,022.9	201,966.5
Removals for Transplant	104	534	1,531	44,378
Adult (18+) Candidates				
Count on waiting list at start*	168	635	2,549	99,726
Person Years**	351.5	1,359.6	4,887.9	198,864.5
Removals for transplant	104	517	1,465	42,635
Pediatric (<18) Candidates				
Count on waiting list at start*	--	--	--	--
Person Years**	--	--	--	--
Removals for transplant	--	--	--	--

* Counts in this table may be lower than similar counts in other waiting list tables, such as Table B1. A small percentage (~1%) of patients are found to have died or been transplanted before being removed from the waiting list, so these patients are excluded if the event occurs prior to the start of the study period. Inactive time on the waiting list is included in the calculations for this table.

** Person years are calculated as days (converted to fractional years). The number of days from January 1 or from the date of first wait listing until death, transplant, removal from the waiting list or December 31.

Figure B1. Observed and expected transplant rates: 01/01/2018 - 12/31/2019

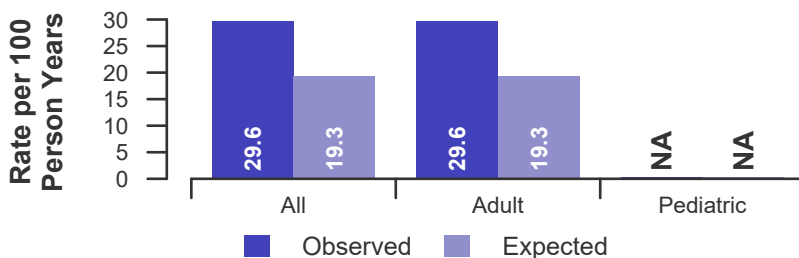


Figure B2. Transplant rate ratio estimate

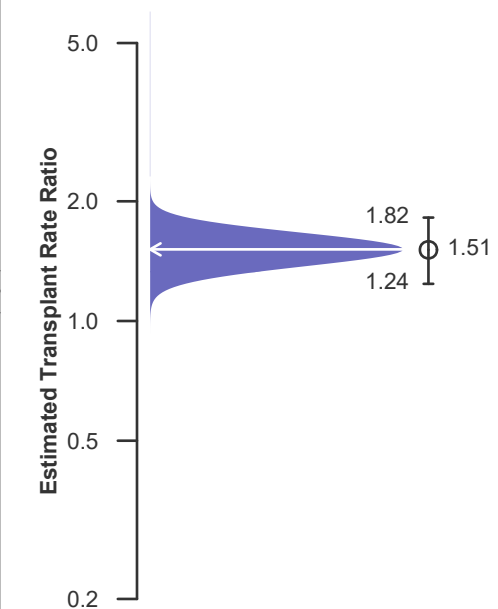
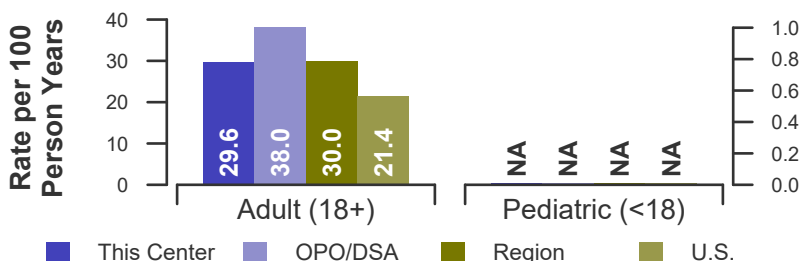


Figure B3. Observed adult (18+) and pediatric (<18) transplant rates: 01/01/2018 - 12/31/2019





B. Waiting List Information

Table B4D. Deceased donor transplant rates: 01/01/2018 - 12/31/2019

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	168	641	2,615	101,257
Person Years**	351.5	1,380.7	5,022.9	201,966.5
Removals for Transplant	95	396	1,163	31,199
Adult (18+) Candidates				
Count on waiting list at start*	168	635	2,549	99,726
Person Years**	351.5	1,359.6	4,887.9	198,864.5
Removals for transplant	95	388	1,115	30,015
Pediatric (<18) Candidates				
Count on waiting list at start*	--	--	--	--
Person Years**	--	--	--	--
Removals for transplant	--	--	--	--

* Counts in this table may be lower than similar counts in other waiting list tables, such as Table B1. A small percentage (~1%) of patients are found to have died or been transplanted before being removed from the waiting list, so these patients are excluded if the event occurs prior to the start of the study period. Inactive time on the waiting list is included in the calculations for this table.

** Person years are calculated as days (converted to fractional years). The number of days from January 1 or from the date of first wait listing until death, transplant, removal from the waiting list or December 31.

Figure B1D. Observed and expected deceased donor transplant rates: 01/01/2018 - 12/31/2019

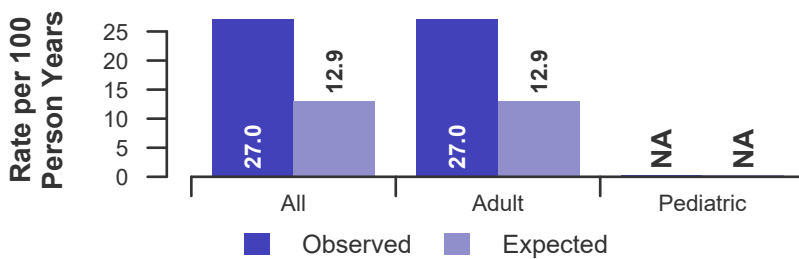


Figure B2D. Deceased donor transplant rate ratio estimate

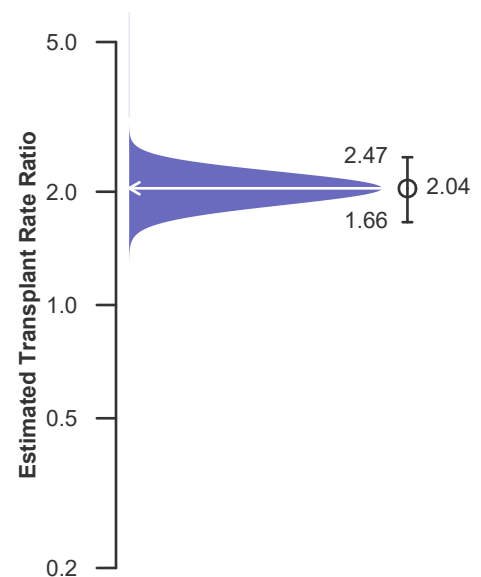
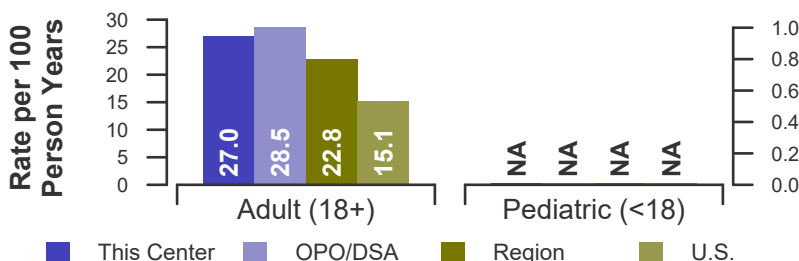


Figure B3D. Observed adult (18+) and pediatric (<18) deceased donor transplant rates: 01/01/2018 - 12/31/2019





B. Waiting List Information

Table B5. Waiting list mortality rates: 01/01/2018 - 12/31/2019

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	168	641	2,615	101,257
Person Years**	376.9	1,476.8	5,641.9	220,145.1
Number of deaths	11	39	184	10,726
Adult (18+) Candidates				
Count on waiting list at start*	168	635	2,549	99,726
Person Years**	376.9	1,455.6	5,504.6	216,935.0
Number of deaths	11	39	184	10,685
Pediatric (<18) Candidates				
Count on waiting list at start*	--	--	--	--
Person Years**	--	--	--	--
Number of deaths	--	--	--	--

* Counts in this table may be lower than similar counts in other waiting list tables, such as Table B1. A small percentage (~1%) of patients are found to have died or been transplanted before being removed from the waiting list, so these patients are excluded if the event occurs prior to the start of the study period. Inactive time on the waiting list is included in the calculations for this table.

** Person years are calculated as days (converted to fractional years). The number of days from January 1 or from the date of first wait listing until death, transplant, 60 days after recovery, transfer or December 31.

Figure B4. Observed and expected waiting list mortality rates: 01/01/2018 - 12/31/2019

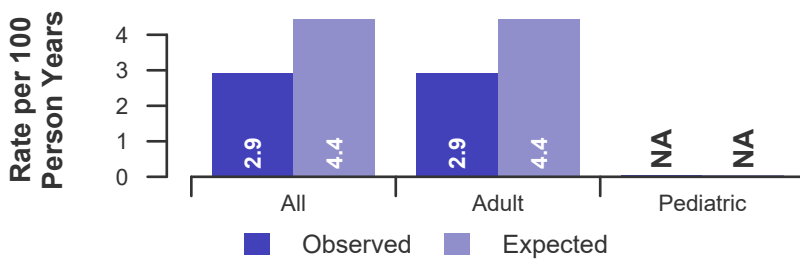


Figure B5. Waiting list mortality rate ratio estimate

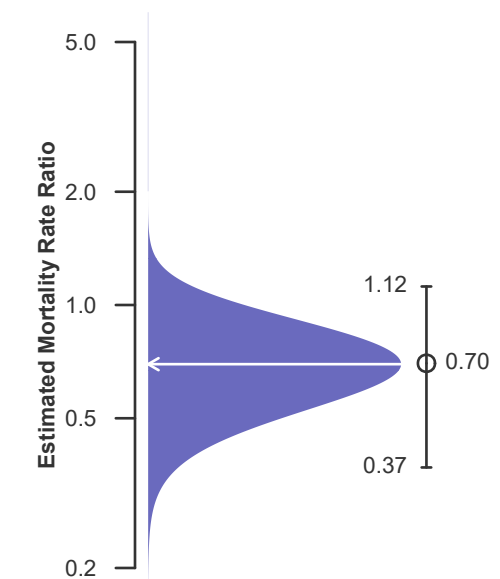
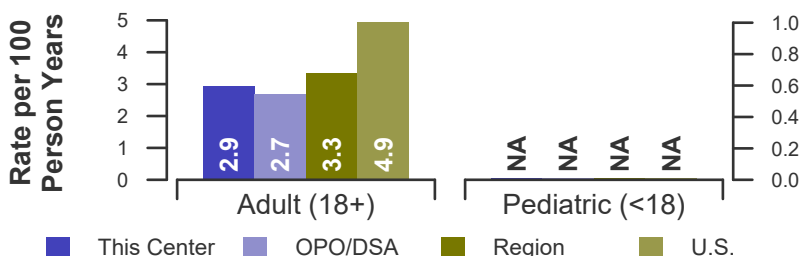


Figure B6. Observed adult (18+) and pediatric (<18) waiting list mortality rates: 01/01/2018 - 12/31/2019





B. Waiting List Information

Table B6. Rates of patient mortality after listing: 01/01/2018 - 12/31/2019

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Patients				
Count at risk during the evaluation period	623	2,751	8,906	296,874
Person-years*	918.6	4,052.5	13,294.6	443,039.1
Number of Deaths	32	127	437	18,853
Adult (18+) Patients				
Count at risk during the evaluation period	623	2,678	8,609	288,141
Person-years*	918.6	3,939.1	12,820.7	429,477.3
Number of Deaths	32	127	436	18,776
Pediatric (<18) Patients				
Count at risk during the evaluation period	0	73	297	8,733
Person-years*	0.0	113.3	473.8	13,561.8
Number of Deaths	0	0	1	77

* Person-years are calculated as days (converted to fractional years). The number of days from 01/01/2018, or from the date of first wait listing until death, reaching 7 years after listing or December 31, 2019.

** Patient mortality after listing describes the relative survival experience of patients after listing. It depends on many factors, some of which are outside of the control of the transplant program. For example, availability of organs may not be the same in every part of the country.

Figure B7. Observed and expected rates of patient mortality after listing: 01/01/2018 - 12/31/2019

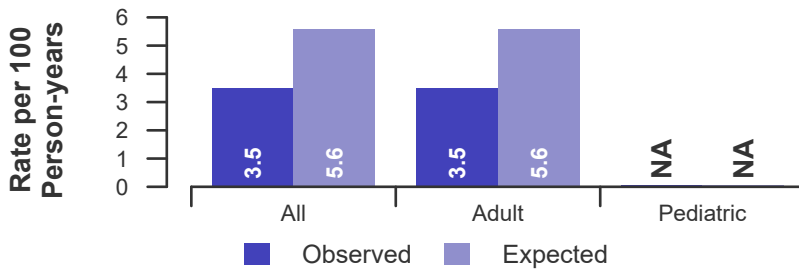


Figure B8. HR estimate of patient mortality after listing

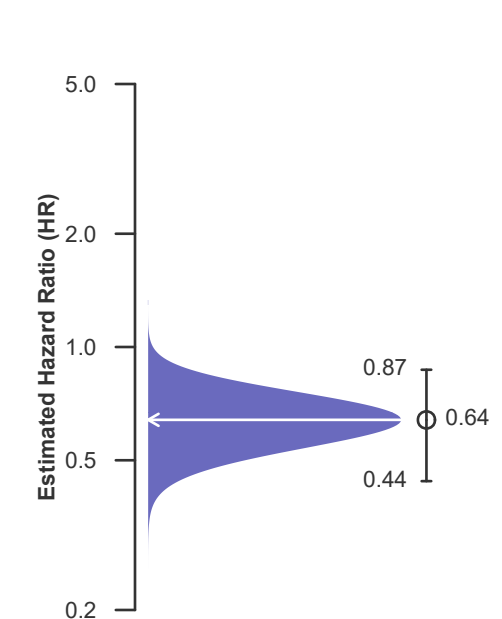
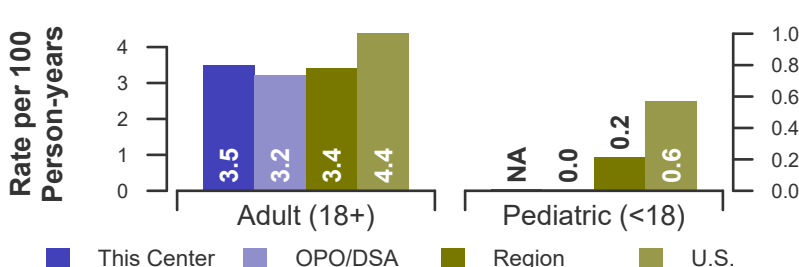


