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STUDY

Swiss Transplant Cohort Study report (May 2008 - December 2014)

November 2015

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Disclaimer

This report covering solid organ transplantation on a national scale is very unique worldwide in its completeness and comprehensiveness. Transplanted organs and organ combinations included in this report are: heart, kidney (including kidney-kidney), kidney-liver, kidney-pancreas, kidney-lung, kidney-islets, liver, pancreas, islets, lung, lung-liver, and small bowel. These outcome data reflect very well the transplant activity in Switzerland as a whole but do not allow firm comparisons between the various transplant centers. Importantly, the individual transplant centers are responsible for patient selection (wait listing) and for the acceptance of a given organ allocated by Swisstransplant. As a consequence, there may be outcome differences! Furthermore, patient numbers per center, such as for instance in heart and pancreas transplantation, are relatively small. Nevertheless, one may not expect major differences with respect to patient and graft survival between our transplant centers. The survival data are completed by prevalent and incident (skin) cancer reports.

The Swiss Transplant Cohort Study (STCS)

List of Abbreviations

STCS	Swiss Transplant Cohort Study
BE	Inselspital Bern
CHUV	Centre Hospitalier Universitaire Vaudois Lausanne
CI	confidence interval
CumInc	cumulative incidence(s)
FUP	follow-up
GF	graft failure
HUG	Hôpitaux Universitaires de Genève
ID	infectious disease
IQR	interquartile range
SG	Kantonsspital St. Gallen
USZ	Universitätsspital Zürich
USB	Universitätsspital Basel
Tpx	transplantation(s)

List of Figures

1	Quarterly overall patient enrolment	7
2	Quarterly patient enrolment by donor type	7
3	Cumulative overall patient enrolment	8
4	Cumulative overall patient enrolment by Tpx type	8
5	Cumulative overall patient enrolment by centre	9
6	Number of patients enrolled	10
7	Number of transplanted organs	10
8	Number of patients enrolled by Tpx type	11
9	Number of patients with first single kidney Tpx	12
10	Number of patients with other kidney Tpx	12
11	Number of patients with first STCS liver, lung, heart, pancreas or islets Tpx	13
12	Number of single kidney Tpx	14
13	Number of single liver Tpx	14
14	Proportions of donor types in all single kidney Tpx	15
15	Proportions of donor types in all single liver Tpx	15
16	Current patients' consent status	16
17	Current patients' consent status by centre	17
18	Number of bio-samples in STCS	18
19	Distribution of number of aliquots by sample type	19
20	Rate of infectious disease events by pathogen and Tpx type	21
21	Number of Tpx with 6 month FUP	23
22	Number of Tpx with 12 month FUP	23
23	Overall survival	25
24	Overall survival for frequent Tpx types	26
25	Overall survival for frequent Tpx	29
26	Overall survival for patients with first STCS single kidney Tpx by donor type	35
27	Overall survival for patients with first STCS single kidney Tpx by donor type combined with AB0 compatibility	35
28	Graft failure free survival by major Tpx	39
29	Graft failure free survival by major Tpx and centre	40
30	Graft failure free survival in patients with first STCS single kidney Tpx by donor type (combined with AB0 compatibility)	40
31	Cumulative incidences of graft failure for organs with at least one graft failure	41
32	Cumulative incidences of graft failure for kidneys in single Tpx by donor type	42
33	Cumulative incidences of graft failure for kidneys in single Tpx by AB0 compatibility	42
34	Cumulative incidences of graft failure for kidney or kidney-kidney tpx by HLA mismatches	51
35	Cumulative incidences of graft failure for liver tpx by HLA mismatches . .	52
36	Cumulative incidences of graft failure for lung tpx by HLA mismatches . .	53
37	Cumulative incidences of graft failure for heart tpx by HLA mismatches . .	54

List of Tables

1	Number of patients enrolled	4
2	Number of patients enrolled by Tpx type	4
3	Number of Tpx types	5
4	Number of transplanted organs	5
5	Patients' characteristics for major Tpx types	6
6	Patients' current consent (columns) against consent status at enrolment (rows)	16
7	Number of patients with bio-samples	18
8	Patients with infectious disease events	20
9	Summary of infectious disease events	20
10	Rate of infectious disease events by pathogen and Tpx type	22
11	Follow-up information of patients	24
12	Patients who dropped out by Tpx type	24
13	Overall mortality	25
14	Overall mortality by Tpx type	27
15	Overall mortality by frequent Tpx type and centre	30
16	Overall mortality in (single) kidney recipients by donor type	36
17	Summary for graft failures	37
18	Graft failures in double Tpx	37
19	Graft failure and related patients' death	38
20	Number of organs with primary non-function	38
21	Graft failure by organ	43
22	Graft failure by organ and centre	45
23	Graft failure of kidneys (in first STCS single Tpx) by donor type	50
24	Overview of patients with incident cancer	55
25	Patients with incident cancer	55
26	Overview of incident cancer occurrence	56
27	Overview of patients with incident skin cancer	57
28	Patients with incident skin cancer	57
29	Overview of incident skin cancer occurrence	57
30	Overall mortality by rare Tpx scenarios	58
31	Overall mortality by rare Tpx scenarios and centre	61

Contents

1	Comments from the centers	1
1.1	Inselspital Bern	1
1.2	Centre Hospitalier Universitaire Vaudois Lausanne	1
1.3	Hôpitaux Universitaires de Genève	1
1.4	Kantonsspital St. Gallen	1
1.5	Universitätsspital Basel	1
1.6	Universitätsspital Zürich	1
2	News and updates	2
3	Patients, transplantations and transplanted organs	3
3.1	Overview	4
3.2	STCS patient enrolment over time	7
3.3	Transplantation activities by centre	10
3.4	Kidney transplantations by centre	12
3.5	Transplantations other than kidney by centre	13
3.6	Single Kidney and Liver Tpx by donor type	14
4	Consent status	16
5	Bio-samples	18
6	Infectious disease events	20
7	Follow-up	23
8	Mortality	24
8.1	Overall	24
8.2	Mortality by Tpx	26
8.3	Mortality by Tpx and centre	29
8.4	Mortality in first single kidney Tpx	35
9	Graft failure and primary non-function	37
9.1	Graft failure	37
9.2	Graft failure free survival	39
9.3	Cumulative incidence of graft failure	41
9.4	Graft failure and number of HLA mismatches	51
10	Cancer	55
10.1	Cancer other than skin	55
10.2	Skin cancer	57
A	Mortality in patients with rare Tpx	58

1 Comments from the centers

1.1 Inselspital Bern

Approves open publication.

1.2 Centre Hospitalier Universitaire Vaudois Lausanne

Approves open publication.

1.3 Hôpitaux Universitaires de Genève

Approves open publication.

1.4 Kantonsspital St. Gallen

Approves open publication.

1.5 Universitätsspital Basel

Approves open publication.

1.6 Universitätsspital Zürich

Approves open publication.

2 News and updates

News:

- Numbers of all single kidney and single liver transplantation(s) (Tpx) are presented, in total and separated by donor type and centre.
- Rates of infectious disease (ID) events are numerically shown in addition to the graphic.
- Cumulative incidence functions of graft failure (GF) for major Tpx are shown separated by the number of HLA mismatches.

Updates:

- Infection data were modified regarding missing pathogen information but given 'other' information. For example, the exact virus information is missing even though an 'other virus' is specified. In this case, virus will be re-specified by 'Other viruses'.
- For mortality and graft failure free survival analyses, single and double Kidney Tpx are shown together.
- The term 'graft failure' is re-defined as graft failure and primary non-function of the allograft. It concerns graft failure free survival and cumulative incidences of graft failures analyses.
- Information about missing cancer and skin cancer information is removed as it needs a quality monitoring.

3 Patients, transplantations and transplanted organs

Definitions applied:

- Enrolment refers to inclusion of all patients into the Swiss Transplant Cohort Study (STCS) from 1st of May 2008 until 31th of December 2014.
 - From those patients, all information until the date of data extraction (11th of August 2015) is included in the report.
- First transplantation(s):
 - Patients with a first transplantation(s) (Tpx) in their medical history at the time of STCS enrolment
- Re-transplantation(s):
 - Patients with a repetition of the same Tpx type
 - Example: Re-Tpx of a kidney allograft after failure of a prior kidney graft
- Second transplantation(s):
 - Patients with a second Tpx different from the previous Tpx either before STCS enrolment or during STCS follow-up (FUP)
 - Example: Tpx of a pancreas following a (successful) single kidney Tpx
 - Double/triple Tpx can qualify for both, re- and second Tpx
- Every Tpx can consist of a single, double or triple transplant(s). The terms 'double' and 'triple' refer to Tpxs in which multiple organs originating from the same donor are transplanted in a recipient (e.g. kidney-pancreas double transplant).
- Tpx prior to STCS enrolment have also been considered. Patients may thus start with a re- or a 2nd Tpx in STCS.
- Sequences of previous islet Tpx have been counted as one prior Tpx and bone marrow Tpx are excluded from the report.

3.1 Overview

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

Table 1: Number of patients enrolled

	Patients	(%)
Total number	3034	100.0
Single Tpx at enrolment	2880	94.9
Double Tpx at enrolment	150	4.9
Triple Tpx at enrolment	4	0.1
1st Tpx at enrolment	2658	87.6
Re-Tpx at enrolment	300	9.9
2nd Tpx at enrolment	76	2.5

Table 2: Number of patients enrolled by Tpx type

	Total	First Tpx	(%)	Re Tpx	(%)	Second Tpx	(%)
Total	3034	2658	87.6	300	9.9	76	2.5
Kidney	1702	1411	82.9	259	15.2	32	1.9
Liver	615	587	95.4	22	3.6	6	1.0
Lung	304	292	96.1	9	3.0	3	1.0
Heart	219	218	99.5	1	0.5	0	0.0
Islets	29	6	20.7	8	27.6	15	51.7
Pancreas	10	5	50.0	0	0.0	5	50.0
Small bowel	1	0	0.0	1	100.0	0	0.0
Kidney - Pancreas	73	69	94.5	0	0.0	4	5.5
Kidney - Kidney	30	28	93.3	0	0.0	2	6.7
Kidney - Liver	28	22	78.6	0	0.0	6	21.4
Kidney - Islets	10	10	100.0	0	0.0	0	0.0
Kidney - Heart	4	4	100.0	0	0.0	0	0.0
Kidney - Lung	1	0	0.0	0	0.0	1	100.0
Liver - Lung	1	1	100.0	0	0.0	0	0.0
Heart - Lung	1	1	100.0	0	0.0	0	0.0
Pancreas - Small bowel	2	2	100.0	0	0.0	0	0.0
Kidney - Kidney - Pancreas	2	1	50.0	0	0.0	1	50.0
Kidney - Islets - Liver	1	0	0.0	0	0.0	1	100.0
Islets - Liver - Lung	1	1	100.0	0	0.0	0	0.0

3 PATIENTS, TRANSPLANTATIONS AND TRANSPLANTED ORGANS

In contrast to Table 1 and 2, Table 3 and 4 list all Tpx performed and the number of implanted organs in patients enrolled until the end of 2014.

Table 3: Number of Tpx types

	Total	First Tpx	(%)	Re Tpx	(%)	Second Tpx	(%)
Total	3158	2658	84.2	396	12.5	104	3.3
Kidney	1745	1411	80.9	292	16.7	42	2.4
Liver	658	587	89.2	64	9.7	7	1.1
Lung	316	292	92.4	20	6.3	4	1.3
Heart	220	218	99.1	2	0.9	0	0.0
Islets	43	6	14.0	15	34.9	22	51.2
Pancreas	16	5	31.2	1	6.2	10	62.5
Small bowel	1	0	0.0	1	100.0	0	0.0
Kidney - Pancreas	74	69	93.2	1	1.4	4	5.4
Kidney - Kidney	30	28	93.3	0	0.0	2	6.7
Kidney - Liver	29	22	75.9	0	0.0	7	24.1
Kidney - Islets	11	10	90.9	0	0.0	1	9.1
Kidney - Heart	4	4	100.0	0	0.0	0	0.0
Kidney - Lung	2	0	0.0	0	0.0	2	100.0
Liver - Lung	1	1	100.0	0	0.0	0	0.0
Heart - Lung	1	1	100.0	0	0.0	0	0.0
Pancreas - Small bowel	2	2	100.0	0	0.0	0	0.0
Kidney - Kidney - Pancreas	2	1	50.0	0	0.0	1	50.0
Kidney - Islets - Liver	1	0	0.0	0	0.0	1	100.0
Liver - Pancreas - Small bowel	1	0	0.0	0	0.0	1	100.0
Islets - Liver - Lung	1	1	100.0	0	0.0	0	0.0

Remark: 'Liver - Pancreas - Small bowel' Tpx a Tpx type not performed as first STCS Tpx.

Table 4: Number of transplanted organs

	Total	First Tpx	(%)	Re Tpx	(%)	Second Tpx	(%)
Total	3322	2802	84.3	434	13.1	86	2.6
Kidney	1930	1574	81.6	317	16.4	39	2.0
Liver	691	612	88.6	68	9.8	11	1.6
Lung	321	295	91.9	21	6.5	5	1.6
Heart	225	223	99.1	2	0.9	0	0.0
Pancreas	95	78	82.1	7	7.4	10	10.5
Islets	56	17	30.4	18	32.1	21	37.5
Small bowel	4	3	75.0	1	25.0	0	0.0

3 PATIENTS, TRANSPLANTATIONS AND TRANSPLANTED ORGANS

Table 5: Patients' characteristics for major Tpx types

	Total	Kidney	Liver	Lung	Heart	Islets	Kidney - Pancreas
Total no. patients	2942	1702	615	304	219	29	73
Age (yrs), median - IQR*	53.6 (41.6,61.7)	53.8 (42,62.7)	54.4 (44,61.2)	54.1 (36.7,60.4)	51.8 (37.8,59.7)	52.2 (46,56.9)	44.3 (37.9,50.1)
Male gender, n (%)	1859 (63.2%)	1087 (63.9%)	405 (65.9%)	149 (49%)	163 (74.4%)	17 (58.6%)	38 (52.1%)
Pediatric, n (%)	156 (5.3%)	72 (4.2%)	51 (8.3%)	12 (3.9%)	21 (9.6%)	0 (0%)	0 (0%)
Observation time (yrs), median - IQR	3.5 (1.8,5.3)	3.8 (2.5,5)	3.1 (1.6,5)	2.7 (1.3,4.1)	2.9 (1.2,4.6)	4.0 (2.2,6.5)	3.7 (2.1,5.5)
No. deaths, n (%)	370 (12.6%)	108 (6.3%)	110 (17.9%)	98 (32.2%)	48 (21.9%)	4 (13.8%)	2 (2.7%)
No. patients with at least one GF**, n (%)	247 (8.4%)	116 (6.8%)	55 (8.9%)	34 (11.2%)	19 (8.7%)	8 (27.6%)	15 (20.5%)
- with GF, alive	135 (4.6%)	87 (5.1%)	19 (3.1%)	7 (2.3%)	1 (0.5%)	7 (24.1%)	14 (19.2%)
- with GF -> death	64 (2.2%)	25 (1.5%)	24 (3.9%)	10 (3.3%)	3 (1.4%)	1 (3.4%)	1 (1.4%)
- with GF - related death	48 (1.6%)	4 (0.2%)	12 (2%)	17 (5.6%)	15 (6.8%)	0 (0%)	0 (0%)
- death without GF	258 (8.8%)	79 (4.6%)	74 (12%)	71 (23.4%)	30 (13.7%)	3 (10.3%)	1 (1.4%)
No. patients with any ID***	2232 (75.9 %)	1325 (77.8%)	450 (73.2%)	222 (73%)	162 (74%)	15 (51.7%)	58 (79.5%)
- any proven/viral ID event	1600 (54.4 %)	924 (54.3%)	321 (52.2%)	178 (58.6%)	124 (56.6%)	9 (31%)	44 (60.3%)
- any incident cancer other than skin	198 (6.7 %)	97 (5.7%)	67 (10.9%)	19 (6.2%)	9 (4.1%)	3 (10.3%)	3 (4.1%)
- any incident skin cancer	234 (8 %)	158 (9.3%)	28 (4.6%)	25 (8.2%)	16 (7.3%)	5 (17.2%)	2 (2.7%)

* IQR: interquartile range

** GF: graft failure

*** ID: infectious disease event

Remark: 'Total' refers to the total number of patients with Tpx presented in this table.

3.2 STCS patient enrolment over time

For the recruitment activity over time, patient enrolment in STCS from May 2008 till December 2014 is depicted quarterly.

