



**SWISS  
TRANSPLANT  
COHORT  
STUDY**

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## Swiss Transplant Cohort Study Report (January 2008 - December 2022)

October 2023

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## Disclaimer

The STCS Annual Report covers all solid organ transplantation (SOT) activities on the Swiss national level since January 2008. The report is comprehensive and contains all combinations of simultaneous solid organ transplantations, consecutive transplantations, centre-specific activities and key outcomes of all transplantation programs including limited reporting of infectious disease and cancer occurrence. To serve the aim of comprehensive transplant outcome reporting, the report is based on unselected patient populations of the different transplant programs and transplant centres. **However, it is important to note that the report is not designed for and does not serve the purpose of center-specific outcomes comparison.**

The Swiss Transplant Cohort Study (STCS)

## List of Abbreviations

<b>STCS</b>	Swiss Transplant Cohort Study
<b>CI</b>	confidence interval
<b>CumInc</b>	cumulative incidence
<b>FUP</b>	follow-up
<b>GF</b>	graft failure
<b>KPD</b>	kidney paired donation (cross-over living donation)
<b>DBD</b>	donation after brain death
<b>DCD</b>	donation after cardiac death (non-heart-beating donor, NHBD)
<b>Tpx</b>	transplantation

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# 1 Comments from the centres

**all centres:** awaiting approval

## 2 News and updates

News:

- The current report is reduced to a minimal version without Samples, Infections and HLA mismatches chapters due to the migration to the new STCS data collection system: 3LC. An addendum will follow.



## 3 Patients, transplantations and transplanted organs

### 3.1 Definitions applied

- Enrolment refers to the inclusion of all patients into the Swiss Transplant Cohort Study (STCS) from 1 January 2008 until 31 December 2022. From those patients, the follow-up information from the date of transplantation until end of follow-up (15 September 2023) is included in the report.
- First transplantation:
  - Patients with a first solid organ transplantation in their medical history at the time of STCS enrolment
- Re-transplantation:
  - Patients with a repetition of the same type of transplantation (Re-Tpx)
  - Example: Re-Tpx of a kidney allograft after failure of a previous kidney graft
- Second transplantation:
  - Patients with a second transplantation that differs from the preceding transplantation type
  - Example: Transplantation of a pancreas following a single Kidney transplantation
- Simultaneous transplantation:
  - Simultaneous (eg double or triple) transplantation refer to multiple organs that originate from the same donor (e.g. Kidney-Pancreas).
  - Simultaneous transplantation can be categorized as first, re- or second transplantation.
- Every transplant procedure can consist of a single or simultaneous transplantation.
- Knowledge on previous solid organ transplantations from the pre-STCS era (before January 2008) is considered. Patients may thus be enrolled within the STCS as a re- or a second transplantation.
- Sequences of previous Islets transplantations have been counted as one prior transplantation.
- Human stem cell transplantations are not considered in this report.

### 3.2 Overview and baseline demographic data

The following tables list the number of patients enrolled in the STCS, the number of transplantations performed, and organs transplanted. Table 1 and 2 show patients according to their first STCS transplantation.

Table 1: Number of patients enrolled

	Patients	(%)
Total number	7377	100.0
Single Tpx at enrolment	7111	96.4
Double Tpx at enrolment	263	3.6
Triple Tpx at enrolment	3	0.0
1st Tpx at enrolment	6679	90.5
Re-Tpx at enrolment	593	8.0
2nd Tpx at enrolment	105	1.4
HSCT Tpx prior to enrolment	37	0.5

Table 2: Number of patients enrolled by Tpx type

	Total	First Tpx	(%)	Re Tpx	(%)	Second Tpx	(%)
Total	7377	6679	90.5	593	8.0	105	1.4
Kidney	4233	3662	86.5	518	12.2	53	1.3
Liver	1631	1582	97.0	43	2.6	6	0.4
Lung	656	640	97.6	13	2.0	3	0.5
Heart	534	528	98.9	5	0.9	1	0.2
Islets	41	12	29.3	11	26.8	18	43.9
Pancreas	14	8	57.1	0	0.0	6	42.9
Small bowel	2	1	50.0	1	50.0	0	0.0
Kidney - Pancreas	151	144	95.4	1	0.7	6	4.0
Kidney - Liver	60	52	86.7	0	0.0	8	13.3
Kidney - Islets	24	23	95.8	0	0.0	1	4.2
Kidney - Heart	16	14	87.5	1	6.2	1	6.2
Kidney - Lung	2	1	50.0	0	0.0	1	50.0
Liver - Lung	4	4	100.0	0	0.0	0	0.0
Liver - Pancreas	1	1	100.0	0	0.0	0	0.0
Heart - Lung	1	1	100.0	0	0.0	0	0.0
Islets - Liver	1	1	100.0	0	0.0	0	0.0
Pancreas - Small bowel	3	3	100.0	0	0.0	0	0.0
Kidney - Islets - Liver	1	0	0.0	0	0.0	1	100.0
Liver - Pancreas - Small bowel	1	1	100.0	0	0.0	0	0.0
Islets - Liver - Lung	1	1	100.0	0	0.0	0	0.0

In contrast to Table 1 and 2, Table 3 and 4 list all transplantations performed and the number of transplanted organs.

Table 3: Number of Tpx types

	Total	First Tpx	(%)	Re Tpx	(%)	Second Tpx	(%)
Total	7820	6679	85.4	951	12.2	190	2.4
Kidney	4385	3662	83.5	639	14.6	84	1.9
Liver	1791	1582	88.3	194	10.8	15	0.8
Lung	676	640	94.7	31	4.6	5	0.7
Heart	540	528	97.8	11	2.0	1	0.2
Islets	122	12	9.8	69	56.6	41	33.6
Pancreas	26	8	30.8	1	3.8	17	65.4
Small bowel	2	1	50.0	1	50.0	0	0.0
Kidney - Pancreas	155	144	92.9	3	1.9	8	5.2
Kidney - Liver	63	52	82.5	0	0.0	11	17.5
Kidney - Islets	26	23	88.5	1	3.8	2	7.7
Kidney - Heart	16	14	87.5	1	6.2	1	6.2
Kidney - Lung	3	1	33.3	0	0.0	2	66.7
Liver - Lung	4	4	100.0	0	0.0	0	0.0
Liver - Pancreas	1	1	100.0	0	0.0	0	0.0
Heart - Lung	1	1	100.0	0	0.0	0	0.0
Islets - Liver	2	1	50.0	0	0.0	1	50.0
Pancreas - Small bowel	3	3	100.0	0	0.0	0	0.0
Kidney - Islets - Liver	1	0	0.0	0	0.0	1	100.0
Liver - Pancreas - Small bowel	2	1	50.0	0	0.0	1	50.0
Islets - Liver - Lung	1	1	100.0	0	0.0	0	0.0

Table 4: Number of transplanted organs

	Total	First Tpx	(%)	Re Tpx	(%)	Second Tpx	(%)
Total	8102	6927	85.5	1021	12.6	154	1.9
Kidney	4649	3896	83.8	673	14.5	80	1.7
Liver	1865	1642	88.0	201	10.8	22	1.2
Lung	685	647	94.5	32	4.7	6	0.9
Heart	557	543	97.5	13	2.3	1	0.2
Pancreas	187	157	84.0	14	7.5	16	8.6
Islets	152	37	24.3	86	56.6	29	19.1
Small bowel	7	5	71.4	2	28.6	0	0.0

Table 5: Patients' characteristics for major Tpx types

	Total*	Kidney	Liver	Lung	Heart	Kidney - Pancreas
Total number of patients	7205	4233	1631	656	534	151
Age (yrs), median	54.0	54.0	56.0	54.5	51.0	44.0
Age (yrs), IQR	(42-62)	(42-63)	(46-62)	(40-60)	(36-59)	(37.5-51.5)
Age (yrs), min; max	0; 82	1; 82	0; 77	4; 71	0; 71	23; 64
Male, n(%)	4652 (64.6%)	2742 (58.9%)	1102 (23.7%)	339 (7.3%)	380 (8.2%)	89 (1.9%)
Pediatric, n(%)	349 (4.8%)	159 (45.6%)	123 (35.2%)	18 (5.2%)	49 (14.0%)	
Time on the waitinglist (yrs), median	1.0	1.6	0.6	0.6	0.6	1.3
- IQR	(0.3-2.3)	(0.4-3.4)	(0.2-1.1)	(0.2-1.2)	(0.2-1.3)	(0.6-2)
- min; max	0; 21.1	0; 20.7	0; 7.3	0; 5.5	0; 21.1	0; 10.4
Observation time (yrs), median	5.6	6.1	4.9	4.3	5.1	7.4
- IQR	(2.6-9.4)	(3-9.9)	(2.1-8.9)	(1.8-7.9)	(1.9-9.2)	(3.3-11.2)
- min; max	0; 15.3	0; 15.3	0; 15.3	0; 15.3	0; 15.2	0.1; 15.3
Number of deaths, n (%)	1512 (21%)	689 (45.6%)	405 (26.8%)	269 (17.8%)	130 (8.6%)	19 (1.3%)
Number of patients with at least one GF, n (%)	862 (12%)	444 (51.5%)	207 (24.0%)	126 (14.6%)	56 (6.5%)	29 (3.4%)
Alive, with graft failure, n(%)	422 (5.9%)	310 (73.5%)	79 (18.7%)	9 (2.1%)	5 (1.2%)	19 (4.5%)
Graft failure - related death, n(%)	204 (2.8%)	10 (4.9%)	61 (29.9%)	96 (47.1%)	37 (18.1%)	
Graft failure -> death, n(%)	236 (3.3%)	124 (52.5%)	67 (28.4%)	21 (8.9%)	14 (5.9%)	10 (4.2%)
Death without graft failure, n(%)	1072 (14.9%)	555 (51.8%)	277 (25.8%)	152 (14.2%)	79 (7.4%)	9 (0.8%)

(\*) "Total" refers to the total number of patients with Tpx presented in this table

Table 6: Donors' characteristics by donor types

	Total	DBD	DCD	Living, KPD	Living related	Living unrelated
Total no. donors	3990	1907	355	61	816	851
Donor age (yrs), median	54	53	59	52	53	54
- IQR	(43-64)	(37-66)	(49-68)	(46-63)	(44-61)	(46-62)
- min; max	0; 89	0; 89	1; 87	24; 72	1; 81	0; 79
Male gender, n (%)	1885 (47.2%)	1032 (55.1%)	245 (69%)	25 (41%)	307 (39.5%)	276 (33.8%)
No. organs donated, median	1	3	2	1	1	1
- min; max	1; 7	1; 7	1; 5	1; 1	1; 1	1; 1

### 3.3 STCS patient enrolment by calendar time

Figure 1 shows the patient enrollment activity by quarter from January 2008 till December 2022.

Figure 1: Quarterly patient enrolment by donor type

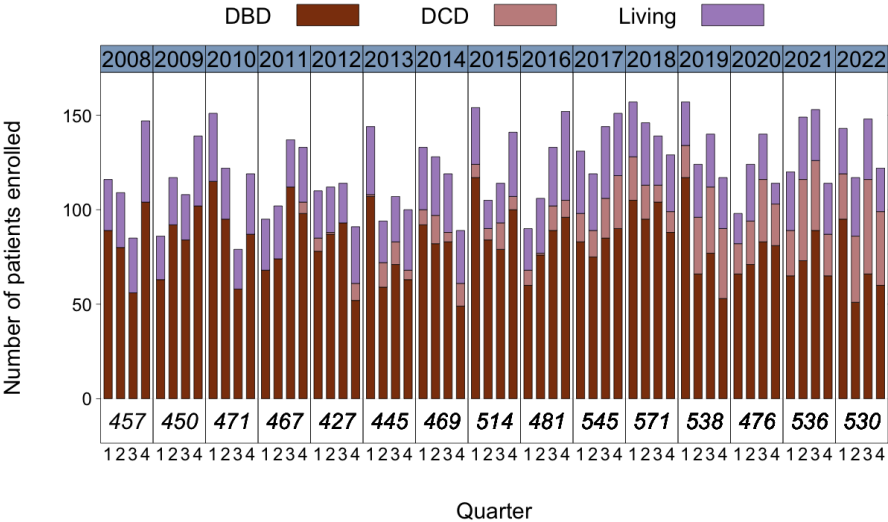
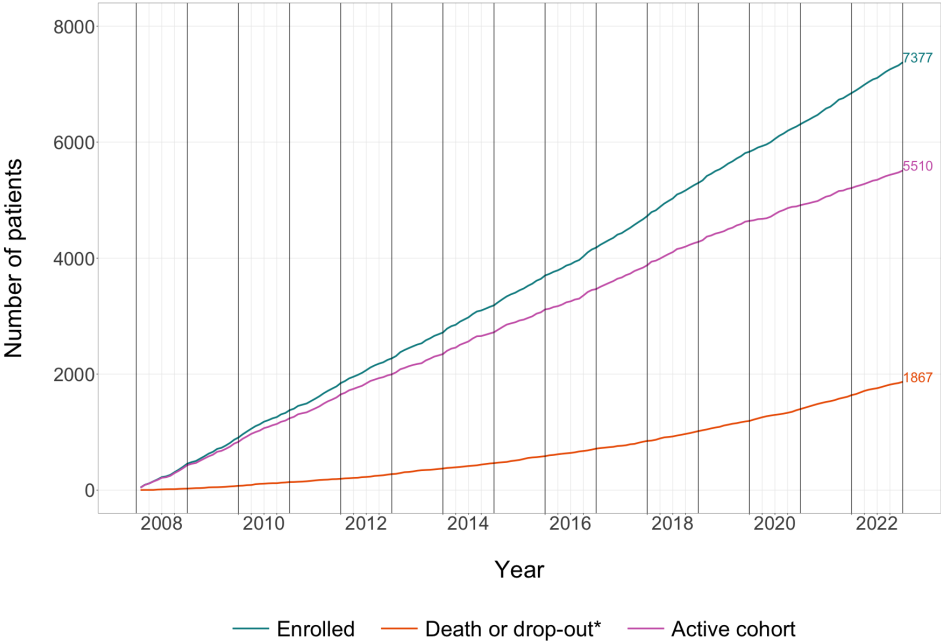
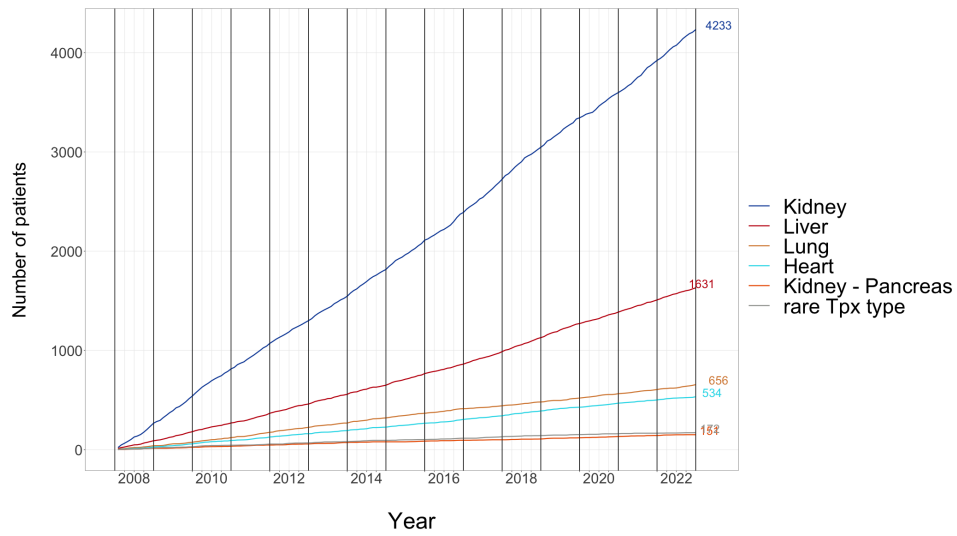


Figure 2: Cumulative patient enrolment



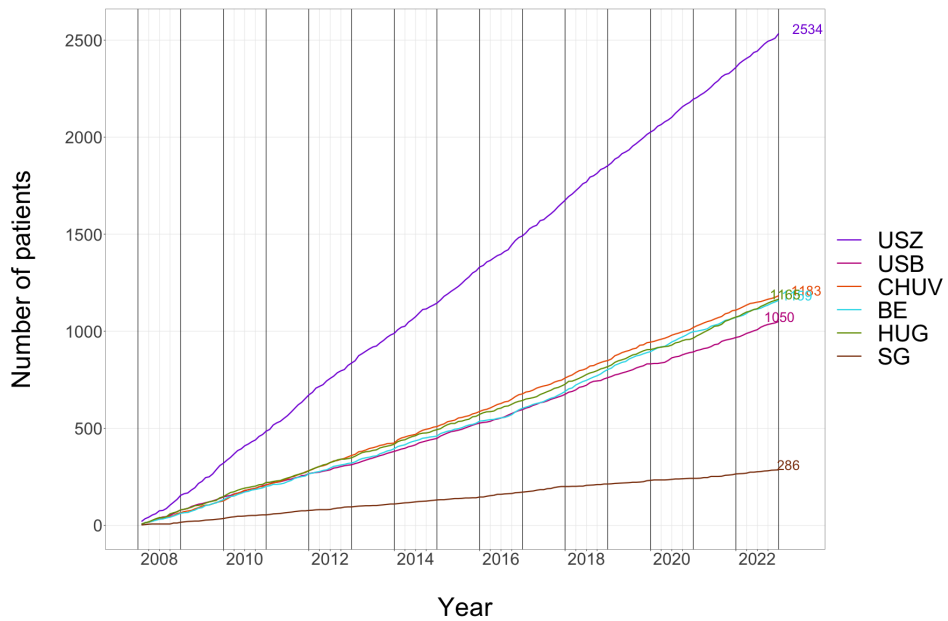
\*including patients with renal Tpx failure who are no longer candidates for retransplantation.