Figure B9. Observed adult (18+) and pediatric (<18) rates of patient mortality after listing: 01/01/2018 - 12/31/2019





B. Waiting List Information

Table B7. Waiting list candidate status after listing
Candidates registered on waiting list between 07/01/2017 and 06/30/2018

Waiting list status (survival status)	This Center (N=69)			U.S. (N=37,827)		
	Months Since Listing			Months Since Listing		
	6	12	18	6	12	18
Alive on waiting list (%)	88.4	65.2	49.3	77.3	64.3	54.4
Died on the waiting list without transplant (%)	0.0	1.4	4.3	1.1	2.0	2.8
Removed without transplant (%):						
Condition worsened (status unknown)	2.9	8.7	10.1	0.6	1.5	2.3
Condition improved (status unknown)	0.0	0.0	0.0	0.1	0.2	0.2
Refused transplant (status unknown)	0.0	0.0	0.0	0.1	0.1	0.2
Other	0.0	0.0	0.0	0.8	1.6	2.6
Transplant (living donor from waiting list only) (%):						
Functioning (alive)	1.4	4.3	1.4	6.9	10.5	9.5
Failed-Retransplanted (alive)	0.0	0.0	0.0	0.0	0.0	0.0
Failed-alive not retransplanted	0.0	0.0	0.0	0.0	0.0	0.0
Died	0.0	0.0	0.0	0.0	0.1	0.1
Status Yet Unknown**	0.0	0.0	4.3	0.1	0.4	3.5
Transplant (deceased donor) (%):						
Functioning (alive)	7.2	20.3	23.2	10.8	14.7	13.1
Failed-Retransplanted (alive)	0.0	0.0	0.0	0.0	0.0	0.0
Failed-alive not retransplanted	0.0	0.0	0.0	0.0	0.1	0.1
Died	0.0	0.0	1.4	0.2	0.4	0.6
Status Yet Unknown*	0.0	0.0	5.8	1.7	3.5	9.3
Lost or Transferred (status unknown) (%)	0.0	0.0	0.0	0.3	0.7	1.2
TOTAL (%)	100.0	100.0	100.0	100.0	100.0	100.0
Total % known died on waiting list or after transplant	0.0	1.4	5.8	1.3	2.4	3.6
Total % known died or removed as unstable	2.9	10.1	15.9	1.9	4.0	5.9
Total % removed for transplant	8.7	24.6	36.2	19.7	29.6	36.2
Total % with known functioning transplant (alive)	8.7	24.6	24.6	17.7	25.2	22.6

* Follow-up form covering specified time period not yet completed, and possibly has not become due.



B. Waiting List Information

Table B8. Percent of candidates with deceased donor transplants: demographic characteristics
Candidates registered on the waiting list between 01/01/2014 and 12/31/2016

Characteristic	Percent transplanted at time periods since listing									
	This Center					United States				
	N	30 day	1 year	2 years	3 years	N	30 day	1 year	2 years	3 years
All	217	2.3	15.7	22.6	34.6	93,944	3.2	14.8	21.4	26.6
Ethnicity/Race*										
White	123	1.6	13.8	20.3	33.3	37,623	3.6	15.9	22.6	27.6
African-American	52	3.8	26.9	32.7	46.2	29,876	2.9	14.5	21.1	26.4
Hispanic/Latino	12	8.3	16.7	16.7	16.7	17,287	3.3	14.5	21.0	26.4
Asian	26	0.0	3.8	15.4	26.9	7,615	1.9	10.6	17.2	22.7
Other	4	0.0	0.0	25.0	25.0	1,543	3.4	18.0	24.2	29.9
Unknown	0	--	--	--	--	0	--	--	--	--
Age										
<2 years	0	--	--	--	--	133	5.3	33.1	50.4	63.9
2-11 years	0	--	--	--	--	840	7.9	48.6	63.0	70.8
12-17 years	0	--	--	--	--	1,395	7.5	49.6	62.0	67.7
18-34 years	9	0.0	0.0	11.1	22.2	9,573	2.9	15.8	24.3	31.5
35-49 years	36	2.8	13.9	13.9	16.7	23,788	2.7	13.6	20.5	26.2
50-64 years	115	1.7	16.5	24.3	37.4	40,509	3.3	13.8	19.7	24.5
65-69 years	47	4.3	19.1	25.5	40.4	12,157	3.3	13.9	19.6	24.0
70+ years	10	0.0	10.0	30.0	50.0	5,549	2.8	14.1	19.8	23.7
Gender										
Male	203	2.5	15.8	22.7	34.5	58,265	3.3	14.4	20.6	25.6
Female	14	0.0	14.3	21.4	35.7	35,679	3.0	15.4	22.8	28.3

* Race and ethnicity are reported together as a single data element, reflecting their data collection (either race or ethnicity is required, but not both). Patients formerly coded as white and Hispanic are coded as Hispanic. Race and ethnicity sum to 100%.



B. Waiting List Information

Table B9. Percent of candidates with deceased donor transplants: medical characteristics
Candidates registered on the waiting list between 01/01/2014 and 12/31/2016

Characteristic	N	Percent transplanted at time periods since listing								
		This Center				United States				
		30 day	1 year	2 years	3 years	N	30 day	1 year	2 years	3 years
All	217	2.3	15.7	22.6	34.6	93,944	3.2	14.8	21.4	26.6
Blood Type										
O	124	4.0	12.1	15.3	24.2	46,715	2.9	12.9	18.4	22.9
A	64	0.0	18.8	34.4	53.1	29,546	3.9	17.7	25.8	32.1
B	24	0.0	12.5	16.7	29.2	14,207	2.2	11.9	17.7	22.4
AB	5	0.0	80.0	80.0	80.0	3,476	5.2	28.8	39.7	47.4
Previous Transplant										
Yes	11	0.0	27.3	36.4	36.4	12,976	2.5	15.0	23.0	28.6
No	206	2.4	15.0	21.8	34.5	80,968	3.3	14.8	21.2	26.3
Peak PRA/CPRA										
0-9%	197	1.5	15.2	22.3	35.5	75,948	3.4	14.3	20.5	25.6
10-79%	16	12.5	18.8	25.0	25.0	10,612	2.3	14.6	22.1	27.8
80+%	4	0.0	25.0	25.0	25.0	7,301	2.5	20.2	30.2	35.5
Unknown	0	--	--	--	--	7	100.0	100.0	100.0	100.0
Primary Disease*										
Glomerular Diseases	50	4.0	12.0	16.0	32.0	16,973	2.6	15.8	24.0	30.7
Tubular & Interstitial Diseases	5	0.0	20.0	20.0	20.0	3,391	4.5	18.2	26.2	31.2
Polycystic Kidneys	21	0.0	0.0	9.5	19.0	6,192	1.8	13.4	20.7	27.9
Congenital, Familial, Metabolic	0	--	--	--	--	1,859	3.9	28.2	38.1	45.1
Diabetes	73	0.0	15.1	21.9	35.6	33,131	2.0	10.7	15.6	19.6
Renovascular & Vascular Diseases	0	--	--	--	--	149	5.4	19.5	27.5	32.9
Neoplasms	2	0.0	0.0	50.0	50.0	311	5.1	22.5	28.9	33.8
Hypertensive Nephrosclerosis	43	4.7	20.9	30.2	44.2	20,622	2.8	14.4	21.1	26.7
Other	23	4.3	30.4	34.8	34.8	10,940	8.6	24.0	31.5	36.2
Missing*	0	--	--	--	--	376	1.3	10.9	16.0	20.7

* When "retransplant" is indicated, the primary disease is passed forward from the prior transplant in order to indicate the initial primary disease causing organ failure. "Missing" may include some patients for whom retransplant is indicated but no prior diagnosis can be found.



B. Waiting List Information

Table B10. Time to transplant for waiting list candidates*

Candidates registered on the waiting list between 01/01/2014 and 06/30/2019

Percentile	Center	Months to Transplant**		U.S.
		OPO/DSA	Region	
5th	1.9	1.2	1.5	1
10th	3.7	2.6	3.5	2.7
25th	12.8	7.4	10.3	10.2
50th (median time to transplant)	32.9	22.4	34.7	45.4
75th	Not Observed	Not Observed	Not Observed	Not Observed

* If cells contain "Not Observed" fewer than that percentile of patients had received a transplant. For example, the 50th percentile of time to transplant is the time when 50% of candidates have received transplants. If waiting times are long, then the 50th percentile may not be observed during the follow-up period for this table. Also, if more than 50% of candidates are removed from the list due to death or other reasons before receiving transplants, then the 50th percentile of time to transplant will not be observed.

** Censored on 12/31/2019. Calculated as the months after listing, during which the corresponding percent of all patients initially listed had received a transplant.



B. Waiting List Information

Table B11. Offer Acceptance Practices: 01/01/2019 - 12/31/2019

Offers Acceptance Characteristics	This Center	OPO/DSA	Region	U.S.
Overall				
Number of Offers	1,713	6,849	24,784	1,914,666
Number of Acceptances	51	223	586	15,506
Expected Acceptances	42.7	202.7	681.3	15,486.6
Offer Acceptance Ratio*	1.19	1.10	0.86	1.00
95% Credible Interval**	[0.89, 1.52]	--	--	--
Low-KDRI Donors (KDRI < 1.05)				
Number of Offers	260	1,471	5,676	218,756
Number of Acceptances	25	98	278	5,219
Expected Acceptances	16.6	100.1	291.1	5,214.5
Offer Acceptance Ratio*	1.45	0.98	0.96	1.00
95% Credible Interval**	[0.95, 2.04]	--	--	--
Medium-KDRI Donors (1.05 < KDRI < 1.75)				
Number of Offers	1,136	4,804	17,000	1,285,612
Number of Acceptances	22	116	286	8,475
Expected Acceptances	20.2	90.3	339.7	8,460.8
Offer Acceptance Ratio*	1.08	1.28	0.84	1.00
95% Credible Interval**	[0.69, 1.56]	--	--	--
High-KDRI Donors (KDRI > 1.75)				
Number of Offers	317	574	2,108	410,298
Number of Acceptances	4	9	22	1,812
Expected Acceptances	5.9	12.3	50.5	1,811.2
Offer Acceptance Ratio*	0.76	0.77	0.46	1.00
95% Credible Interval**	[0.28, 1.48]	--	--	--
Hard-to-Place Kidneys (Over 100 Offers)				
Number of Offers	1,151	4,560	13,460	1,639,492
Number of Acceptances	2	16	34	2,194
Expected Acceptances	2.3	9.1	35.1	2,191.3
Offer Acceptance Ratio*	0.92	1.63	0.97	1.00
95% Credible Interval**	[0.25, 2.02]	--	--	--

* The offer acceptance ratio estimates the relative offer acceptance practice of VA Portland Health Care System (ORVA) compared to the national offer acceptance practice. A ratio above one indicates the program is more likely to accept an offer compared to national offer acceptance practices (e.g., an offer acceptance ratio of 1.25 indicates a 25% more likely to accept an offer), while a ratio below one indicates the program is less likely to accept an offer compared to national offer acceptance practices (e.g., an offer acceptance ratio of 0.75 indicates a 25% less likely to accept an offer).

** As an example, the 95% Credible Interval for the overall offer acceptance ratio, [0.89, 1.52], indicates the location of ORVA's true offer acceptance ratio with 95% probability. The best estimate is 19% more likely to accept an offer compared to national acceptance behavior, but ORVA's performance could plausibly range from 11% reduced acceptance up to 52% higher acceptance.



B. Waiting List Information

Figure B10. Offer acceptance: Overall

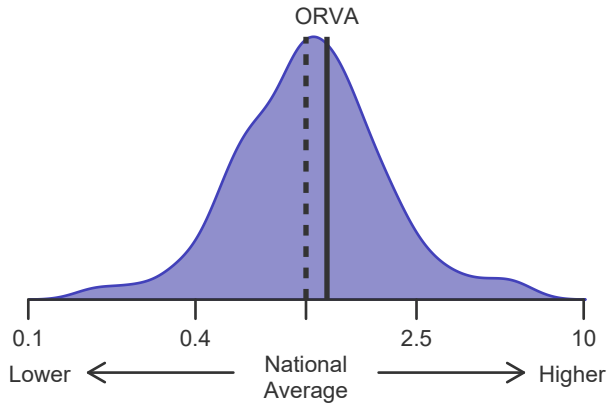


Figure B11. Offer acceptance: Low-KDRI

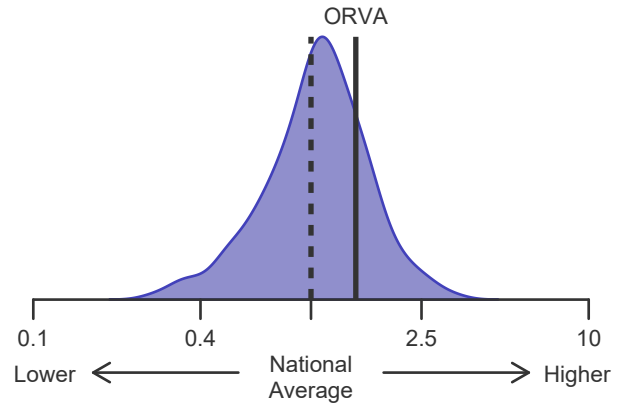


Figure B12. Offer acceptance: Medium-KDRI

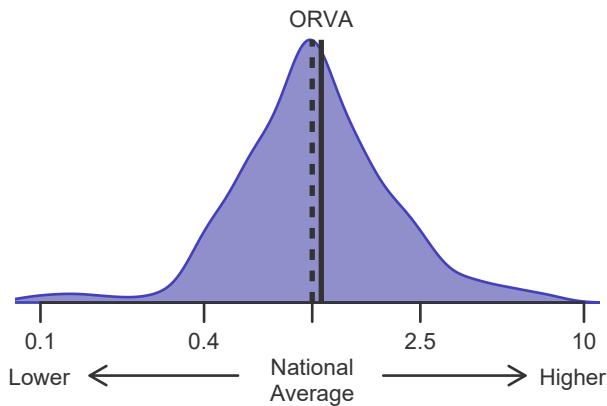


Figure B13. Offer acceptance: High-KDRI

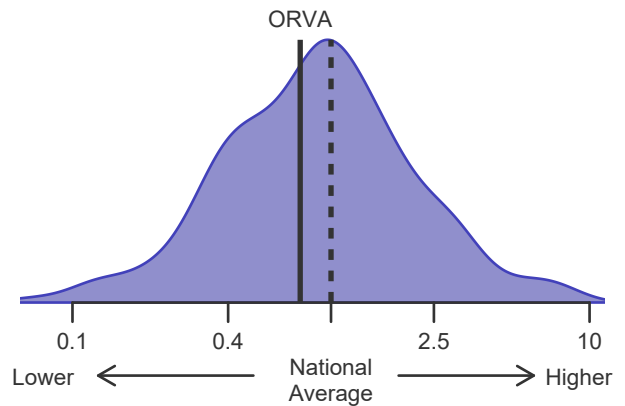
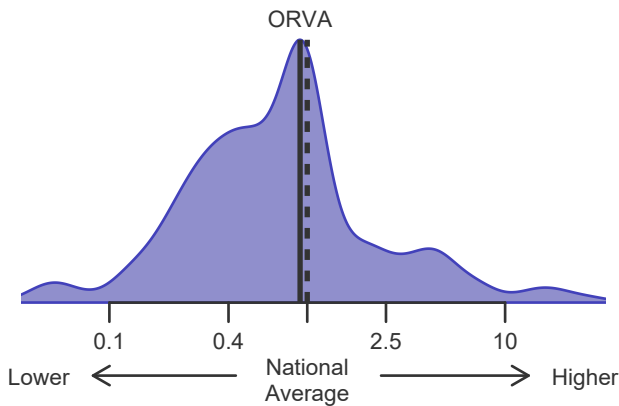