Figure 1: Quarterly overall patient enrolment

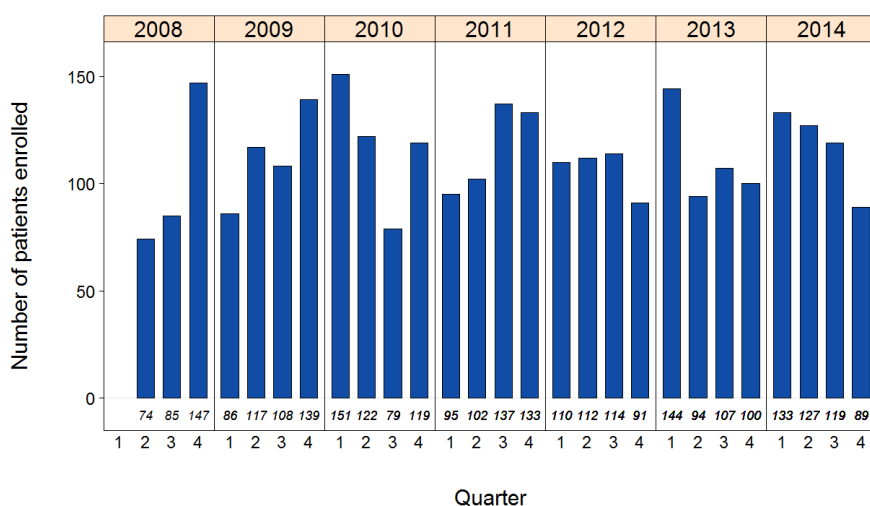
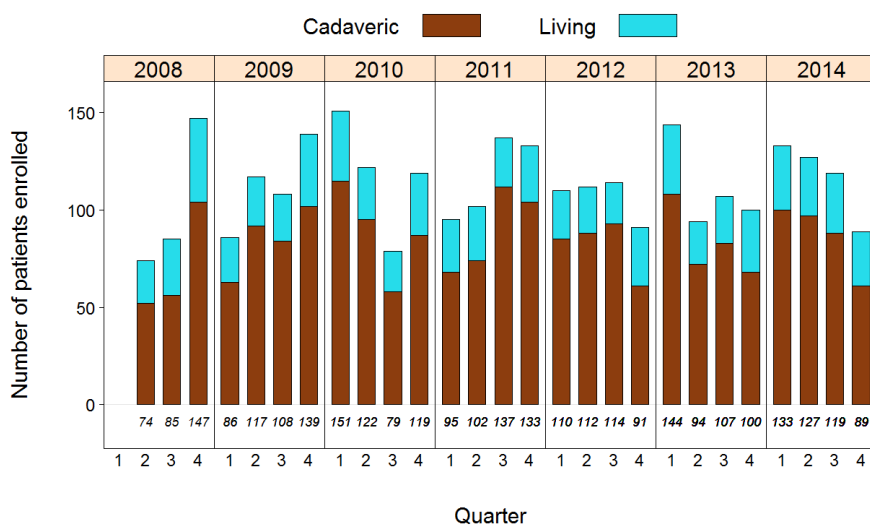


Figure 2: Quarterly patient enrolment by donor type



3 PATIENTS, TRANSPLANTATIONS AND TRANSPLANTED ORGANS

Figure 3: Cumulative overall patient enrolment

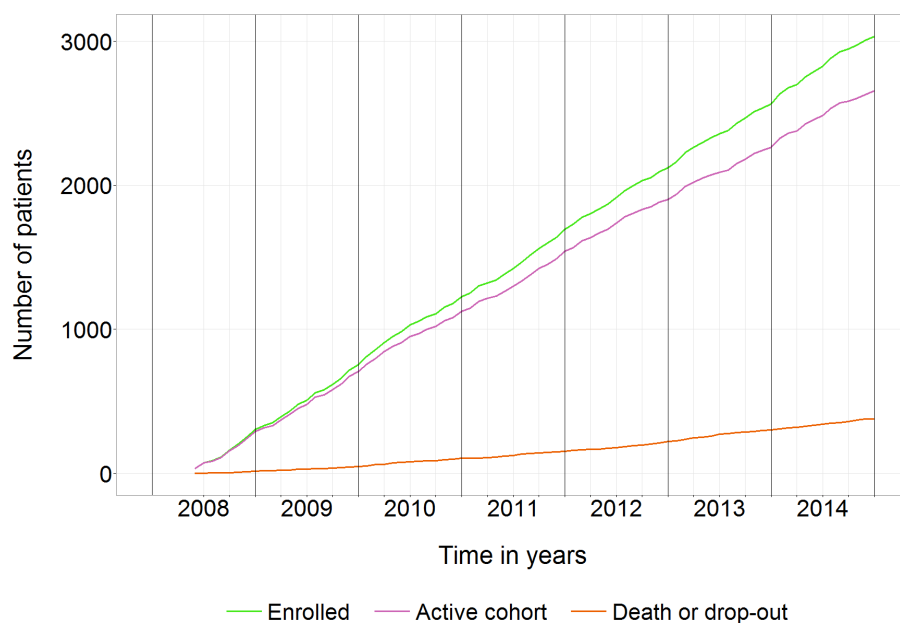


Figure 4: Cumulative overall patient enrolment by Tpx type

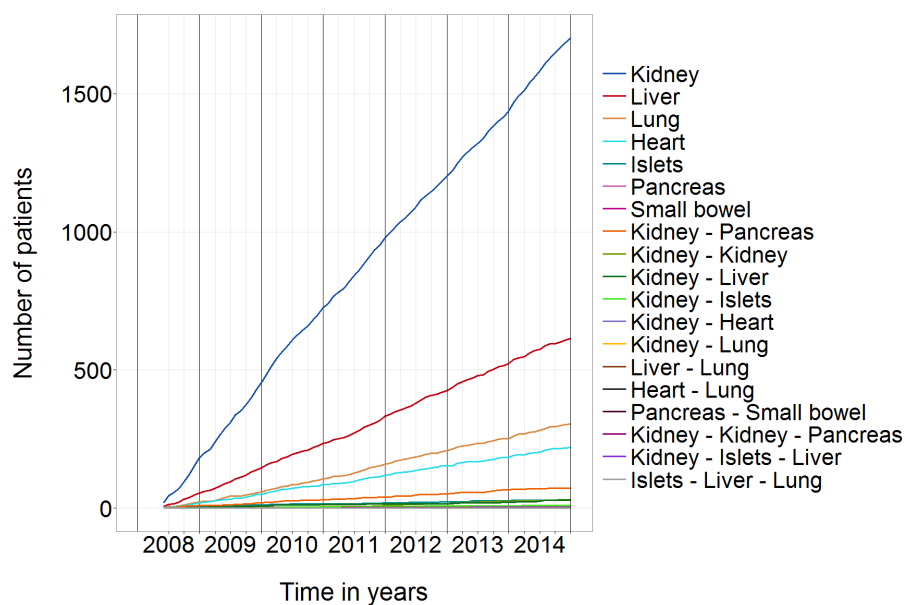
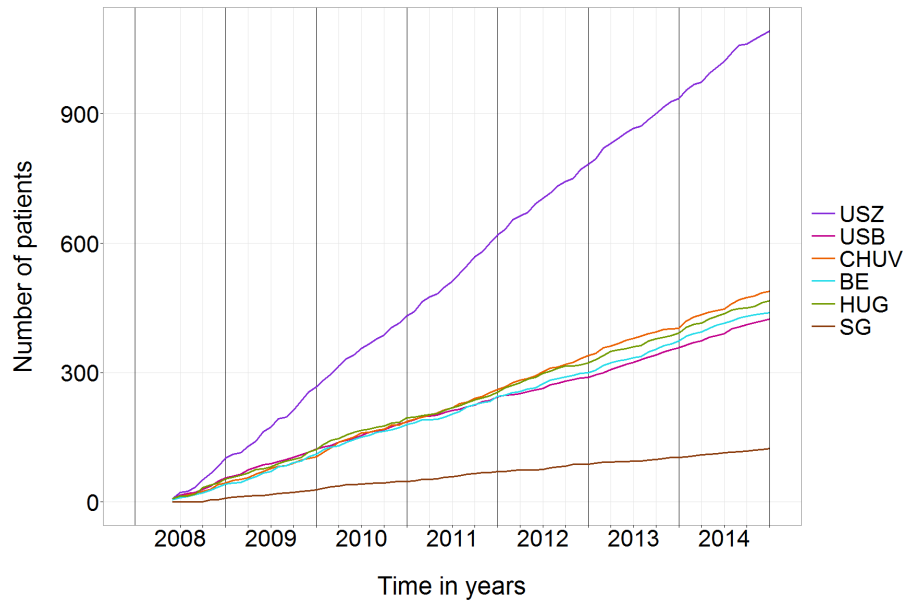


Figure 5: Cumulative overall patient enrolment by centre



Remark: Universitätsspital Zürich (USZ), Universitätsspital Basel (USB), Centre Hospitalier Universitaire Vaudois Lausanne (CHUV), Inselspital Bern (BE), Hôpitaux Universitaires de Genève (HUG), Kantonsspital St. Gallen (SG)

3.3 Transplantation activities by centre

Figure 6: Number of patients enrolled

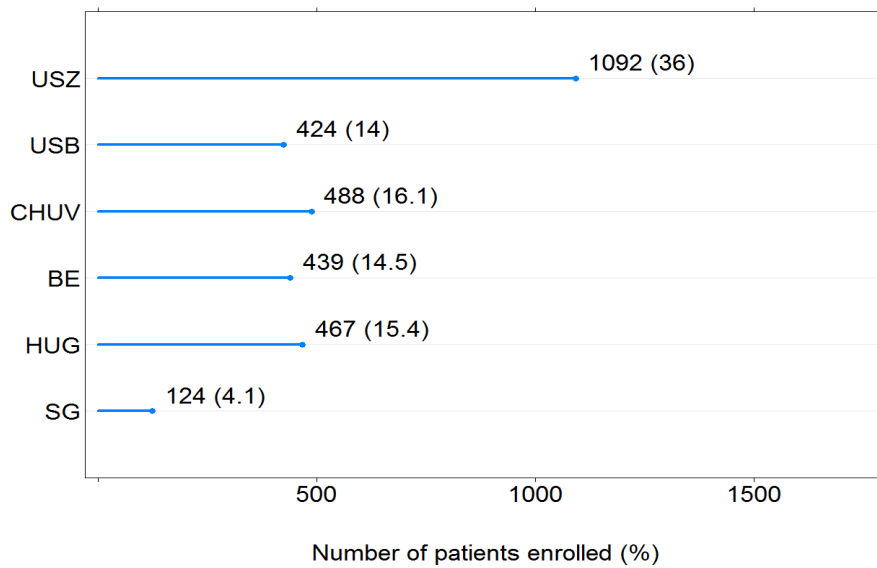
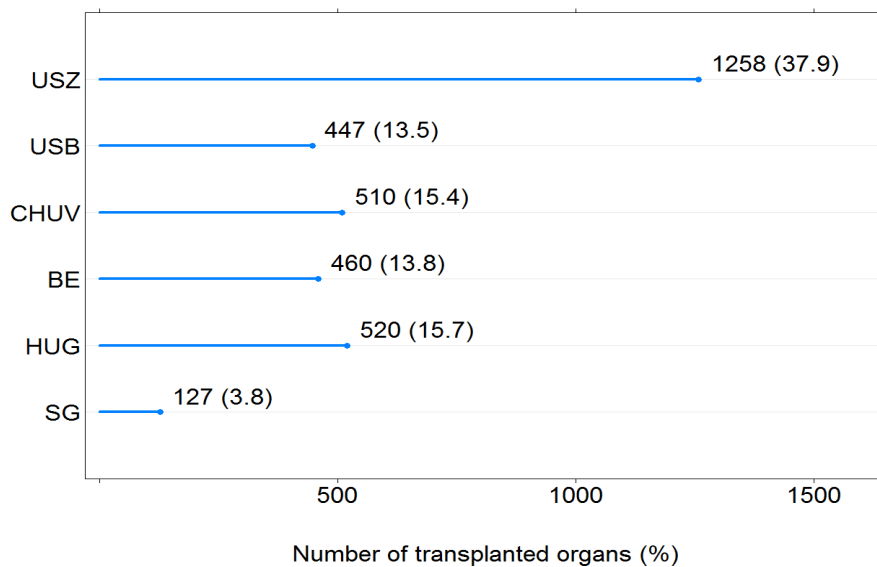
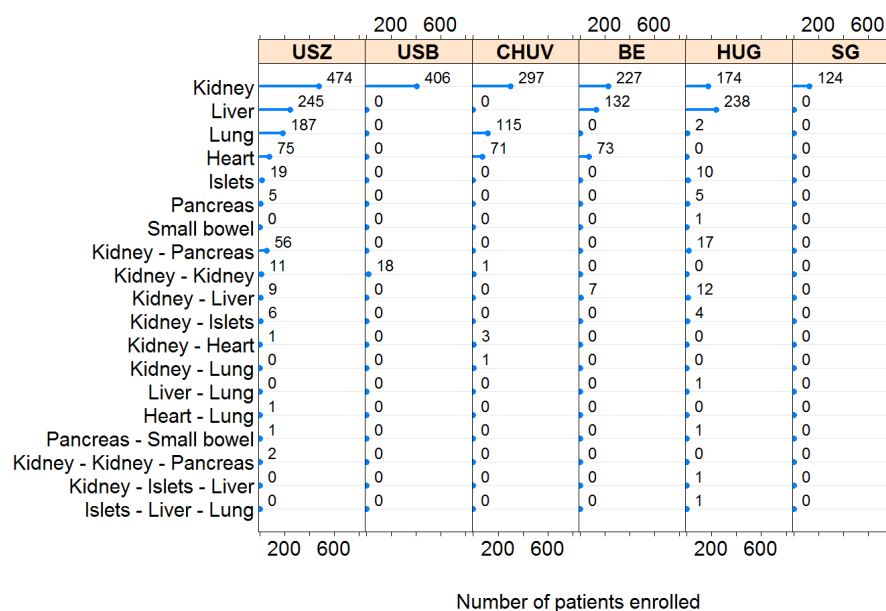


Figure 7: Number of transplanted organs



3 PATIENTS, TRANSPLANTATIONS AND TRANSPLANTED ORGANS

Figure 8: Number of patients enrolled by Tpx type



3.4 Kidney transplantations by centre

Figure 9: Number of patients with first single kidney Tpx

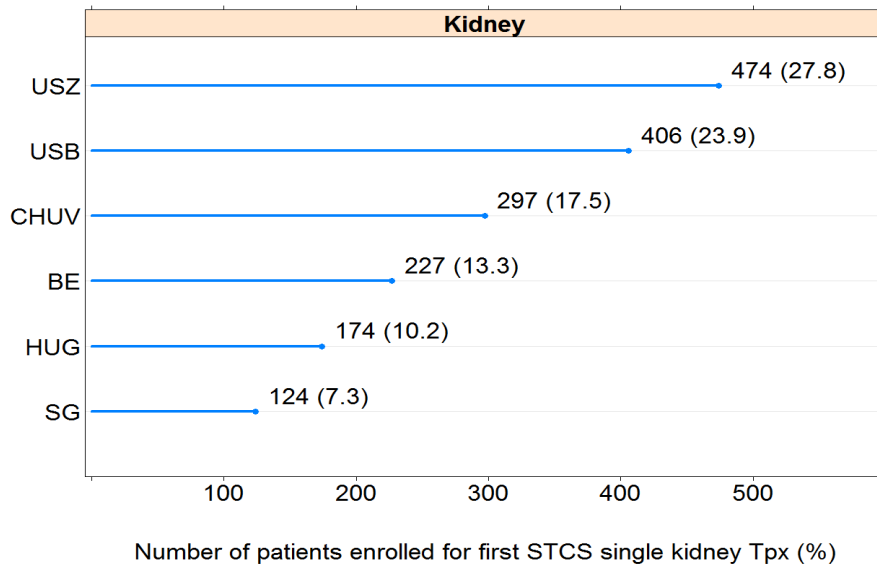
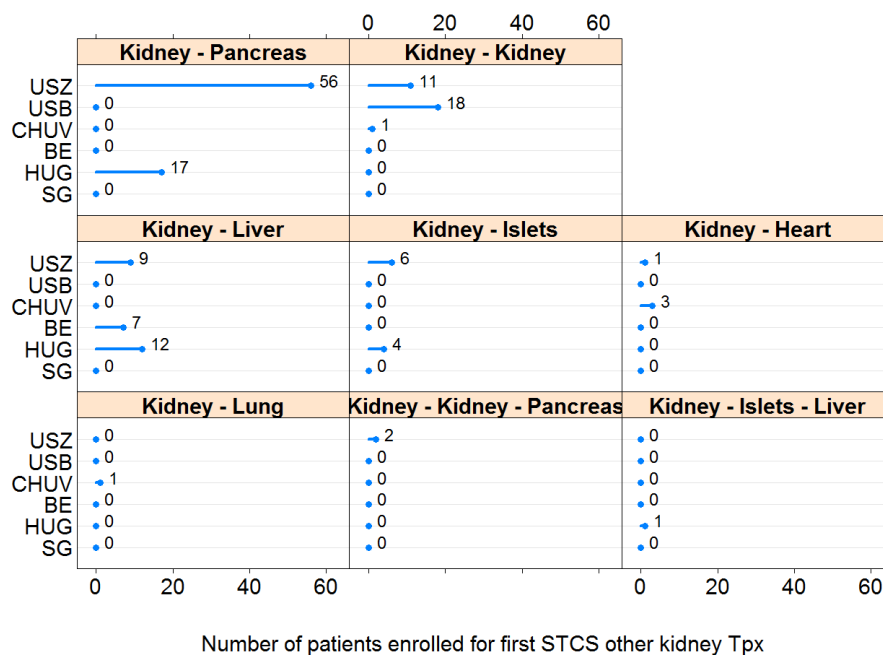


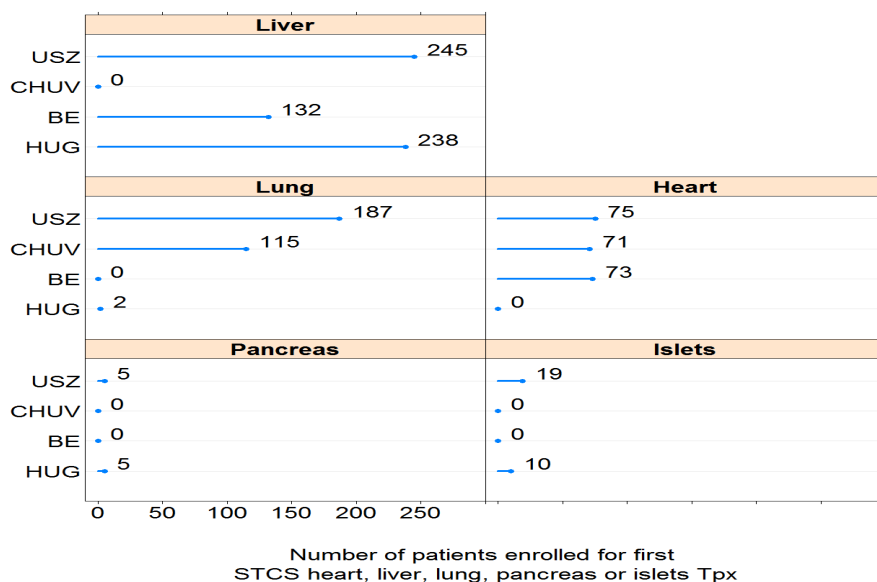
Figure 10: Number of patients with other kidney Tpx



3.5 Transplantations other than kidney by centre

Data from following rare Tpx are not shown: Small bowel (1, HUG), Liver - Lung (1, HUG), Heart - Lung (1, USZ), Pancreas - Small bowel (each 1 in USZ and HUG) and Islets - Liver - Lung (1, HUG).