Figure 3: Cumulative patient enrolment by Tpx type



'Rare Tpx type' includes: Islets, Pancreas, Small bowel, Kidney - Liver, Kidney - Islets, Kidney - Heart, Kidney - Lung, Liver - Lung, Liver - Pancreas, Heart - Lung, Islets - Liver, Pancreas - Small bowel, Kidney - Islets - Liver, Liver - Pancreas - Small bowel, Islets - Liver - Lung.

Figure 4: Cumulative patient enrolment by center



### 3.4 Transplantation activities by centre and year

Table 7: Number of enrolled patients by year and centre

	Total	USZ	%	USB	%	CHUV	%	BE	%	HUG	%	SG	%
Total	7377	2534	34.4	1050	14.2	1183	16	1159	15.7	1165	15.8	286	3.9
2022	530	174	32.8	82	15.5	74	14	87	16.4	92	17.4	21	4
2021	536	165	30.8	75	14	90	16.8	74	13.8	109	20.3	23	4.3
2020	476	169	35.5	61	12.8	75	15.8	103	21.6	58	12.2	10	2.1
2019	538	173	32.2	71	13.2	95	17.7	92	17.1	88	16.4	19	3.5
2018	571	178	31.2	86	15.1	90	15.8	113	19.8	91	15.9	13	2.3
2017	545	184	33.8	79	14.5	82	15	87	16	84	15.4	29	5.3
2016	481	160	33.3	69	14.3	90	18.7	66	13.7	71	14.8	25	5.2
2015	514	186	36.2	79	15.4	78	15.2	77	15	79	15.4	15	2.9
2014	469	156	33.3	67	14.3	85	18.1	65	13.9	75	16	21	4.5
2013	445	153	34.4	69	15.5	64	14.4	74	16.6	70	15.7	15	3.4
2012	427	164	38.4	45	10.5	78	18.3	55	12.9	67	15.7	18	4.2
2011	467	187	40	58	12.4	74	15.8	65	13.9	60	12.8	23	4.9
2010	471	165	35	63	13.4	82	17.4	69	14.6	73	15.5	19	4
2009	450	165	36.7	67	14.9	61	13.6	70	15.6	68	15.1	19	4.2
2008	457	155	33.9	79	17.3	65	14.2	62	13.6	80	17.5	16	3.5

Table 8: Number of Tpx by year and centre

	Total	USZ	%	USB	%	CHUV	%	BE	%	HUG	%	SG	%
Total	7820	2699	34.5	1072	13.7	1226	15.7	1248	16	1283	16.4	292	3.7
2022	571	186	32.6	86	15.1	80	14	97	17	101	17.7	21	3.7
2021	586	181	30.9	77	13.1	93	15.9	90	15.4	122	20.8	23	3.9
2020	519	182	35.1	65	12.5	79	15.2	112	21.6	70	13.5	11	2.1
2019	582	179	30.8	73	12.5	101	17.4	108	18.6	102	17.5	19	3.3
2018	599	186	31.1	91	15.2	90	15	121	20.2	98	16.4	13	2.2
2017	578	197	34.1	79	13.7	86	14.9	93	16.1	93	16.1	30	5.2
2016	503	171	34	69	13.7	91	18.1	72	14.3	74	14.7	26	5.2
2015	555	199	35.9	81	14.6	83	15	82	14.8	94	16.9	16	2.9
2014	504	178	35.3	68	13.5	88	17.5	67	13.3	81	16.1	22	4.4
2013	471	167	35.5	69	14.6	66	14	78	16.6	76	16.1	15	3.2
2012	448	173	38.6	45	10	81	18.1	56	12.5	75	16.7	18	4
2011	492	197	40	60	12.2	76	15.4	71	14.4	64	13	24	4.9
2010	487	174	35.7	63	12.9	83	17	69	14.2	79	16.2	19	3.9
2009	466	173	37.1	67	14.4	64	13.7	70	15	73	15.7	19	4.1
2008	459	156	34	79	17.2	65	14.2	62	13.5	81	17.6	16	3.5

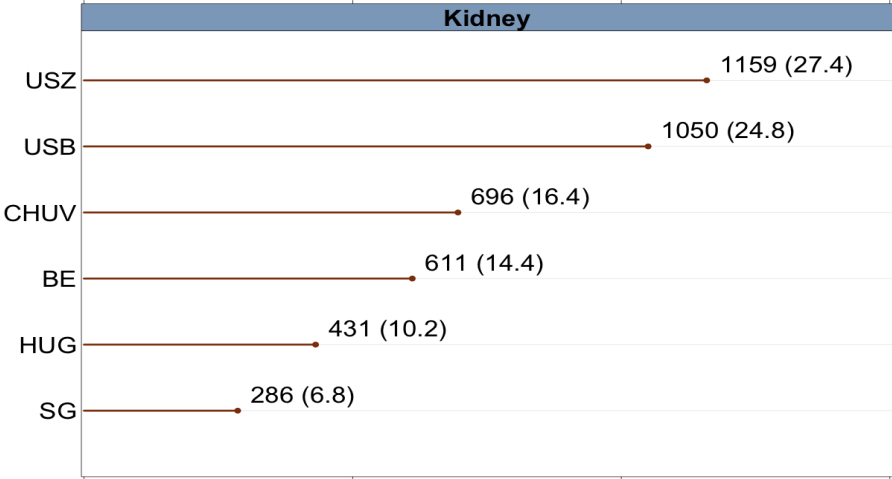


Table 9: Number of organs by year and centre

	Total	USZ	%	USB	%	CHUV	%	BE	%	HUG	%	SG	%
Total	8102	2848	35.2	1072	13.2	1240	15.3	1266	15.6	1384	17.1	292	3.6
2022	584	190	32.5	86	14.7	81	13.9	98	16.8	108	18.5	21	3.6
2021	605	190	31.4	77	12.7	94	15.5	91	15	130	21.5	23	3.8
2020	542	192	35.4	65	12	82	15.1	113	20.8	79	14.6	11	2
2019	603	190	31.5	73	12.1	101	16.7	110	18.2	110	18.2	19	3.2
2018	617	194	31.4	91	14.7	92	14.9	123	19.9	104	16.9	13	2.1
2017	595	206	34.6	79	13.3	88	14.8	95	16	97	16.3	30	5
2016	522	181	34.7	69	13.2	91	17.4	73	14	82	15.7	26	5
2015	570	204	35.8	81	14.2	83	14.6	82	14.4	104	18.2	16	2.8
2014	523	186	35.6	68	13	88	16.8	69	13.2	90	17.2	22	4.2
2013	495	184	37.2	69	13.9	67	13.5	79	16	81	16.4	15	3
2012	468	184	39.3	45	9.6	84	17.9	56	12	81	17.3	18	3.8
2011	510	209	41	60	11.8	76	14.9	72	14.1	69	13.5	24	4.7
2010	508	188	37	63	12.4	83	16.3	70	13.8	85	16.7	19	3.7
2009	482	182	37.8	67	13.9	65	13.5	72	14.9	77	16	19	3.9
2008	478	168	35.1	79	16.5	65	13.6	63	13.2	87	18.2	16	3.3

### 3.5 Transplantations by centre

Figure 5: Number of patients with first single Kidney Tpx

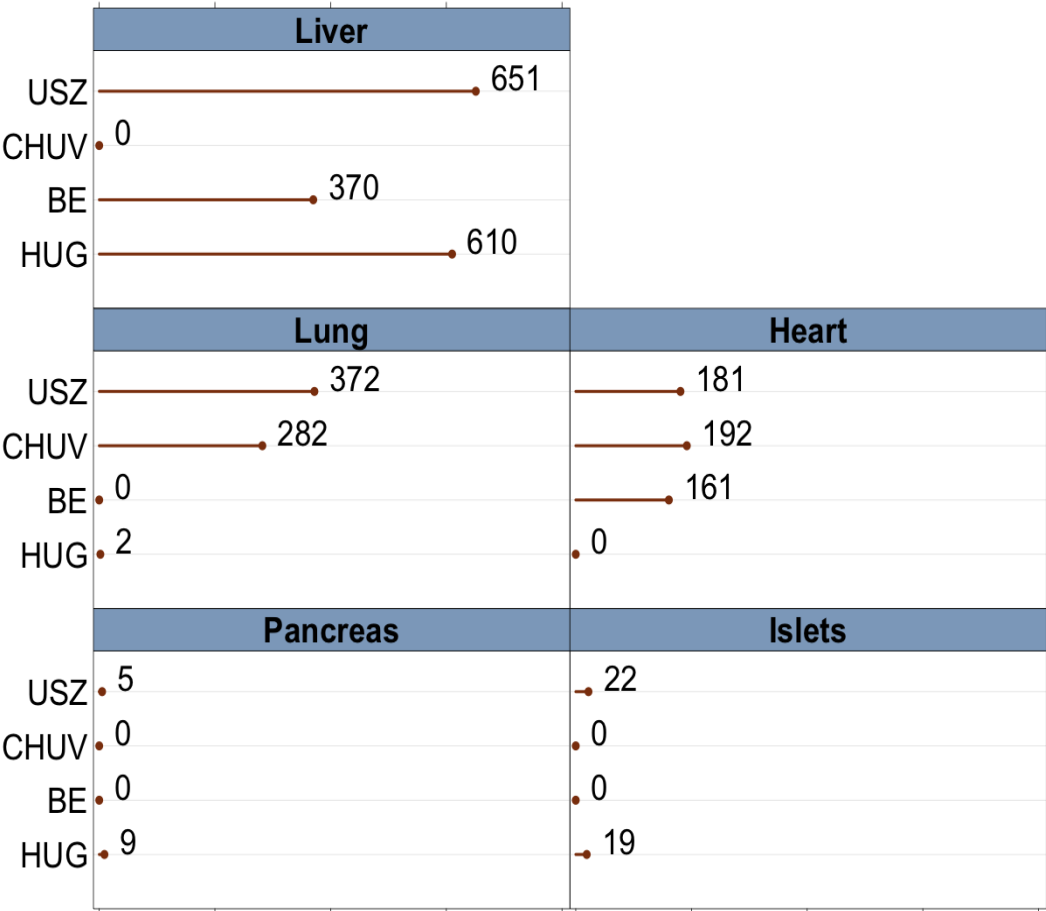


Number of patients enrolled for first STCS single kidney Tpx (%)

### 3.6 Transplantations other than Kidney by centre

Data from following rare transplantations are not shown: Small bowel (2, HUG), Liver - Lung (4, HUG), Liver - Pancreas (1, HUG), Heart - Lung (1, USZ), Islets - Liver (1, USZ; 1, HUG), Pancreas - Small bowel (2, HUG; 1, USZ), Islets - Liver - Lung (1, HUG) and Liver - Pancreas - Small bowel(2, USZ).

Figure 6: Number of patients with first STCS Liver. Lung. Heart. Pancreas or Islets Tpx



Number of patients enrolled for first STCS heart, liver, lung, pancreas or islets Tpx

### 3.7 Single Kidney transplantation by donor type

Figure 7 and 8 show all STCS single Kidney transplantations by donor type (DBD, DCD, Living related, Living unrelated and Living, KPD) and proportions of Kidney donor types within centres. Table 10 lists the Kidney patients characteristics by donor type. Figures 9 and 10 show the enrollment of patients from KPD and DCD donation by centre.

Figure 7: Number of single Kidney Tpx by donor type

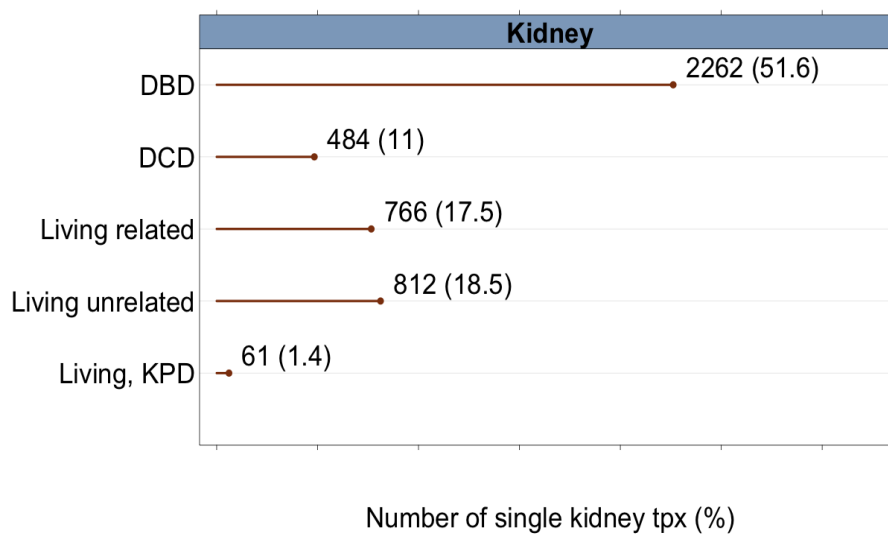


Figure 8: Distribution of donor types in all single Kidney Tpx

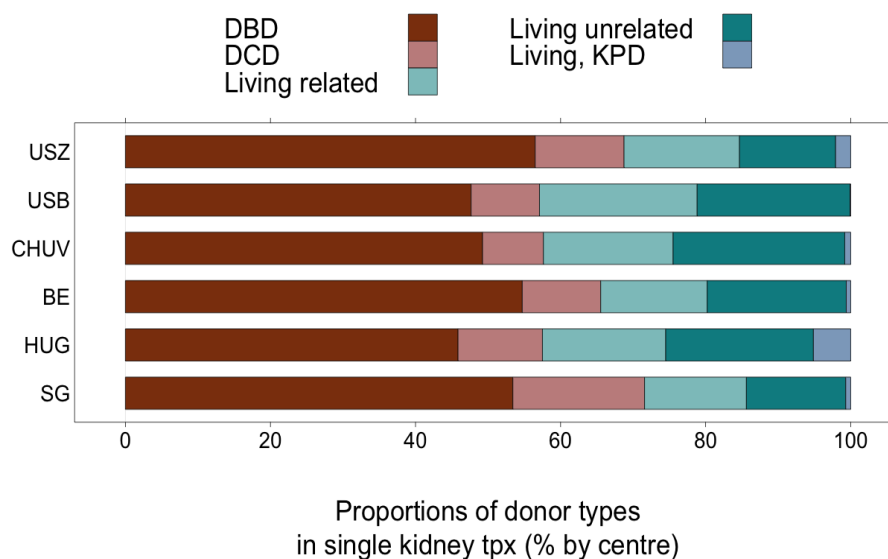


Table 10: Kidney patients' characteristics by donor type

	Total	DBD	DCD	Living
Total no. kidney patients	4233	2157	468	1608
Age (yrs), median	54	56	57	50
- IQR	(42-63)	(45-65)	(49-64)	(37-60)
- min; max	1; 82	1; 82	5; 78	1; 79
Male gender, n (%)	2742 (64.8%)	1363 (63.2%)	297 (63.5%)	1082 (67.3%)
Donor age (yrs), median	55	55	57	54
- IQR	(45-63)	(41-65)	(48-64)	(46-62)
- min; max	0; 88	0; 88	1; 81	1; 81
Cold ischemia time (yrs), median	6.6	9.2	8.7	1.7
- IQR	(2-10)	(7.1-12.2)	(7.1-10.6)	(1.4-2.3)
Pediatric, n (%)	159 (3.8%)	99 (4.6%)	4 (0.9%)	56 (3.5%)
Observation time (yrs), median	6.1	6.4	3.4	6.8
- IQR	(3-9.9)	(3.3-10.2)	(1.7-5.5)	(3.7-10.5)
No. DGF, n (%)	635 (15%)	368 (17.1%)	234 (50%)	33 (2.1%)
No. deaths, n (%)	689 (16.3%)	458 (21.2%)	46 (9.8%)	185 (11.5%)
No. patients with at least one GF, n (%)	444 (10.5%)	294 (13.6%)	35 (7.5%)	115 (7.2%)
Death without graft failure	555 (13.1%)	364 (16.9%)	37 (7.9%)	154 (9.6%)
- with GF - related death	10 (0.2%)	6 (0.3%)	0 (0%)	4 (0.2%)
- with GF -> death	124 (2.9%)	88 (4.1%)	9 (1.9%)	27 (1.7%)
Death without GF	310 (7.3%)	200 (9.3%)	26 (5.6%)	84 (5.2%)