Figure B14. Offer acceptance: Offer number > 100





C. Transplant Information

Table C1D. Deceased donor transplant recipient demographic characteristics
Patients transplanted between 01/01/2019 and 12/31/2019

Characteristic	Percentage in each category		
	Center (N=52)	Region (N=605)	U.S. (N=16,534)
Ethnicity/Race (%)*			
White	46.2	51.1	37.4
African-American	23.1	9.6	32.7
Hispanic/Latino	11.5	13.1	20.1
Asian	19.2	23.3	7.9
Other	0.0	3.0	1.9
Unknown	0.0	0.0	0.0
Age (%)			
<2 years	0.0	0.0	0.1
2-11 years	0.0	2.3	1.4
12-17	0.0	1.5	1.7
18-34	5.8	11.9	9.6
35-49 years	19.2	24.3	23.4
50-64 years	34.6	33.4	40.6
65-69 years	21.2	13.7	13.6
70+ years	19.2	12.9	9.7
Gender (%)			
Male	92.3	60.7	60.2
Female	7.7	39.3	39.8

* Race and ethnicity are reported together as a single data element, reflecting their data collection (either race or ethnicity is required, but not both). Patients formerly coded as white and Hispanic are coded as Hispanic. Race and ethnicity sum to 100%.



C. Transplant Information

Table C1L. Living donor transplant recipient demographic characteristics
Patients transplanted between 01/01/2019 and 12/31/2019

Characteristic	Percentage in each category		
	Center (N=5)	Region (N=195)	U.S. (N=6,867)
Ethnicity/Race (%)*			
White	60.0	80.5	64.1
African-American	40.0	3.1	12.9
Hispanic/Latino	0.0	3.6	15.3
Asian	0.0	11.3	6.1
Other	0.0	1.5	1.5
Unknown	0.0	0.0	0.0
Age (%)			
<2 years	0.0	0.0	0.1
2-11 years	0.0	2.6	1.8
12-17	0.0	1.5	1.6
18-34	0.0	20.5	16.8
35-49 years	0.0	23.6	25.6
50-64 years	60.0	35.9	35.4
65-69 years	0.0	10.3	10.4
70+ years	40.0	5.6	8.3
Gender (%)			
Male	100.0	61.0	62.9
Female	0.0	39.0	37.1

* Race and ethnicity are reported together as a single data element, reflecting their data collection (either race or ethnicity is required, but not both). Patients formerly coded as white and Hispanic are coded as Hispanic. Race and ethnicity sum to 100%.



C. Transplant Information

Table C2D. Deceased donor transplant recipient medical characteristics
Patients transplanted between 01/01/2019 and 12/31/2019

Characteristic	Percentage in each category		
	Center (N=52)	Region (N=605)	U.S. (N=16,534)
Blood Type (%)			
O	50.0	42.0	46.1
A	40.4	39.5	34.8
B	9.6	13.4	13.8
AB	0.0	5.1	5.4
Previous Transplant (%)			
Yes	3.8	10.2	13.3
No	96.2	89.8	86.7
Peak PRA/CPRA Prior to Transplant (%)			
0-9%	55.8	63.1	59.5
10-79%	40.4	24.8	23.0
80+ %	3.8	12.1	17.4
Unknown	0.0	0.0	0.0
Body Mass Index (%)			
0-20	3.8	11.7	9.7
21-25	34.6	28.3	27.7
26-30	40.4	36.4	30.5
31-35	21.2	16.7	21.3
36-40	0.0	6.3	7.8
41+	0.0	0.3	1.4
Unknown	0.0	0.3	1.5
Primary Disease (%)*			
Glomerular Diseases	23.1	27.4	21.3
Tubular and Interstitial Disease	0.0	4.1	4.1
Polycystic Kidneys	5.8	8.9	7.7
Congenital, Familial, Metabolic	0.0	3.5	2.7
Diabetes	36.5	26.3	29.6
Renovascular & Vascular Diseases	0.0	0.0	0.2
Neoplasms	0.0	0.0	0.4
Hypertensive Nephrosclerosis	25.0	14.9	23.2
Other Kidney	9.6	14.2	10.6
Missing*	0.0	0.7	0.2

* When "retransplant" is indicated, the primary disease is passed forward from the prior transplant in order to indicate the initial primary disease causing organ failure. "Missing" may include some patients for whom retransplant is indicated but no prior diagnosis can be found.



C. Transplant Information

Table C2L. Living donor transplant recipient medical characteristics
Patients transplanted between 01/01/2019 and 12/31/2019

Characteristic	Percentage in each category		
	Center (N=5)	Region (N=195)	U.S. (N=6,867)
Blood Type (%)			
O	80.0	42.6	43.6
A	0.0	42.6	38.2
B	0.0	11.8	13.9
AB	20.0	3.1	4.3
Previous Transplant (%)			
Yes	20.0	10.3	10.6
No	80.0	89.7	89.4
Peak PRA/CPRA Prior to Transplant (%)			
0-9%	40.0	82.6	75.2
10-79%	60.0	13.8	19.9
80+ %	0.0	3.6	4.8
Unknown	0.0	0.0	0.0
Body Mass Index (%)			
0-20	0.0	9.7	12.0
21-25	40.0	31.8	27.9
26-30	60.0	32.3	31.2
31-35	0.0	21.5	19.6
36-40	0.0	4.1	7.4
41+	0.0	0.5	1.3
Unknown	0.0	0.0	0.5
Primary Disease (%)*			
Glomerular Diseases	80.0	35.9	29.4
Tubular and Interstitial Disease	0.0	4.1	5.3
Polycystic Kidneys	0.0	16.9	12.4
Congenital, Familial, Metabolic	0.0	7.7	3.8
Diabetes	0.0	13.3	24.2
Renovascular & Vascular Diseases	0.0	0.0	0.2
Neoplasms	0.0	0.0	0.5
Hypertensive Nephrosclerosis	20.0	12.8	15.0
Other Kidney	0.0	9.2	8.9
Missing*	0.0	0.0	0.2

* When "retransplant" is indicated, the primary disease is passed forward from the prior transplant in order to indicate the initial primary disease causing organ failure. "Missing" may include some patients for whom retransplant is indicated but no prior diagnosis can be found.



C. Transplant Information

Table C3D. Deceased donor characteristics
Transplants performed between 01/01/2019 and 12/31/2019

Donor Characteristic	Percentage in each category		
	Center (N=52)	Region (N=605)	U.S. (N=16,534)
Cause of Death (%)			
Deceased: Stroke	25.0	21.2	23.4
Deceased: MVA	15.4	13.1	13.8
Deceased: Other	59.6	65.8	62.8
Ethnicity/Race (%)*			
White	78.8	74.4	67.7
African-American	5.8	3.0	12.9
Hispanic/Latino	9.6	9.6	15.3
Asian	1.9	8.4	2.8
Other	3.8	4.6	1.3
Not Reported	0.0	0.0	0.0
Age (%)			
<2 years	0.0	0.7	0.9
2-11 years	1.9	3.0	2.7
12-17	1.9	4.3	3.9
18-34	36.5	34.9	32.3
35-49 years	28.8	35.7	32.0
50-64 years	30.8	20.7	25.5
65-69 years	0.0	0.8	2.0
70+ years	0.0	0.0	0.6
Gender (%)			
Male	59.6	60.7	61.7
Female	40.4	39.3	38.3
Blood Type (%)			
O	50.0	43.3	47.9
A	46.2	43.3	37.3
B	3.8	10.2	11.4
AB	0.0	3.1	3.3
Unknown	0.0	0.0	0.0

* Race and ethnicity are reported together as a single data element, reflecting their data collection (either race or ethnicity is required, but not both). Patients formerly coded as white and Hispanic are coded as Hispanic. Race and ethnicity sum to 100%.



C. Transplant Information

Table C3L. Living donor characteristics
Transplants performed between 01/01/2019 and 12/31/2019

Donor Characteristic	Percentage in each category		
	Center (N=5)	Region (N=195)	U.S. (N=6,867)
Ethnicity/Race (%)*			
White	40.0	82.1	70.7
African-American	40.0	2.6	8.7
Hispanic/Latino	20.0	3.6	14.5
Asian	0.0	6.7	4.6
Other	0.0	5.1	1.4
Not Reported	0.0	0.0	0.0
Age (%)			
0-11 years	0.0	0.0	0.0
12-17	0.0	0.0	0.0
18-34	60.0	24.6	26.3
35-49 years	20.0	42.6	38.8
50-64 years	0.0	29.2	29.8
65-69 years	20.0	2.6	3.8
70+ years	0.0	1.0	1.4
Gender (%)			
Male	0.0	27.2	34.9
Female	100.0	72.8	65.1
Blood Type (%)			
O	80.0	57.4	62.7
A	20.0	34.4	27.5
B	0.0	6.7	8.2
AB	0.0	1.5	1.6
Unknown	0.0	0.0	0.0

* Race and ethnicity are reported together as a single data element, reflecting their data collection (either race or ethnicity is required, but not both). Patients formerly coded as white and Hispanic are coded as Hispanic. Race and ethnicity sum to 100%.



C. Transplant Information

Table C4D. Deceased donor transplant characteristics
Transplants performed between 01/01/2019 and 12/31/2019

Transplant Characteristic	Percentage in each category		
	Center (N=52)	Region (N=605)	U.S. (N=16,534)
Cold Ischemic Time (Hours): Local (%)			
Deceased: 0-11 hr	41.2	33.1	33.8
Deceased: 12-21 hr	44.1	43.8	48.6
Deceased: 22-31 hr	14.7	20.8	14.4
Deceased: 32-41 hr	0.0	1.9	1.6
Deceased: 42+ hr	0.0	0.0	0.6
Not Reported	0.0	0.4	0.9
Cold Ischemic Time (Hours): Shared (%)			
Deceased: 0-11 hr	11.1	11.3	8.6
Deceased: 12-21 hr	66.7	47.9	37.9
Deceased: 22-31 hr	16.7	33.8	37.9
Deceased: 32-41 hr	5.6	7.0	11.5
Deceased: 42+ hr	0.0	0.0	3.5
Not Reported	0.0	0.0	0.6
Level of Mismatch (%)			
A Locus Mismatches (%)			
0	1.9	10.4	11.5
1	32.7	44.0	39.4
2	65.4	45.6	48.8
Not Reported	0.0	0.0	0.3
B Locus Mismatches (%)			
0	0.0	4.5	7.5
1	21.2	26.0	24.8
2	78.8	69.6	67.4
Not Reported	0.0	0.0	0.3
DR Locus Mismatches (%)			
0	3.8	12.7	16.6
1	44.2	50.9	47.4
2	51.9	36.4	35.7
Not Reported	0.0	0.0	0.3
Total Mismatches (%)			
0	0.0	2.3	4.7
1	0.0	0.5	1.3
2	0.0	4.5	4.7
3	5.8	16.4	13.9
4	30.8	30.4	27.4
5	30.8	31.9	32.6
6	32.7	14.0	15.1
Not Reported	0.0	0.0	0.3
Procedure Type (%)			
Kidney alone	98.1	97.2	94.1
Kidney and another organ	1.9	2.8	5.9
Dialysis in First Week After Transplant (%)			
Yes	23.1	19.2	29.5
No	76.9	80.8	70.4
Not Reported	0.0	0.0	0.2
Sharing (%)			
Local	65.4	88.3	68.9
Shared	34.6	11.7	31.1
Median Time in Hospital After Transplant*	4.0 Days	4.0 Days	5.0 Days

* Multiple organ transplants are excluded from this statistic.



C. Transplant Information

Table C4L. Living donor transplant characteristics
Transplants performed between 01/01/2019 and 12/31/2019

Transplant Characteristic	Percentage in each category		
	Center (N=5)	Region (N=195)	U.S. (N=6,867)
Relation with Donor (%)			
Related	60.0	32.8	38.0
Unrelated	40.0	67.2	61.8
Not Reported	0.0	0.0	0.2
Level of Mismatch (%)			
A Locus Mismatches (%)			
0	0.0	15.4	16.5
1	100.0	49.2	47.9
2	0.0	34.9	31.6
Not Reported	0.0	0.5	3.9
B Locus Mismatches (%)			
0	20.0	12.3	9.9
1	60.0	37.9	41.5
2	20.0	49.2	44.7
Not Reported	0.0	0.5	3.9
DR Locus Mismatches (%)			
0	0.0	15.4	15.0
1	100.0	48.7	48.3
2	0.0	35.4	32.8
Not Reported	0.0	0.5	3.9
Total Mismatches (%)			
0	0.0	4.6	4.8
1	0.0	3.6	3.8
2	20.0	13.8	11.5
3	60.0	19.0	23.1
4	20.0	21.0	17.6
5	0.0	22.1	22.7
6	0.0	15.4	12.7
Not Reported	0.0	0.5	3.9
Procedure Type (%)			
Kidney alone	100.0	100.0	100.0
Kidney and another organ	0.0	0.0	0.0
Dialysis in First Week After Transplant (%)			
Yes	0.0	2.6	3.0
No	100.0	97.4	96.9
Not Reported	0.0	0.0	0.2
Median Time in Hospital After Transplant*	4.0 Days	4.0 Days	4.0 Days

* Multiple organ transplants are excluded from this statistic.