Figure 11: Number of patients with first STCS liver, lung, heart, pancreas or islets Tpx



3.6 Single Kidney and Liver Tpx by donor type

Figures 12 and 13 show all STCS single kidney and liver Tpx by donor type. Figures 14 and 15 present proportions of donor types in all single and liver Tpx within centres.

Figure 12: Number of single kidney Tpx

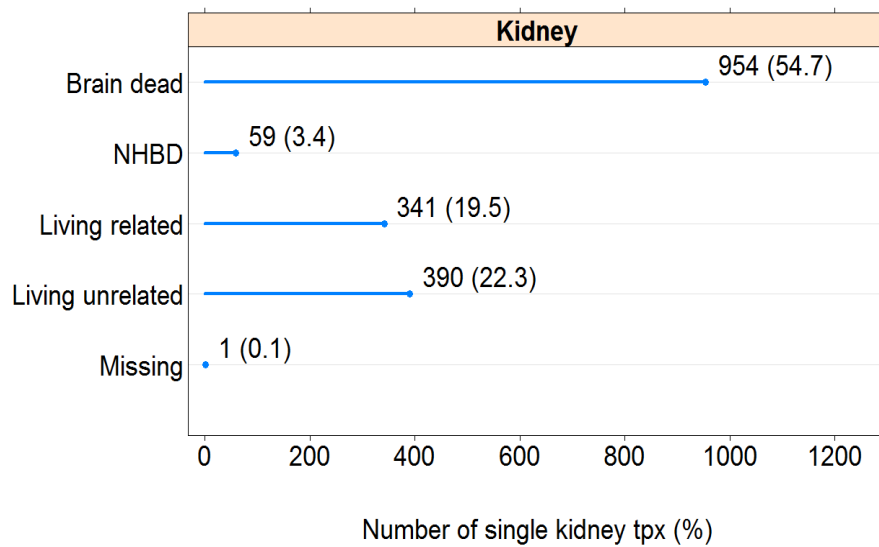


Figure 13: Number of single liver Tpx

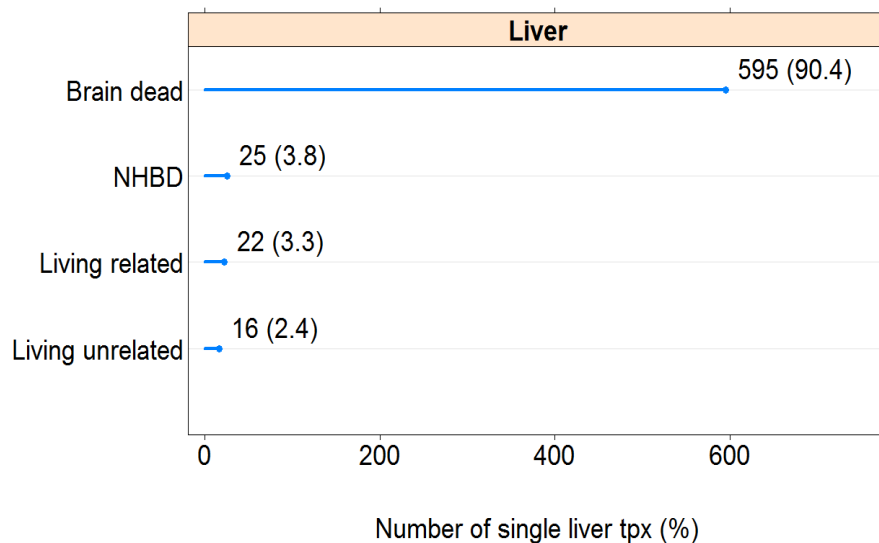
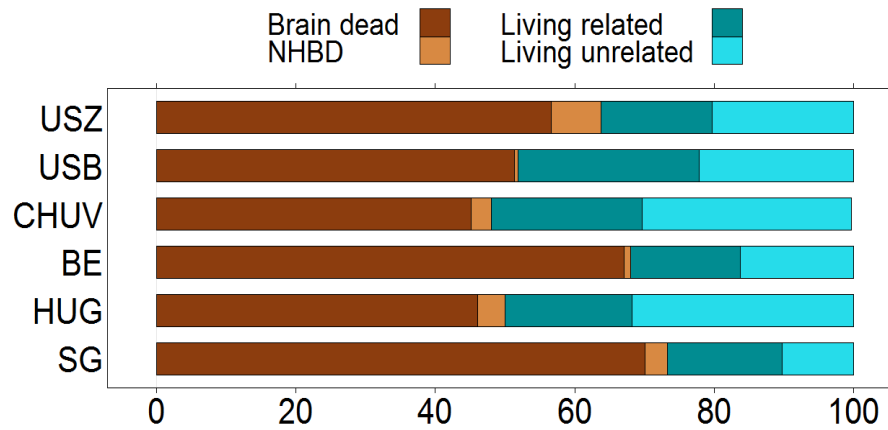


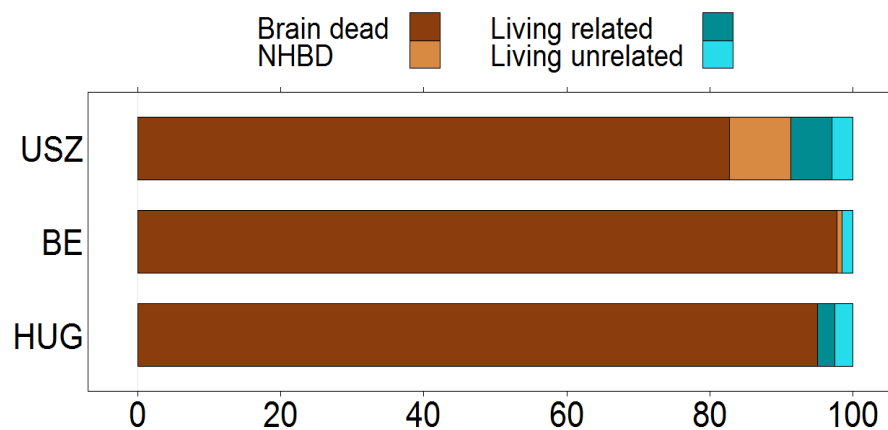
Figure 14: Proportions of donor types in all single kidney Tpx



Proportions of donor types
in single kidney tpx (% by centre)

Remark: The missing record is not shown (see Figure 12).

Figure 15: Proportions of donor types in all single liver Tpx



Proportions of donor types
in single liver tpx (% by centre)

4 Consent status

Patients in STCS may change their consent status. Figures 16 and 17 show patients' current consent status (by centre). Table 6 shows patients' status update (from enrolment (row, 'E') to a more current date (column, 'C')).

Figure 16: Current patients' consent status

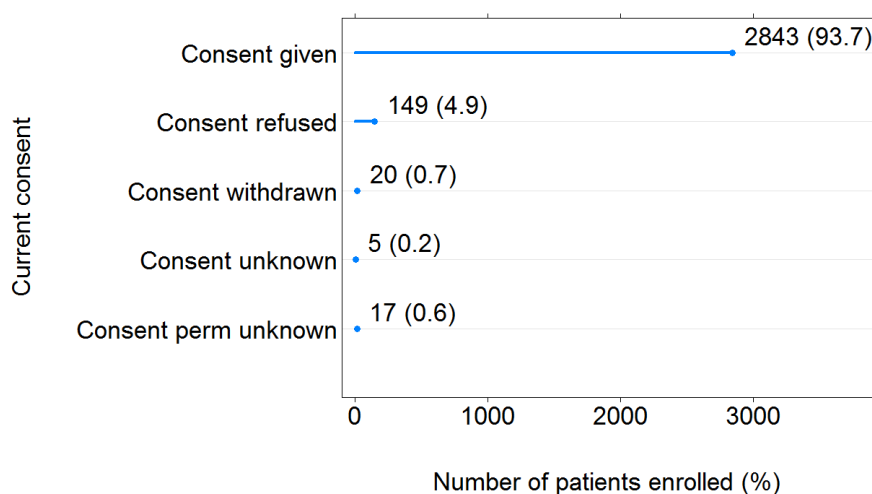


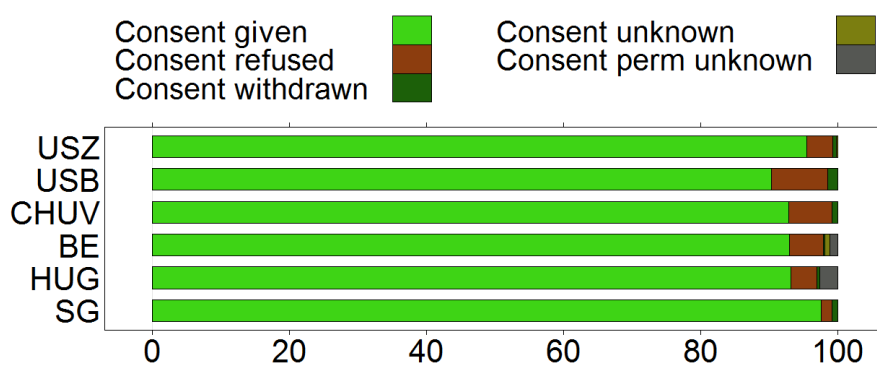
Table 6: Patients' current consent (columns) against consent status at enrolment (rows)

	Total	C-Given	C-Refused	C-Withdrawn	C-Unknown	C-Perm unknown
Total	3034	2843	149	20	5	17
E-Given	2839	2819	0	20	0	0
E-Refused	151	3	148	0	0	0
E-Withdrawn	0	0	0	0	0	0
E-Unknown	28	21	1	0	5	1
E-Perm unknown	16	0	0	0	0	16

Remark: 'C' means 'current consent status' and 'E' denotes the consent status at enrolment.

In Figure 17, current patients' status (i. e. last known consent status) is given proportionally within each centre.

Figure 17: Current patients' consent status by centre



Proportions of current
consent types for patients (% by centre)

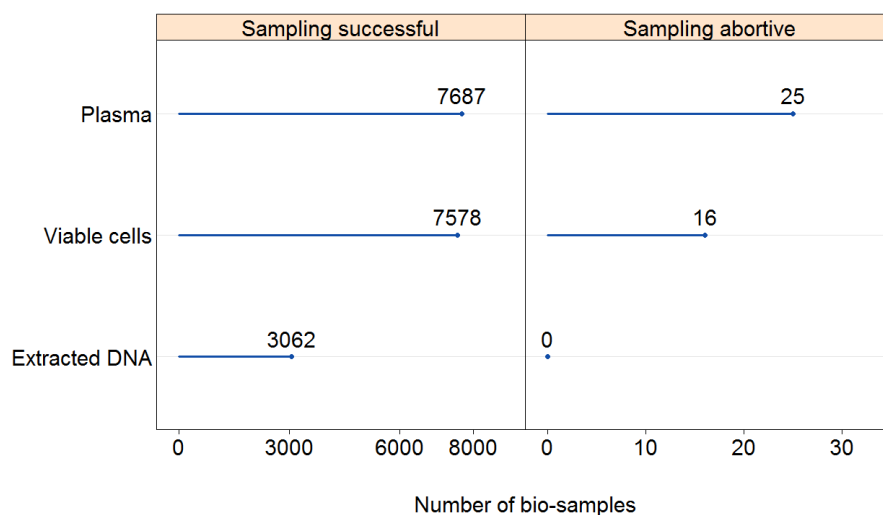
5 Bio-samples

Table 7 presents the number of patients with and without bio-samples. The consent status for patients with at least one bio-sample is at the time point of the first drawn bio.sample. Consent status at enrolment is taken for patients without any bio-samples.

Table 7: Number of patients with bio-samples

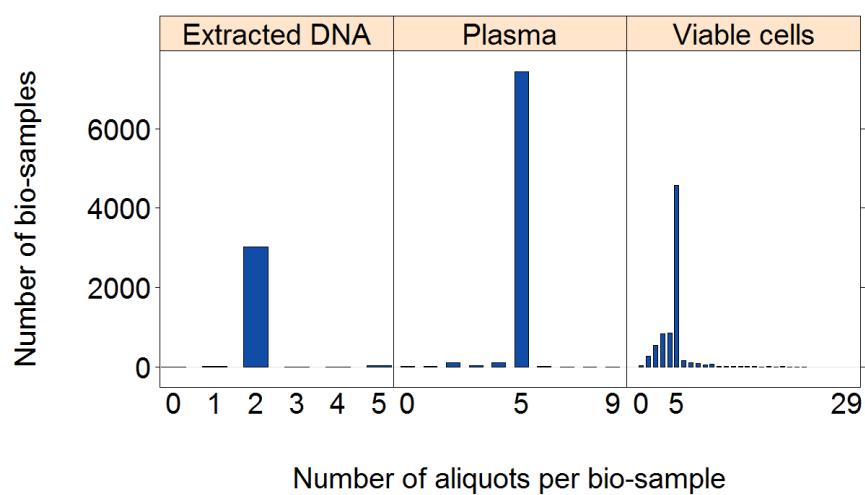
	Total	Sample (%)	No sample (%)
Total	3034	2836 93.5	198 6.5
Consent given	2849	2819 98.9	30 1.1
Consent refused	150	0 0.0	150 100.0
Consent unknown	19	12 63.2	7 36.8
Consent perm unknown	16	5 31.2	11 68.8

Figure 18: Number of bio-samples in STCS



Remark: Sampling is defined as abortive if no aliquots were stored.

Figure 19: Distribution of number of aliquots by sample type



6 Infectious disease events

In Tables 8 and 9, descriptive information about patients with infectious disease (ID) events and types of ID events are given. Table 10 and Figure 20 give ID event rates by Tpx and pathogen type.