Figure 9: Cumulative number of patients enrolled from KPD program by centre

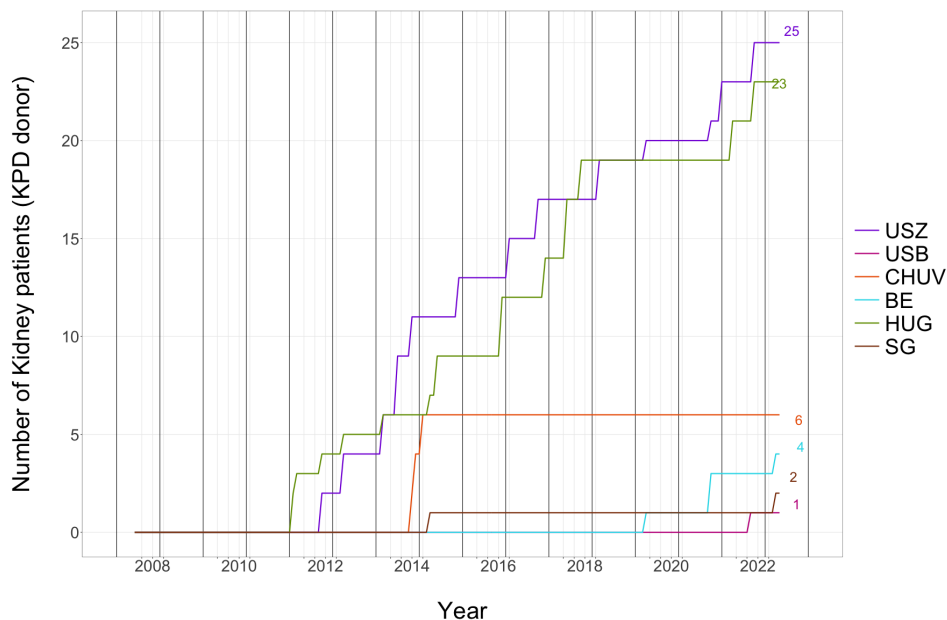
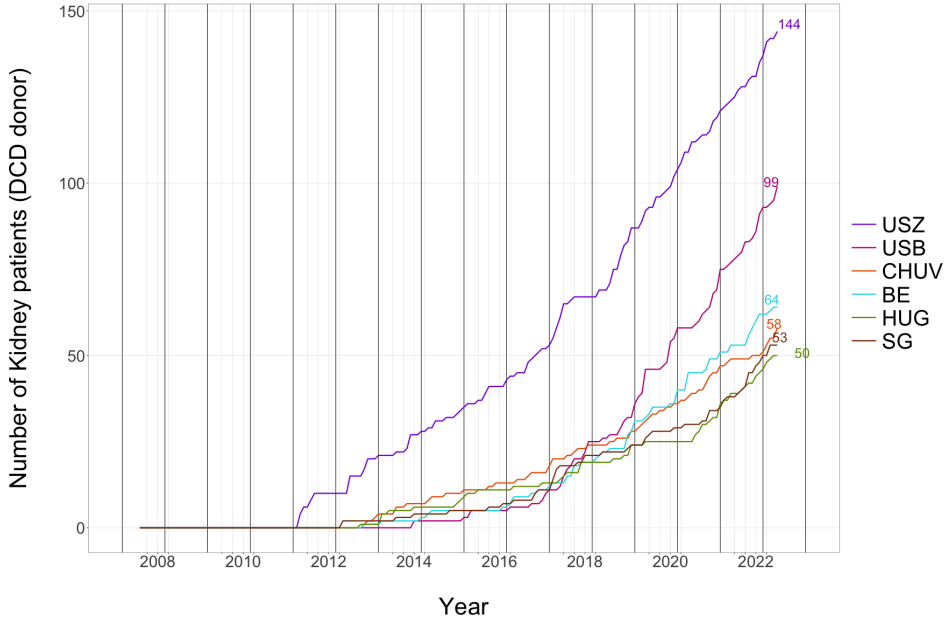


Figure 10: Cumulative number of patients with Kidney transplantations from DCD donation by centre



### 3.8 Single Liver transplantation by donor type

Figure 11 show all STCS single Liver transplantation by donor type and figure 12 the proportions of donor types in all single Liver transplantation within centres. Table 11 lists the Liver patients characteristics by donor type. Figures 13 show the enrollment of patients with Liver transplantation from DCD donation by centre.

Figure 11: Number of single Liver Tpx by donor type

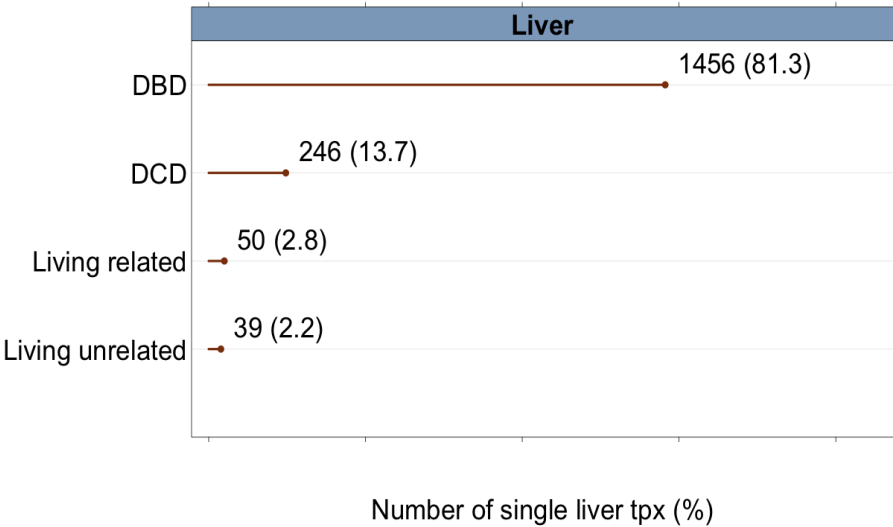


Figure 12: Distribution of donor types in all single Liver Tpx

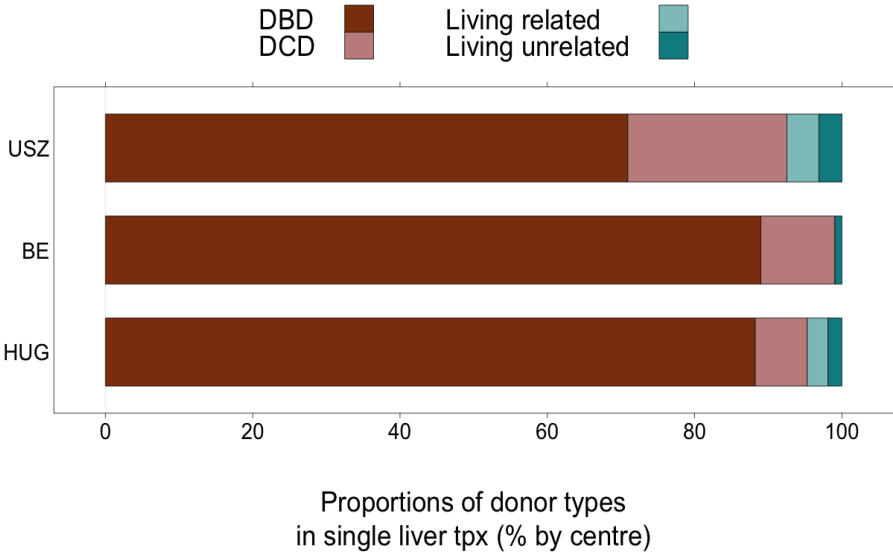
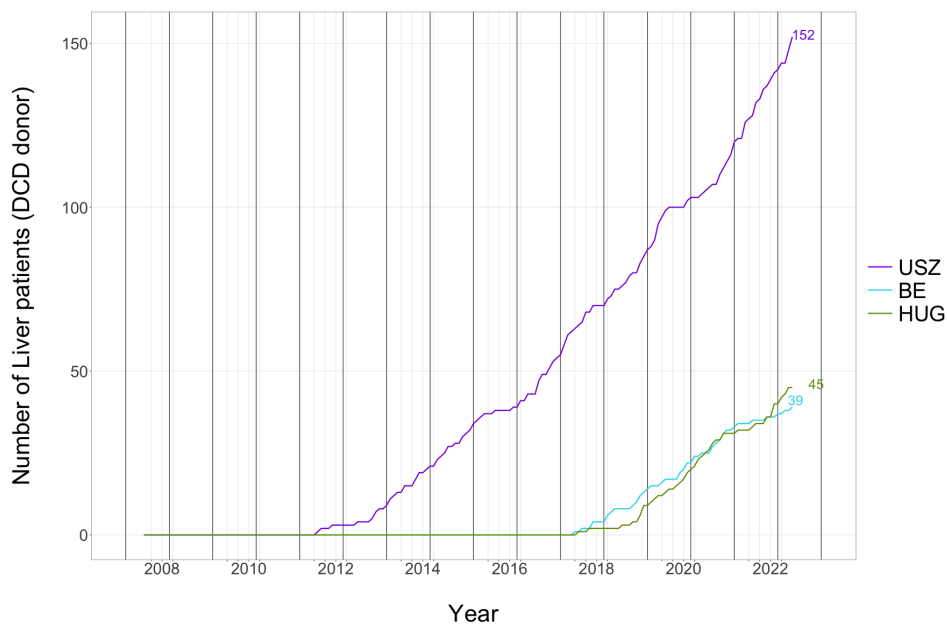


Table 11: Liver patients' characteristics by donor type

	Total	DBD	DCD	Living
Total no. liver patients	1631	1308	236	87
Age (yrs), median	56	55	60	53
- IQR	(46-62)	(44-62)	(54-64)	(39.5-60)
- min; max	0; 77	0; 77	22; 73	0; 70
Male gender, n (%)	1102 (67.6%)	867 (66.3%)	189 (80.1%)	46 (52.9%)
Donor age (yrs), median	55	55	60	38
- IQR	(39-67)	(39-67)	(50.8-70.2)	(31-46)
- min; max	0; 88	1; 88	13; 87	0; 68
Cold ischemia time (yrs), median	6.5	6.4	7.2	2.0
- IQR	(5.3-8)	(5.3-8)	(6.2-8.6)	(1.5-2.5)
Pediatric, n (%)	123 (7.5%)	115 (8.8%)	0 (0%)	8 (9.2%)
Observation time (yrs), median	4.9	5.3	2.7	5.4
- IQR	(2.1-8.9)	(2.5-9.4)	(1.2-4.6)	(2.1-10.2)
No. DGF, n (%)	45 (2.8%)	34 (2.6%)	6 (2.5%)	5 (5.7%)
No. deaths, n (%)	405 (24.8%)	320 (24.5%)	52 (22%)	33 (37.9%)
No. patients with at least one GF, n (%)	207 (12.7%)	137 (10.5%)	46 (19.5%)	24 (27.6%)
Death without graft failure	277 (17%)	230 (17.6%)	29 (12.3%)	18 (20.7%)
- with GF - related death	61 (3.7%)	48 (3.7%)	7 (3%)	6 (6.9%)
- with GF -> death	67 (4.1%)	42 (3.2%)	16 (6.8%)	9 (10.3%)
Death without GF	79 (4.8%)	47 (3.6%)	23 (9.7%)	9 (10.3%)

Figure 13: Cumulative number of patients with Liver transplantations from DCD donation by centre





## 4 Consent status

Figure 14 presents the latest known consent status - current consent status. In Figure 15, current consent status is given proportionally within each centre. Table 12 shows patients' consent status change between enrollment and the current date. 'ReCap' stands for retrospectively captured patients between January 2008 and May 2008.

Figure 14: Patients current consent status

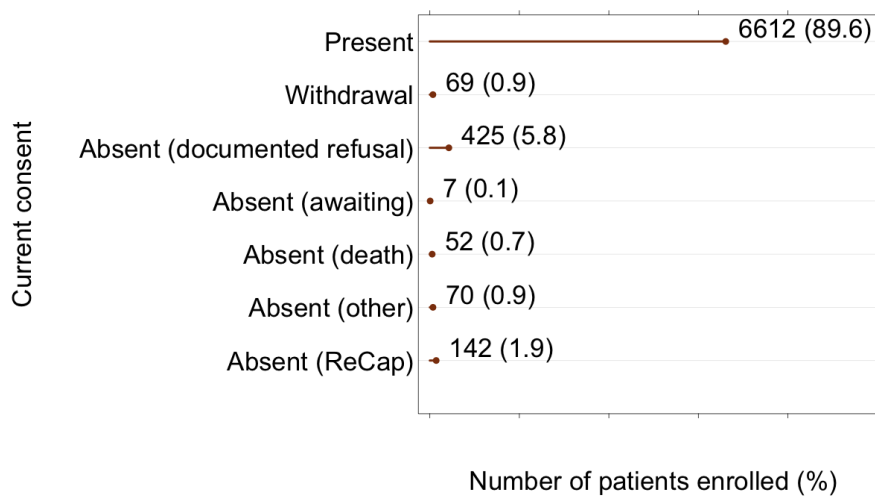


Figure 15: Patients current consent status by centre

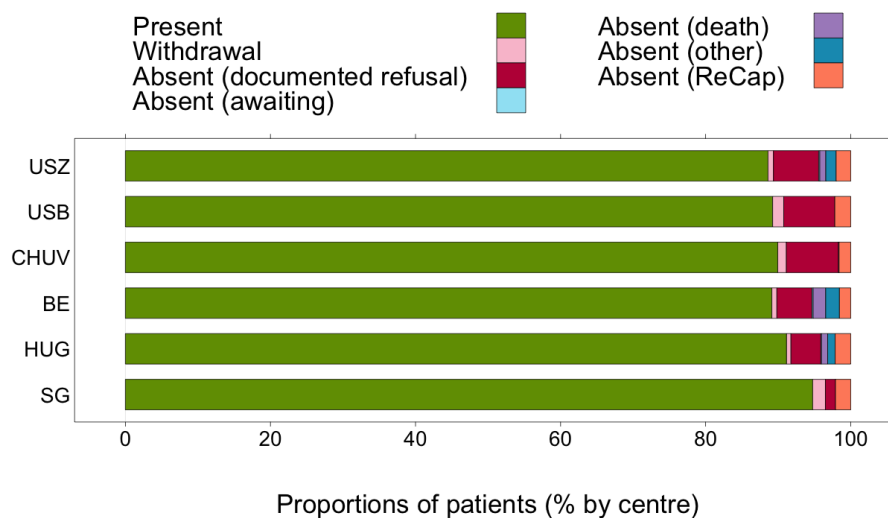


Table 12: Patients' current consent against consent status at enrolment

	Total	C - Present	C - Withdrawal	C - Refused	C - Absent (awaiting)	C - Absent (death)	C - Absent (other)	C - Absent (ReCap)
Total	7377	6612	69	425	7	52	70	142
E - Present	5865	5798	61	2	-	1	3	-
E - Refused	352	25	1	326	-	-	-	-
E - Absent (awaiting)	996	781	7	97	6	43	62	-
E - Absent (death)	7	-	-	-	-	7	-	-
E - Absent (other)	6	1	-	-	-	-	5	-
E - Absent (ReCap)	151	7	-	-	1	1	-	142

Remarks: 'C' stands for 'current consent status' and 'E' denotes the consent status at enrolment. Absent (other) reasons include: Permanent illness/Too sick, Language/Communication barrier, Psychiatric disorder, Reminder process closed, Other reason. 'ReCap' - 'Retrospectively captured patients'.

## 5 Mortality

In the following, survival probability estimates can only be descriptively interpreted since the precision is low due to the small number of patients at risk at the end of FUP. In Figure 16, the 95%-confidence interval (CI) is given. Furthermore, survival probability estimates are not adjusted for potential risk factors (in Figures and Tables).

### 5.1 Overall mortality

Table 13: Follow-up information of patients

	Follow-up
Median follow-up duration (years)	5.6
IQR (years)	2.65 - 9.46
Maximum follow-up (years)*	15.32
Number of deaths	1561
Patients with (at least one) graft failure	904
Patients lost to follow-up**	183

\* Time period from 1 January 2008 to 15 September 2023

\*\* More details in Table 14.

Table 14: Number of patients who dropped out by Tpx type

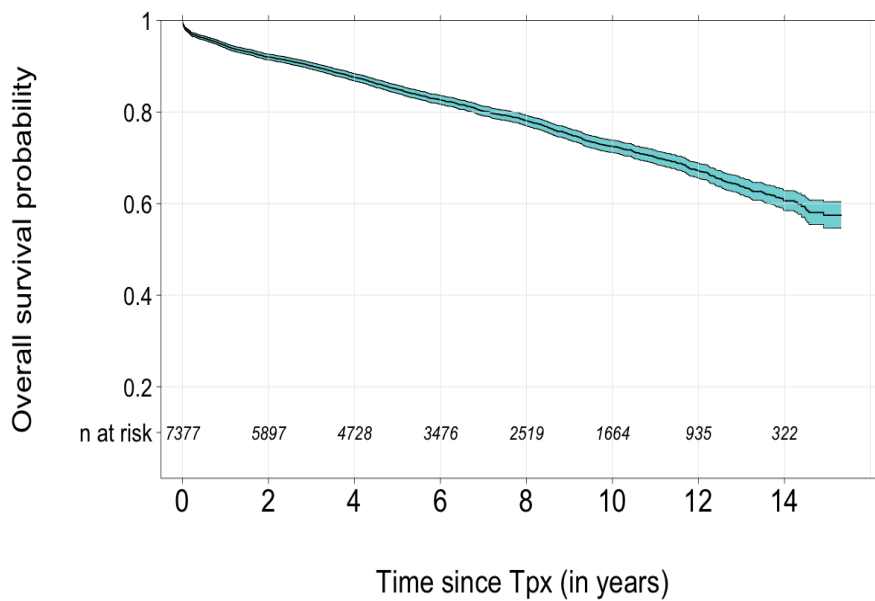
	BE	CHUV	HUG	SG	USB	USZ	Sum
Enrolled, N	1159	1183	1165	286	1050	2534	7377
Dropped out, N (%)	20 (1.7%)	50 (4.2%)	44 (3.8%)	4 (1.4%)	16 (1.5%)	49 (1.9%)	183 (2.5%)
- Heart	3	3	-	-	-	4	10
- Islets	-	-	-	-	-	2	2
- Kidney	13	40	17	4	16	22	112
- Kidney - Heart	-	1	-	-	-	-	1
- Kidney - Liver	-	-	1	-	-	-	1
- Kidney - Lung	-	1	-	-	-	-	1
- Kidney - Pancreas	-	-	1	-	-	3	4
- Liver	4	-	25	-	-	17	46
- Lung	-	5	-	-	-	1	6

Table 15: Overall mortality

Time	Mortality (%)	95% CI	No at risk	Cum. deaths
Baseline	0.0	-	7377	0
1 month	1.9	(1.6, 2.2)	7233	142
6 months	3.8	(3.4, 4.3)	7000	282
1 year	5.5	(5, 6)	6630	401
2 year(s)	8.0	(7.3, 8.6)	5897	568
4 year(s)	12.4	(11.6, 13.2)	4728	830
6 year(s)	17.3	(16.4, 18.3)	3476	1066
8 year(s)	21.9	(20.8, 23)	2519	1235
10 year(s)	27.5	(26.1, 28.8)	1664	1389
12 year(s)	32.8	(31.2, 34.4)	935	1486
14 year(s)	39.4	(37.2, 41.5)	322	1551
Overall	42.5	(39.6, 45.4)	-	1561

Remarks: 'Cum.' stands for 'Cumulative'. The 95%-CI is given for 'Mortality'. The time point 'Overall' refers to the maximal follow-up time in the STCS (from January 2008 to 15 September 2023).