C. Transplant Information

Table C5. Adult (18+) 1-month survival with a functioning graft
Single organ transplants performed between 01/01/2017 and 06/30/2019
Deaths and retransplants are considered graft failures

	ORVA	U.S.
Number of transplants evaluated	104	48,030
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	99.04%	98.68%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	98.63%	--
Number of observed graft failures (including deaths) during the first month after transplant	1	636
Number of expected graft failures (including deaths) during the first month after transplant	1.43	--
Estimated hazard ratio*	0.87	--
95% credible interval for the hazard ratio**	[0.18, 2.11]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.18, 2.11], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 13% lower risk of graft failure compared to an average program, but ORVA's performance could plausibly range from 82% reduced risk up to 111% increased risk.

Figure C1. Adult (18+) 1-month graft failure HR estimate

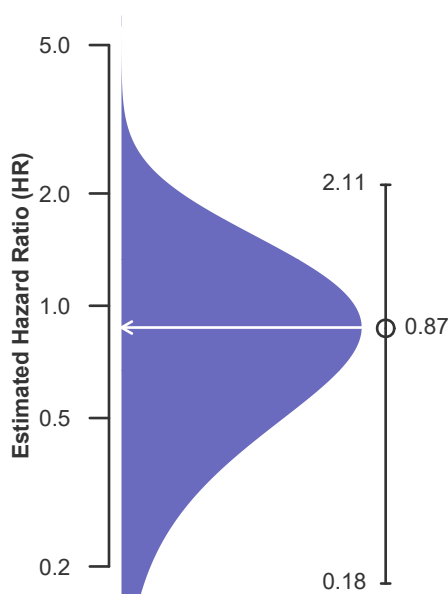
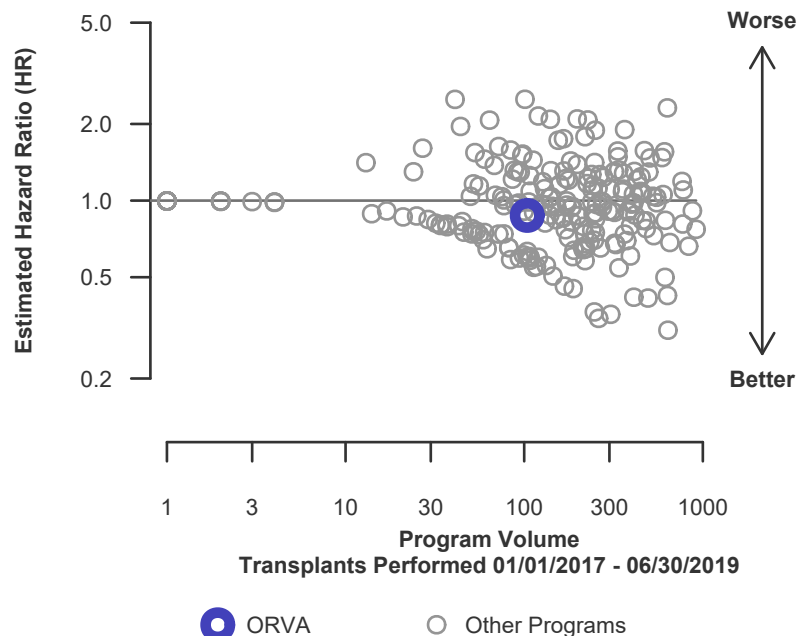


Figure C2. Adult (18+) 1-month graft failure HR program comparison





C. Transplant Information

Table C5D. Adult (18+) 1-month survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2017 and 06/30/2019
Deaths and retransplants are considered graft failures

	ORVA	U.S.
Number of transplants evaluated	94	33,069
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	98.94%	98.42%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	98.58%	--
Number of observed graft failures (including deaths) during the first month after transplant	1	524
Number of expected graft failures (including deaths) during the first month after transplant	1.35	--
Estimated hazard ratio*	0.90	--
95% credible interval for the hazard ratio**	[0.18, 2.16]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.18, 2.16], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 10% lower risk of graft failure compared to an average program, but ORVA's performance could plausibly range from 82% reduced risk up to 116% increased risk.

Figure C1D. Adult (18+) 1-month deceased donor graft failure HR estimate

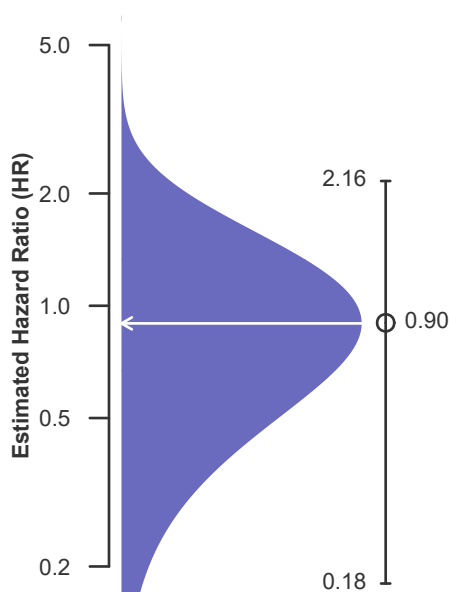
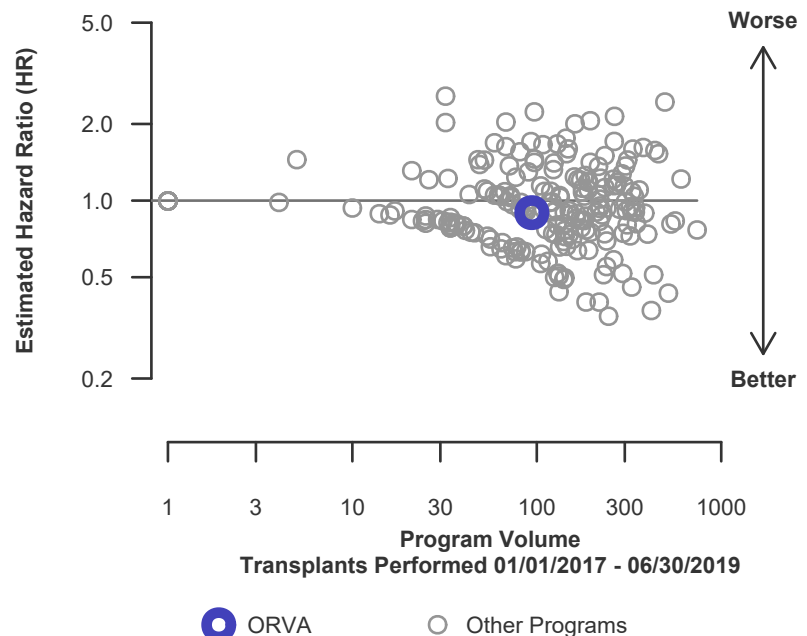


Figure C2D. Adult (18+) 1-month deceased donor graft failure HR program comparison





C. Transplant Information

Table C5L. Adult (18+) 1-month survival with a functioning living donor graft
Single organ transplants performed between 01/01/2017 and 06/30/2019
Deaths and retransplants are considered graft failures

	ORVA	U.S.
Number of transplants evaluated	10	14,961
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	100.00%	99.25%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	99.14%	--
Number of observed graft failures (including deaths) during the first month after transplant	0	112
Number of expected graft failures (including deaths) during the first month after transplant	0.09	--
Estimated hazard ratio*	0.96	--
95% credible interval for the hazard ratio**	[0.12, 2.67]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.12, 2.67], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 4% lower risk of graft failure compared to an average program, but ORVA's performance could plausibly range from 88% reduced risk up to 167% increased risk.

Figure C1L. Adult (18+) 1-month living donor graft failure HR estimate

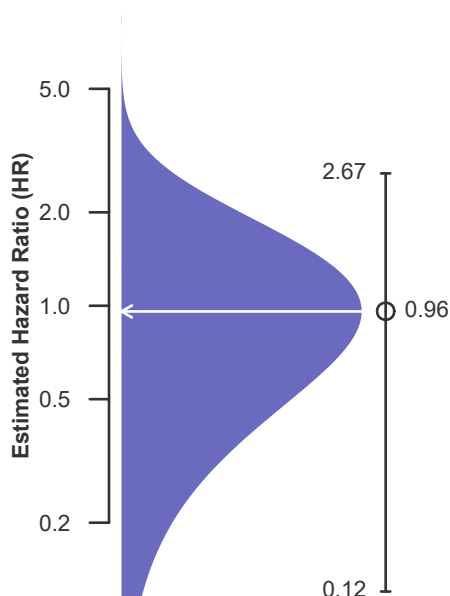
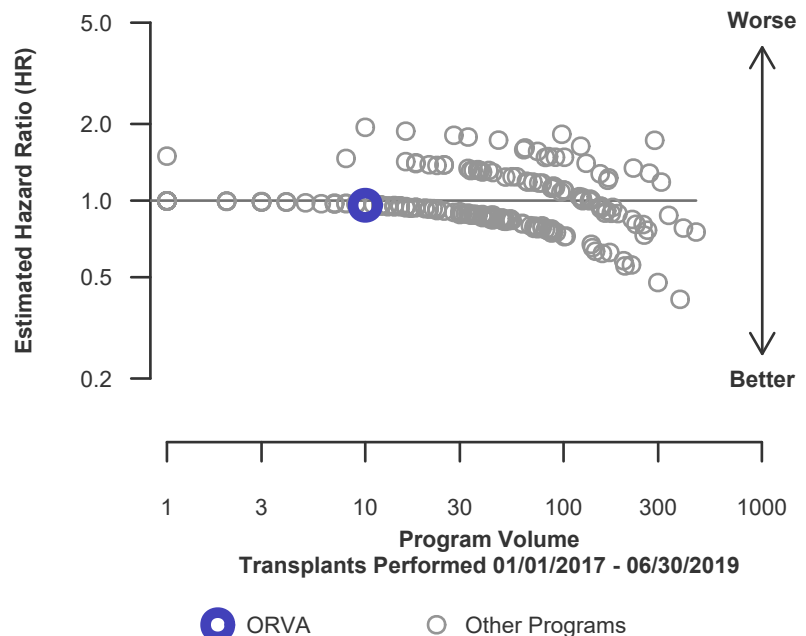


Figure C2L. Adult (18+) 1-month living donor graft failure HR program comparison





C. Transplant Information

Table C6. Adult (18+) 1-year survival with a functioning graft
Single organ transplants performed between 01/01/2017 and 06/30/2019
Deaths and retransplants are considered graft failures

	ORVA	U.S.
Number of transplants evaluated	104	48,030
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	99.04%	95.89%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	95.62%	--
Number of observed graft failures (including deaths) during the first year after transplant	1	1,846
Number of expected graft failures (including deaths) during the first year after transplant	4.36	--
Estimated hazard ratio*	0.47	--
95% credible interval for the hazard ratio**	[0.10, 1.14]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.10, 1.14], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 53% lower risk of graft failure compared to an average program, but ORVA's performance could plausibly range from 90% reduced risk up to 14% increased risk.

Figure C3. Adult (18+) 1-year graft failure HR estimate

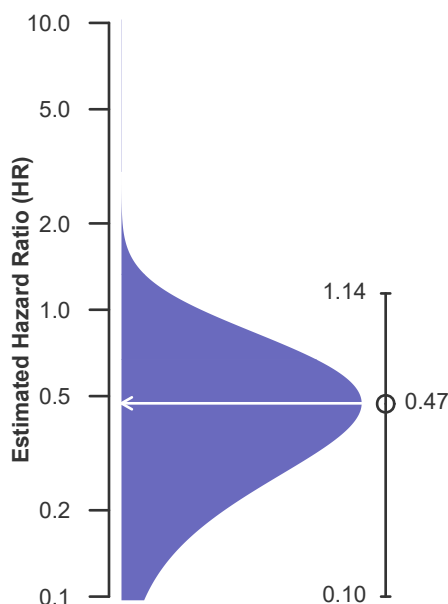
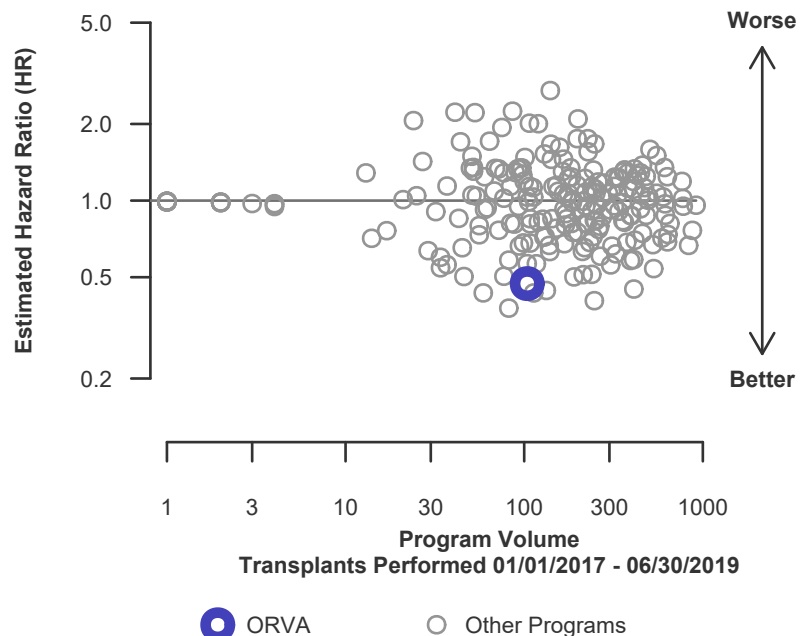


Figure C4. Adult (18+) 1-year graft failure HR program comparison





C. Transplant Information

Table C6D. Adult (18+) 1-year survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2017 and 06/30/2019
Deaths and retransplants are considered graft failures

	ORVA	U.S.
Number of transplants evaluated	94	33,069
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	98.94%	94.88%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	95.38%	--
Number of observed graft failures (including deaths) during the first year after transplant	1	1,582
Number of expected graft failures (including deaths) during the first year after transplant	4.16	--
Estimated hazard ratio*	0.49	--
95% credible interval for the hazard ratio**	[0.10, 1.17]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.10, 1.17], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 51% lower risk of graft failure compared to an average program, but ORVA's performance could plausibly range from 90% reduced risk up to 17% increased risk.