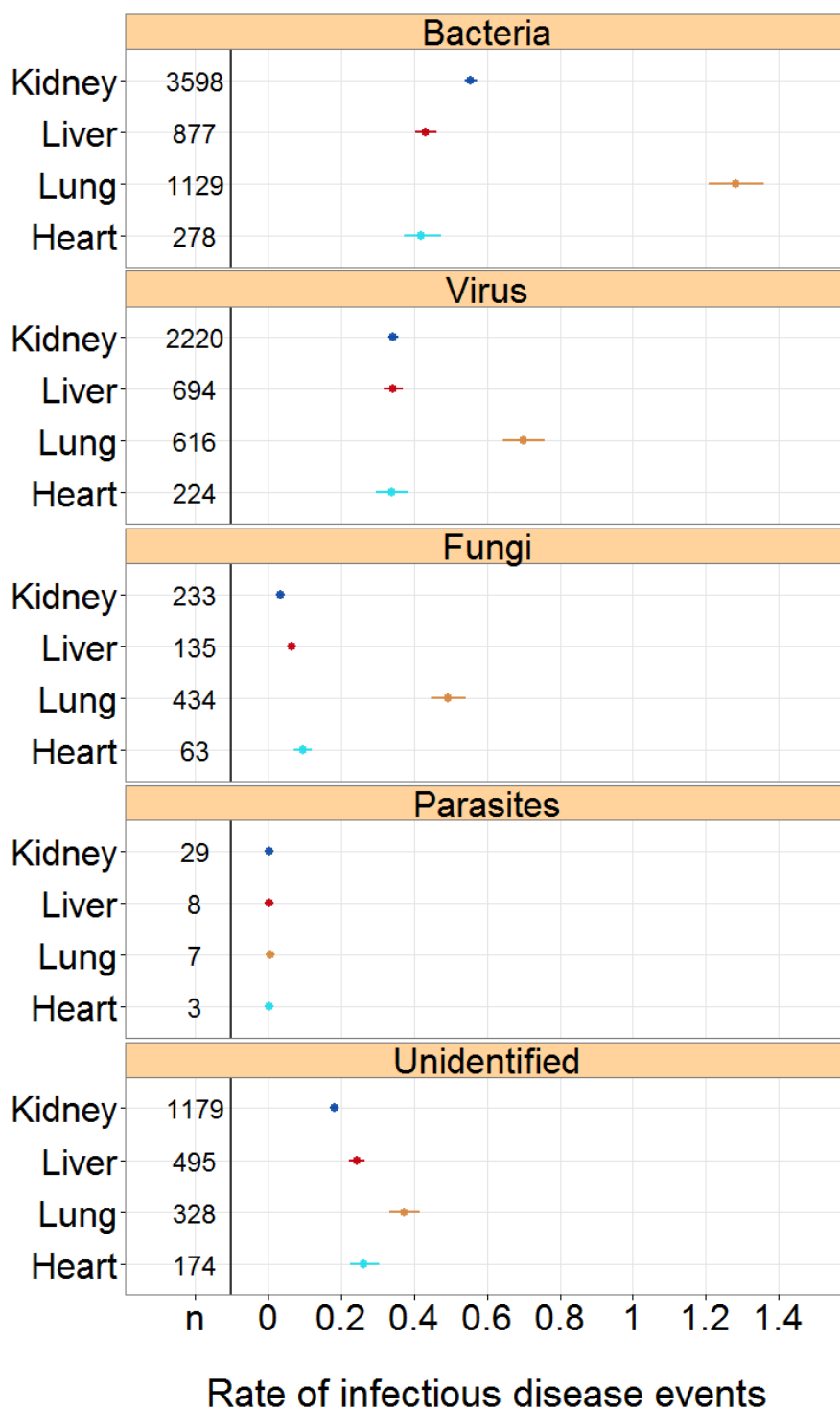
Table 8: Patients with infectious disease events

	N	% (sd)
Total number of patients	3034	
Patients with at least one ID event	2306	76%
- Number of ID events, mean (sd)	5.9	(5.4)
Patients with at least one proven/viral ID event	1659	54.7%
- Number of proven/viral ID events, mean (sd)	3	(2.8)

Table 9: Summary of infectious disease events

	N	(%)
Total number of ID events	13603	100.0
Proven disease	4834	35.5
Viral syndrome	99	0.7
Primary infection	44	0.3
Probable disease	2973	21.9
Asymptomatic	2271	16.7
Colonization	3062	22.5
Possible disease	43	0.3
Fever neutropenia	11	0.1
Information missing	266	2.0

Figure 20: Rate of infectious disease events by pathogen and Tpx type



Remark: The rate of ID events is defined as the number of ID events per year of observation time. It is calculated as number of ID events divided by the total observation time of patients at risk.

Table 10: Rate of infectious disease events by pathogen and Tpx type

Tpx	Pathogen	No. ID events	ID event rate	(95% CI)
Kidney	Bacteria	3598	0.56	(0.54, 0.57)
	Virus	2220	0.34	(0.33, 0.36)
	Fungi	233	0.04	(0.03, 0.04)
	Parasites	29	0	(0, 0.01)
	Unidentified	1179	0.18	(0.17, 0.19)
	Total	7259	1.12	(1.1, 1.15)
Liver	Bacteria	877	0.43	(0.4, 0.46)
	Virus	694	0.34	(0.32, 0.37)
	Fungi	135	0.07	(0.06, 0.08)
	Parasites	8	0	(0, 0.01)
	Unidentified	495	0.24	(0.22, 0.27)
	Total	2209	1.09	(1.05, 1.14)
Lung	Bacteria	1129	1.28	(1.21, 1.36)
	Virus	616	0.7	(0.65, 0.76)
	Fungi	434	0.49	(0.45, 0.54)
	Parasites	7	0.01	(0, 0.02)
	Unidentified	328	0.37	(0.33, 0.42)
	Total	2514	2.86	(2.75, 2.97)
Heart	Bacteria	278	0.42	(0.37, 0.47)
	Virus	224	0.34	(0.3, 0.39)
	Fungi	63	0.1	(0.07, 0.12)
	Parasites	3	0	(0, 0.01)
	Unidentified	174	0.26	(0.23, 0.31)
	Total	742	1.12	(1.04, 1.21)

7 Follow-up

Percentages in Figures 21 and 22 have to be read as proportions of Tpx for which at least the 6 month or the 12 month FUP visit was performed.

Figure 21: Number of Tpx with 6 month FUP

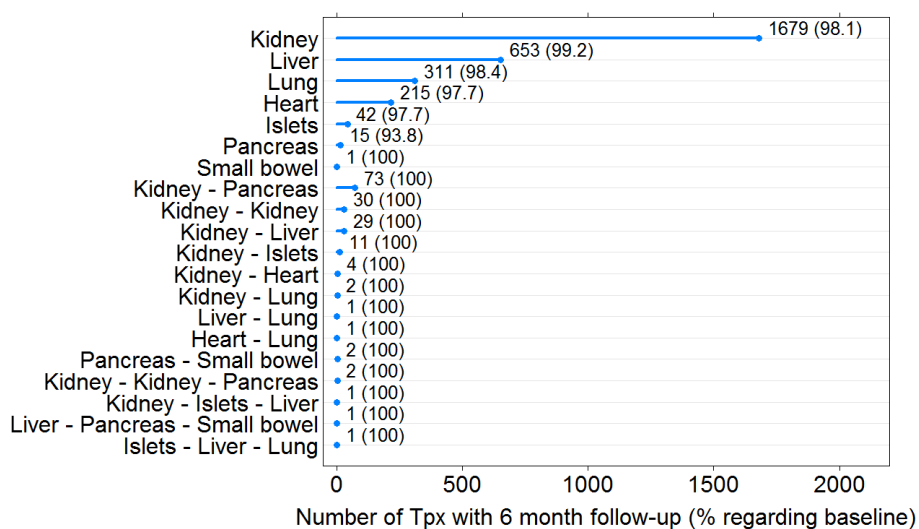
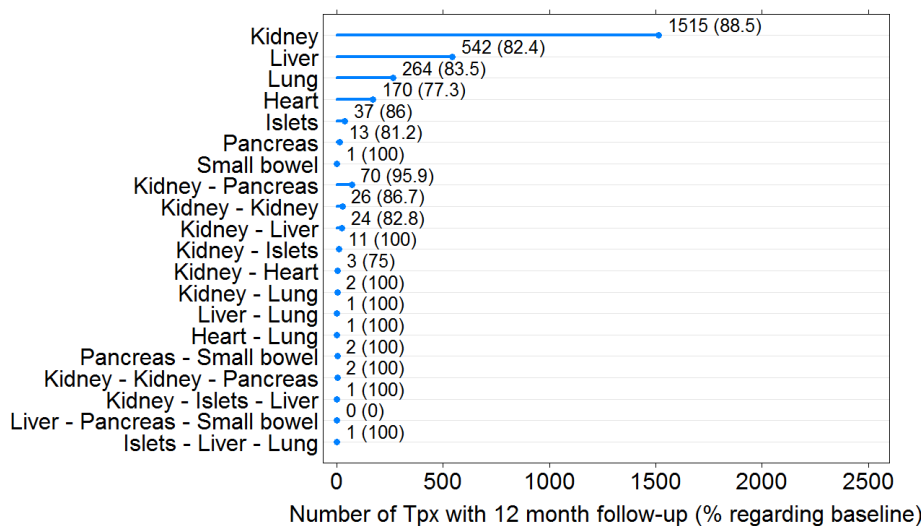


Figure 22: Number of Tpx with 12 month FUP



8 Mortality

In the following, survival rate 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 23, the 95%-confidence interval (CI) is given. Furthermore, survival rate estimates are not adjusted for potential risk factors (in Figures and Tables).

8.1 Overall

Table 11: Follow-up information of patients

	Follow-up
Median follow-up duration (years)	3.48
IQR (years)	1.76 - 5.34
Maximal follow-up (years)*	7.27
Number of deaths	385
Patients with (at least one) graft failure	216
Patients lost to follow-up**	25

* Time period from 2nd of May 2008 to 11th of August 2015

** More details in Table 12

Table 12: Patients who dropped out by Tpx type

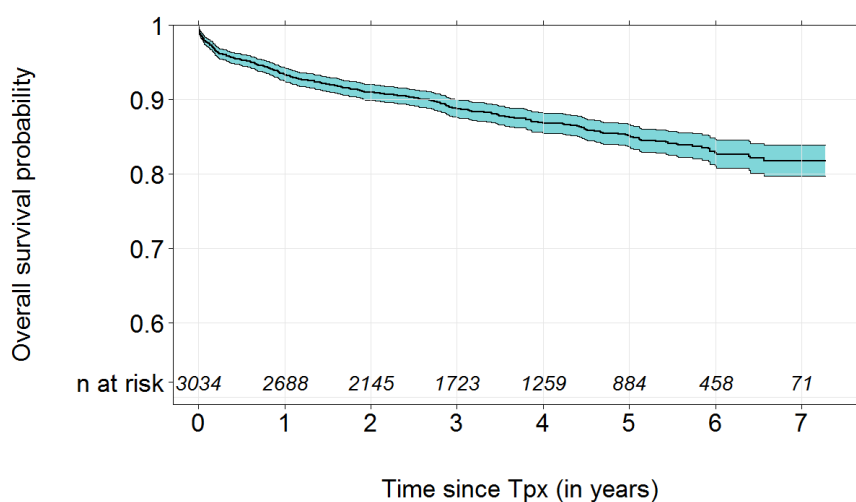
	BE	CHUV	HUG	SG	USB	USZ	Sum
No. patients enrolled, N	439	488	467	124	424	1092	3034
No. patients dropped out, N (%)	2 (0.5%)	6 (1.2%)	3 (0.6%)	0 (0%)	4 (0.9%)	10 (0.9%)	25 (0.8%)
- Heart	1	-	-	-	-	1	2
- Islets	-	-	-	-	-	1	1
- Kidney	1	4	1	-	4	4	14
- Kidney - Pancreas	-	-	-	-	-	2	2
- Liver	-	-	2	-	-	2	4
- Lung	-	2	-	-	-	-	2

Table 13: Overall mortality

Time	Mortality (%)	95% CI	No at risk	Cum. deaths
Baseline	0.0	-	3034	0
1 month	2.2	(1.7, 2.7)	2966	67
6 months	4.7	(4, 5.5)	2888	143
1 year(s)	6.6	(5.7, 7.5)	2688	200
2 year(s)	9.1	(8, 10.1)	2145	264
3 year(s)	11.2	(10, 12.4)	1723	310
4 year(s)	13.2	(11.9, 14.5)	1259	343
5 year(s)	14.9	(13.3, 16.4)	884	363
6 year(s)	17.2	(15.3, 19)	458	381
7 year(s)	18.2	(16.1, 20.3)	71	385
Overall	18.2	(16.1, 20.3)	-	385

Remark: 'Cum.' means 'Cumulative'. The 95%-CI is given for 'Mortality'. The time point 'Overall' refers to the maximal follow-up time in the STCS (from 2nd of May in 2008 to 11th of August in 2015).

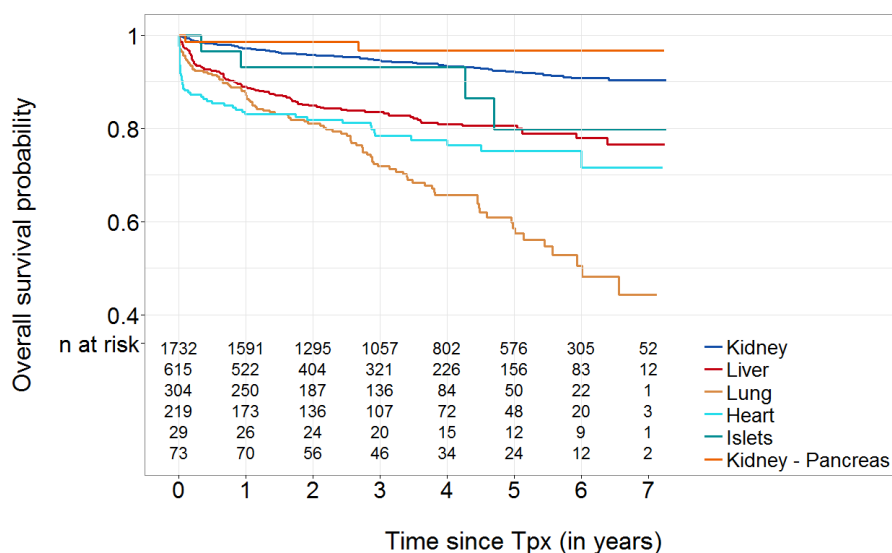
Figure 23: Overall survival



8.2 Mortality by Tpx

For the issue of clarity, Tpx types performed in STCS are separated in frequent and rare Tpx scenarios regarding their frequency of occurrence. Rare Tpx (unless Islets Tpx) are performed less than 30 in STCS so far. Figures and Tables are thus potentially given per frequent and rare Tpx (see Appendix A).

Figure 24: Overall survival for frequent Tpx types



Remark: 30 Kidney-Kidney Tpx are included in Kidney Tpx.

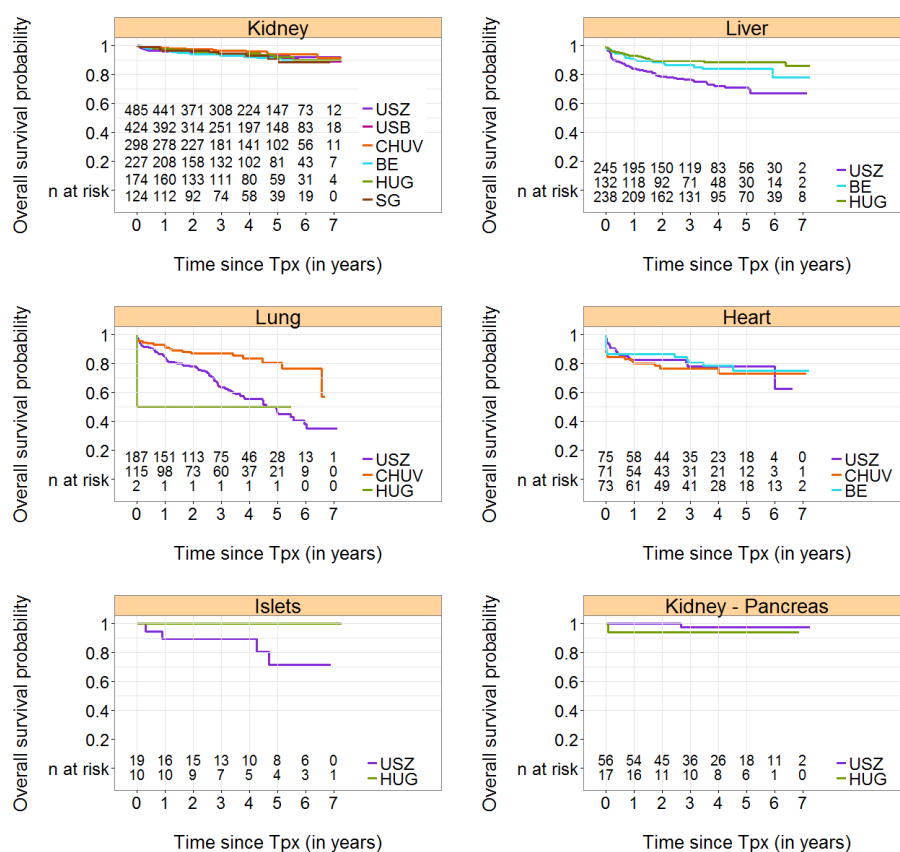
Table 14: Overall mortality by Tpx type

Tpx	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
Kidney	Baseline	0.0	-	1732	0
-	1 month	0.5	(0.1, 0.8)	1723	8
-	6 months	1.8	(1.2, 2.4)	1699	31
-	1 year(s)	2.8	(2, 3.6)	1591	48
-	2 year(s)	4.3	(3.3, 5.2)	1295	70
-	3 year(s)	5.4	(4.3, 6.6)	1057	84
-	4 year(s)	6.7	(5.3, 8)	802	96
-	5 year(s)	7.8	(6.2, 9.3)	576	104
-	6 year(s)	9.2	(7.3, 11)	305	111
-	7 year(s)	9.7	(7.6, 11.7)	52	112
-	Overall	9.7	(7.6, 11.7)	-	112
Liver	Baseline	0.0	-	615	0
-	1 month	2.8	(1.5, 4.1)	598	17
-	6 months	7.6	(5.5, 9.7)	568	47
-	1 year(s)	11.0	(8.4, 13.4)	522	67
-	2 year(s)	15.1	(12.1, 17.9)	404	89
-	3 year(s)	16.4	(13.3, 19.4)	321	95
-	4 year(s)	19.1	(15.6, 22.4)	226	104
-	5 year(s)	19.5	(15.9, 22.9)	156	105
-	6 year(s)	22.0	(17.7, 26)	83	109
-	7 year(s)	23.4	(18.3, 28.1)	12	110
-	Overall	23.4	(18.3, 28.1)	-	110
Lung	Baseline	0.0	-	304	0
-	1 month	4.3	(2, 6.5)	291	13
-	6 months	8.6	(5.4, 11.6)	278	26
-	1 year(s)	12.9	(9.1, 16.6)	250	39
-	2 year(s)	18.9	(14.3, 23.3)	187	55
-	3 year(s)	28.1	(22.3, 33.5)	136	74
-	4 year(s)	34.3	(27.7, 40.3)	84	84
-	5 year(s)	41.4	(33.3, 48.4)	50	91
-	6 year(s)	49.4	(39.1, 58)	22	96
-	7 year(s)	55.8	(42.1, 66.2)	1	98
-	Overall	55.8	(42.1, 66.2)	-	98
Heart	Baseline	0.0	-	219	0
-	1 month	11.4	(7.1, 15.5)	194	25
-	6 months	14.6	(9.8, 19.2)	186	32
-	1 year(s)	17.0	(11.8, 21.8)	173	37
-	2 year(s)	18.1	(12.8, 23.1)	136	39
-	3 year(s)	21.6	(15.6, 27.2)	107	44
-	4 year(s)	23.5	(17, 29.5)	72	46
-	5 year(s)	24.9	(17.9, 31.2)	48	47
-	6 year(s)	28.4	(18.5, 37.2)	20	48
-	7 year(s)	28.4	(18.5, 37.2)	3	48
-	Overall	28.4	(18.5, 37.2)	-	48
Islets	Baseline	0.0	-	29	0
-	1 month	0.0	-	29	0
-	6 months	3.4	(0, 9.9)	28	1
-	1 year(s)	6.9	(0, 15.7)	26	2
-	2 year(s)	6.9	(0, 15.7)	24	2
-	3 year(s)	6.9	(0, 15.7)	20	2