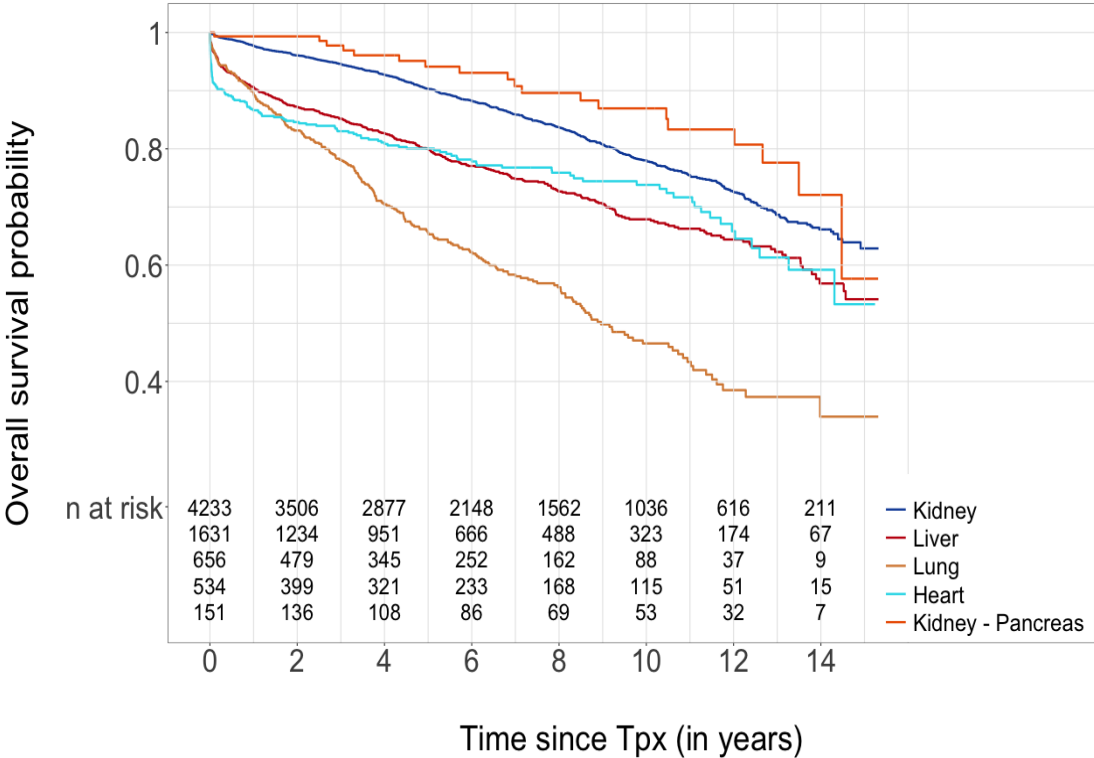
Figure 16: Overall survival



## 5.2 Mortality by transplantation

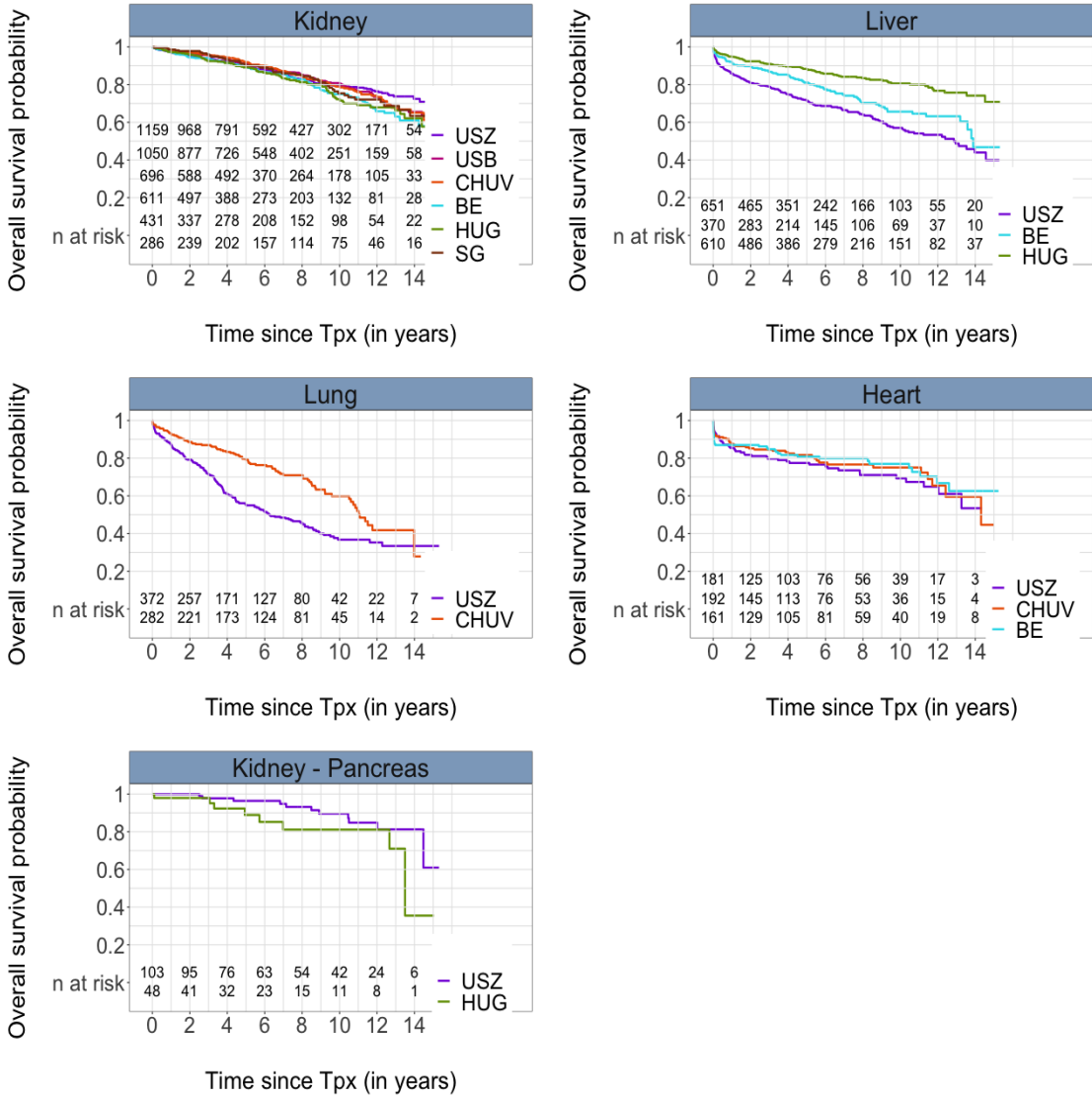
In the following section only frequent transplantation types are presented. In Appendix C a short summary of rare transplantation types are presented in two tables.

Figure 17: Overall survival for frequent Tpx types



### 5.3 Mortality by Tpx and centre

Figure 18: Overall survival for frequent Tpx



## 5.4 Mortality in first single Kidney transplantation

Overall survival for patients with Kidney transplantation as first STCS transplantation is presented separated by the donor type. In Figure 20, category 'Living' is separated in 'Living, ABO c' and 'Living, not ABO c'. The letter 'c' stands for 'compatible'.

Figure 19: Overall survival for patients with first STCS Kidney Tpx by donor type

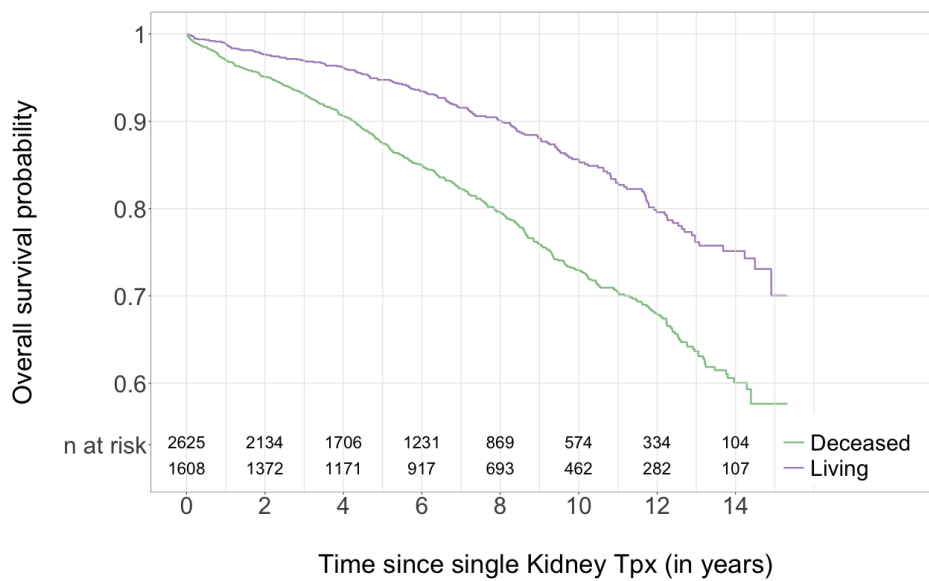
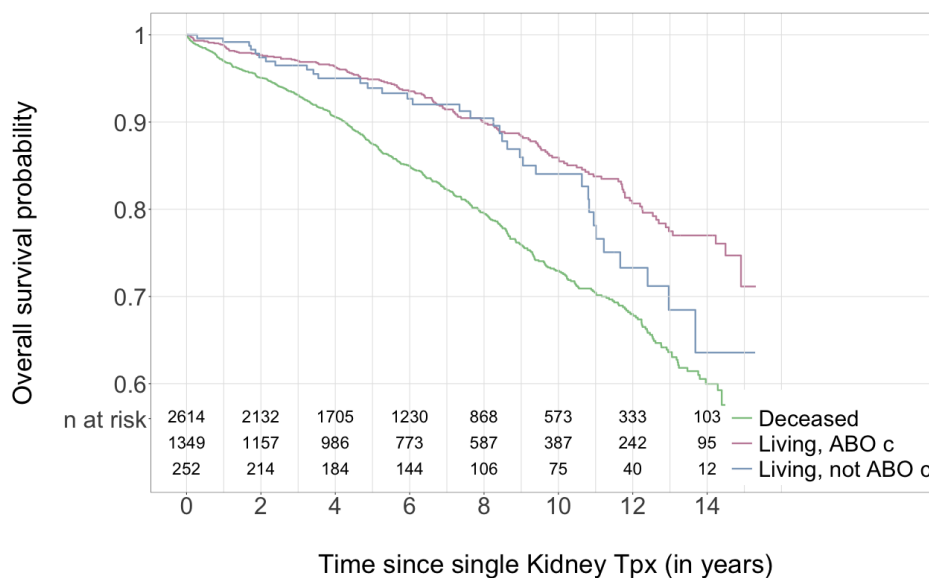
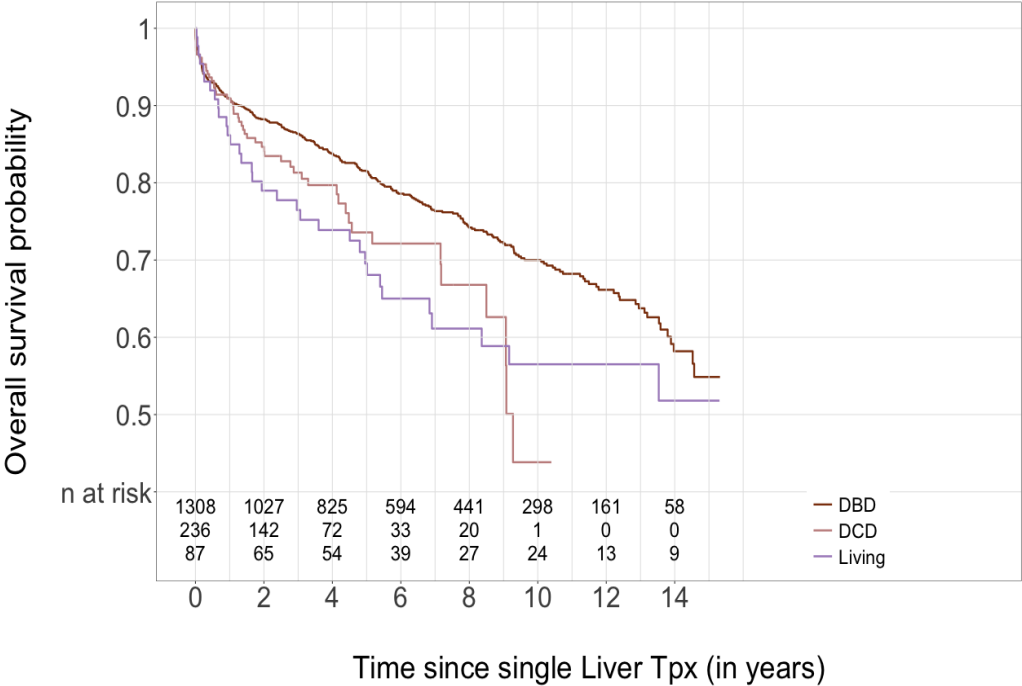


Figure 20: Overall survival for patients with first STCS Kidney Tpx by donor type and ABO compatibility of living donor organ recipients



### 5.5 Mortality in first single Liver transplantation by donortype

Figure 21: Overall survival in patients with first STCS Liver Tpx by donor type





## 6 Graft failure and primary non-function

Failure and primary non-function in an allograft are considered as one, no distinction is therefore made in this section.

### 6.1 Graft failure

Graft failures (incl. grafts with primary non-function) are displayed on the layer of the transplanted organ (Tables 17 and 18). Table 16 gives a summary of numbers of graft failures on patient- and organ-level. In addition to, numbers of organs with primary non-function are given separately in Table 19.

Table 16: Summary for graft failures

	N	(%)
Graft failure - total	1009	100.0
- in single Tpx	931	92.3
- in double Tpx	72	7.1
- in triple Tpx	6	0.6
Patients with at least one graft failure	913	
Patients with graft failure or death	2005	100.0
- graft failure and alive at end of follow-up	444	22.1
- graft failure followed by late death	253	12.6
- graft failure related death (at same day)	207	10.3
- death without any graft failure	1101	54.9

Table 17: Graft failures in double Tpx

	Total	Heart	Islets	Kidney	Liver	Lung	Pancreas	Small bowel
Total	72	3	10	24	5	2	26	2
Heart - Lung	2	1	-	-	-	1	-	-
Kidney - Heart	3	2	-	1	-	-	-	-
Kidney - Islets	16	-	10	6	-	-	-	-
Kidney - Liver	9	-	-	4	5	-	-	-
Kidney - Lung	1	-	-	1	-	-	-	-
Kidney - Pancreas	36	-	-	12	-	-	24	-
Liver - Lung	1	-	-	-	-	1	-	-
Pancreas - Small bowel	4	-	-	-	-	-	2	2

Remark: Only double tpx with at least one graft failure are listed.

Table 18: Graft failure and related patients' death

	Total	All GF*	(%)	GF, late death	(%)	GF related death	(%)
Total	8102	1009	12.5	289	28.6	239	23.7
Kidney	4649	486	10.5	138	28.4	11	2.3
Liver	1865	257	13.8	86	33.5	80	31.1
Lung	685	138	20.1	22	15.9	107	77.5
Heart	557	60	10.8	14	23.3	41	68.3
Islets	152	29	19.1	11	37.9	-	-
Pancreas	187	34	18.2	13	38.2	-	-
Small bowel	7	5	71.4	5	100	-	-

\* GF: graft failure (incl. primary non-function)

Table 19: Number of organs with primary non-function

	Total	USZ	USB	CHUV	BE	HUG	SG
Total	116	50	7	7	28	22	2
Kidney	40	16	7	4	1	10	2
Liver	58	26	-	-	21	11	-
Lung	2	2	-	-	-	-	-
Heart	12	3	-	3	6	-	-
Pancreas	2	1	-	-	-	1	-
Islets	2	2	-	-	-	-	-
Small bowel	-	-	-	-	-	-	-

## 6.2 Graft failure free survival

In the following, estimates of graft failure free survival are not adjusted for potential risk factors. Only the first STCS transplantation of each patient is considered. Figure 24 shows graft failure free survival only for patients with first STCS Kidney transplantation.