Figure C3D. Adult (18+) 1-year deceased donor graft failure HR estimate

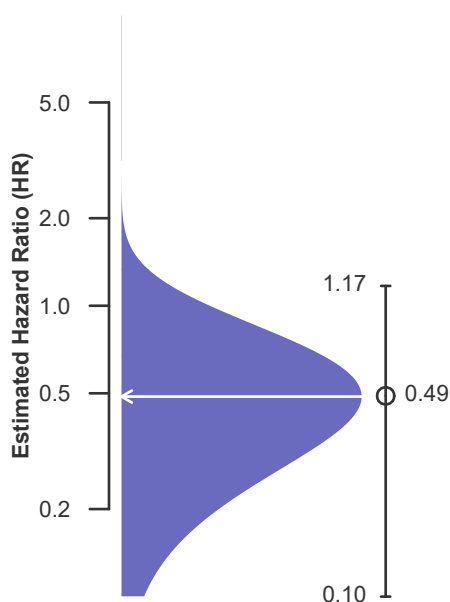
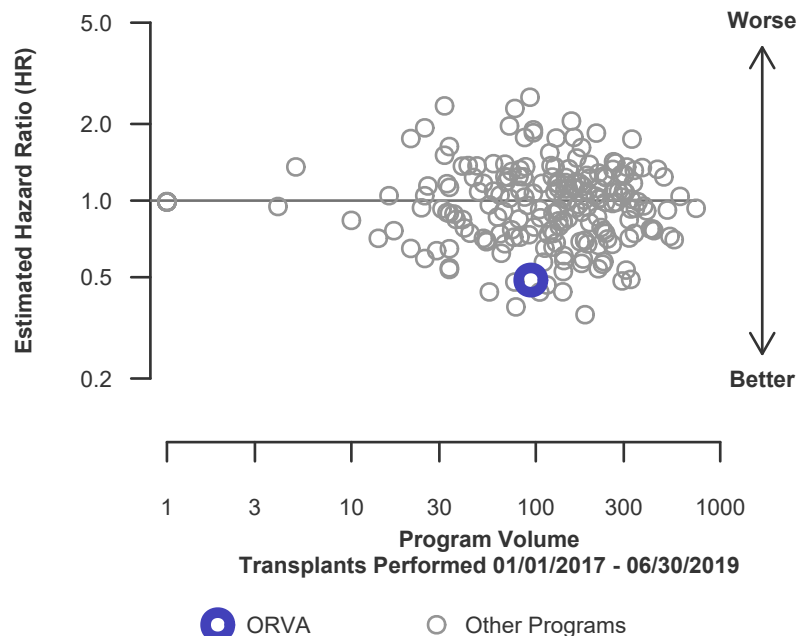


Figure C4D. Adult (18+) 1-year deceased donor graft failure HR program comparison





C. Transplant Information

Table C6L. Adult (18+) 1-year survival with a functioning living donor graft
Single organ transplants performed between 01/01/2017 and 06/30/2019
Deaths and retransplants are considered graft failures

	ORVA	U.S.
Number of transplants evaluated	10	14,961
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	100.00%	98.11%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	97.83%	--
Number of observed graft failures (including deaths) during the first year after transplant	0	264
Number of expected graft failures (including deaths) during the first year after transplant	0.20	--
Estimated hazard ratio*	0.91	--
95% credible interval for the hazard ratio**	[0.11, 2.53]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.11, 2.53], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 9% lower risk of graft failure compared to an average program, but ORVA's performance could plausibly range from 89% reduced risk up to 153% increased risk.

Figure C3L. Adult (18+) 1-year living donor graft failure HR estimate

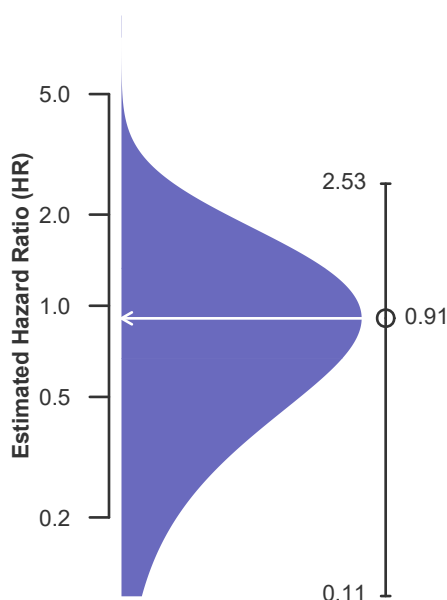
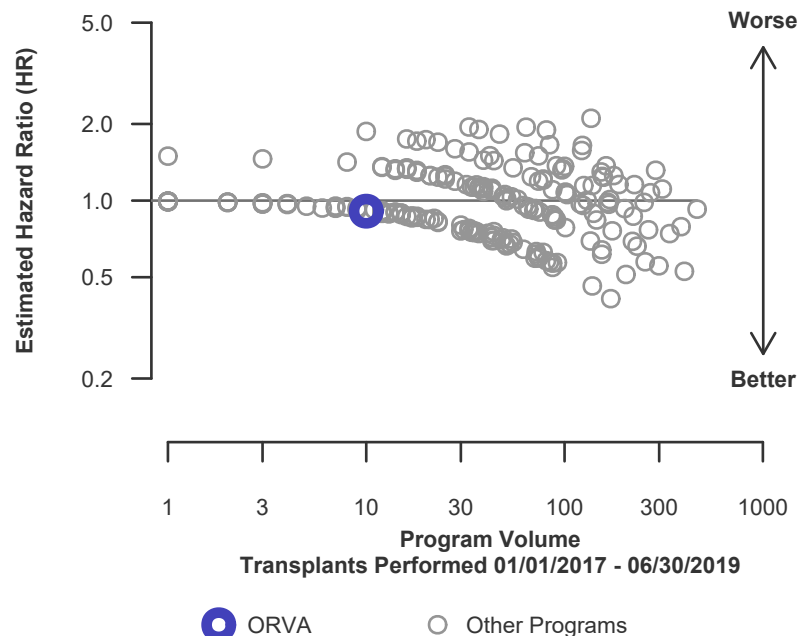


Figure C4L. Adult (18+) 1-year living donor graft failure HR program comparison





C. Transplant Information

Table C7. Adult (18+) 3-year survival with a functioning graft
Single organ transplants performed between 07/01/2014 and 12/31/2016
Deaths and retransplants are considered graft failures

	ORVA	U.S.
Number of transplants evaluated	100	41,625
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	94.00%	89.28%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	87.18%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	6	4,463
Number of expected graft failures (including deaths) during the first 3 years after transplant	13.49	--
Estimated hazard ratio*	0.52	--
95% credible interval for the hazard ratio**	[0.22, 0.93]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.22, 0.93], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 48% lower risk of graft failure compared to an average program, but ORVA's performance could plausibly range from 78% reduced risk up to 7% reduced risk.

Figure C5. Adult (18+) 3-year graft failure HR estimate

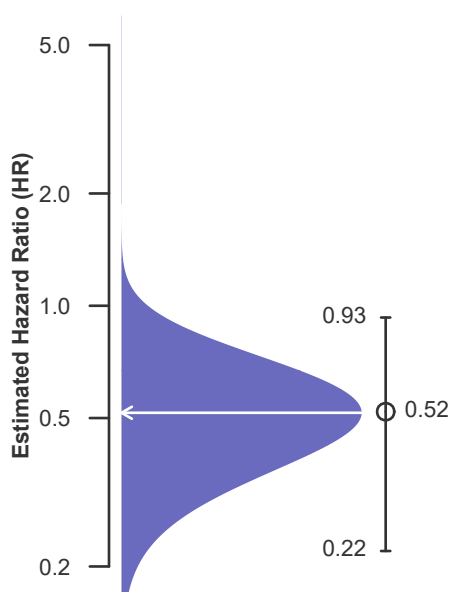
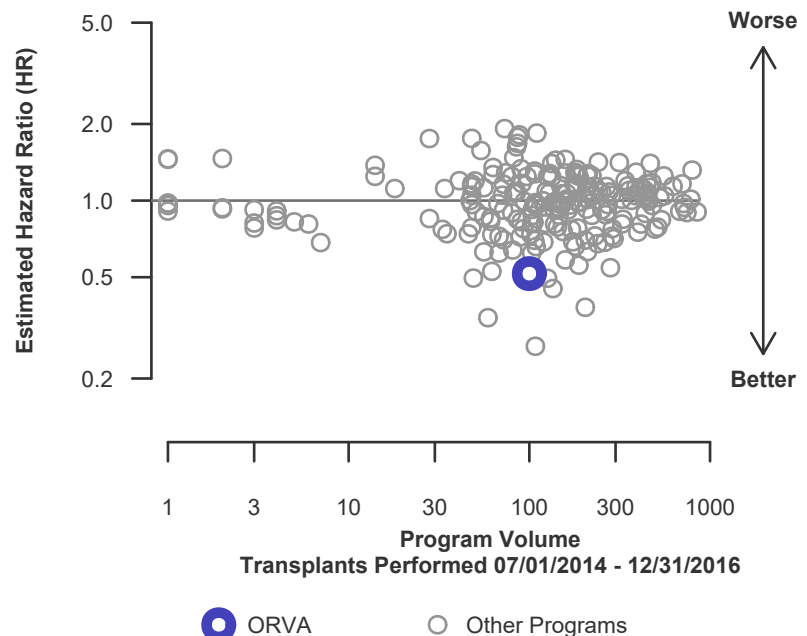


Figure C6. Adult (18+) 3-year graft failure HR program comparison





C. Transplant Information

Table C7D. Adult (18+) 3-year survival with a functioning deceased donor graft
Single organ transplants performed between 07/01/2014 and 12/31/2016
Deaths and retransplants are considered graft failures

	ORVA	U.S.
Number of transplants evaluated	90	28,182
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	93.33%	86.96%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	86.33%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	6	3,674
Number of expected graft failures (including deaths) during the first 3 years after transplant	12.96	--
Estimated hazard ratio*	0.53	--
95% credible interval for the hazard ratio**	[0.23, 0.96]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.23, 0.96], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 47% lower risk of graft failure compared to an average program, but ORVA's performance could plausibly range from 77% reduced risk up to 4% reduced risk.

Figure C5D. Adult (18+) 3-year deceased donor graft failure HR estimate

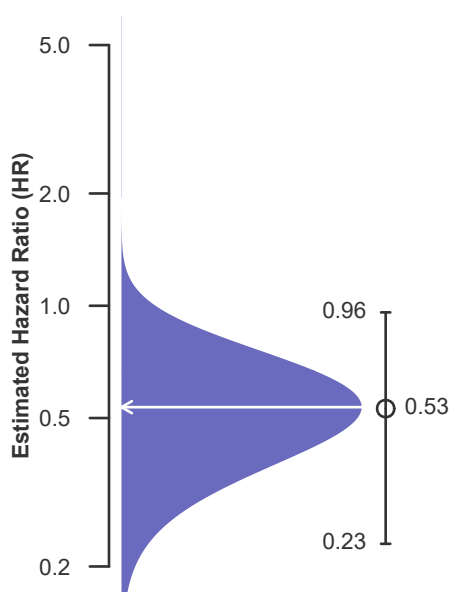
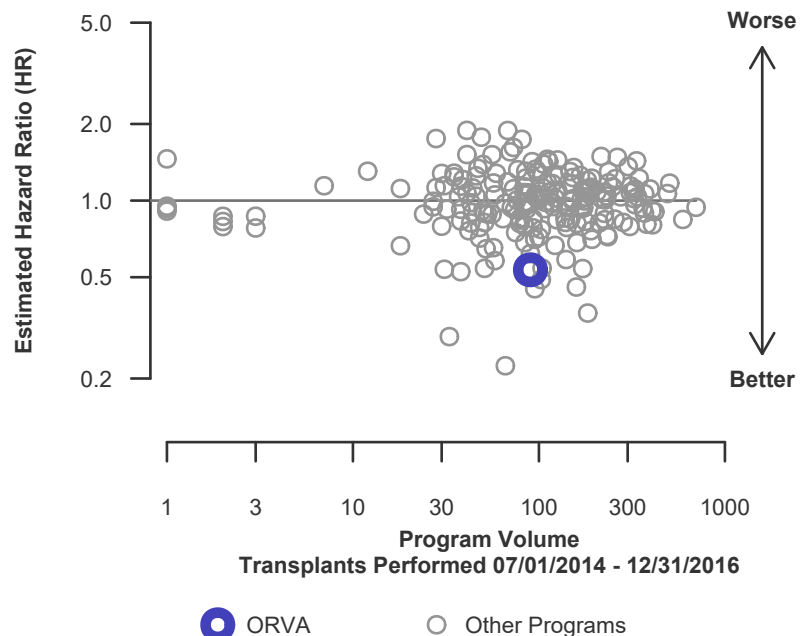


Figure C6D. Adult (18+) 3-year deceased donor graft failure HR program comparison





C. Transplant Information

Table C7L. Adult (18+) 3-year survival with a functioning living donor graft
Single organ transplants performed between 07/01/2014 and 12/31/2016
Deaths and retransplants are considered graft failures

	ORVA	U.S.
Number of transplants evaluated	10	13,443
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	100.00%	94.13%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	94.86%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	0	789
Number of expected graft failures (including deaths) during the first 3 years after transplant	0.53	--
Estimated hazard ratio*	0.79	--
95% credible interval for the hazard ratio**	[0.10, 2.20]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.10, 2.20], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 21% lower risk of graft failure compared to an average program, but ORVA's performance could plausibly range from 90% reduced risk up to 120% increased risk.