Tpx	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
-	4 year(s)	6.9	(0, 15.7)	15	2
-	5 year(s)	20.2	(0, 37)	12	4
-	6 year(s)	20.2	(0, 37)	9	4
-	7 year(s)	20.2	(0, 37)	1	4
-	Overall	20.2	(0, 37)	-	4
Kidney - Pancreas	Baseline	0.0	-	73	0
-	1 month	0.0	-	73	0
-	6 months	1.4	(0, 4)	72	1
-	1 year(s)	1.4	(0, 4)	70	1
-	2 year(s)	1.4	(0, 4)	56	1
-	3 year(s)	3.3	(0, 7.9)	46	2
-	4 year(s)	3.3	(0, 7.9)	34	2
-	5 year(s)	3.3	(0, 7.9)	24	2
-	6 year(s)	3.3	(0, 7.9)	12	2
-	7 year(s)	3.3	(0, 7.9)	2	2
-	Overall	3.3	(0, 7.9)	-	2

8.3 Mortality by Tpx and centre

Figure 25: Overall survival for frequent Tpx



Remark: 30 Kidney-Kidney Tpx (11 (USZ), 18 (USB) and 1 (CHUV)) are included in Kidney Tpx.

Table 15: Overall mortality by frequent Tpx type and centre

Tpx - centre	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
Kidney - USZ	Baseline	0.0	-	485	0
-	1 month	0.6	(0, 1.3)	481	3
-	6 months	3.3	(1.7, 4.9)	468	16
-	1 year(s)	4.2	(2.4, 5.9)	441	20
-	2 year(s)	4.9	(2.9, 6.8)	371	23
-	3 year(s)	5.4	(3.3, 7.5)	308	25
-	4 year(s)	6.9	(4.3, 9.3)	224	29
-	5 year(s)	7.4	(4.7, 10)	147	30
-	6 year(s)	8.1	(5, 11.1)	73	31
-	7 year(s)	8.1	(5, 11.1)	12	31
-	Overall	8.1	(5, 11.1)	-	31
Kidney - USB	Baseline	0.0	-	424	0
-	1 month	0.5	(0, 1.1)	422	2
-	6 months	1.4	(0.3, 2.5)	418	6
-	1 year(s)	2.4	(0.9, 3.8)	392	10
-	2 year(s)	4.3	(2.3, 6.2)	314	17
-	3 year(s)	6.0	(3.5, 8.4)	251	22
-	4 year(s)	8.1	(5, 11)	197	27
-	5 year(s)	8.6	(5.4, 11.7)	148	28
-	6 year(s)	11.1	(6.8, 15.2)	83	31
-	7 year(s)	11.1	(6.8, 15.2)	18	31
-	Overall	11.1	(6.8, 15.2)	-	31
Kidney - CHUV	Baseline	0.0	-	298	0
-	1 month	0.3	(0, 1)	297	1
-	6 months	0.7	(0, 1.6)	296	2
-	1 year(s)	1.4	(0, 2.7)	278	4
-	2 year(s)	2.5	(0.7, 4.4)	227	7
-	3 year(s)	3.5	(1.2, 5.8)	181	9
-	4 year(s)	4.2	(1.5, 6.8)	141	10
-	5 year(s)	5.8	(2.3, 9.2)	102	12
-	6 year(s)	5.8	(2.3, 9.2)	56	12
-	7 year(s)	8.4	(2.2, 14.2)	11	13
-	Overall	8.4	(2.2, 14.2)	-	13
Kidney - BE	Baseline	0.0	-	227	0
-	1 month	0.0	-	227	0
-	6 months	1.8	(0, 3.5)	223	4
-	1 year(s)	2.7	(0.5, 4.7)	208	6
-	2 year(s)	6.2	(2.9, 9.4)	158	13
-	3 year(s)	6.9	(3.3, 10.4)	132	14
-	4 year(s)	7.8	(3.8, 11.5)	102	15
-	5 year(s)	8.7	(4.3, 12.8)	81	16
-	6 year(s)	9.9	(5, 14.5)	43	17
-	7 year(s)	9.9	(5, 14.5)	7	17
-	Overall	9.9	(5, 14.5)	-	17
Kidney - HUG	Baseline	0.0	-	174	0
-	1 month	0.6	(0, 1.7)	173	1
-	6 months	1.1	(0, 2.7)	171	2
-	1 year(s)	2.3	(0, 4.6)	160	4
-	2 year(s)	3.6	(0.7, 6.5)	133	6
-	3 year(s)	5.2	(1.6, 8.7)	111	8

Tpx - centre	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
-	4 year(s)	5.2	(1.6, 8.7)	80	8
-	5 year(s)	8.0	(2.7, 13)	59	10
-	6 year(s)	10.0	(3.4, 16.2)	31	11
-	7 year(s)	10.0	(3.4, 16.2)	4	11
-	Overall	10.0	(3.4, 16.2)	-	11
Kidney - SG	Baseline	0.0	-	124	0
-	1 month	0.8	(0, 2.4)	123	1
-	6 months	0.8	(0, 2.4)	123	1
-	1 year(s)	3.3	(0.1, 6.5)	112	4
-	2 year(s)	3.3	(0.1, 6.5)	92	4
-	3 year(s)	5.7	(1.1, 10)	74	6
-	4 year(s)	7.2	(1.7, 12.3)	58	7
-	5 year(s)	9.3	(2.4, 15.8)	39	8
-	6 year(s)	11.7	(3.4, 19.2)	19	9
-	7 year(s)	11.7	(3.4, 19.2)	-	9
-	Overall	11.7	(3.4, 19.2)	-	9
Liver - USZ	Baseline	0.0	-	245	0
-	1 month	3.7	(1.3, 6)	236	9
-	6 months	11.4	(7.4, 15.3)	217	28
-	1 year(s)	16.0	(11.3, 20.5)	195	39
-	2 year(s)	21.3	(15.8, 26.4)	150	50
-	3 year(s)	23.6	(17.8, 29)	119	54
-	4 year(s)	27.9	(21.3, 33.8)	83	60
-	5 year(s)	28.8	(22.1, 34.9)	56	61
-	6 year(s)	32.8	(24.9, 39.8)	30	64
-	7 year(s)	32.8	(24.9, 39.8)	2	64
-	Overall	32.8	(24.9, 39.8)	-	64
Liver - BE	Baseline	0.0	-	132	0
-	1 month	2.3	(0, 4.8)	129	3
-	6 months	5.3	(1.4, 9)	125	7
-	1 year(s)	9.2	(4.1, 14)	118	12
-	2 year(s)	11.6	(5.9, 16.9)	92	15
-	3 year(s)	13.5	(7.3, 19.4)	71	17
-	4 year(s)	16.2	(9, 22.8)	48	19
-	5 year(s)	16.2	(9, 22.8)	30	19
-	6 year(s)	21.8	(8.4, 33.2)	14	20
-	7 year(s)	21.8	(8.4, 33.2)	2	20
-	Overall	21.8	(8.4, 33.2)	-	20
Liver - HUG	Baseline	0.0	-	238	0
-	1 month	2.1	(0.3, 3.9)	233	5
-	6 months	5.0	(2.2, 7.8)	226	12
-	1 year(s)	6.8	(3.5, 9.9)	209	16
-	2 year(s)	10.6	(6.5, 14.6)	162	24
-	3 year(s)	10.6	(6.5, 14.6)	131	24
-	4 year(s)	11.4	(7, 15.6)	95	25
-	5 year(s)	11.4	(7, 15.6)	70	25
-	6 year(s)	11.4	(7, 15.6)	39	25
-	7 year(s)	14.2	(7.1, 20.7)	8	26
-	Overall	14.2	(7.1, 20.7)	-	26
Lung - USZ	Baseline	0.0	-	187	0
-	1 month	3.7	(1, 6.4)	180	7

Tpx - centre	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
-	6 months	9.6	(5.3, 13.8)	169	18
-	1 year(s)	15.6	(10.2, 20.7)	151	29
-	2 year(s)	22.1	(15.8, 28)	113	40
-	3 year(s)	36.7	(28.5, 43.9)	75	59
-	4 year(s)	44.4	(35.3, 52.3)	46	67
-	5 year(s)	53.3	(42.5, 62)	28	73
-	6 year(s)	62.2	(49.1, 72)	13	77
-	7 year(s)	65.1	(51.1, 75.1)	1	78
-	Overall	65.1	(51.1, 75.1)	-	78
Lung - CHUV	Baseline	0.0	-	115	0
-	1 month	4.3	(0.5, 8)	110	5
-	6 months	6.1	(1.6, 10.4)	108	7
-	1 year(s)	7.9	(2.8, 12.7)	98	9
-	2 year(s)	13.1	(6.4, 19.3)	73	14
-	3 year(s)	13.1	(6.4, 19.3)	60	14
-	4 year(s)	16.6	(8.4, 24)	37	16
-	5 year(s)	19.4	(9.5, 28.3)	21	17
-	6 year(s)	23.7	(10.7, 34.8)	9	18
-	7 year(s)	42.8	(0, 68.2)	-	19
-	Overall	42.8	(0, 68.2)	-	19
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(s)	50.0	(0, 87.5)	1	1
-	2 year(s)	50.0	(0, 87.5)	1	1
-	3 year(s)	50.0	(0, 87.5)	1	1
-	4 year(s)	50.0	(0, 87.5)	1	1
-	5 year(s)	50.0	(0, 87.5)	1	1
-	6 year(s)	50.0	(0, 87.5)	-	1
-	7 year(s)	50.0	(0, 87.5)	-	1
-	Overall	50.0	(0, 87.5)	-	1
Heart - USZ	Baseline	0.0	-	75	0
-	1 month	5.3	(0.1, 10.3)	71	4
-	6 months	14.8	(6.3, 22.4)	63	11
-	1 year(s)	17.5	(8.4, 25.8)	58	13
-	2 year(s)	17.5	(8.4, 25.8)	44	13
-	3 year(s)	21.9	(11.1, 31.4)	35	15
-	4 year(s)	21.9	(11.1, 31.4)	23	15
-	5 year(s)	21.9	(11.1, 31.4)	18	15
-	6 year(s)	37.5	(1.4, 60.5)	4	16
-	7 year(s)	37.5	(1.4, 60.5)	-	16
-	Overall	37.5	(1.4, 60.5)	-	16
Heart - CHUV	Baseline	0.0	-	71	0
-	1 month	15.5	(6.6, 23.5)	60	11
-	6 months	15.5	(6.6, 23.5)	60	11
-	1 year(s)	19.8	(10, 28.6)	54	14
-	2 year(s)	23.3	(12.5, 32.7)	43	16
-	3 year(s)	23.3	(12.5, 32.7)	31	16
-	4 year(s)	27.0	(14.1, 37.9)	21	17
-	5 year(s)	27.0	(14.1, 37.9)	12	17
-	6 year(s)	27.0	(14.1, 37.9)	3	17

Tpx - centre	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
-	7 year(s)	27.0	(14.1, 37.9)	1	17
-	Overall	27.0	(14.1, 37.9)	-	17
Heart - BE	Baseline	0.0	-	73	0
-	1 month	13.7	(5.4, 21.2)	63	10
-	6 months	13.7	(5.4, 21.2)	63	10
-	1 year(s)	13.7	(5.4, 21.2)	61	10
-	2 year(s)	13.7	(5.4, 21.2)	49	10
-	3 year(s)	19.3	(9.1, 28.4)	41	13
-	4 year(s)	21.7	(10.6, 31.4)	28	14
-	5 year(s)	25.0	(12.2, 35.9)	18	15
-	6 year(s)	25.0	(12.2, 35.9)	13	15
-	7 year(s)	25.0	(12.2, 35.9)	2	15
-	Overall	25.0	(12.2, 35.9)	-	15
Islets - USZ	Baseline	0.0	-	19	0
-	1 month	0.0	-	19	0
-	6 months	5.3	(0, 14.8)	18	1
-	1 year(s)	10.5	(0, 23.3)	16	2
-	2 year(s)	10.5	(0, 23.3)	15	2
-	3 year(s)	10.5	(0, 23.3)	13	2
-	4 year(s)	10.5	(0, 23.3)	10	2
-	5 year(s)	28.4	(0, 49.4)	8	4
-	6 year(s)	28.4	(0, 49.4)	6	4
-	7 year(s)	28.4	(0, 49.4)	-	4
-	Overall	28.4	(0, 49.4)	-	4
Islets - HUG	Baseline	0.0	-	10	0
-	1 month	0.0	-	10	0
-	6 months	0.0	-	10	0
-	1 year(s)	0.0	-	10	0
-	2 year(s)	0.0	-	9	0
-	3 year(s)	0.0	-	7	0
-	4 year(s)	0.0	-	5	0
-	5 year(s)	0.0	-	4	0
-	6 year(s)	0.0	-	3	0
-	7 year(s)	0.0	-	1	0
-	Overall	0.0	-	-	0
Kidney - Pancreas - USZ	Baseline	0.0	-	56	0
-	1 month	0.0	-	56	0
-	6 months	0.0	-	56	0
-	1 year(s)	0.0	-	54	0
-	2 year(s)	0.0	-	45	0
-	3 year(s)	2.5	(0, 7.2)	36	1
-	4 year(s)	2.5	(0, 7.2)	26	1
-	5 year(s)	2.5	(0, 7.2)	18	1
-	6 year(s)	2.5	(0, 7.2)	11	1
-	7 year(s)	2.5	(0, 7.2)	2	1
-	Overall	2.5	(0, 7.2)	-	1
Kidney - Pancreas - HUG	Baseline	0.0	-	17	0
-	1 month	0.0	-	17	0
-	6 months	5.9	(0, 16.4)	16	1
-	1 year(s)	5.9	(0, 16.4)	16	1
-	2 year(s)	5.9	(0, 16.4)	11	1

Tpx - centre	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
-	3 year(s)	5.9	(0, 16.4)	10	1
-	4 year(s)	5.9	(0, 16.4)	8	1
-	5 year(s)	5.9	(0, 16.4)	6	1
-	6 year(s)	5.9	(0, 16.4)	1	1
-	7 year(s)	5.9	(0, 16.4)	-	1
-	Overall	5.9	(0, 16.4)	-	1

8.4 Mortality in first single kidney Tpx

Overall survival for patients with single kidney Tpx as first STCS Tpx is presented separated by the donor type. In Figure 27, category 'Living' is separated in 'Living, ABO c' and 'Living, not ABO c'. The letter 'c' means 'compatible'.