Figure 22: Graft failure free survival by major Tpx

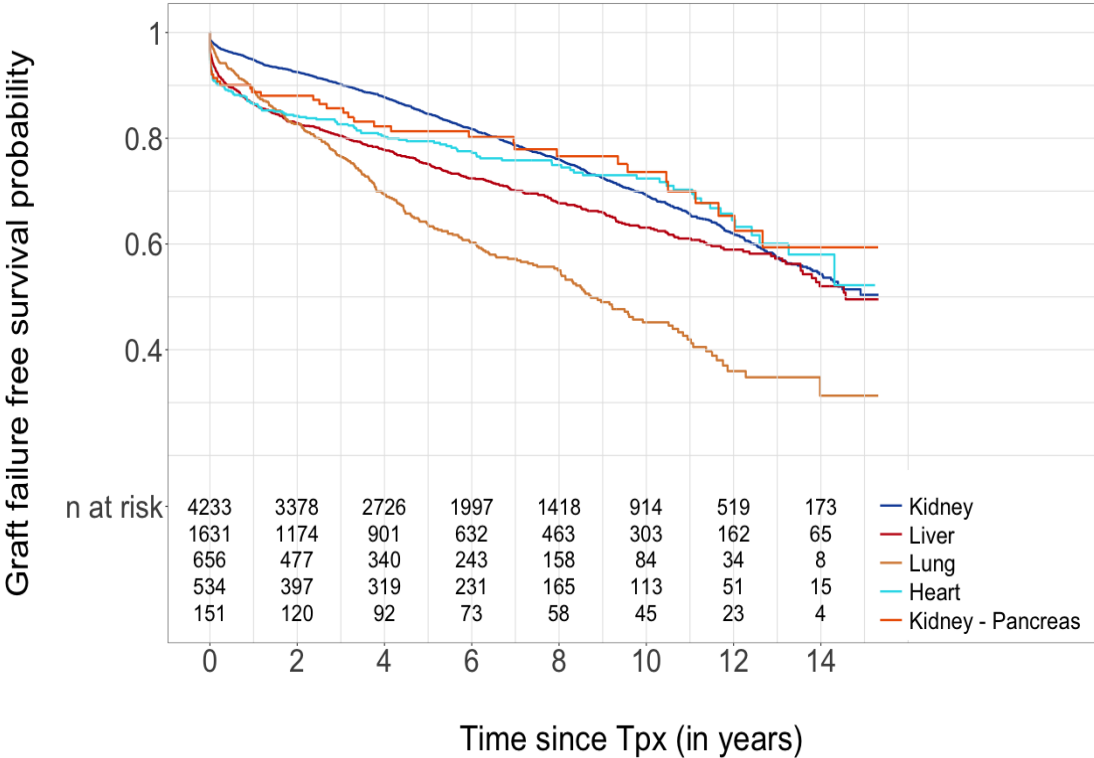


Figure 23: Graft failure free survival by major Tpx and centre

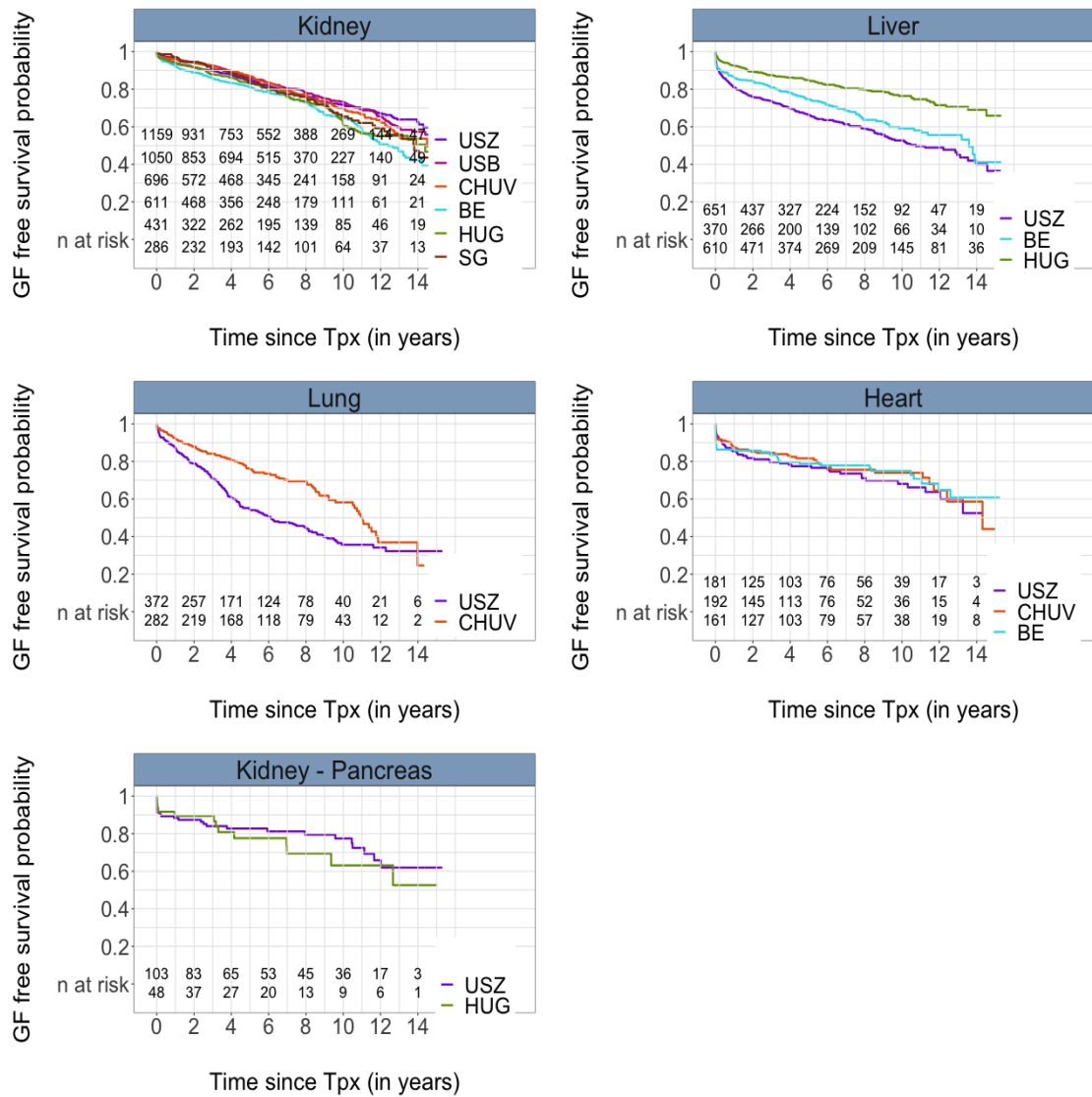


Figure 24: Graft failure free survival in patients with first STCS single Kidney Tpx by donor type and ABO compatibility of living donor organ recipients

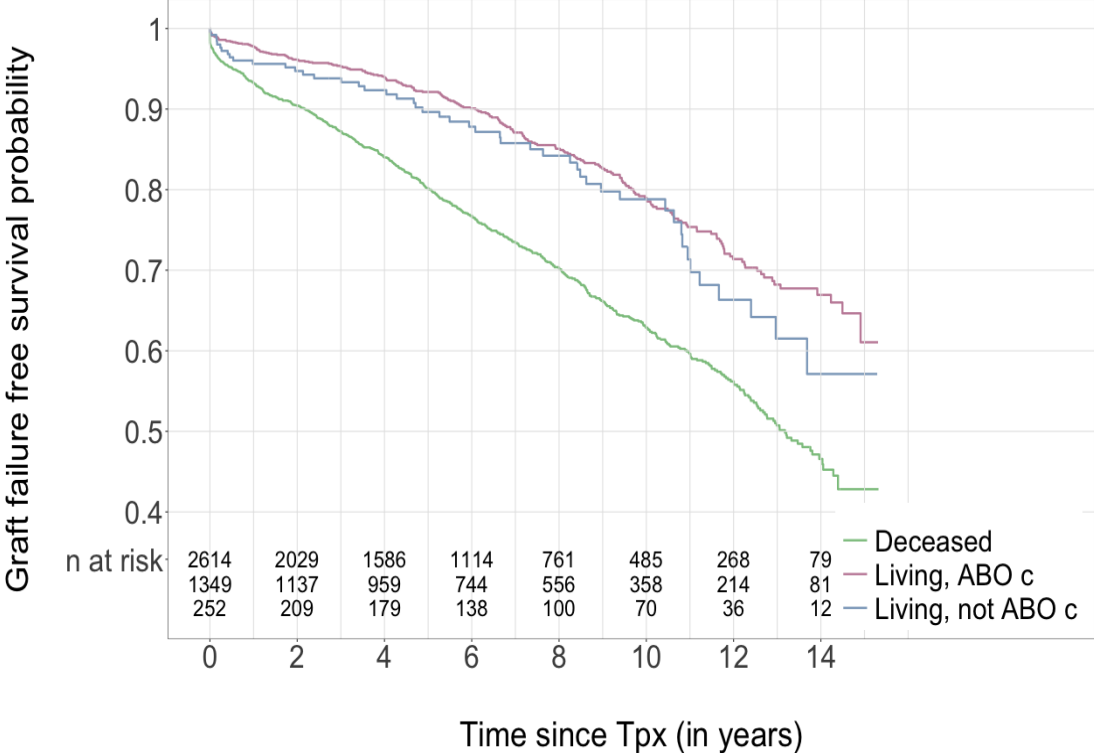
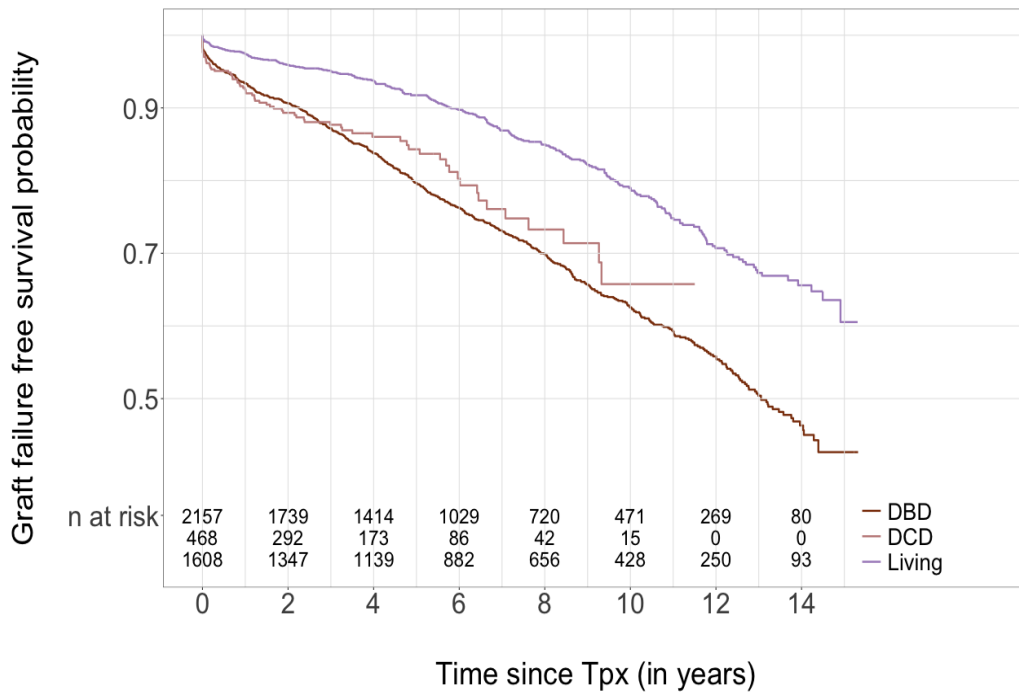


Figure 25: Graft failure free survival in patients with first STCS Kidney Tpx by donor type



### 6.3 Cumulative incidence of graft failure

The cumulative incidence (CumInc) of a graft failure is the probability for a graft failure within the reported time period. CumInc functions for graft failure are not adjusted for potential risk factors (illustrated in Figures and Tables). In Figure 26, Table 33 and Table 34 double kidneys are counted as one kidney.

Figure 26: Cumulative incidence of graft failure

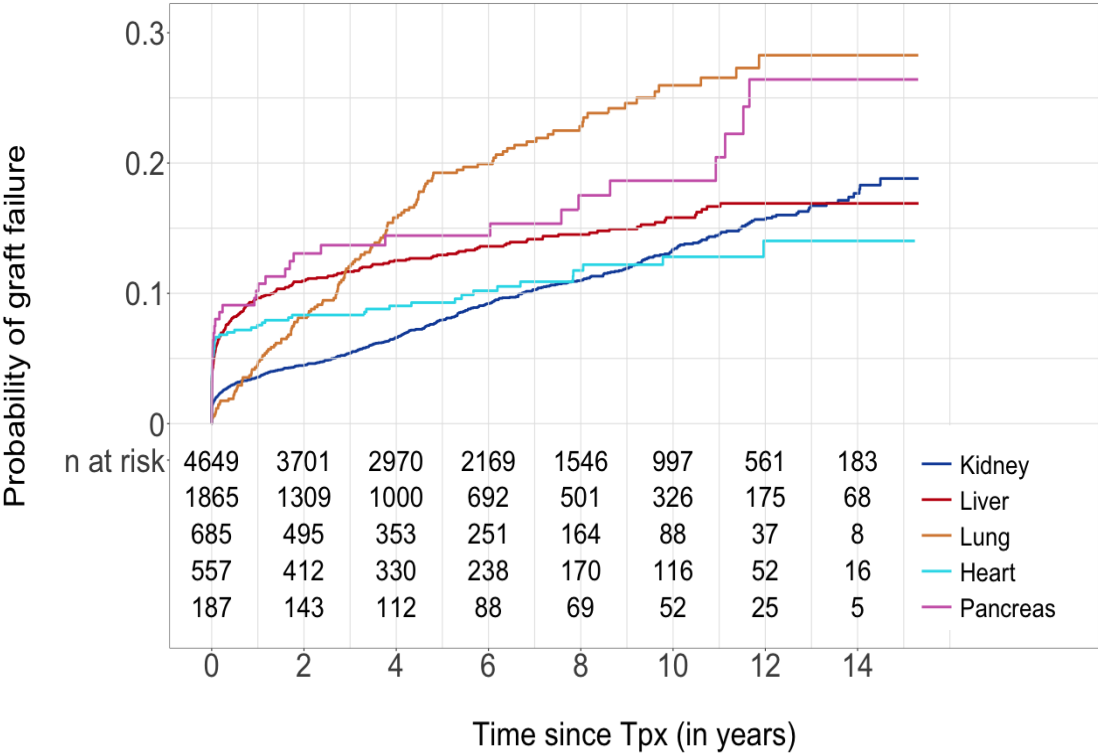


Figure 27: Cumulative incidence of graft failure for single Kidney Tpx by donor type

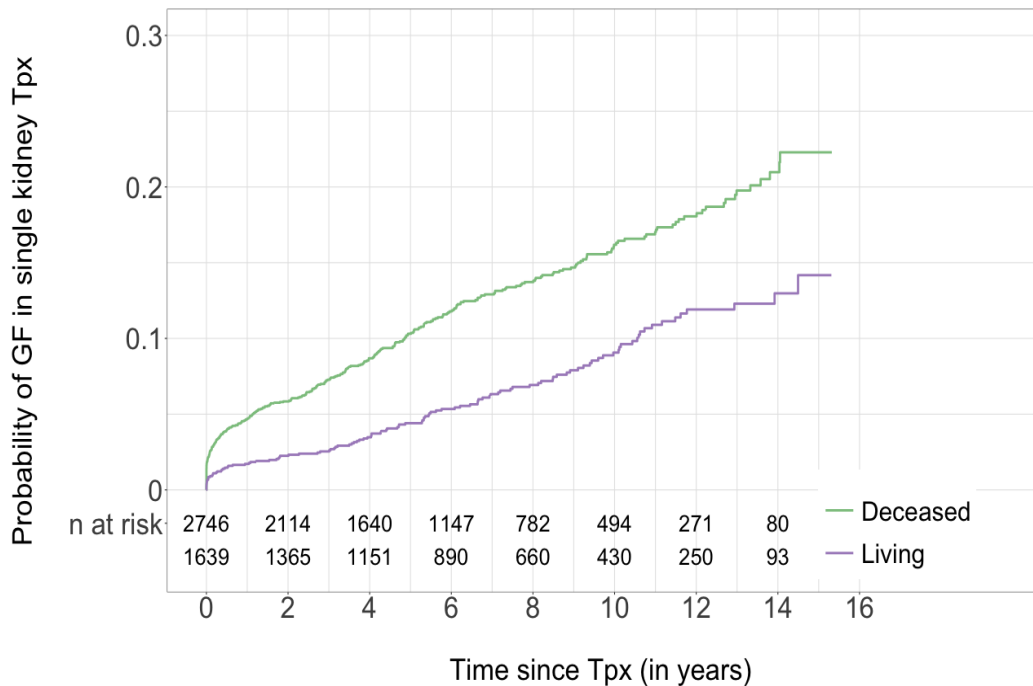


Figure 28: Cumulative incidence of graft failure for kidneys in single Tpx stratified by ABO compatibility