Figure C5L. Adult (18+) 3-year living donor graft failure HR estimate

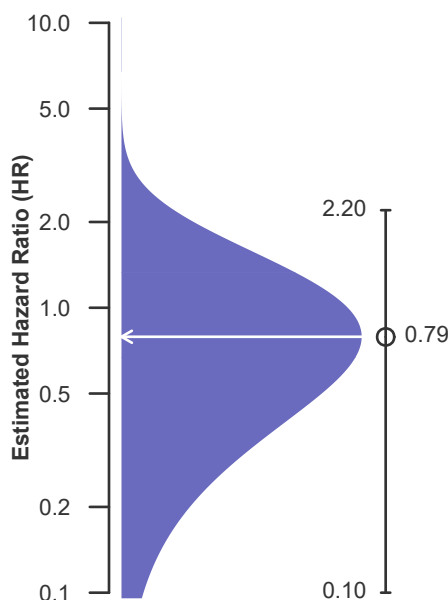
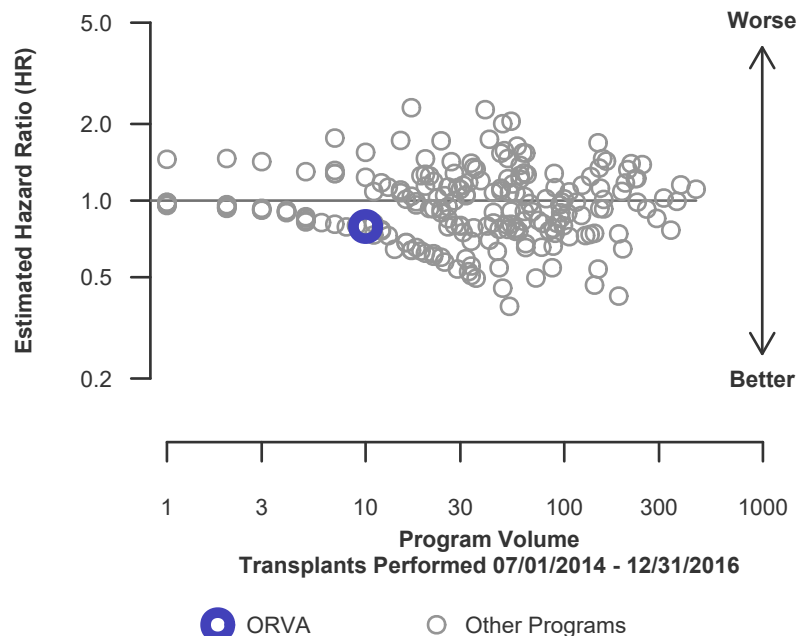


Figure C6L. Adult (18+) 3-year living donor graft failure HR program comparison





C. Transplant Information

Table C8. Pediatric (<18) 1-month survival with a functioning graft
Single organ transplants performed between 01/01/2017 and 06/30/2019
Deaths and retransplants are considered graft failures

This center did not perform any
transplants relevant to
this table during
01/01/2017-06/30/2019

**Figure C7. Pediatric (<18)
1-month graft failure HR estimate**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019

**Figure C8. Pediatric (<18) 1-month graft failure HR program
comparison**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019



C. Transplant Information

Table C8D. Pediatric (<18) 1-month survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2017 and 06/30/2019
Deaths and retransplants are considered graft failures

This center did not perform any
transplants relevant to
this table during
01/01/2017-06/30/2019

Figure C7D. Pediatric (<18)
1-month deceased donor graft
failure HR estimate

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019

Figure C8D. Pediatric (<18) 1-month deceased donor graft
failure HR program comparison

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019



C. Transplant Information

Table C8L. Pediatric (<18) 1-month survival with a functioning living donor graft
Single organ transplants performed between 01/01/2017 and 06/30/2019
Deaths and retransplants are considered graft failures

This center did not perform any
transplants relevant to
this table during
01/01/2017-06/30/2019

Figure C7L. Pediatric (<18)
1-month living donor graft failure
HR estimate

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019

Figure C8L. Pediatric (<18) 1-month living donor graft failure
HR program comparison

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019



C. Transplant Information

Table C9. Pediatric (<18) 1-year survival with a functioning graft
Single organ transplants performed between 01/01/2017 and 06/30/2019
Deaths and retransplants are considered graft failures

This center did not perform any
transplants relevant to
this table during
01/01/2017-06/30/2019

**Figure C9. Pediatric (<18) 1-year
graft failure HR estimate**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019

**Figure C10. Pediatric (<18) 1-year graft failure HR program
comparison**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019



C. Transplant Information

Table C9D. Pediatric (<18) 1-year survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2017 and 06/30/2019
Deaths and retransplants are considered graft failures

This center did not perform any
transplants relevant to
this table during
01/01/2017-06/30/2019

Figure C9D. Pediatric (<18)
1-year deceased donor graft
failure HR estimate

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019

Figure C10D. Pediatric (<18) 1-year deceased donor graft
failure HR program comparison

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019



C. Transplant Information

Table C9L. Pediatric (<18) 1-year survival with a functioning living donor graft
Single organ transplants performed between 01/01/2017 and 06/30/2019
Deaths and retransplants are considered graft failures

This center did not perform any
transplants relevant to
this table during
01/01/2017-06/30/2019

**Figure C9L. Pediatric (<18) 1-year
living donor graft failure HR
estimate**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019

**Figure C10L. Pediatric (<18) 1-year living donor graft failure
HR program comparison**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019



C. Transplant Information

Table C10. Pediatric (<18) 3-year survival with a functioning graft
Single organ transplants performed between 07/01/2014 and 12/31/2016
Deaths and retransplants are considered graft failures

This center did not perform any
transplants relevant to
this table during
07/01/2014-12/31/2016

**Figure C11. Pediatric (<18) 3-year
graft failure HR estimate**

This center did not perform any
transplants relevant to
this figure during
07/01/2014-12/31/2016

**Figure C12. Pediatric (<18) 3-year graft failure HR program
comparison**

This center did not perform any
transplants relevant to
this figure during
07/01/2014-12/31/2016



C. Transplant Information

Table C10D. Pediatric (<18) 3-year survival with a functioning deceased donor graft
Single organ transplants performed between 07/01/2014 and 12/31/2016
Deaths and retransplants are considered graft failures

This center did not perform any
transplants relevant to
this table during
07/01/2014-12/31/2016

Figure C11D. Pediatric (<18)
3-year deceased donor graft
failure HR estimate

This center did not perform any
transplants relevant to
this figure during
07/01/2014-12/31/2016

Figure C12D. Pediatric (<18) 3-year deceased donor graft
failure HR program comparison

This center did not perform any
transplants relevant to
this figure during
07/01/2014-12/31/2016



C. Transplant Information

Table C10L. Pediatric (<18) 3-year survival with a functioning living donor graft
Single organ transplants performed between 07/01/2014 and 12/31/2016
Deaths and retransplants are considered graft failures

This center did not perform any
transplants relevant to
this table during
07/01/2014-12/31/2016

Figure C11L. Pediatric (<18)
3-year living donor graft failure
HR estimate

This center did not perform any
transplants relevant to
this figure during
07/01/2014-12/31/2016

Figure C12L. Pediatric (<18) 3-year living donor graft failure
HR program comparison

This center did not perform any
transplants relevant to
this figure during
07/01/2014-12/31/2016



C. Transplant Information

Table C11. Adult (18+) 1-month patient survival

Single organ transplants performed between 01/01/2017 and 06/30/2019
Retransplants excluded

	ORVA	U.S.
Number of transplants evaluated	101	42,495
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	99.01%	99.57%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.46%	--
Number of observed deaths during the first month after transplant	1	183
Number of expected deaths during the first month after transplant	0.55	--
Estimated hazard ratio*	1.18	--
95% credible interval for the hazard ratio**	[0.24, 2.84]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.24, 2.84], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 18% higher risk of patient death compared to an average program, but ORVA's performance could plausibly range from 76% reduced risk up to 184% increased risk.

Figure C13. Adult (18+) 1-month patient death HR estimate

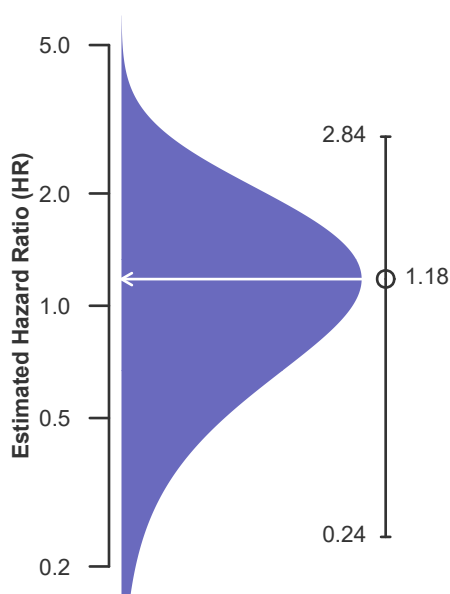
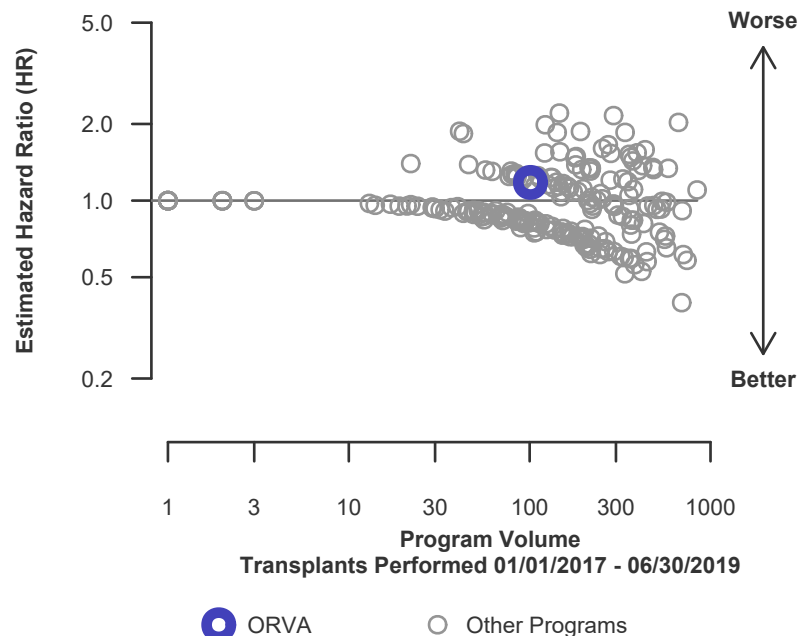


Figure C14. Adult (18+) 1-month patient death HR program comparison





C. Transplant Information

Table C11D. Adult (18+) 1-month patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2017 and 06/30/2019
Retransplants excluded

	ORVA	U.S.
Number of transplants evaluated	92	28,975
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	98.91%	99.47%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.44%	--
Number of observed deaths during the first month after transplant	1	154
Number of expected deaths during the first month after transplant	0.52	--
Estimated hazard ratio*	1.19	--
95% credible interval for the hazard ratio**	[0.25, 2.87]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.25, 2.87], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 19% higher risk of patient death compared to an average program, but ORVA's performance could plausibly range from 75% reduced risk up to 187% increased risk.

Figure C13D. Adult (18+) 1-month patient death HR estimate (deceased donor grafts)

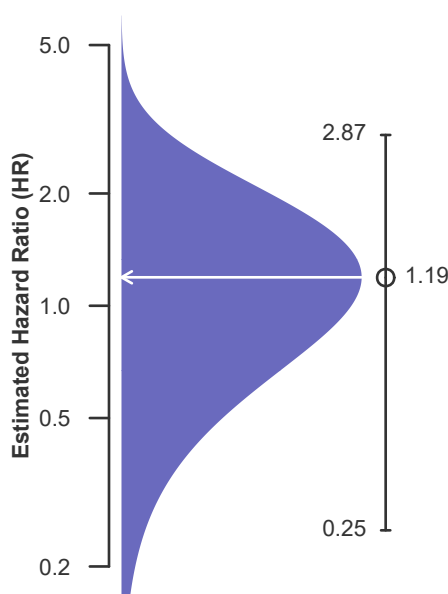
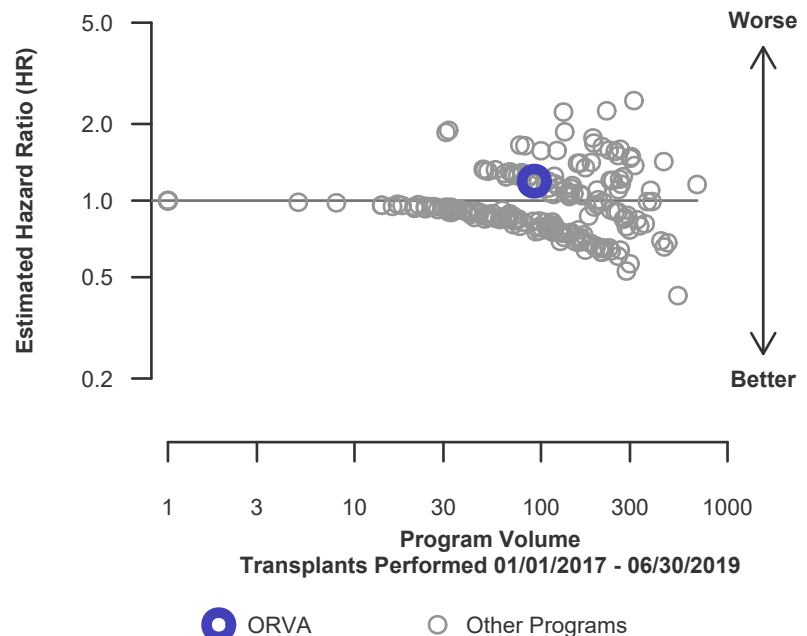


Figure C14D. Adult (18+) 1-month patient death HR program comparison (deceased donor grafts)





C. Transplant Information

Table C11L. Adult (18+) 1-month patient survival (living donor graft recipients)
Single organ transplants performed between 01/01/2017 and 06/30/2019
Retransplants excluded

	ORVA	U.S.
Number of transplants evaluated	9	13,520
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	99.79%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.69%	--
Number of observed deaths during the first month after transplant	0	29
Number of expected deaths during the first month after transplant	0.03	--
Estimated hazard ratio*	0.99	--
95% credible interval for the hazard ratio**	[0.12, 2.75]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.12, 2.75], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 1% lower risk of patient death compared to an average program, but ORVA's performance could plausibly range from 88% reduced risk up to 175% increased risk.