Figure 26: Overall survival for patients with first STCS single kidney Tpx by donor type

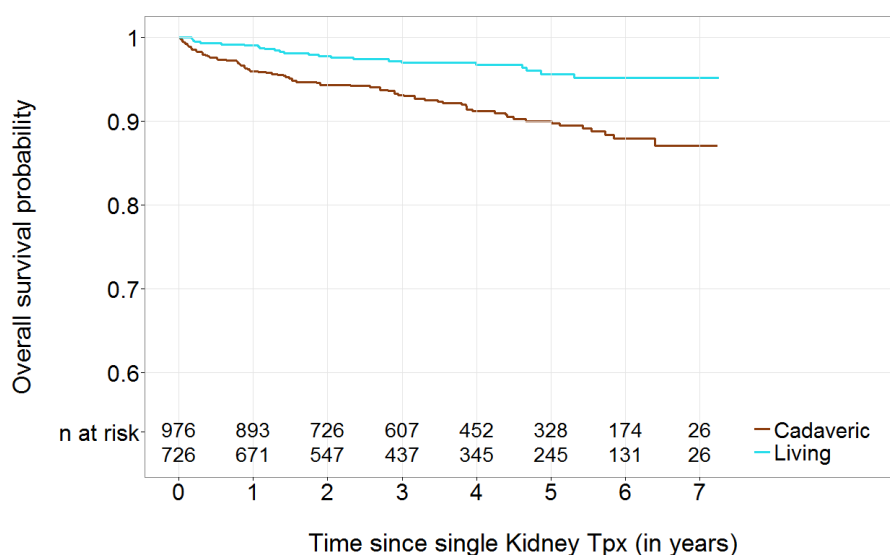


Figure 27: Overall survival for patients with first STCS single kidney Tpx by donor type combined with ABO compatibility

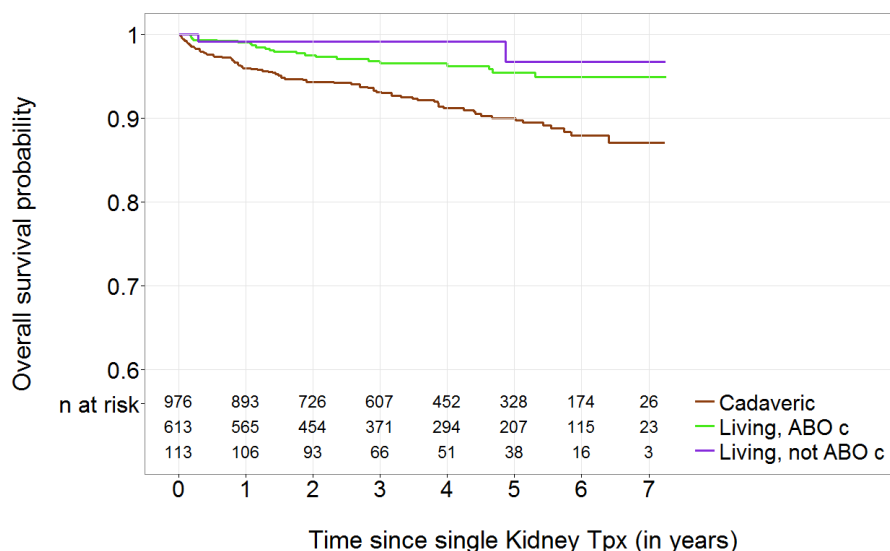


Table 16: Overall mortality in (single) kidney recipients by donor type

Donor type	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
Cadaveric	Baseline	0.0	-	976	0
-	1 month	0.7	(0.2, 1.2)	969	7
-	6 months	2.5	(1.5, 3.4)	951	24
-	1 years	4.0	(2.8, 5.3)	893	39
-	2 years	5.7	(4.2, 7.2)	726	53
-	3 years	6.9	(5.2, 8.5)	607	61
-	4 years	8.8	(6.8, 10.8)	452	72
-	5 years	10.0	(7.7, 12.2)	328	77
-	6 years	12.1	(9.3, 14.8)	174	83
-	7 years	13.0	(9.7, 16.1)	26	84
-	Overall	13.0	(9.7, 16.1)	-	84
Living	Baseline	0.0	-	726	0
-	1 month	0.0	-	725	0
-	6 months	0.7	(0.1, 1.3)	720	5
-	1 years	1.0	(0.3, 1.7)	671	7
-	2 years	2.2	(1.1, 3.4)	547	15
-	3 years	3.0	(1.7, 4.4)	437	19
-	4 years	3.3	(1.8, 4.8)	345	20
-	5 years	4.4	(2.5, 6.2)	245	23
-	6 years	4.8	(2.7, 6.8)	131	24
-	7 years	4.8	(2.7, 6.8)	26	24
-	Overall	4.8	(2.7, 6.8)	-	24

9 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.

9.1 Graft failure

Graft failures (incl. grafts with primary non-function) are counted on organ-level (Tables 18 and 19). Table 17 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 20.

Table 17: Summary for graft failures

	N	(%)
Graft failure - total	275	100.0
- in single Tpx	245	89.1
- in double Tpx	30	10.9
Patients with at least one graft failure	249	
Patients with graft failure or death	518	100.0
- graft failure and alive at end of follow-up	133	25.7
- graft failure followed by late death	66	12.7
- graft failure related death (at same day)	50	9.7
- death without any graft failure	269	51.9

Table 18: Graft failures in double Tpx

	Total	Kidney	Heart	Liver	Pancreas
Total	30	9	1	4	16
Kidney	1	1	0	0	0
Kidney - Heart	1	0	1	0	0
Kidney - Islets	1	1	0	0	0
Kidney - Kidney	2	2	0	0	0
Kidney - Liver	7	3	0	4	0
Kidney - Pancreas	17	2	0	0	15
Pancreas - Small bowel	1	0	0	0	1

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

Table 19: Graft failure and related patients' death

	Total	All GF*	(%)	GF, late death	(%)	GF related death	(%)
Total	3262	275	8.4	75	27.3	57	20.7
Kidney	1930	127	6.6	28	22	4	3.1
Liver	691	72	10.4	31	43.1	18	25
Lung	321	37	11.5	11	29.7	19	51.4
Heart	225	20	8.9	3	15	16	80
Pancreas	95	19	20	2	10.5	0	0

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

Remark: Islet and small bowel graft failures are disregarded.

Table 20: Number of organs with primary non-function

	Total	USZ	USB	CHUV	BE	HUG	SG
Total	45	23	1	3	6	11	1
Kidney	19	10	1	1	0	6	1
Liver	19	11	0	0	4	4	0
Lung	1	1	0	0	0	0	0
Heart	5	1	0	2	2	0	0
Pancreas	1	0	0	0	0	1	0

9.2 Graft failure free survival

In the following, rate estimates for graft failure free survival are not adjusted for potential risk factors. In Figure 28 and 29, both single kidney and double kidney Tpx are included as mentioned previously. In contrast, Figure 30 shows graft failure free survival only for patients with first STCS single kidney Tpx.

Figure 28: Graft failure free survival by major Tpx

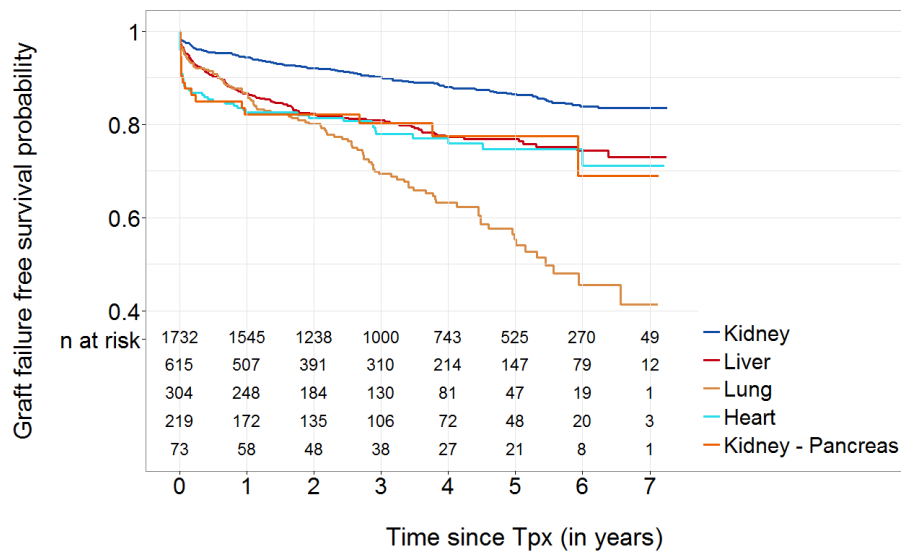


Figure 29: Graft failure free survival by major Tpx and centre

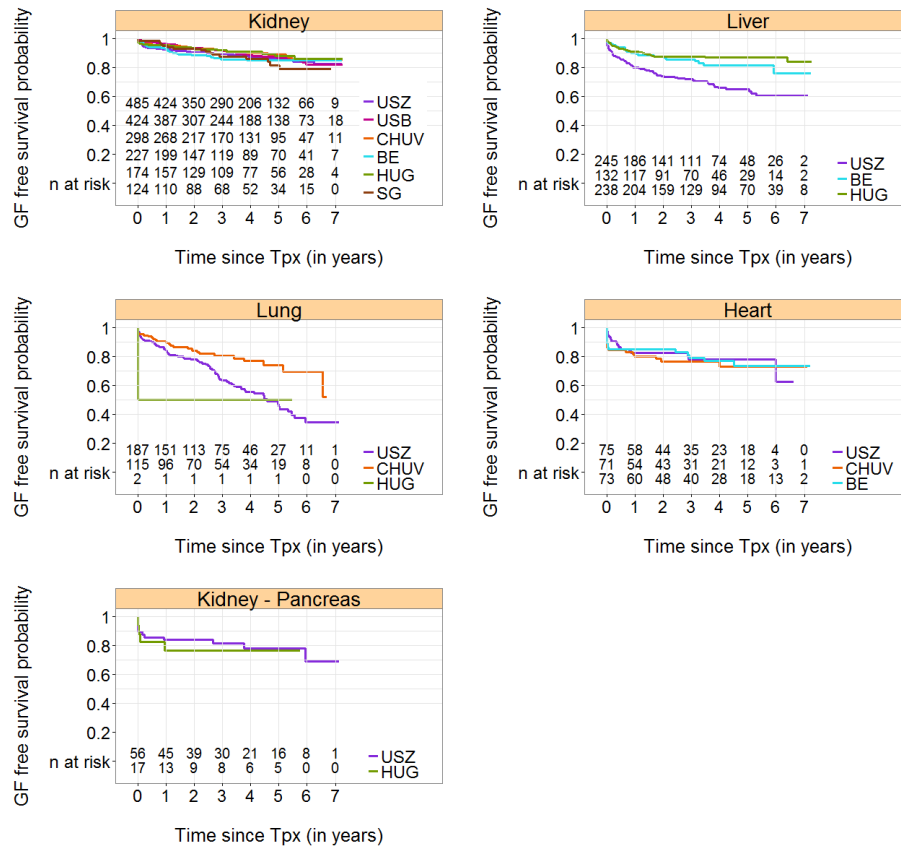
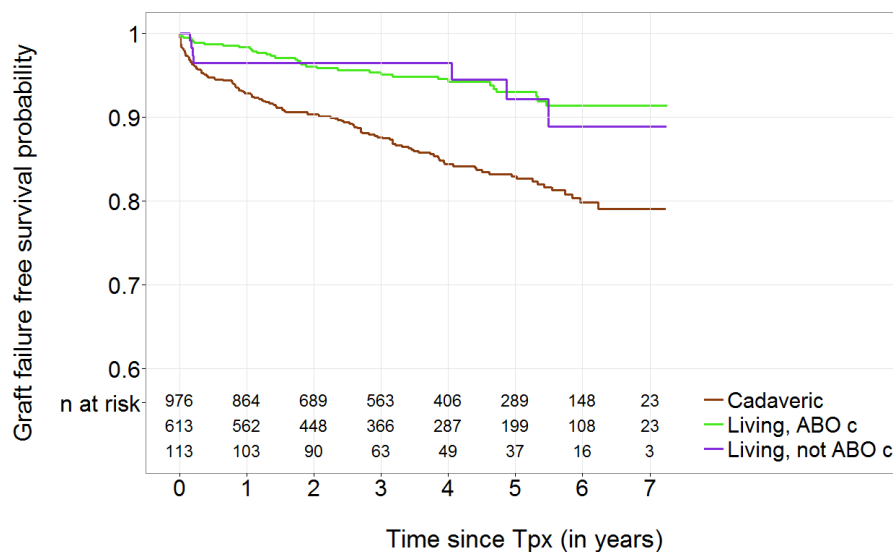


Figure 30: Graft failure free survival in patients with first STCS single kidney Tpx by donor type (combined with ABO compatibility)



9.3 Cumulative incidence of graft failure

The cumulative incidence(s) (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).

Figure 31: Cumulative incidences of graft failure for organs with at least one graft failure

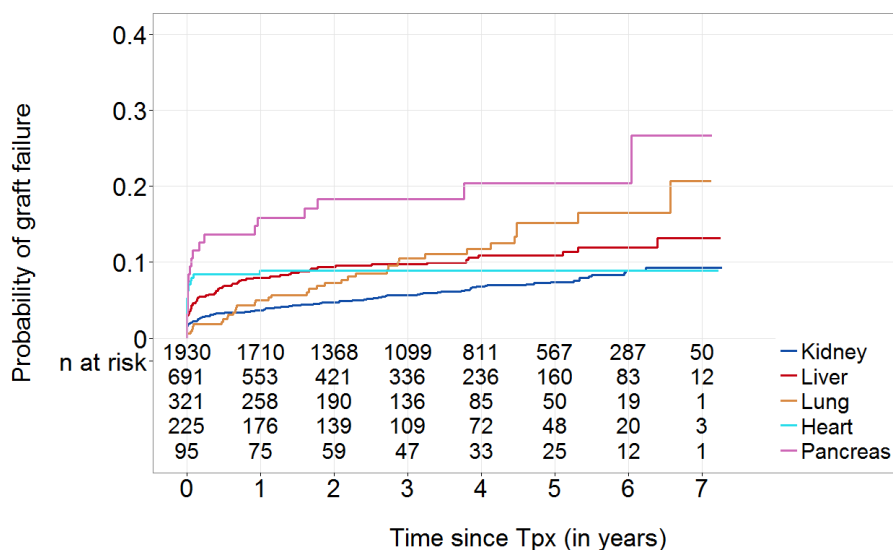


Figure 32: Cumulative incidences of graft failure for kidneys in single Tpx by donor type

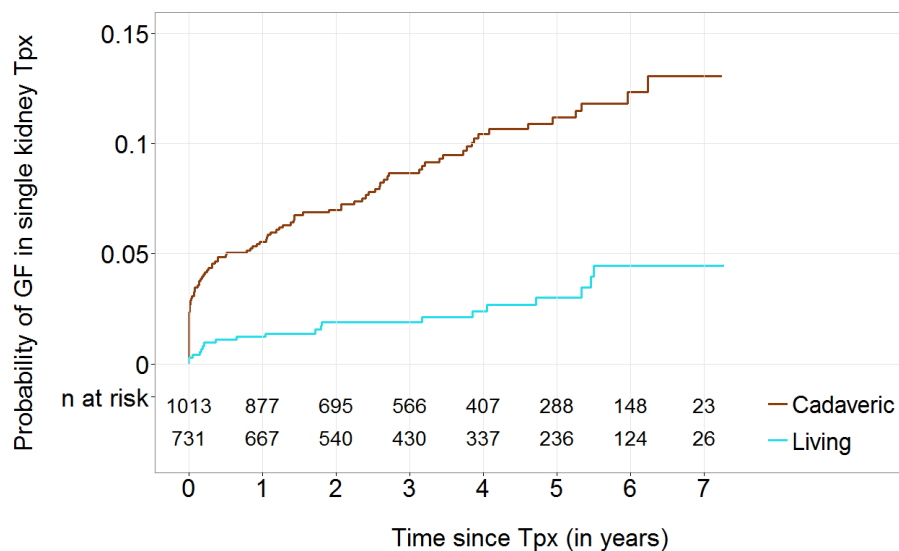
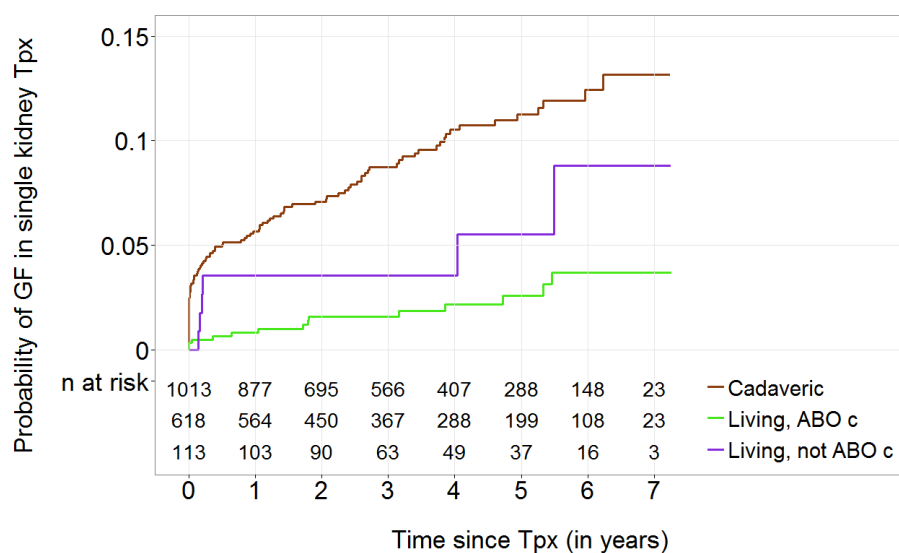


Figure 33: Cumulative incidences of graft failure for kidneys in single Tpx by ABO compatibility