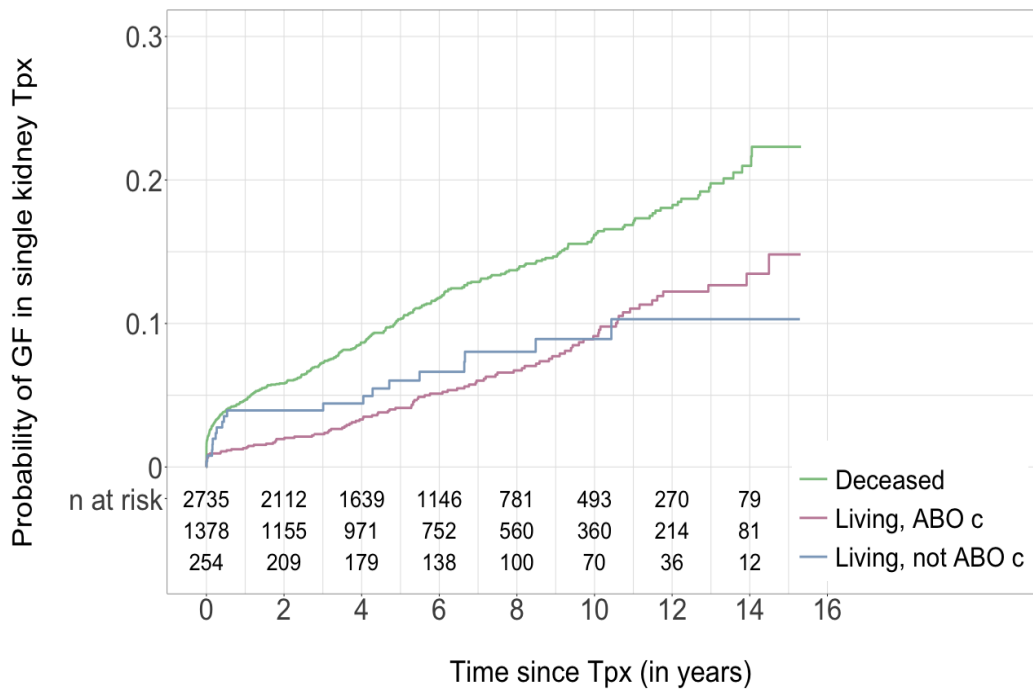
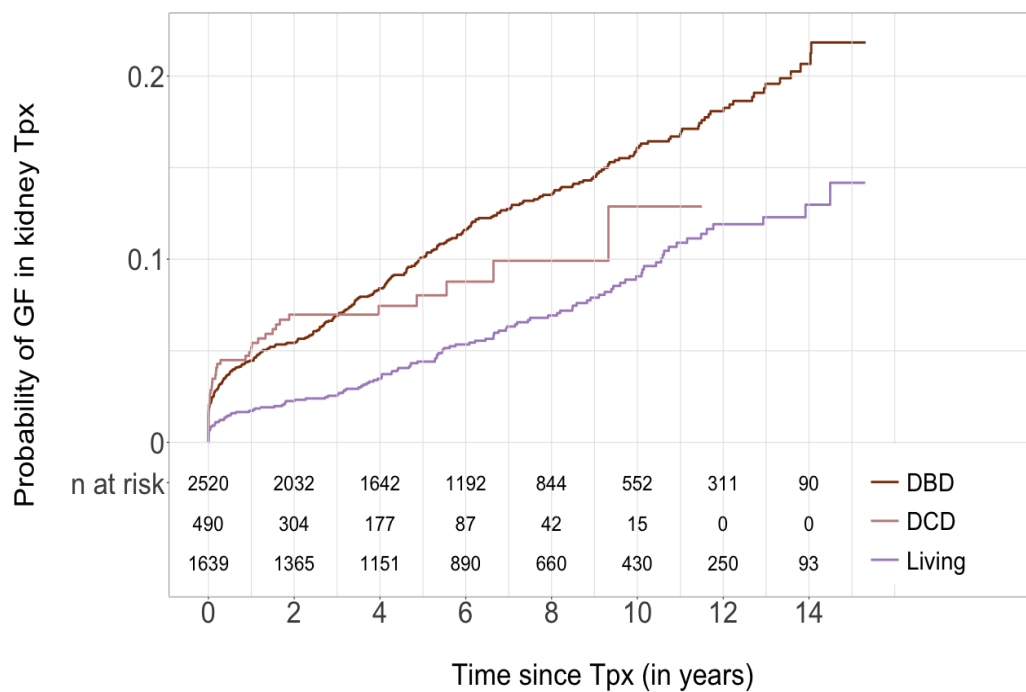




Figure 29: Cumulative incidence of graft failure for Kidney Tpx by donor type



## 7 Cancer

Results regarding the incidence of cancer and skin cancer have to be considered with caution as data may be incomplete at the moment.

### 7.1 Cancer other than skin

Table 20: Overview of patients with incident cancer

	N	%
Total number of patients	7377	
Patients with incident cancer (other than skin)	844	11.4
- single record (% of line 2)	608	72
- multiple records (% of line 2)	236	28

Table 21: Patients with incident cancer

	Patients	Episodes	Median time (in yrs)*
Total	844	1280	3.88
Heart	36	54	5.44
Islets	5	5	3.72
Kidney	438	616	4.41
Kidney - Islets	2	2	7.18
Kidney - Liver	8	12	5.54
Kidney - Lung	1	1	1.17
Kidney - Pancreas	10	11	4.37
Liver	265	469	3.10
Lung	75	103	3.23
Pancreas	2	3	7.79
Pancreas - Small bowel	2	4	0.31

\* Median time (in years) from first STCS transplantation to diagnosis of cancer  
 Remark: Patients are listed regarding the first STCS transplantation.

Table 22: Overview of incident cancer occurrence

	N	%
Total	1280	100.0%
Breast cancer	42	3.3%
Cancer of unknown primary origin	8	0.6%
Cervix - Uterus - Adnex	13	1.0%
Cholangiocarcinoma	2	0.2%
Colorectal cancer	37	2.9%
CTU	12	0.9%
HCC	3	0.2%
Head and neck cancer	2	0.2%
Hemangioendothelioma	0	0.0%
Kaposi	13	1.0%
Kidney cancer	59	4.6%
Leukemia	18	1.4%
Liver cancer	133	10.4%
Lung cancer	132	10.3%
Myeloid neoplasm	16	1.2%
Myeloma	11	0.9%
Neuroendocrine TU	17	1.3%
Other neoplasia	398	31.1%
Pancreas cancer	2	0.2%
Prostate cancer	101	7.9%
PTLD	146	11.4%
Sarkoma	14	1.1%
Testicular cancer	7	0.5%
Thyroid cancer	20	1.6%
Urothel/Bladder	74	5.8%

## 7.2 Skin cancer

Table 23: Overview of patients with incident skin cancer

	N	%
Total number of patients	7377	
Patients with incident skin cancer	1166	15.8
- single record (% of line 2)	573	49.1
- multiple records (% of line 2)	593	50.9

Table 24: Patients with incident skin cancer

	Patients	Episodes	Median time (in yrs)*
Total	1166	3453	5.00
Heart	78	211	6.06
Islets	10	26	5.86
Kidney	769	2389	4.90
Kidney - Heart	6	14	3.92
Kidney - Islets	7	17	4.45
Kidney - Islets - Liver	1	1	6.37
Kidney - Liver	7	36	6.60
Kidney - Lung	1	1	1.39
Kidney - Pancreas	17	51	6.74
Liver	161	329	3.83
Liver - Lung	1	1	7.18
Lung	103	352	5.08
Pancreas	5	25	4.35

\* Median time (in years) from first STCS transplantation to diagnosis of skin cancer  
 Remark: Patients are listed regarding the first STCS transplantation.

Table 25: Overview of incident skin cancer occurrence

	N	%
Total	3453	100.0%
Basalioma	950	27.5%
Melanoma	107	3.1%
Other skin cancer	771	22.3%
Spinalioma	1625	47.1%

## 8 Specific Populations

### 8.1 Pediatric patients

Table 26: Number of pediatric patients (under 18) by first Tpx type

	Total	USZ	%	USB	%	CHUV	%	BE	%	HUG	%	SG	%
Total	354	116	32.8	8	2.3	41	11.6	52	14.7	133	37.6	4	1.1
Kidney	159	75	47.2	8	5	23	14.5	40	25.2	9	5.7	4	2.5
Liver	123	4	3.3	-	-	-	-	1	0.8	118	95.9	-	-
Lung	18	15	83.3	-	-	2	11.1	-	-	1	5.6	-	-
Heart	49	22	44.9	-	-	16	32.7	11	22.4	-	-	-	-
Kidney - Liver	4	-	-	-	-	-	-	-	-	4	100	-	-
Islets - Liver - Lung	1	-	-	-	-	-	-	-	-	1	100	-	-

Table 27: Number of Tpx in pediatric patients by organ and centre

	Total	USZ	%	USB	%	CHUV	%	BE	%	HUG	%	SG	%
Total	370	121	32.7	8	2.2	44	11.9	53	14.3	140	37.8	4	1.1
Kidney	163	77	47.2	8	4.9	25	15.3	40	24.5	9	5.5	4	2.5
Liver	128	5	3.9	-	-	-	-	1	0.8	122	95.3	-	-
Lung	21	17	81	-	-	3	14.3	-	-	1	4.8	-	-
Heart	50	22	44	-	-	16	32	12	24	-	-	-	-
Kidney - Liver	5	-	-	-	-	-	-	-	-	5	100	-	-
Islets - Liver - Lung	1	-	-	-	-	-	-	-	-	1	100	-	-

Remark: Patients that are under 18 at baseline might be over 18 at the time of re or second transplantation.

## A Overall mortality by transplantation type

Table 28: Overall mortality by Tpx type

Tpx	Time	Mortality (%)	95% CI	No at risk	Cum. deaths	
Kidney	Baseline	0.0	-	4233	0	
	-	1 month	0.3 (0.2, 0.5)	4217	14	
	-	6 months	1.2 (0.9, 1.5)	4132	50	
	-	1 year	2.3 (1.8, 2.7)	3926	95	
	-	2 year(s)	4.0 (3.3, 4.5)	3506	159	
	-	4 year(s)	7.3 (6.4, 8.1)	2877	271	
	-	6 year(s)	11.7 (10.6, 12.8)	2148	395	
	-	8 year(s)	16.3 (14.9, 17.7)	1562	493	
	-	10 year(s)	22.0 (20.2, 23.7)	1036	584	
	-	12 year(s)	27.4 (25.3, 29.4)	616	642	
	-	14 year(s)	33.9 (31.1, 36.6)	211	683	
	-	Overall	37.1 (33.2, 40.8)	-	689	
	Liver	Baseline	0.0	-	1631	0
		-	1 month	3.4 (2.5, 4.2)	1576	55
-		6 months	7.1 (5.8, 8.3)	1494	115	
-		1 year	9.4 (8, 10.8)	1406	152	
-		2 year(s)	12.7 (11.1, 14.4)	1234	202	
-		4 year(s)	17.4 (15.4, 19.3)	951	261	
-		6 year(s)	22.9 (20.6, 25.2)	666	317	
-		8 year(s)	27.3 (24.7, 29.9)	488	350	
-		10 year(s)	32.1 (29, 35.1)	323	377	
-		12 year(s)	35.6 (32.1, 38.9)	174	390	
-		14 year(s)	43.2 (37.9, 48)	67	403	
-		Overall	45.9 (39.5, 51.6)	-	405	
Lung		Baseline	0.0	-	656	0
		-	1 month	3.0 (1.7, 4.4)	636	20
	-	6 months	6.9 (4.9, 8.8)	599	45	
	-	1 year	10.5 (8.1, 12.9)	554	68	
	-	2 year(s)	16.9 (13.9, 19.7)	479	106	
	-	4 year(s)	29.6 (25.7, 33.2)	345	173	
	-	6 year(s)	37.8 (33.5, 41.8)	252	210	
	-	8 year(s)	43.8 (39.2, 48.1)	162	232	
	-	10 year(s)	53.5 (48, 58.3)	88	256	
	-	12 year(s)	61.5 (54.9, 67.2)	37	267	
	-	14 year(s)	66.1 (56.3, 73.6)	9	269	
	-	Overall	66.1 (56.3, 73.6)	-	269	
	Heart	Baseline	0.0	-	534	0
		-	1 month	8.6 (6.2, 11)	488	46
-		6 months	11.1 (8.4, 13.7)	467	59	
-		1 year	13.4 (10.4, 16.2)	444	71	
-		2 year(s)	15.4 (12.3, 18.4)	399	81	
-		4 year(s)	19.2 (15.6, 22.6)	321	97	
-		6 year(s)	22.2 (18.3, 25.9)	233	107	
-		8 year(s)	24.1 (19.9, 28.1)	168	112	
-		10 year(s)	26.2 (21.6, 30.5)	115	116	
-		12 year(s)	34.2 (27.4, 40.3)	51	125	
-		14 year(s)	40.8 (31.6, 48.8)	15	129	
-		Overall	46.7 (31.5, 58.6)	-	130	
Kidney - Pancreas		Baseline	0.0	-	151	0
		-	1 month	0.0	151	0

Tpx	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
-	6 months	0.7	(0, 1.9)	150	1
-	1 year	0.7	(0, 1.9)	147	1
-	2 year(s)	0.7	(0, 1.9)	136	1
-	4 year(s)	3.9	(0.5, 7.2)	108	5
-	6 year(s)	6.9	(2.1, 11.5)	86	8
-	8 year(s)	10.4	(4.3, 16.1)	69	11
-	10 year(s)	13.1	(6, 19.6)	53	13
-	12 year(s)	16.7	(8.1, 24.4)	32	15
-	14 year(s)	27.9	(11.9, 41.1)	7	18
-	Overall	42.3	(6.6, 64.4)	-	19

## B Overall mortality in patients with major Tpx scenarios by centre

Table 29: Overall mortality by frequent Tpx type and centre

Tpx - centre	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
Kidney - USZ	Baseline	0.0	-	1159	0
	- 1 month	0.3	(0, 0.6)	1155	3
	- 6 months	1.6	(0.9, 2.4)	1124	19
	- 1 year	2.9	(1.9, 3.9)	1064	33
-	2 year(s)	4.6	(3.4, 5.8)	968	51
-	4 year(s)	8.0	(6.3, 9.6)	791	83
-	6 year(s)	12.1	(10, 14.2)	592	115
-	8 year(s)	17.0	(14.3, 19.6)	427	144
-	10 year(s)	20.7	(17.6, 23.7)	302	161
-	12 year(s)	23.6	(19.9, 27)	171	169
-	14 year(s)	27.6	(22.6, 32.2)	54	175
-	Overall	34.2	(22.4, 44.2)	-	177
Kidney - USB	Baseline	0.0	-	1050	0
	- 1 month	0.4	(0, 0.8)	1046	4
	- 6 months	1.2	(0.6, 1.9)	1025	13
	- 1 year	1.9	(1.1, 2.8)	975	20
-	2 year(s)	3.4	(2.3, 4.5)	877	34
-	4 year(s)	6.7	(5, 8.3)	726	61
-	6 year(s)	11.0	(8.8, 13.2)	548	92
-	8 year(s)	14.9	(12.3, 17.6)	402	113
-	10 year(s)	19.2	(15.9, 22.3)	251	130
-	12 year(s)	26.4	(22, 30.5)	159	149
-	14 year(s)	34.5	(28.6, 39.8)	58	163
-	Overall	36.1	(29.5, 42.1)	-	164
Kidney - CHUV	Baseline	0.0	-	696	0
	- 1 month	0.3	(0, 0.7)	693	2
	- 6 months	0.6	(0, 1.1)	685	4
	- 1 year	1.5	(0.6, 2.3)	664	10
-	2 year(s)	3.0	(1.7, 4.3)	588	20
-	4 year(s)	5.7	(3.8, 7.5)	492	35
-	6 year(s)	9.9	(7.4, 12.4)	370	55
-	8 year(s)	15.5	(12.1, 18.8)	264	75
-	10 year(s)	21.0	(16.7, 25.1)	178	90
-	12 year(s)	26.6	(21.3, 31.5)	105	100
-	14 year(s)	34.9	(27.4, 41.7)	33	109
-	Overall	38.8	(28.1, 47.9)	-	110
Kidney - BE	Baseline	0.0	-	611	0
	- 1 month	0.5	(0, 1)	608	3
	- 6 months	1.5	(0.5, 2.4)	591	9
	- 1 year	2.8	(1.5, 4.2)	562	17
-	2 year(s)	5.6	(3.7, 7.4)	497	32
-	4 year(s)	8.3	(6, 10.7)	388	45
-	6 year(s)	13.2	(10.1, 16.3)	273	63
-	8 year(s)	17.3	(13.4, 21)	203	74
-	10 year(s)	25.0	(19.9, 29.8)	132	91
-	12 year(s)	34.1	(27.5, 40.2)	81	104
-	14 year(s)	39.1	(31.4, 45.9)	28	109