Figure C13L. Adult (18+) 1-month patient death HR estimate (living donor grafts)

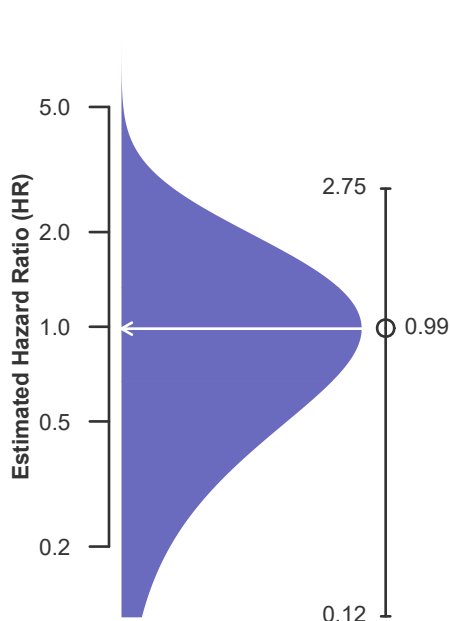
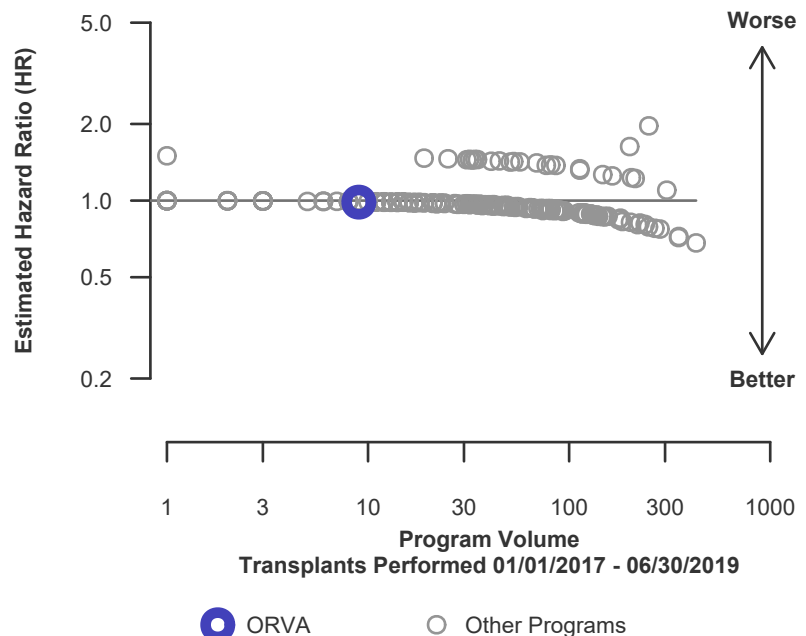


Figure C14L. Adult (18+) 1-month patient death HR program comparison (living donor grafts)





C. Transplant Information

Table C12. Adult (18+) 1-year patient survival
Single organ transplants performed between 01/01/2017 and 06/30/2019
Retransplants excluded

	ORVA	U.S.
Number of transplants evaluated	101	42,495
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	99.01%	97.68%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	96.99%	--
Number of observed deaths during the first year after transplant	1	899
Number of expected deaths during the first year after transplant	2.80	--
Estimated hazard ratio*	0.62	--
95% credible interval for the hazard ratio**	[0.13, 1.50]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.13, 1.50], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 38% lower risk of patient death compared to an average program, but ORVA's performance could plausibly range from 87% reduced risk up to 50% increased risk.

Figure C15. Adult (18+) 1-year patient death HR estimate

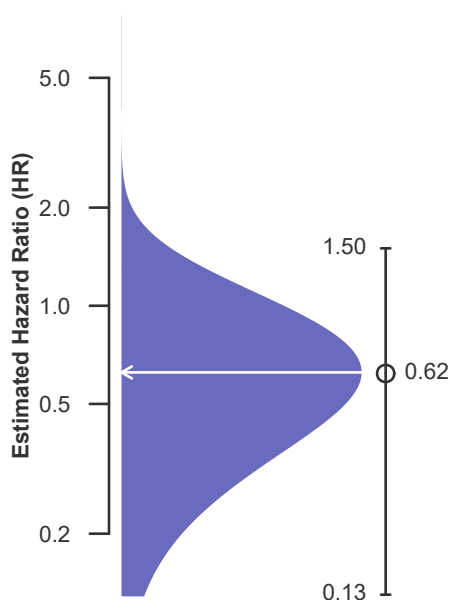
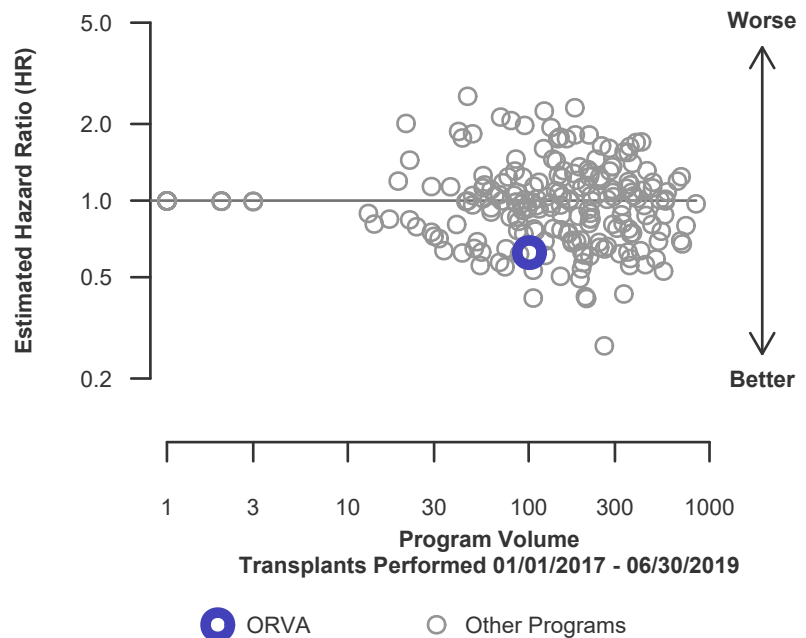


Figure C16. Adult (18+) 1-year patient death HR program comparison





C. Transplant Information

**Table C12D. Adult (18+) 1-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2017 and 06/30/2019
Retransplants excluded**

	ORVA	U.S.
Number of transplants evaluated	92	28,975
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	98.91%	97.02%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	96.83%	--
Number of observed deaths during the first year after transplant	1	788
Number of expected deaths during the first year after transplant	2.70	--
Estimated hazard ratio*	0.64	--
95% credible interval for the hazard ratio**	[0.13, 1.54]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.13, 1.54], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 36% lower risk of patient death compared to an average program, but ORVA's performance could plausibly range from 87% reduced risk up to 54% increased risk.

Figure C15D. Adult (18+) 1-year patient death HR estimate (deceased donor grafts)

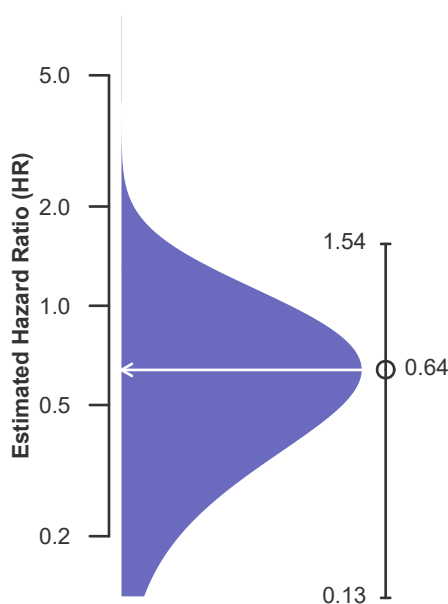
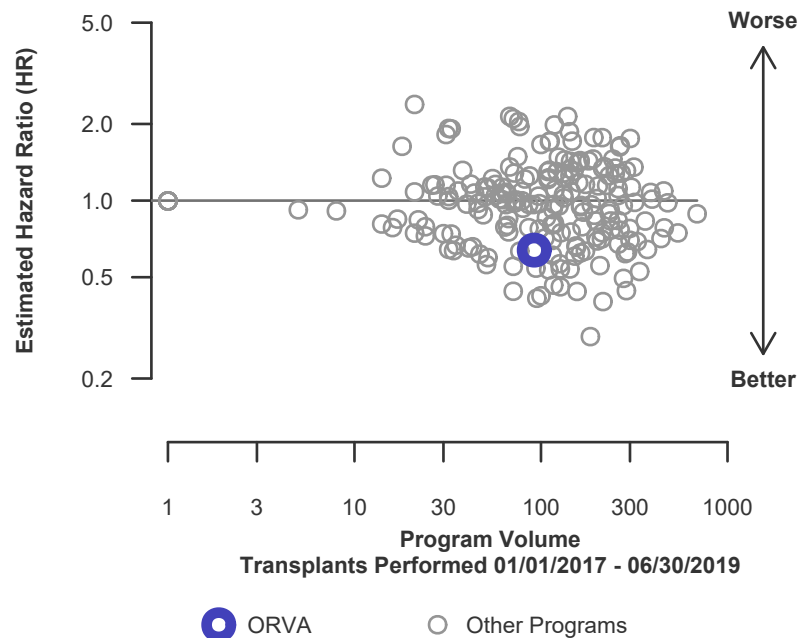


Figure C16D. Adult (18+) 1-year patient death HR program comparison (deceased donor grafts)





C. Transplant Information

Table C12L. Adult (18+) 1-year patient survival (living donor graft recipients)
Single organ transplants performed between 01/01/2017 and 06/30/2019
Retransplants excluded

	ORVA	U.S.
Number of transplants evaluated	9	13,520
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	100.00%	99.10%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	98.68%	--
Number of observed deaths during the first year after transplant	0	111
Number of expected deaths during the first year after transplant	0.11	--
Estimated hazard ratio*	0.95	--
95% credible interval for the hazard ratio**	[0.11, 2.64]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.11, 2.64], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 5% lower risk of patient death compared to an average program, but ORVA's performance could plausibly range from 89% reduced risk up to 164% increased risk.

Figure C15L. Adult (18+) 1-year patient death HR estimate (living donor grafts)

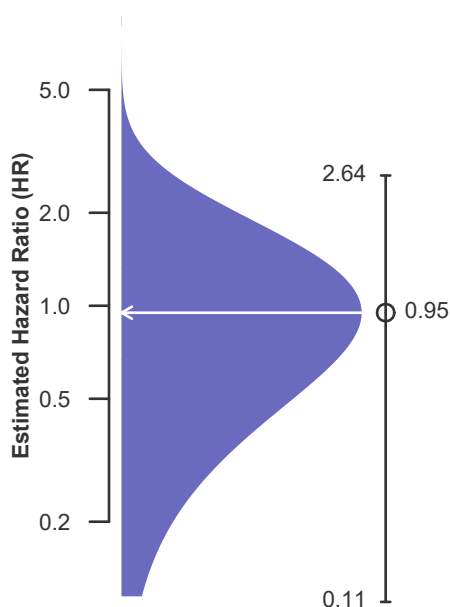
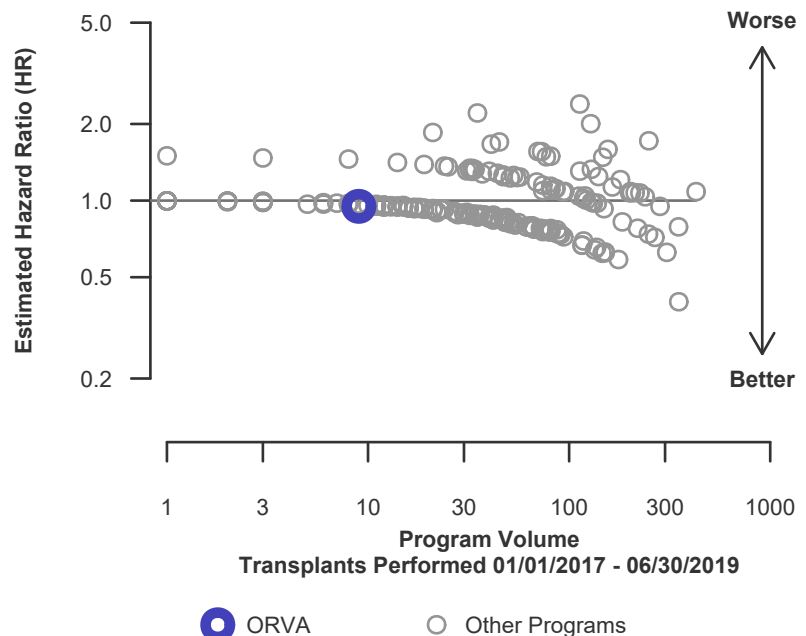


Figure C16L. Adult (18+) 1-year patient death HR program comparison (living donor grafts)





C. Transplant Information

Table C13. Adult (18+) 3-year patient survival
Single organ transplants performed between 07/01/2014 and 12/31/2016
Retransplants excluded

	ORVA	U.S.
Number of transplants evaluated	97	35,996
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	94.85%	93.69%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	90.39%	--
Number of observed deaths during the first 3 years after transplant	5	2,273
Number of expected deaths during the first 3 years after transplant	9.72	--
Estimated hazard ratio*	0.60	--
95% credible interval for the hazard ratio**	[0.24, 1.11]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.24, 1.11], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 40% lower risk of patient death compared to an average program, but ORVA's performance could plausibly range from 76% reduced risk up to 11% increased risk.

Figure C17. Adult (18+) 3-year patient death HR estimate

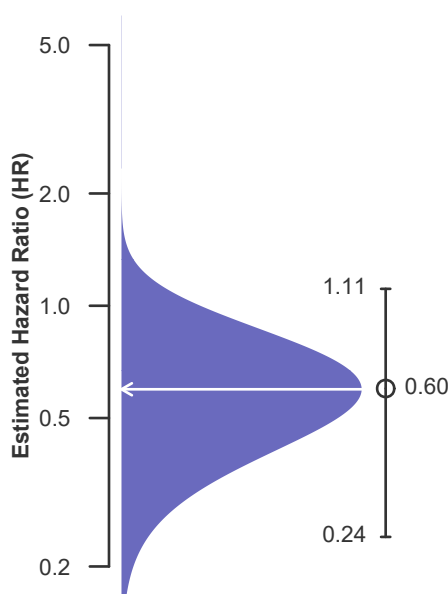
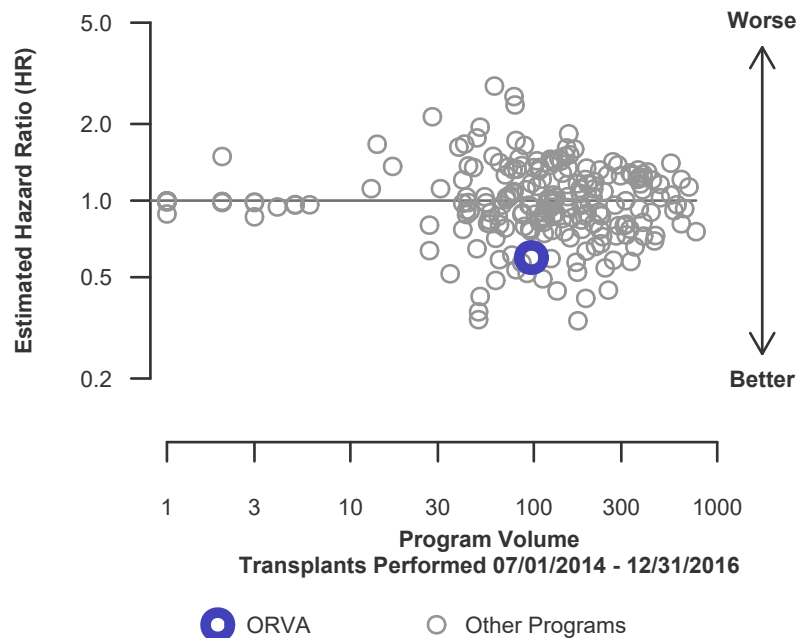


Figure C18. Adult (18+) 3-year patient death HR program comparison





C. Transplant Information

Table C13D. Adult (18+) 3-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 07/01/2014 and 12/31/2016
Retransplants excluded

	ORVA	U.S.
Number of transplants evaluated	87	23,929
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	94.25%	92.14%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	89.60%	--
Number of observed deaths during the first 3 years after transplant	5	1,881
Number of expected deaths during the first 3 years after transplant	9.45	--
Estimated hazard ratio*	0.61	--
95% credible interval for the hazard ratio**	[0.25, 1.14]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.25, 1.14], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 39% lower risk of patient death compared to an average program, but ORVA's performance could plausibly range from 75% reduced risk up to 14% increased risk.