9 GRAFT FAILURE AND PRIMARY NON-FUNCTION

Table 21: Graft failure by organ

Organ	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths
Kidney	Baseline	-	-	1930	0	0
-	1 month	2.2	(1.6,3)	1881	43	5
-	6 months	3.3	(2.5,4.1)	1830	63	27
-	1 year(s)	3.7	(2.9,4.6)	1710	71	41
-	2 year(s)	4.8	(3.9,5.8)	1368	89	58
-	3 year(s)	5.6	(4.6,6.8)	1099	101	74
-	4 year(s)	6.8	(5.6,8.1)	811	113	82
-	5 year(s)	7.4	(6.1,8.9)	567	118	90
-	6 year(s)	8.9	(7.3,10.7)	287	125	97
-	7 year(s)	9.3	(7.5,11.2)	50	126	97
-	Overall	9.3	(7.5,11.2)	0	126	97
Liver	Baseline	-	-	691	0	0
-	1 month	4.6	(3.2,6.4)	648	32	11
-	6 months	6.9	(5.2,9)	604	48	38
-	1 year(s)	8	(6.1,10.2)	553	55	53
-	2 year(s)	9.3	(7.3,11.7)	421	63	69
-	3 year(s)	9.7	(7.6,12.1)	336	65	73
-	4 year(s)	10.9	(8.6,13.6)	236	69	81
-	5 year(s)	10.9	(8.6,13.6)	160	69	83
-	6 year(s)	11.9	(9.3,14.9)	83	71	87
-	7 year(s)	13.1	(9.7,17.1)	12	72	87
-	Overall	13.1	(9.7,17.1)	0	72	87
Lung	Baseline	-	-	321	0	0
-	1 month	1.6	(0.6,3.4)	304	5	12
-	6 months	2.5	(1.2,4.7)	288	8	23
-	1 year(s)	5	(3,7.8)	258	16	30
-	2 year(s)	7.3	(4.7,10.6)	190	22	42
-	3 year(s)	10.5	(7.2,14.5)	136	29	57
-	4 year(s)	11.7	(8.1,16.1)	85	31	65
-	5 year(s)	15.2	(10.5,20.7)	50	35	69
-	6 year(s)	16.5	(11.3,22.6)	19	36	74
-	7 year(s)	20.7	(11.9,31.2)	1	37	74
-	Overall	20.7	(11.9,31.2)	0	37	74
Heart	Baseline	-	-	225	0	0
-	1 month	8	(4.9,12)	198	18	9
-	6 months	8.4	(5.3,12.5)	190	19	15
-	1 year(s)	8.9	(5.6,13.1)	176	20	20
-	2 year(s)	8.9	(5.6,13.1)	139	20	22
-	3 year(s)	8.9	(5.6,13.1)	109	20	27
-	4 year(s)	8.9	(5.6,13.1)	72	20	29
-	5 year(s)	8.9	(5.6,13.1)	48	20	30
-	6 year(s)	8.9	(5.6,13.1)	20	20	31
-	7 year(s)	8.9	(5.6,13.1)	3	20	31
-	Overall	8.9	(5.6,13.1)	0	20	31

9 GRAFT FAILURE AND PRIMARY NON-FUNCTION

Organ	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths
Pancreas	Baseline	-	-	95	0	0
-	1 month	11.6	(6.1,18.9)	84	11	0
-	6 months	13.7	(7.7,21.4)	81	13	1
-	1 year(s)	15.8	(9.3,23.9)	75	15	1
-	2 year(s)	18.3	(11.2,26.8)	59	17	2
-	3 year(s)	18.3	(11.2,26.8)	47	17	3
-	4 year(s)	20.4	(12.5,29.7)	33	18	3
-	5 year(s)	20.4	(12.5,29.7)	25	18	3
-	6 year(s)	20.4	(12.5,29.7)	12	18	3
-	7 year(s)	26.7	(13.4,42)	1	19	3
-	Overall	26.7	(13.4,42)	0	19	3

9 GRAFT FAILURE AND PRIMARY NON-FUNCTION

Table 22: Graft failure by organ and centre

Organ - Centre	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths
Kidney-USZ	Baseline	0.0	-	591	0	0
-	1 month	2.7	(1.6,4.3)	572	16	2
-	6 months	4.6	(3.1,6.5)	550	27	11
-	1 year(s)	4.9	(3.4,6.9)	515	29	14
-	2 year(s)	6.1	(4.3,8.3)	425	35	16
-	3 year(s)	6.6	(4.7,8.8)	346	37	20
-	4 year(s)	7.5	(5.4,10.1)	246	40	23
-	5 year(s)	8.4	(6,11.2)	156	42	24
-	6 year(s)	10.1	(7,14)	78	44	25
-	7 year(s)	11.6	(7.6,16.5)	10	45	25
-	Overall	11.6	(7.6,16.5)	0	45	25
Kidney-USB	Baseline	0.0	-	447	0	0
-	1 month	0.9	(0.3,2.2)	441	4	2
-	6 months	1.3	(0.6,2.8)	433	6	6
-	1 year(s)	1.6	(0.7,3.1)	405	7	11
-	2 year(s)	2.6	(1.4,4.5)	321	11	17
-	3 year(s)	3.3	(1.8,5.4)	252	13	22
-	4 year(s)	4.9	(2.9,7.7)	192	17	26
-	5 year(s)	6.0	(3.6,9.2)	141	19	27
-	6 year(s)	7.8	(4.6,12.1)	73	21	30
-	7 year(s)	7.8	(4.6,12.1)	18	21	30
-	Overall	7.8	(4.6,12.1)	0	21	30
Kidney-CHUV	Baseline	0.0	-	313	0	0
-	1 month	2.6	(1.2,4.8)	304	8	1
-	6 months	2.9	(1.4,5.2)	298	9	4
-	1 year(s)	3.2	(1.6,5.6)	279	10	6
-	2 year(s)	3.2	(1.6,5.6)	227	10	9
-	3 year(s)	4.0	(2.2,6.7)	179	12	11
-	4 year(s)	5.1	(2.9,8.3)	135	14	12
-	5 year(s)	5.1	(2.9,8.3)	98	14	14
-	6 year(s)	8.4	(4.6,13.6)	49	17	14
-	7 year(s)	8.4	(4.6,13.6)	11	17	14
-	Overall	8.4	(4.6,13.6)	0	17	14
Kidney-BE	Baseline	0.0	-	241	0	0
-	1 month	2.1	(0.8,4.5)	236	5	0
-	6 months	4.2	(2.1,7.2)	225	10	4
-	1 year(s)	5.0	(2.7,8.3)	210	12	5
-	2 year(s)	7.4	(4.5,11.3)	156	17	9
-	3 year(s)	9.3	(5.9,13.8)	124	20	10
-	4 year(s)	10.2	(6.4,15)	93	21	10
-	5 year(s)	10.2	(6.4,15)	73	21	10
-	6 year(s)	10.2	(6.4,15)	41	21	11
-	7 year(s)	10.2	(6.4,15)	7	21	11
-	Overall	10.2	(6.4,15)	0	21	11

9 GRAFT FAILURE AND PRIMARY NON-FUNCTION

Organ - Centre	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths
Kidney-HUG	Baseline	0.0	-	211	0	0
-	1 month	3.8	(1.8,7)	203	8	0
-	6 months	4.3	(2.1,7.6)	199	9	2
-	1 year(s)	4.3	(2.1,7.6)	189	9	2
-	2 year(s)	4.8	(2.4,8.3)	150	10	4
-	3 year(s)	4.8	(2.4,8.3)	129	10	6
-	4 year(s)	5.5	(2.9,9.4)	92	11	6
-	5 year(s)	5.5	(2.9,9.4)	65	11	9
-	6 year(s)	5.5	(2.9,9.4)	31	11	10
-	7 year(s)	5.5	(2.9,9.4)	4	11	10
-	Overall	5.5	(2.9,9.4)	0	11	10
Kidney-SG	Baseline	0.0	-	127	0	0
-	1 month	1.6	(0.3,5.1)	125	2	0
-	6 months	1.6	(0.3,5.1)	125	2	0
-	1 year(s)	3.2	(1,7.4)	112	4	3
-	2 year(s)	4.9	(2,9.8)	89	6	3
-	3 year(s)	8.2	(4,14.3)	69	9	5
-	4 year(s)	9.7	(4.8,16.6)	53	10	5
-	5 year(s)	11.9	(5.9,20.2)	34	11	6
-	6 year(s)	11.9	(5.9,20.2)	15	11	7
-	7 year(s)	-	-	0	11	7
-	Overall	11.9	(5.9,20.2)	0	11	7
Liver-USZ	Baseline	0.0	-	288	0	0
-	1 month	7.3	(4.7,10.7)	260	21	7
-	6 months	10.1	(6.9,13.9)	233	29	26
-	1 year(s)	12.2	(8.7,16.3)	207	35	33
-	2 year(s)	14.2	(10.4,18.6)	155	40	42
-	3 year(s)	15.2	(11.2,19.7)	123	42	44
-	4 year(s)	17.3	(12.8,22.3)	85	45	49
-	5 year(s)	17.3	(12.8,22.3)	55	45	50
-	6 year(s)	19.7	(14.4,25.8)	28	47	52
-	7 year(s)	19.7	(14.4,25.8)	2	47	52
-	Overall	19.7	(14.4,25.8)	0	47	52
Liver-BE	Baseline	0.0	-	145	0	0
-	1 month	3.4	(1.3,7.4)	139	5	1
-	6 months	4.8	(2.1,9.2)	133	7	5
-	1 year(s)	4.8	(2.1,9.2)	126	7	10
-	2 year(s)	4.8	(2.1,9.2)	97	7	13
-	3 year(s)	4.8	(2.1,9.2)	75	7	15
-	4 year(s)	6.1	(2.8,11.2)	50	8	17
-	5 year(s)	6.1	(2.8,11.2)	32	8	17
-	6 year(s)	6.1	(2.8,11.2)	14	8	19
-	7 year(s)	6.1	(2.8,11.2)	2	8	19
-	Overall	6.1	(2.8,11.2)	0	8	19
Liver-HUG	Baseline	0.0	-	258	0	0

9 GRAFT FAILURE AND PRIMARY NON-FUNCTION

Organ - Centre	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths
-	1 month	2.3	(1,4.8)	249	6	3
-	6 months	4.7	(2.5,7.7)	238	12	7
-	1 year(s)	5.0	(2.8,8.2)	220	13	10
-	2 year(s)	6.4	(3.8,10)	169	16	14
-	3 year(s)	6.4	(3.8,10)	138	16	14
-	4 year(s)	6.4	(3.8,10)	101	16	15
-	5 year(s)	6.4	(3.8,10)	73	16	16
-	6 year(s)	6.4	(3.8,10)	41	16	16
-	7 year(s)	9.0	(4.3,16)	8	17	16
-	Overall	9.0	(4.3,16)	0	17	16
Lung-USZ	Baseline	0.0	-	193	0	0
-	1 month	2.1	(0.7,4.9)	182	4	7
-	6 months	2.6	(1,5.6)	172	5	16
-	1 year(s)	5.2	(2.7,9)	153	10	23
-	2 year(s)	7.1	(4,11.5)	113	13	32
-	3 year(s)	10.1	(6.1,15.4)	75	17	47
-	4 year(s)	12.1	(7.4,17.9)	46	19	53
-	5 year(s)	15.9	(10,23.1)	27	22	57
-	6 year(s)	17.8	(11.1,25.8)	11	23	61
-	7 year(s)	17.8	(11.1,25.8)	1	23	61
-	Overall	17.8	(11.1,25.8)	0	23	61
Lung-CHUV	Baseline	0.0	-	123	0	0
-	1 month	0.8	(0.1,4.1)	118	1	4
-	6 months	1.6	(0.3,5.3)	113	2	6
-	1 year(s)	4.1	(1.5,8.8)	102	5	6
-	2 year(s)	7.0	(3.3,12.8)	75	8	9
-	3 year(s)	10.7	(5.6,17.7)	59	11	9
-	4 year(s)	10.7	(5.6,17.7)	37	11	11
-	5 year(s)	13.5	(6.7,22.6)	21	12	11
-	6 year(s)	13.5	(6.7,22.6)	8	12	12
-	7 year(s)	-	-	0	13	12
-	Overall	31.3	(4.5,64.7)	0	13	12
Lung-HUG	Baseline	0.0	-	5	0	0
-	1 month	0.0	-	4	0	1
-	6 months	20.0	(0.4,63.2)	3	1	1
-	1 year(s)	20.0	(0.4,63.2)	3	1	1
-	2 year(s)	20.0	(0.4,63.2)	2	1	1
-	3 year(s)	20.0	(0.4,63.2)	2	1	1
-	4 year(s)	20.0	(0.4,63.2)	2	1	1
-	5 year(s)	20.0	(0.4,63.2)	2	1	1
-	6 year(s)	-	-	0	1	1
-	7 year(s)	-	-	0	1	1
-	Overall	20.0	(0.4,63.2)	0	1	1
Heart-USZ	Baseline	0.0	-	77	0	0
-	1 month	2.6	(0.5,8.2)	72	2	3

9 GRAFT FAILURE AND PRIMARY NON-FUNCTION

Organ - Centre	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths
-	6 months	3.9	(1,10)	64	3	9
-	1 year(s)	3.9	(1,10)	58	3	12
-	2 year(s)	3.9	(1,10)	44	3	12
-	3 year(s)	3.9	(1,10)	35	3	14
-	4 year(s)	3.9	(1,10)	23	3	14
-	5 year(s)	3.9	(1,10)	18	3	14
-	6 year(s)	3.9	(1,10)	4	3	15
-	7 year(s)	-	-	0	3	15
-	Overall	3.9	(1,10)	0	3	15
Heart-CHUV	Baseline	0.0	-	74	0	0
-	1 month	12.2	(5.9,20.8)	63	9	2
-	6 months	12.2	(5.9,20.8)	63	9	2
-	1 year(s)	13.6	(6.9,22.4)	57	10	4
-	2 year(s)	13.6	(6.9,22.4)	46	10	6
-	3 year(s)	13.6	(6.9,22.4)	33	10	6
-	4 year(s)	13.6	(6.9,22.4)	21	10	7
-	5 year(s)	13.6	(6.9,22.4)	12	10	7
-	6 year(s)	13.6	(6.9,22.4)	3	10	7
-	7 year(s)	13.6	(6.9,22.4)	1	10	7
-	Overall	13.6	(6.9,22.4)	0	10	7
Heart-BE	Baseline	0.0	-	74	0	0
-	1 month	9.5	(4.1,17.5)	63	7	4
-	6 months	9.5	(4.1,17.5)	63	7	4
-	1 year(s)	9.5	(4.1,17.5)	61	7	4
-	2 year(s)	9.5	(4.1,17.5)	49	7	4
-	3 year(s)	9.5	(4.1,17.5)	41	7	7
-	4 year(s)	9.5	(4.1,17.5)	28	7	8
-	5 year(s)	9.5	(4.1,17.5)	18	7	9
-	6 year(s)	9.5	(4.1,17.5)	13	7	9
-	7 year(s)	9.5	(4.1,17.5)	2	7	9
-	Overall	9.5	(4.1,17.5)	0	7	9
Pancreas-USZ	Baseline	0.0	-	69	0	0
-	1 month	10.1	(4.4,18.6)	62	7	0
-	6 months	13.0	(6.4,22.2)	59	9	1
-	1 year(s)	14.5	(7.4,24)	54	10	1
-	2 year(s)	17.9	(9.8,28)	44	12	1
-	3 year(s)	17.9	(9.8,28)	33	12	2
-	4 year(s)	21.0	(11.4,32.6)	23	13	2
-	5 year(s)	21.0	(11.4,32.6)	16	13	2
-	6 year(s)	21.0	(11.4,32.6)	9	13	2
-	7 year(s)	29.4	(12.5,48.7)	1	14	2
-	Overall	29.4	(12.5,48.7)	0	14	2
Pancreas-HUG	Baseline	0.0	-	26	0	0
-	1 month	15.4	(4.7,31.8)	22	4	0
-	6 months	15.4	(4.7,31.8)	22	4	0

9 GRAFT FAILURE AND PRIMARY NON-FUNCTION

Organ - Centre	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths
-	1 year(s)	19.2	(6.8,36.4)	21	5	0
-	2 year(s)	19.2	(6.8,36.4)	15	5	1
-	3 year(s)	19.2	(6.8,36.4)	14	5	1
-	4 year(s)	19.2	(6.8,36.4)	10	5	1
-	5 year(s)	19.2	(6.8,36.4)	9	5	1
-	6 year(s)	19.2	(6.8,36.4)	3	5	1
-	7 year(s)	19.2	-	0	5	1
-	Overall	19.2	(6.8,36.4)	0	5	1

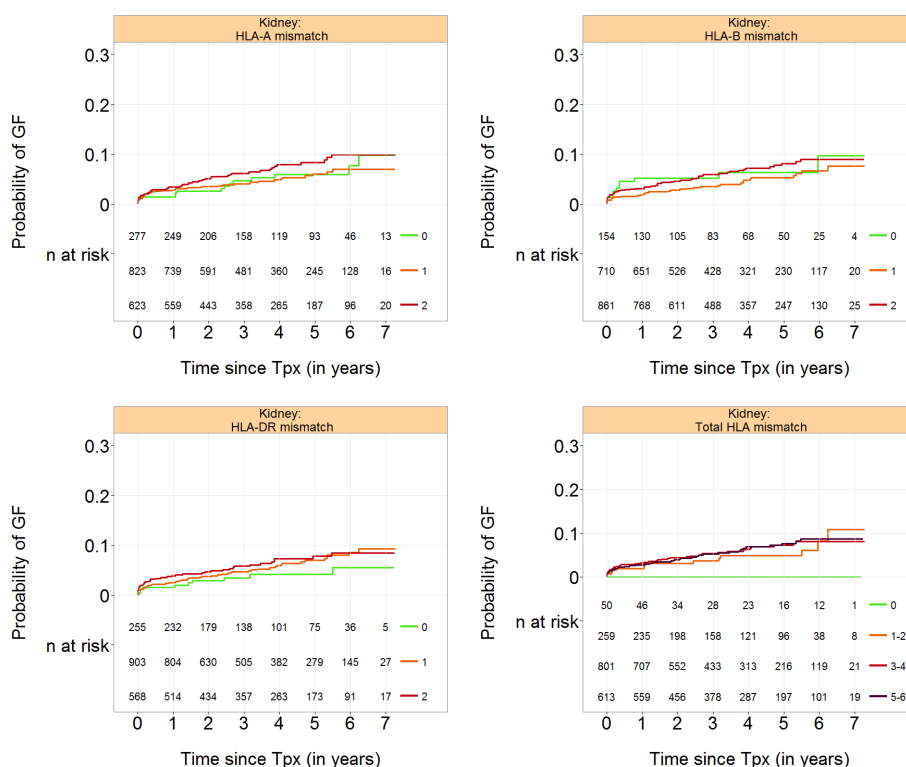
Table 23: Graft failure of kidneys (in first STCS single Tpx) by donor type