Tpx - centre	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
-	Overall	42.0	(32.4, 50.2)	-	110
Kidney - HUG	Baseline	0.0	-	431	0
-	1 month	0.2	(0, 0.7)	430	1
-	6 months	0.9	(0, 1.8)	424	4
-	1 year	2.6	(1.1, 4.1)	392	11
-	2 year(s)	3.9	(2, 5.8)	337	16
-	4 year(s)	8.5	(5.6, 11.3)	278	31
-	6 year(s)	13.6	(9.8, 17.3)	208	45
-	8 year(s)	18.7	(14, 23.2)	152	56
-	10 year(s)	27.8	(21.4, 33.6)	98	70
-	12 year(s)	32.1	(24.9, 38.6)	54	75
-	14 year(s)	37.9	(28.3, 46.2)	22	78
-	Overall	42.3	(29.2, 53)	-	79
Kidney - SG	Baseline	0.0	-	286	0
-	1 month	0.3	(0, 1)	285	1
-	6 months	0.3	(0, 1)	283	1
-	1 year	1.4	(0, 2.8)	269	4
-	2 year(s)	2.2	(0.4, 3.9)	239	6
-	4 year(s)	6.6	(3.4, 9.6)	202	16
-	6 year(s)	11.0	(6.8, 15.1)	157	25
-	8 year(s)	14.8	(9.7, 19.6)	114	31
-	10 year(s)	24.6	(17.3, 31.3)	75	42
-	12 year(s)	27.9	(19.8, 35.2)	46	45
-	14 year(s)	36.7	(24.9, 46.6)	16	49
-	Overall	36.7	(24.9, 46.6)	-	49
Liver - USZ	Baseline	0.0	-	651	0
-	1 month	5.1	(3.4, 6.7)	618	33
-	6 months	10.8	(8.3, 13.1)	572	70
-	1 year	14.1	(11.3, 16.7)	537	91
-	2 year(s)	18.9	(15.8, 21.9)	465	120
-	4 year(s)	25.1	(21.5, 28.5)	351	152
-	6 year(s)	31.3	(27.3, 35.2)	242	178
-	8 year(s)	36.1	(31.5, 40.3)	166	192
-	10 year(s)	43.0	(37.6, 47.9)	103	207
-	12 year(s)	46.7	(40.8, 52)	55	213
-	14 year(s)	56.0	(47.3, 63.3)	20	220
-	Overall	60.0	(48.1, 69.2)	-	221
Liver - BE	Baseline	0.0	-	370	0
-	1 month	3.2	(1.4, 5)	358	12
-	6 months	5.7	(3.3, 8)	344	21
-	1 year	8.2	(5.3, 11)	321	30
-	2 year(s)	10.2	(7.1, 13.3)	283	37
-	4 year(s)	15.1	(11.1, 18.9)	214	51
-	6 year(s)	22.5	(17.4, 27.3)	145	67
-	8 year(s)	29.7	(23.5, 35.4)	106	79
-	10 year(s)	34.4	(27.4, 40.7)	69	85
-	12 year(s)	36.8	(29.2, 43.6)	37	87
-	14 year(s)	53.2	(35.3, 66.2)	10	91
-	Overall	53.2	(35.3, 66.2)	-	91
Liver - HUG	Baseline	0.0	-	610	0
-	1 month	1.6	(0.6, 2.6)	600	10
-	6 months	3.9	(2.4, 5.5)	578	24
-	1 year	5.1	(3.4, 6.9)	548	31
-	2 year(s)	7.7	(5.5, 9.8)	486	45

Tpx - centre	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
-	4 year(s)	10.4	(7.8, 12.9)	386	58
-	6 year(s)	14.2	(11, 17.3)	279	72
-	8 year(s)	16.6	(13, 20.1)	216	79
-	10 year(s)	19.4	(15.2, 23.3)	151	85
-	12 year(s)	23.3	(18, 28.2)	82	90
-	14 year(s)	25.9	(19.5, 31.7)	37	92
-	Overall	29.2	(20, 37.4)	-	93
Lung - USZ	Baseline	0.0	-	372	0
-	1 month	3.5	(1.6, 5.3)	359	13
-	6 months	8.6	(5.7, 11.4)	333	32
-	1 year	12.8	(9.3, 16.2)	304	47
-	2 year(s)	20.8	(16.5, 24.9)	257	74
-	4 year(s)	39.1	(33.5, 44.3)	171	129
-	6 year(s)	48.2	(42.2, 53.6)	127	153
-	8 year(s)	54.6	(48.3, 60.1)	80	167
-	10 year(s)	63.3	(56.2, 69.2)	42	180
-	12 year(s)	64.7	(57.2, 70.9)	22	181
-	14 year(s)	66.6	(58.4, 73.2)	7	182
-	Overall	66.6	(58.4, 73.2)	-	182
Lung - CHUV	Baseline	0.0	-	282	0
-	1 month	2.1	(0.4, 3.8)	276	6
-	6 months	4.3	(1.9, 6.6)	265	12
-	1 year	7.2	(4.1, 10.2)	249	20
-	2 year(s)	11.4	(7.6, 15.2)	221	31
-	4 year(s)	16.7	(12, 21.2)	173	43
-	6 year(s)	23.7	(17.9, 29)	124	56
-	8 year(s)	29.1	(22.5, 35.1)	81	64
-	10 year(s)	40.2	(31.5, 47.7)	45	75
-	12 year(s)	58.2	(45.4, 68.1)	14	85
-	14 year(s)	72.2	(35.2, 88)	2	86
-	Overall	72.2	(35.2, 88)	-	86
Lung - HUG	Baseline	0.0	-	2	0
-	1 month	50.0	(0, 87.5)	1	1
-	6 months	50.0	(0, 87.5)	1	1
-	1 year	50.0	(0, 87.5)	1	1
-	2 year(s)	50.0	(0, 87.5)	1	1
-	4 year(s)	50.0	(0, 87.5)	1	1
-	6 year(s)	50.0	(0, 87.5)	1	1
-	8 year(s)	50.0	(0, 87.5)	1	1
-	10 year(s)	50.0	(0, 87.5)	1	1
-	12 year(s)	50.0	(0, 87.5)	1	1
-	14 year(s)	50.0	(0, 87.5)	-	1
-	Overall	50.0	(0, 87.5)	-	1
Heart - USZ	Baseline	0.0	-	181	0
-	1 month	6.1	(2.5, 9.5)	170	11
-	6 months	11.7	(6.8, 16.2)	155	21
-	1 year	14.5	(9.2, 19.6)	144	26
-	2 year(s)	18.2	(12.3, 23.8)	125	32
-	4 year(s)	21.8	(15.2, 27.8)	103	37
-	6 year(s)	24.4	(17.4, 30.8)	76	40
-	8 year(s)	28.9	(20.8, 36.2)	56	44
-	10 year(s)	30.7	(22, 38.4)	39	45
-	12 year(s)	35.1	(24.6, 44.2)	17	47
-	14 year(s)	46.6	(26.1, 61.4)	3	49

Tpx - centre	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
-	Overall	46.6	(26.1, 61.4)	-	49
Heart - CHUV	Baseline	0.0	-	192	0
-	1 month	7.8	(3.9, 11.5)	177	15
-	6 months	8.8	(4.7, 12.8)	174	17
-	1 year	12.6	(7.7, 17.2)	163	24
-	2 year(s)	14.8	(9.6, 19.8)	145	28
-	4 year(s)	17.6	(11.8, 22.9)	113	32
-	6 year(s)	22.3	(15.4, 28.7)	76	37
-	8 year(s)	23.4	(16.2, 29.9)	53	38
-	10 year(s)	25.0	(17.2, 32)	36	39
-	12 year(s)	34.5	(21.3, 45.6)	15	42
-	14 year(s)	40.5	(22.6, 54.2)	4	43
-	Overall	55.4	(16.7, 76.1)	-	44
Heart - BE	Baseline	0.0	-	161	0
-	1 month	12.4	(7.2, 17.4)	141	20
-	6 months	13.0	(7.7, 18.1)	138	21
-	1 year	13.0	(7.7, 18.1)	137	21
-	2 year(s)	13.0	(7.7, 18.1)	129	21
-	4 year(s)	18.4	(11.9, 24.3)	105	28
-	6 year(s)	20.1	(13.3, 26.4)	81	30
-	8 year(s)	20.1	(13.3, 26.4)	59	30
-	10 year(s)	23.0	(15.2, 30.1)	40	32
-	12 year(s)	33.2	(20.6, 43.9)	19	36
-	14 year(s)	37.4	(22.4, 49.5)	8	37
-	Overall	37.4	(22.4, 49.5)	-	37
Kidney - Pancreas - USZ	Baseline	0.0	-	103	0
-	1 month	0.0	-	103	0
-	6 months	0.0	-	103	0
-	1 year	0.0	-	103	0
-	2 year(s)	0.0	-	95	0
-	4 year(s)	2.3	(0, 5.3)	76	2
-	6 year(s)	3.6	(0, 7.6)	63	3
-	8 year(s)	6.8	(0.8, 12.5)	54	5
-	10 year(s)	10.3	(2.6, 17.5)	42	7
-	12 year(s)	15.2	(5.1, 24.3)	24	9
-	14 year(s)	18.7	(6.5, 29.4)	6	10
-	Overall	39.0	(0, 66)	-	11
Kidney - Pancreas - HUG	Baseline	0.0	-	48	0
-	1 month	0.0	-	48	0
-	6 months	2.1	(0, 6)	47	1
-	1 year	2.1	(0, 6)	44	1
-	2 year(s)	2.1	(0, 6)	41	1
-	4 year(s)	7.7	(0, 15.7)	32	3
-	6 year(s)	14.8	(1.6, 26.2)	23	5
-	8 year(s)	18.9	(3.5, 31.8)	15	6
-	10 year(s)	18.9	(3.5, 31.8)	11	6
-	12 year(s)	18.9	(3.5, 31.8)	8	6
-	14 year(s)	64.5	(0, 91.4)	1	8
-	Overall	64.5	(0, 91.4)	-	8

## C Overall mortality in patients with rare Tpx scenarios

Table 30: Overall mortality by rare Tpx scenarios

Tpx	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
Islets	Baseline	0.00	-	41	0
	Overall	45.67	(21.7, 62.3)	-	14
Pancreas	Baseline	0.00	-	14	0
	Overall	43.75	(0, 68.4)	-	4
Small bowel	Baseline	0.00	-	2	0
	Overall	50.00	(0, 87.5)	-	1
Kidney - Liver	Baseline	0.00	-	60	0
	Overall	42.32	(19.1, 58.9)	-	16
Kidney - Islets	Baseline	0.00	-	24	0
	Overall	65.06	(0.3, 87.8)	-	6
Kidney - Heart	Baseline	0.00	-	16	0
	Overall	19.23	(0, 36.6)	-	3
Kidney - Lung	Baseline	0.00	-	2	0
	Overall	0.00	-	-	0
Liver - Lung	Baseline	0.00	-	4	0
	Overall	25.00	(0, 57.4)	-	1
Liver - Pancreas	Baseline	0.00	-	1	0
	Overall	0.00	-	-	0
Heart - Lung	Baseline	0.00	-	1	0
	Overall	100.00	-	-	1
Islets - Liver	Baseline	0.00	-	1	0
	Overall	0.00	-	-	0
Pancreas - Small bowel	Baseline	0.00	-	3	0
	Overall	66.67	(0, 93.3)	-	2
Kidney - Islets - Liver	Baseline	0.00	-	1	0
	Overall	0.00	-	-	0
Liver - Pancreas - Small bowel	Baseline	0.00	-	1	0
	Overall	100.00	-	-	1
Islets - Liver - Lung	Baseline	0.00	-	1	0
	Overall	0.00	-	-	0

Table 31: Overall mortality by rare Tpx scenarios and centre

Tpx - centre	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
Islets - USZ	Baseline	0.0	-	22	0
-	Overall	74.7	(40.6, 89.3)	-	14
Islets - HUG	Baseline	0.0	-	19	0
-	Overall	0.0	-	-	0
Pancreas - USZ	Baseline	0.0	-	5	0
-	Overall	25.0	(0, 57.4)	-	1
Pancreas - HUG	Baseline	0.0	-	9	0
-	Overall	60.0	(0, 86.3)	-	3
Small bowel - HUG	Baseline	0.0	-	2	0
-	Overall	50.0	(0, 87.5)	-	1
Kidney - Liver - USZ	Baseline	0.0	-	20	0
-	Overall	15.0	(0, 29.3)	-	3
Kidney - Liver - BE	Baseline	0.0	-	15	0
-	Overall	20.4	(0, 43.1)	-	2
Kidney - Liver - HUG	Baseline	0.0	-	25	0
-	Overall	81.1	(8.5, 96.1)	-	11
Kidney - Islets - USZ	Baseline	0.0	-	14	0
-	Overall	71.4	(0, 94.4)	-	3
Kidney - Islets - HUG	Baseline	0.0	-	10	0
-	Overall	52.0	(0, 81.2)	-	3
Kidney - Heart - USZ	Baseline	0.0	-	3	0
-	Overall	33.3	(0, 70)	-	1
Kidney - Heart - CHUV	Baseline	0.0	-	11	0
-	Overall	10.0	(0, 26.8)	-	1
Kidney - Heart - BE	Baseline	0.0	-	2	0
-	Overall	50.0	(0, 87.5)	-	1
Kidney - Lung - CHUV	Baseline	0.0	-	2	0
-	Overall	0.0	-	-	0
Liver - Lung - HUG	Baseline	0.0	-	4	0
-	Overall	25.0	(0, 57.4)	-	1
Liver - Pancreas - HUG	Baseline	0.0	-	1	0
-	Overall	0.0	-	-	0
Heart - Lung - USZ	Baseline	0.0	-	1	0
-	Overall	100.0	-	-	1
Islets - Liver - USZ	Baseline	0.0	-	1	0
-	Overall	0.0	-	-	0
Pancreas - Small bowel - USZ	Baseline	0.0	-	1	0
-	Overall	100.0	-	-	1
Pancreas - Small bowel - HUG	Baseline	0.0	-	2	0
-	Overall	50.0	(0, 87.5)	-	1
Kidney - Islets - Liver - HUG	Baseline	0.0	-	1	0
-	Overall	0.0	-	-	0
Liver - Pancreas - Small bowel - USZ	Baseline	0.0	-	1	0
-	Overall	100.0	-	-	1
Islets - Liver - Lung - HUG	Baseline	0.0	-	1	0
-	Overall	0.0	-	-	0

## D Overall mortality in first Kidney transplantation

Table 32: Overall mortality in (single) kidney recipients by donor type

Donor type	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
Deceased	Baseline	0.0	-	2625	0
-	1 month	0.5	(0.2, 0.8)	2611	13
-	6 months	1.5	(1, 1.9)	2555	39
-	1 year	3.0	(2.3, 3.6)	2413	77
-	2 year(s)	4.9	(4.1, 5.8)	2134	123
-	4 year(s)	9.4	(8.2, 10.6)	1706	215
-	6 year(s)	15.0	(13.4, 16.6)	1231	309
-	8 year(s)	20.4	(18.5, 22.3)	869	378
-	10 year(s)	27.0	(24.6, 29.4)	574	440
-	12 year(s)	32.0	(29.1, 34.7)	334	472
-	14 year(s)	40.0	(36, 43.6)	104	501
-	Overall	42.4	(37.7, 46.7)	-	504
Living	Baseline	0.0	-	1608	0
-	1 month	0.1	(0, 0.2)	1606	1
-	6 months	0.7	(0.3, 1.1)	1577	11
-	1 year	1.1	(0.6, 1.7)	1513	18
-	2 year(s)	2.4	(1.6, 3.1)	1372	36
-	4 year(s)	3.9	(2.9, 4.9)	1171	56
-	6 year(s)	6.6	(5.2, 8)	917	86
-	8 year(s)	9.9	(8.1, 11.7)	693	115
-	10 year(s)	14.3	(12, 16.6)	462	144
-	12 year(s)	20.4	(17.2, 23.5)	282	170
-	14 year(s)	24.9	(20.9, 28.6)	107	182
-	Overall	30.0	(22.2, 37)	-	185

## E Graft failure by organ, centre and donortype

Table 33: Graft failure by organ

Organ	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths	
Kidney	Baseline	-	-	4649		0	
	- 1 month	1.9	(1.6,2.4)	4547		11	
	- 6 months	3	(2.6,3.6)	4415		40	
	- 1 year	3.6	(3.1,4.1)	4178		82	
	- 2 year(s)	4.5	(3.9,5.1)	3701		138	
	- 4 year(s)	6.6	(5.9,7.4)	2970		232	
	- 6 year(s)	9.2	(8.3,10.2)	2169		336	
	- 8 year(s)	11	(9.9,12)	1546		427	
	- 10 year(s)	13.4	(12.1,14.7)	997		505	
	- 12 year(s)	15.7	(14.2,17.2)	561		561	
	- 14 year(s)	17.7	(15.8,19.6)	183		600	
	- Overall	18.8	(16.6,21.1)	0		606	
	Liver	Baseline	-	-	1865		0
		- 1 month	5.7	(4.7,6.8)	1731		28
- 6 months		8.2	(7,9.5)	1612		75	
- 1 year		9.6	(8.4,11)	1505		101	
- 2 year(s)		10.9	(9.6,12.4)	1309		140	
- 4 year(s)		12.5	(11,14.1)	1000		192	
- 6 year(s)		13.6	(12,15.3)	692		242	
- 8 year(s)		14.5	(12.8,16.3)	501		276	
- 10 year(s)		15.8	(13.9,17.8)	326		297	
- 12 year(s)		16.9	(14.8,19.1)	175		309	
- 14 year(s)		16.9	(14.8,19.1)	68		323	
- Overall		16.9	(14.8,19.1)	0		325	
Lung		Baseline	-	-	685		0
		- 1 month	0.9	(0.4,1.8)	663		16
	- 6 months	2.3	(1.4,3.7)	622		35	
	- 1 year	4.6	(3.2,6.4)	572		47	
	- 2 year(s)	8.1	(6.2,10.4)	495		66	
	- 4 year(s)	15.8	(13,18.8)	353		99	
	- 6 year(s)	19.9	(16.7,23.3)	251		121	
	- 8 year(s)	22.8	(19.3,26.5)	164		130	
	- 10 year(s)	26	(22,30.1)	88		146	
	- 12 year(s)	28.3	(23.6,33.1)	37		155	
	- 14 year(s)	28.3	(23.6,33.1)	8		157	
	- Overall	28.3	(23.6,33.1)	0		157	
	Heart	Baseline	-	-	557		0
		- 1 month	6.5	(4.6,8.7)	506		15
- 6 months		7.2	(5.2,9.5)	485		24	
- 1 year		7.6	(5.6,10)	460		35	
- 2 year(s)		8.3	(6.2,10.8)	412		43	
- 4 year(s)		9	(6.8,11.6)	330		57	
- 6 year(s)		10.2	(7.7,13)	238		63	
- 8 year(s)		11.8	(8.9,15)	170		65	