Figure C17D. Adult (18+) 3-year patient death HR estimate (deceased donor grafts)

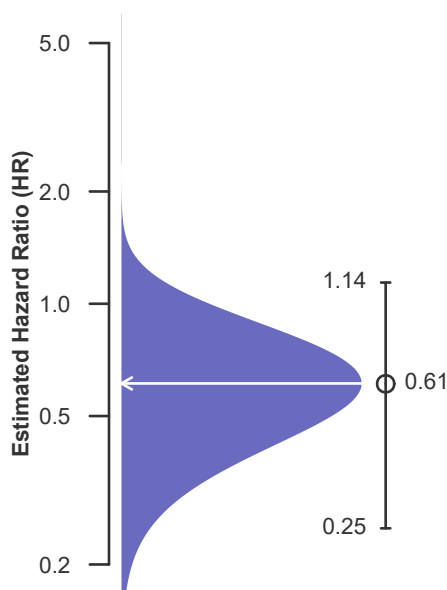
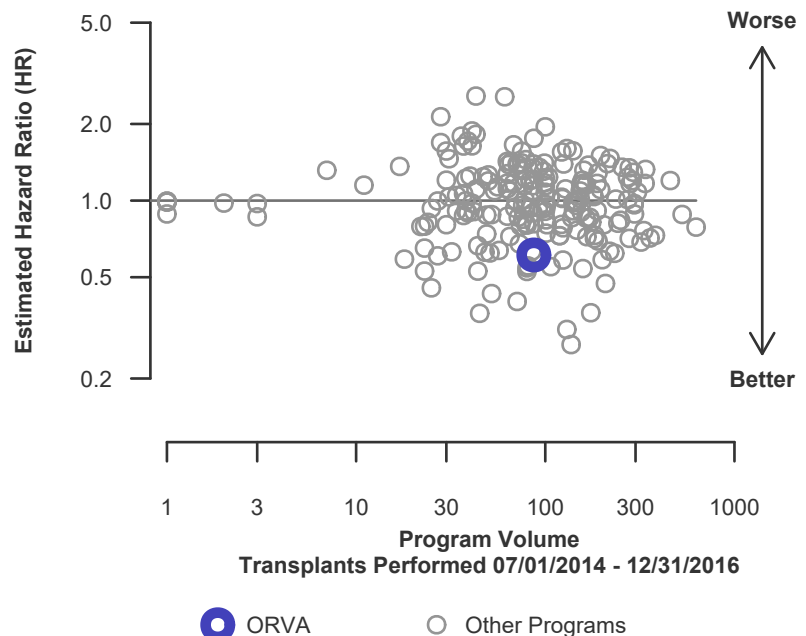


Figure C18D. Adult (18+) 3-year patient death HR program comparison (deceased donor grafts)





C. Transplant Information

Table C13L. Adult (18+) 3-year patient survival (living donor graft recipients)
Single organ transplants performed between 07/01/2014 and 12/31/2016
Retransplants excluded

	ORVA	U.S.
Number of transplants evaluated	10	12,067
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	100.00%	96.75%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	97.30%	--
Number of observed deaths during the first 3 years after transplant	0	392
Number of expected deaths during the first 3 years after transplant	0.27	--
Estimated hazard ratio*	0.88	--
95% credible interval for the hazard ratio**	[0.11, 2.45]	--

* The hazard ratio provides an estimate of how VA Portland Health Care System (ORVA)'s results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If ORVA's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.11, 2.45], indicates the location of ORVA's true hazard ratio with 95% probability. The best estimate is 12% lower risk of patient death compared to an average program, but ORVA's performance could plausibly range from 89% reduced risk up to 145% increased risk.

Figure C17L. Adult (18+) 3-year patient death HR estimate (living donor grafts)

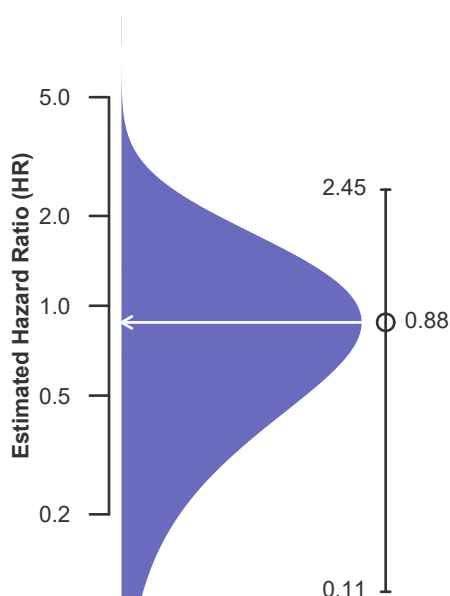
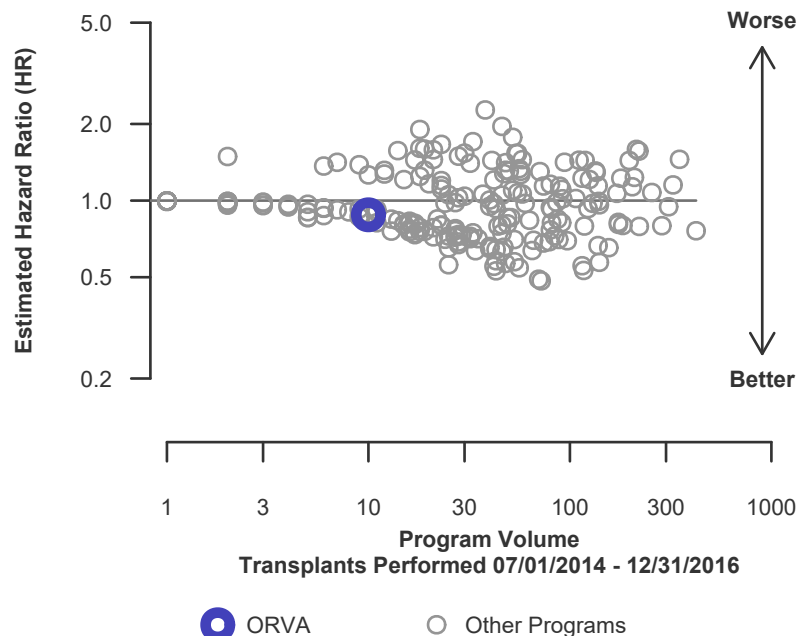


Figure C18L. Adult (18+) 3-year patient death HR program comparison (living donor grafts)





C. Transplant Information

Table C14. Pediatric (<18) 1-month patient survival
Single organ transplants performed between 01/01/2017 and 06/30/2019
Retransplants excluded

This center did not perform any
transplants relevant to
this table during
01/01/2017-06/30/2019

**Figure C19. Pediatric (<18)
1-month patient death HR
estimate**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019

**Figure C20. Pediatric (<18) 1-month patient death HR program
comparison**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019



C. Transplant Information

**Table C14D. Pediatric (<18) 1-month patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2017 and 06/30/2019
Retransplants excluded**

This center did not perform any
transplants relevant to
this table during
01/01/2017-06/30/2019

**Figure C19D. Pediatric (<18)
1-month patient death HR
estimate (deceased donor grafts)**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019

**Figure C20D. Pediatric (<18) 1-month patient death HR
program comparison (deceased donor grafts)**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019



C. Transplant Information

Table C14L. Pediatric (<18) 1-month patient survival (living donor graft recipients)
Single organ transplants performed between 01/01/2017 and 06/30/2019
Retransplants excluded

This center did not perform any
transplants relevant to
this table during
01/01/2017-06/30/2019

Figure C19L. Pediatric (<18)
1-month patient death HR
estimate (living donor grafts)

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019

Figure C20L. Pediatric (<18) 1-month patient death HR
program comparison (living donor grafts)

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019



C. Transplant Information

Table C15. Pediatric (<18) 1-year patient survival

Single organ transplants performed between 01/01/2017 and 06/30/2019
Retransplants excluded

This center did not perform any
transplants relevant to
this table during
01/01/2017-06/30/2019

**Figure C21. Pediatric (<18) 1-year
patient death HR estimate**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019

**Figure C22. Pediatric (<18) 1-year patient death HR program
comparison**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019



C. Transplant Information

Table C15D. Pediatric (<18) 1-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2017 and 06/30/2019
Retransplants excluded

This center did not perform any
transplants relevant to
this table during
01/01/2017-06/30/2019

**Figure C21D. Pediatric (<18)
1-year patient death HR estimate
(deceased donor grafts)**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019

**Figure C22D. Pediatric (<18) 1-year patient death HR program
comparison (deceased donor grafts)**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019



C. Transplant Information

Table C15L. Pediatric (<18) 1-year patient survival (living donor graft recipients)
Single organ transplants performed between 01/01/2017 and 06/30/2019
Retransplants excluded

This center did not perform any
transplants relevant to
this table during
01/01/2017-06/30/2019

**Figure C21L. Pediatric (<18)
1-year patient death HR estimate
(living donor grafts)**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019

**Figure C22L. Pediatric (<18) 1-year patient death HR program
comparison (living donor grafts)**

This center did not perform any
transplants relevant to
this figure during
01/01/2017-06/30/2019



C. Transplant Information

Table C16. Pediatric (<18) 3-year patient survival

Single organ transplants performed between 07/01/2014 and 12/31/2016
Retransplants excluded

This center did not perform any
transplants relevant to
this table during
07/01/2014-12/31/2016

**Figure C23. Pediatric (<18) 3-year
patient death HR estimate**

This center did not perform any
transplants relevant to
this figure during
07/01/2014-12/31/2016

**Figure C24. Pediatric (<18) 3-year patient death HR program
comparison**

This center did not perform any
transplants relevant to
this figure during
07/01/2014-12/31/2016



C. Transplant Information

Table C16D. Pediatric (<18) 3-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 07/01/2014 and 12/31/2016
Retransplants excluded

This center did not perform any
transplants relevant to
this table during
07/01/2014-12/31/2016

**Figure C23D. Pediatric (<18)
3-year patient death HR estimate
(deceased donor grafts)**

This center did not perform any
transplants relevant to
this figure during
07/01/2014-12/31/2016

**Figure C24D. Pediatric (<18) 3-year patient death HR program
comparison (deceased donor grafts)**

This center did not perform any
transplants relevant to
this figure during
07/01/2014-12/31/2016



C. Transplant Information

Table C16L. Pediatric (<18) 3-year patient survival (living donor graft recipients)
Single organ transplants performed between 07/01/2014 and 12/31/2016
Retransplants excluded

This center did not perform any
transplants relevant to
this table during
07/01/2014-12/31/2016

**Figure C23L. Pediatric (<18)
3-year patient death HR estimate
(living donor grafts)**

This center did not perform any
transplants relevant to
this figure during
07/01/2014-12/31/2016

**Figure C24L. Pediatric (<18) 3-year patient death HR program
comparison (living donor grafts)**

This center did not perform any
transplants relevant to
this figure during
07/01/2014-12/31/2016



C. Transplant Information

Table C17. Multi-organ transplant graft survival: 01/01/2017 - 06/30/2019

Adult (18+) Transplants

Transplant Type	First-Year Outcomes					
	Transplants Performed		Kidney Graft Failures		Estimated Kidney Graft Survival	
	ORVA-TX1	USA	ORVA-TX1	USA	ORVA-TX1	USA
Kidney-Liver	3	1,695	1	196	50.0%	88.0%

Pediatric (<18) Transplants

No pediatric (<18) multi-organ transplants were performed

Table C18. Multi-organ transplant patient survival: 01/01/2017 - 06/30/2019

Adult (18+) Transplants

Transplant Type	First-Year Outcomes					
	Transplants Performed		Patient Deaths		Estimated Patient Survival	
	ORVA-TX1	USA	ORVA-TX1	USA	ORVA-TX1	USA
Kidney-Liver	3	1,695	1	161	50.0%	90.0%

Pediatric (<18) Transplants

No pediatric (<18) multi-organ transplants were performed



D. Living Donor Information

Table D1. Living donor summary: 01/01/2017 - 12/31/2019

Living Donor Follow-Up	This Center			United States		
	01/2017-12/2017	01/2018-12/2018	01/2019-06/2019	01/2017-12/2017	01/2018-12/2018	01/2019-06/2019
Number of Living Donors	3	4	3	5,814	6,448	3,383
6-Month Follow-Up						
Donors due for follow-up	3	4	3	5,811	6,447	3,381
Timely clinical data	3 100.0%	4 100.0%	2 66.7%	5,134 88.3%	5,612 87.0%	2,943 87.0%
Timely lab data	3 100.0%	3 75.0%	2 66.7%	4,947 85.1%	5,385 83.5%	2,857 84.5%
12-Month Follow-Up						
Donors due for follow-up	3	4		5,810	6,442	
Timely clinical data	3 100.0%	4 100.0%		4,819 82.9%	5,343 82.9%	
Timely lab data	3 100.0%	4 100.0%		4,559 78.5%	5,028 78.1%	
24-Month Follow-Up						
Donors due for follow-up	3			5,808		
Timely clinical data	2 66.7%			4,395 75.7%		
Timely lab data	1 33.3%			4,038 69.5%		

Follow-up completion standards through 2 years post-donation were implemented in policy on February 1, 2013.