Organ	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths
-	10 year(s)	12.8	(9.7,16.3)	116		68
-	12 year(s)	14	(10.3,18.3)	52		76
-	14 year(s)	14	(10.3,18.3)	16		80
-	Overall	14	(10.3,18.3)	0		81
Pancreas	Baseline	-	-	187		0
-	1 month	8	(4.7,12.5)	171		1
-	6 months	9.1	(5.5,13.8)	169		1
-	1 year	10.2	(6.4,15)	162		1
-	2 year(s)	13.1	(8.7,18.4)	143		1
-	4 year(s)	14.4	(9.7,20)	112		5
-	6 year(s)	14.4	(9.7,20)	88		7
-	8 year(s)	17.5	(11.9,24)	69		8
-	10 year(s)	18.6	(12.8,25.4)	52		10
-	12 year(s)	26.4	(17.6,36)	25		13
-	14 year(s)	26.4	(17.6,36)	5		15
-	Overall	26.4	(17.6,36)	0		15



Table 34: Graft failure by organ and centre

Organ - Centre	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths		
Kidney-USZ	Baseline	0.0	-	1342	0	0		
	-	1 month	2.3	(1.6,3.2)	1308	31	2	
	-	6 months	3.7	(2.8,4.8)	1266	50	10	
	-	1 year	4.1	(3.1,5.3)	1206	55	21	
	-	2 year(s)	4.8	(3.8,6.1)	1089	64	38	
	-	4 year(s)	6.1	(4.8,7.5)	881	77	68	
	-	6 year(s)	8.4	(6.9,10.1)	652	98	96	
	-	8 year(s)	9.8	(8.1,11.7)	468	108	122	
	-	10 year(s)	11.3	(9.4,13.5)	326	116	139	
	-	12 year(s)	13.6	(11.1,16.2)	171	124	149	
	-	14 year(s)	14.1	(11.5,16.9)	55	125	156	
	-	Overall	15.2	(11.9,18.9)	0	126	159	
	Kidney-USB	Baseline	0.0	-	1072	0	0	
		-	1 month	1.0	(0.5,1.8)	1059	11	2
		-	6 months	1.7	(1,2.6)	1030	18	11
-		1 year	2.2	(1.4,3.2)	972	23	19	
-		2 year(s)	3.0	(2.1,4.2)	867	31	30	
-		4 year(s)	5.1	(3.9,6.7)	702	49	52	
-		6 year(s)	8.0	(6.2,9.9)	517	69	75	
-		8 year(s)	9.7	(7.8,12)	371	79	94	
-		10 year(s)	11.1	(8.8,13.6)	227	84	108	
-		12 year(s)	11.5	(9.1,14.2)	140	85	127	
-		14 year(s)	12.0	(9.5,14.8)	49	86	140	
-		Overall	12.0	(9.5,14.8)	0	86	141	
Kidney-CHUV		Baseline	0.0	-	741	0	0	
		-	1 month	2.0	(1.2,3.2)	724	15	2
		-	6 months	2.7	(1.7,4.1)	709	20	4
	-	1 year	2.8	(1.8,4.2)	684	21	9	
	-	2 year(s)	3.1	(2,4.6)	606	23	18	
	-	4 year(s)	6.0	(4.4,8)	490	40	27	
	-	6 year(s)	8.7	(6.6,11.2)	359	53	45	
	-	8 year(s)	11.0	(8.5,13.9)	250	62	61	
	-	10 year(s)	13.5	(10.5,16.9)	161	69	74	
	-	12 year(s)	16.2	(12.5,20.3)	92	74	82	
	-	14 year(s)	19.5	(14.8,24.6)	24	78	89	
	-	Overall	23.6	(15,33.4)	0	79	89	
	Kidney-BE	Baseline	0.0	-	665	0	0	
		-	1 month	2.3	(1.3,3.6)	647	15	3
		-	6 months	4.5	(3.1,6.3)	615	30	9
-		1 year	5.9	(4.3,7.9)	575	39	18	
-		2 year(s)	7.4	(5.5,9.6)	500	48	31	
-		4 year(s)	10.8	(8.5,13.5)	379	66	40	
-		6 year(s)	12.8	(10.2,15.7)	260	74	53	
-		8 year(s)	14.8	(11.8,18.1)	188	80	62	
-		10 year(s)	17.5	(13.9,21.3)	118	86	75	
-		12 year(s)	22.5	(17.8,27.5)	65	94	87	

Organ - Centre	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths
-	14 year(s)	26.7	(20.8,33)	22	98	91
-	Overall	26.7	(20.8,33)	0	98	92
Kidney-HUG	Baseline	0.0	-	537	0	0
-	1 month	2.8	(1.6,4.5)	520	15	2
-	6 months	3.5	(2.2,5.4)	509	19	6
-	1 year	3.7	(2.4,5.6)	472	20	12
-	2 year(s)	4.8	(3.2,6.8)	403	25	16
-	4 year(s)	6.3	(4.3,8.6)	322	31	34
-	6 year(s)	8.3	(6,11.2)	237	38	49
-	8 year(s)	10.2	(7.4,13.5)	167	43	64
-	10 year(s)	16.1	(12,20.7)	100	54	77
-	12 year(s)	18.0	(13.5,23.1)	55	57	81
-	14 year(s)	20.2	(14.3,26.9)	20	58	85
-	Overall	20.2	(14.3,26.9)	0	58	86
Kidney-SG	Baseline	0.0	-	292	0	0
-	1 month	1.0	(0.3,2.8)	289	3	0
-	6 months	1.4	(0.5,3.3)	286	4	0
-	1 year	2.4	(1.1,4.7)	269	7	3
-	2 year(s)	4.3	(2.3,7.1)	236	12	5
-	4 year(s)	7.2	(4.5,10.7)	196	19	11
-	6 year(s)	11.9	(8.2,16.4)	144	29	18
-	8 year(s)	13.2	(9.1,18)	102	31	24
-	10 year(s)	16.5	(11.6,22.2)	65	35	32
-	12 year(s)	19.2	(13.3,25.9)	38	37	35
-	14 year(s)	22.3	(14.3,31.5)	13	38	39
-	Overall	25.9	(15.9,37.2)	0	39	39
Liver-USZ	Baseline	0.0	-	759	0	0
-	1 month	7.8	(6,9.8)	682	59	18
-	6 months	11.1	(9,13.4)	618	84	48
-	1 year	13.5	(11.2,16)	573	102	60
-	2 year(s)	15.2	(12.7,17.9)	494	114	83
-	4 year(s)	16.7	(14.1,19.5)	370	123	110
-	6 year(s)	18.2	(15.4,21.2)	250	130	134
-	8 year(s)	19.0	(16.1,22.1)	168	133	147
-	10 year(s)	20.7	(17.4,24.1)	103	137	157
-	12 year(s)	21.3	(17.9,24.9)	53	138	163
-	14 year(s)	21.3	(17.9,24.9)	21	138	169
-	Overall	21.3	(17.9,24.9)	0	138	170
Liver-BE	Baseline	0.0	-	434	0	0
-	1 month	7.1	(5,9.8)	398	31	5
-	6 months	9.7	(7.1,12.7)	372	42	12
-	1 year	10.2	(7.5,13.2)	345	44	22
-	2 year(s)	11.0	(8.2,14.1)	301	47	28
-	4 year(s)	13.1	(10.1,16.6)	224	54	40
-	6 year(s)	13.1	(10.1,16.6)	149	54	56
-	8 year(s)	14.7	(11.3,18.6)	109	57	68
-	10 year(s)	16.1	(12.3,20.5)	71	59	73
-	12 year(s)	17.2	(12.9,22)	37	60	75

Organ - Centre	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths
-	14 year(s)	17.2	(12.9,22)	11	60	79
-	Overall	17.2	(12.9,22)	0	60	79
Liver-HUG	Baseline	0.0	-	672	0	0
-	1 month	2.4	(1.4,3.8)	651	16	5
-	6 months	4.0	(2.7,5.7)	622	27	15
-	1 year	4.9	(3.5,6.8)	587	33	19
-	2 year(s)	6.1	(4.4,8.1)	514	40	29
-	4 year(s)	7.4	(5.5,9.6)	406	47	42
-	6 year(s)	8.7	(6.5,11.1)	293	52	52
-	8 year(s)	9.2	(7,11.9)	224	54	61
-	10 year(s)	10.1	(7.6,13)	152	56	67
-	12 year(s)	11.8	(8.8,15.2)	85	59	71
-	14 year(s)	11.8	(8.8,15.2)	36	59	75
-	Overall	11.8	(8.8,15.2)	0	59	76
Lung-USZ	Baseline	0.0	-	383	0	0
-	1 month	1.0	(0.4,2.5)	368	4	11
-	6 months	2.9	(1.5,4.9)	339	11	26
-	1 year	5.6	(3.6,8.3)	308	21	33
-	2 year(s)	9.6	(6.9,12.9)	260	35	48
-	4 year(s)	20.6	(16.4,25.1)	173	69	70
-	6 year(s)	24.2	(19.6,29)	125	79	87
-	8 year(s)	26.9	(22,32)	78	85	94
-	10 year(s)	30.9	(25.3,36.6)	40	91	101
-	12 year(s)	30.9	(25.3,36.6)	21	91	102
-	14 year(s)	30.9	(25.3,36.6)	6	91	103
-	Overall	30.9	(25.3,36.6)	0	91	103
Lung-CHUV	Baseline	0.0	-	295	0	0
-	1 month	0.7	(0.1,2.3)	289	2	4
-	6 months	1.7	(0.6,3.7)	277	5	8
-	1 year	3.4	(1.8,6)	258	10	13
-	2 year(s)	6.4	(3.9,9.6)	229	18	17
-	4 year(s)	9.6	(6.4,13.5)	175	26	28
-	6 year(s)	14.5	(10.4,19.3)	122	36	33
-	8 year(s)	17.8	(13,23.2)	82	41	35
-	10 year(s)	19.7	(14.4,25.6)	46	43	44
-	12 year(s)	25.6	(17.5,34.5)	14	46	52
-	14 year(s)	25.6	(17.5,34.5)	2	46	53
-	Overall	25.6	(17.5,34.5)	0	46	53
Lung-HUG	Baseline	0.0	-	7	0	0
-	1 month	0.0	-	6	0	1
-	6 months	0.0	-	6	0	1
-	1 year	0.0	-	6	0	1
-	2 year(s)	0.0	-	6	0	1
-	4 year(s)	14.3	(0.5,49.6)	5	1	1
-	6 year(s)	14.3	(0.5,49.6)	4	1	1
-	8 year(s)	14.3	(0.5,49.6)	4	1	1
-	10 year(s)	14.3	(0.5,49.6)	2	1	1
-	12 year(s)	14.3	(0.5,49.6)	2	1	1

Organ - Centre	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths
-	14 year(s)		-	0	1	1
-	Overall	14.3	(0.5,49.6)	0	1	1
Heart-USZ	Baseline	0.0	-	186	0	0
-	1 month	4.8	(2.4,8.6)	173	9	4
-	6 months	7.0	(3.9,11.3)	158	13	10
-	1 year	7.6	(4.3,12)	146	14	15
-	2 year(s)	8.8	(5.2,13.5)	127	16	19
-	4 year(s)	8.8	(5.2,13.5)	105	16	24
-	6 year(s)	8.8	(5.2,13.5)	77	16	27
-	8 year(s)	12.2	(7.4,18.3)	57	19	28
-	10 year(s)	15.1	(9.2,22.5)	40	21	28
-	12 year(s)	15.1	(9.2,22.5)	18	21	30
-	14 year(s)	15.1	(9.2,22.5)	4	21	32
-	Overall	15.1	(9.2,22.5)	0	21	32
Heart-CHUV	Baseline	0.0	-	204	0	0
-	1 month	5.4	(2.9,9.1)	189	11	4
-	6 months	5.4	(2.9,9.1)	186	11	6
-	1 year	5.9	(3.2,9.7)	174	12	12
-	2 year(s)	6.4	(3.6,10.4)	155	13	16
-	4 year(s)	7.1	(4.1,11.3)	119	14	19
-	6 year(s)	9.8	(5.8,15)	79	17	21
-	8 year(s)	10.8	(6.5,16.4)	55	18	22
-	10 year(s)	10.8	(6.5,16.4)	37	18	23
-	12 year(s)	10.8	(6.5,16.4)	15	18	26
-	14 year(s)	10.8	(6.5,16.4)	4	18	27
-	Overall	10.8	(6.5,16.4)	0	18	28
Heart-BE	Baseline	0.0	-	167	0	0
-	1 month	9.6	(5.7,14.6)	144	16	7
-	6 months	9.6	(5.7,14.6)	141	16	8
-	1 year	9.6	(5.7,14.6)	140	16	8
-	2 year(s)	10.2	(6.2,15.4)	130	17	8
-	4 year(s)	11.7	(7.3,17.2)	106	19	14
-	6 year(s)	12.6	(7.9,18.4)	82	20	15
-	8 year(s)	12.6	(7.9,18.4)	58	20	15
-	10 year(s)	12.6	(7.9,18.4)	39	20	17
-	12 year(s)	16.0	(8.7,25.2)	19	21	20
-	14 year(s)	16.0	(8.7,25.2)	8	21	21
-	Overall	16.0	(8.7,25.2)	0	21	21
Pancreas-USZ	Baseline	0.0	-	116	0	0
-	1 month	8.6	(4.4,14.6)	105	10	1
-	6 months	10.3	(5.6,16.7)	103	12	1
-	1 year	11.2	(6.3,17.7)	101	13	1
-	2 year(s)	13.9	(8.3,21)	90	16	1
-	4 year(s)	16.1	(9.9,23.5)	71	18	3
-	6 year(s)	16.1	(9.9,23.5)	59	18	4
-	8 year(s)	19.0	(11.9,27.2)	50	20	4
-	10 year(s)	19.0	(11.9,27.2)	39	20	4
-	12 year(s)	27.8	(16.7,40)	17	23	7

Organ - Centre	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths
-	14 year(s)	27.8	(16.7,40)	3	23	8
-	Overall	27.8	(16.7,40)	0	23	8
Pancreas-HUG	Baseline	0.0	-	71	0	0
-	1 month	7.0	(2.6,14.6)	66	5	0
-	6 months	7.0	(2.6,14.6)	66	5	0
-	1 year	8.5	(3.4,16.5)	61	6	0
-	2 year(s)	11.7	(5.4,20.5)	53	8	0
-	4 year(s)	11.7	(5.4,20.5)	41	8	2
-	6 year(s)	11.7	(5.4,20.5)	29	8	3
-	8 year(s)	15.4	(6.8,27.2)	19	9	4
-	10 year(s)	19.4	(8.7,33.1)	13	10	6
-	12 year(s)	25.0	(11,41.9)	8	11	6
-	14 year(s)	25.0	(11,41.9)	2	11	7
-	Overall	25.0	(11,41.9)	0	11	7

Table 35: Graft failure of kidneys (in first STCS single Tpx) by donor type

Donor type	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths
Deceased	Baseline	-	-	2746	0	0
-	1 month	2.5	(1.9,3.1)	2672	68	6
-	6 months	3.9	(3.3,4.7)	2579	108	26
-	1 year	4.7	(3.9,5.5)	2417	128	62
-	2 year(s)	5.8	(5,6.8)	2114	157	101
-	4 year(s)	8.7	(7.6,9.8)	1640	218	177
-	6 year(s)	11.8	(10.5,13.2)	1147	272	252
-	8 year(s)	13.7	(12.3,15.3)	782	298	309
-	10 year(s)	16.2	(14.5,18)	494	321	358
-	12 year(s)	18.1	(16.1,20.1)	271	333	388
-	14 year(s)	21	(18.4,23.7)	80	343	412
-	Overall	22.3	(19.2,25.5)	0	345	415
Living	Baseline	-	-	1639	0	0
-	1 month	0.9	(0.5,1.4)	1623	14	1
-	6 months	1.5	(1,2.1)	1588	24	8
-	1 year	1.7	(1.2,2.4)	1518	28	14
-	2 year(s)	2.3	(1.6,3.1)	1365	36	28
-	4 year(s)	3.5	(2.6,4.5)	1151	52	41
-	6 year(s)	5.3	(4.2,6.6)	890	73	66
-	8 year(s)	6.9	(5.6,8.5)	660	87	94
-	10 year(s)	9.1	(7.4,11)	430	101	119
-	12 year(s)	11.9	(9.7,14.4)	250	114	142
-	14 year(s)	13	(10.4,15.9)	93	116	153
-	Overall	14.2	(10.8,18)	0	117	155

## **F Technical summary**

All analyses were performed using the statistical software R version 4.1.2 (2021-11-01). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL <https://www.R-project.org/>.