Donor type	Time	CumInc (%)	95% CI	No at risk	Cum. GF	Cum. deaths
Cadaveric	Baseline	-	-	1013	0	0
-	1 month	3.5	(2.5,4.7)	977	35	1
-	6 months	4.8	(3.6,6.3)	942	49	16
-	1 year(s)	5.6	(4.3,7.1)	877	56	29
-	2 year(s)	7	(5.5,8.7)	695	69	38
-	3 year(s)	8.7	(6.9,10.6)	566	81	45
-	4 year(s)	10.4	(8.5,12.7)	407	91	52
-	5 year(s)	11.2	(9.1,13.5)	288	94	56
-	6 year(s)	12.3	(9.9,15.1)	148	97	61
-	7 year(s)	13.1	(10.3,16.2)	23	98	61
-	Overall	13.1	(10.3,16.2)	0	98	61
Living	Baseline	-	-	731	0	0
-	1 month	0.4	(0.1,1.1)	727	3	0
-	6 months	1.1	(0.5,2.1)	716	8	4
-	1 year(s)	1.2	(0.6,2.3)	667	9	5
-	2 year(s)	1.9	(1.1,3.1)	540	13	13
-	3 year(s)	1.9	(1.1,3.1)	430	13	17
-	4 year(s)	2.4	(1.4,3.9)	337	15	18
-	5 year(s)	3	(1.8,4.8)	236	17	21
-	6 year(s)	4.5	(2.6,7.1)	124	20	22
-	7 year(s)	4.5	(2.6,7.1)	26	20	22
-	Overall	4.5	(2.6,7.1)	0	20	22

9.4 Graft failure and number of HLA mismatches

Figures 34-37 show cumulative incidence functions for graft failures separated by (major) tpx and the number of HLA mismatches¹ between donor and recipient at baseline (i. e. at timepoint of first STCS tpx). It is distinguished between mismatches for HLA-A, HLA-B and HLA-DR and the total number of mismatches of these HLA classes.

Figure 34: Cumulative incidences of graft failure for kidney or kidney-kidney tpx by HLA mismatches



¹The number of mismatches are the number of HLA surface receptor classes of the donor not present in the recipient. If the surface receptors of the donor are homozygous, they are counted only once. Groups with less than 10 patients at time of tpx are not shown. The number of patients at risk for some tpx is lower compared to the number of tpx due to missing HLA information.

Figure 35: Cumulative incidences of graft failure for liver tpx by HLA mismatches

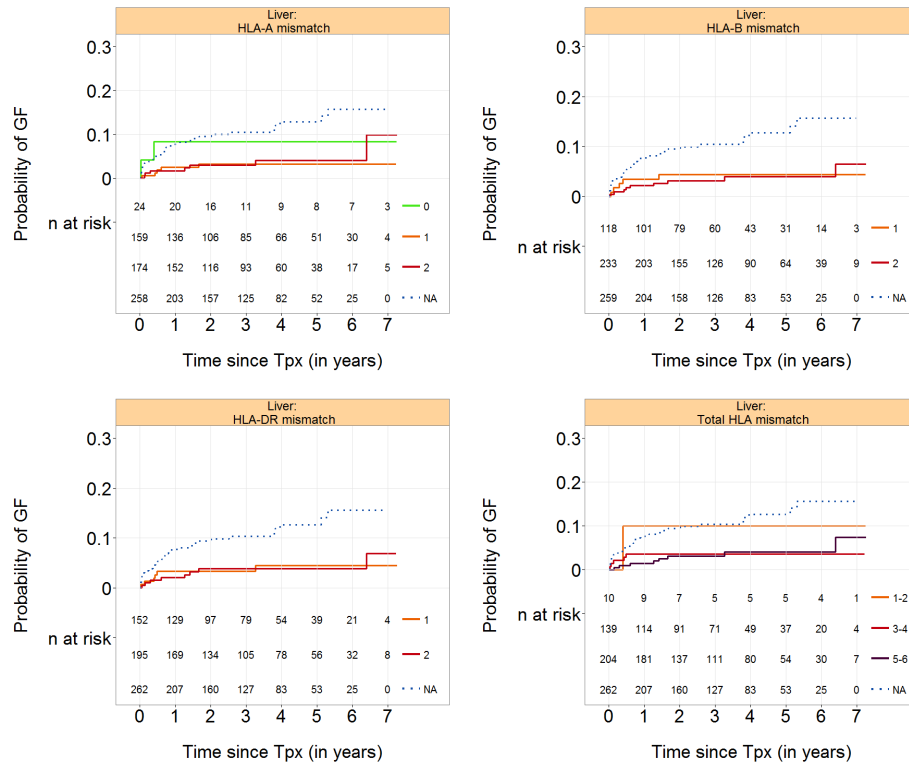


Figure 36: Cumulative incidences of graft failure for lung tpx by HLA mismatches

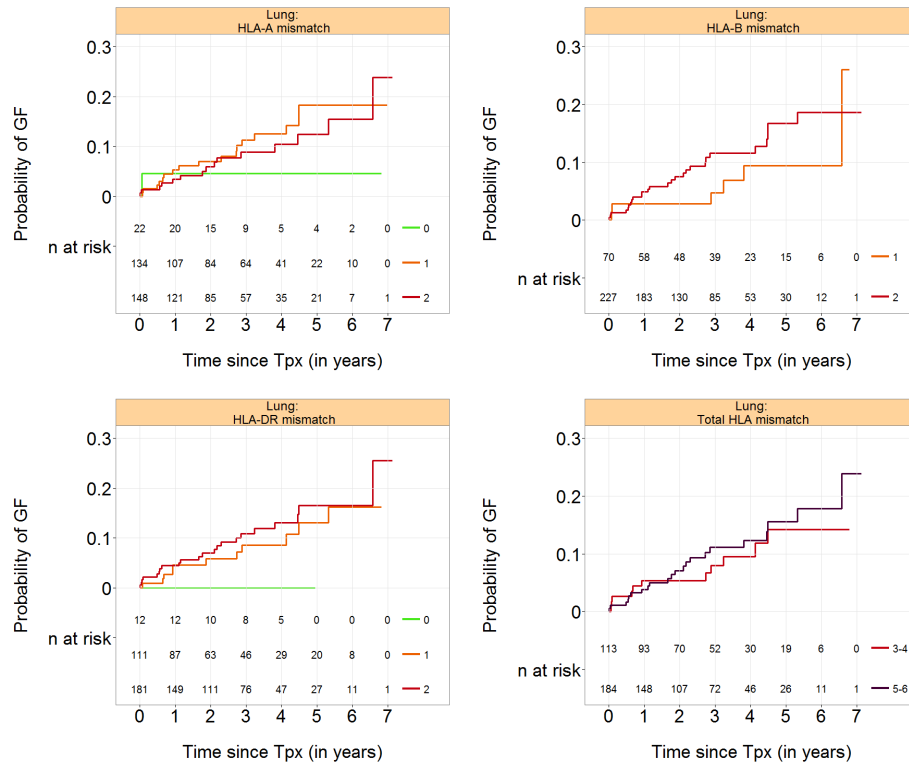
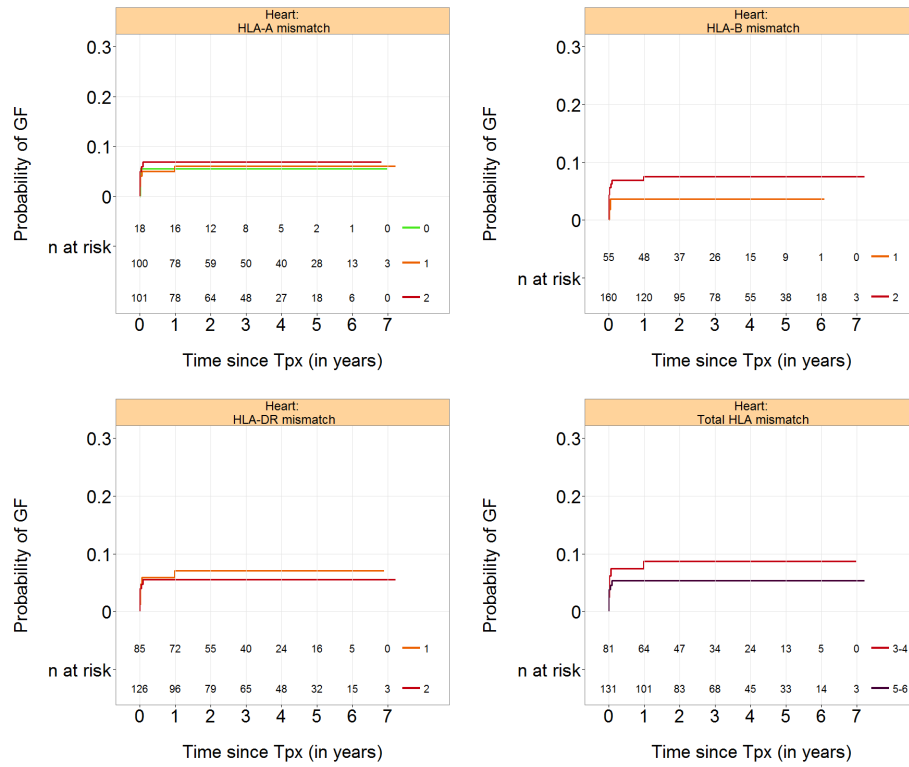


Figure 37: Cumulative incidences of graft failure for heart tpx by HLA mismatches



10 Cancer

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

10.1 Cancer other than skin

Table 24: Overview of patients with incident cancer

	N	%
Total number of patients	3034	
Patients with incident cancer (other than skin)	205	6.8
- single record (% of line 2)	156	76.1
- multiple records (% of line 2)	49	23.9

Table 25: Patients with incident cancer

	No. patients	No. episodes	Median time (in yrs)*
Total	205	277	2.11
Kidney	106	141	2.46
Liver	67	93	1.88
Lung	19	27	2.40
Heart	9	11	2.26
Pancreas	1	2	0.24
Islets	3	3	3.02

* Median time (in years) from first STCS Tpx to diagnosis of cancer

Remark: Patients are listed regarding the organ implanted in the first STCS Tpx.

Table 26: Overview of incident cancer occurrence

	N	%
Total	277	100
Brain	5	2
Breast	4	1
Cervix_Uterus_Adnex	4	1
Colon	9	3
Kaposi	2	1
Kidney	15	5
Leukemia	5	2
Liver	33	12
Lung	27	10
MDS	4	1
Neuroendocrine	2	1
Prostate	22	8
PTLD	30	11
Sarkoma	4	1
Testicular cancer	1	0
Thyroid	5	2
Uro_bladder	12	4
Other	93	34

10.2 Skin cancer

Table 27: Overview of patients with incident skin cancer

	N	%
Total number of patients	3034	
Patients with incident skin cancer	246	8.1
- single record (% of line 2)	137	55.7
- multiple records (% of line 2)	109	44.3

Table 28: Patients with incident skin cancer

	No. patients	No. episodes	Median time (in yrs)*
Total	246	543	2.08
Kidney	168	373	2.07
Liver	28	60	2.09
Lung	25	69	1.93
Heart	17	26	2.21
Pancreas	3	7	3.44
Islets	5	8	2.48

* Median time (in years) from first STCS Tpx to diagnosis of skin cancer

Remark: Patients are listed regarding the organ implanted in the first STCS Tpx.

Table 29: Overview of incident skin cancer occurrence

	N	%
Total	543	100
Basalioma	179	33
Melanoma	24	4
Spinalioma	214	39
Other	126	23

A Mortality in patients with rare Tpx

Kidney - Kidney Tpx are excluded from the following tables.

Table 30: Overall mortality by rare Tpx scenarios

Tpx	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
Pancreas	Baseline	0.00	-	10	0
-	1 month	0.00	-	10	0
-	6 months	0.00	-	10	0
-	1 year(s)	0.00	-	10	0
-	2 year(s)	0.00	-	9	0
-	3 year(s)	0.00	-	7	0
-	4 year(s)	0.00	-	4	0
-	5 year(s)	0.00	-	4	0
-	6 year(s)	0.00	-	3	0
-	7 year(s)	0.00	-	-	0
-	Overall	0.00	-	-	0
Small bowel	Baseline	0.00	-	1	0
-	1 month	0.00	-	1	0
-	6 months	0.00	-	1	0
-	1 year(s)	0.00	-	1	0
-	2 year(s)	0.00	-	1	0
-	3 year(s)	100.00	-	-	1
-	4 year(s)	100.00	-	-	1
-	5 year(s)	100.00	-	-	1
-	6 year(s)	100.00	-	-	1
-	7 year(s)	100.00	-	-	1
-	Overall	100.00	-	-	1
Kidney - Liver	Baseline	0.00	-	28	0
-	1 month	10.71	(0, 21.5)	25	3
-	6 months	14.29	(0.3, 26.3)	24	4
-	1 year(s)	14.29	(0.3, 26.3)	24	4
-	2 year(s)	14.29	(0.3, 26.3)	16	4
-	3 year(s)	14.29	(0.3, 26.3)	14	4
-	4 year(s)	14.29	(0.3, 26.3)	12	4
-	5 year(s)	21.43	(1.3, 37.4)	8	5
-	6 year(s)	37.14	(0, 61.6)	4	6
-	7 year(s)	37.14	(0, 61.6)	-	6
-	Overall	37.14	(0, 61.6)	-	6
Kidney - Islets	Baseline	0.00	-	10	0
-	1 month	0.00	-	10	0
-	6 months	0.00	-	10	0
-	1 year(s)	0.00	-	10	0
-	2 year(s)	0.00	-	9	0
-	3 year(s)	0.00	-	8	0
-	4 year(s)	0.00	-	6	0
-	5 year(s)	0.00	-	4	0
-	6 year(s)	0.00	-	-	0

A MORTALITY IN PATIENTS WITH RARE TPX

Tpx	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
-	7 year(s)	0.00	-	-	0
-	Overall	0.00	-	-	0
Kidney - Heart	Baseline	0.00	-	4	0
-	1 month	25.00	(0, 57.4)	3	1
-	6 months	25.00	(0, 57.4)	3	1
-	1 year(s)	25.00	(0, 57.4)	3	1
-	2 year(s)	25.00	(0, 57.4)	3	1
-	3 year(s)	25.00	(0, 57.4)	2	1
-	4 year(s)	25.00	(0, 57.4)	-	1
-	5 year(s)	25.00	(0, 57.4)	-	1
-	6 year(s)	25.00	(0, 57.4)	-	1
-	7 year(s)	25.00	(0, 57.4)	-	1
-	Overall	25.00	(0, 57.4)	-	1
Kidney - Lung	Baseline	0.00	-	1	0
-	1 month	0.00	-	1	0
-	6 months	0.00	-	1	0
-	1 year(s)	0.00	-	1	0
-	2 year(s)	0.00	-	1	0
-	3 year(s)	0.00	-	1	0
-	4 year(s)	0.00	-	1	0
-	5 year(s)	0.00	-	1	0
-	6 year(s)	0.00	-	-	0
-	7 year(s)	0.00	-	-	0
-	Overall	0.00	-	-	0
Liver - Lung	Baseline	0.00	-	1	0
-	1 month	0.00	-	1	0
-	6 months	0.00	-	1	0
-	1 year(s)	0.00	-	1	0
-	2 year(s)	0.00	-	1	0
-	3 year(s)	0.00	-	1	0
-	4 year(s)	0.00	-	1	0
-	5 year(s)	0.00	-	1	0
-	6 year(s)	0.00	-	-	0
-	7 year(s)	0.00	-	-	0
-	Overall	0.00	-	-	0
Heart - Lung	Baseline	0.00	-	1	0
-	1 month	0.00	-	1	0
-	6 months	0.00	-	1	0
-	1 year(s)	100.00	-	-	1
-	2 year(s)	100.00	-	-	1
-	3 year(s)	100.00	-	-	1
-	4 year(s)	100.00	-	-	1
-	5 year(s)	100.00	-	-	1
-	6 year(s)	100.00	-	-	1
-	7 year(s)	100.00	-	-	1
-	Overall	100.00	-	-	1
Pancreas - Small bowel	Baseline	0.00	-	2	0
-	1 month	0.00	-	2	0
-	6 months	0.00	-	2	0
-	1 year(s)	0.00	-	2	0
-	2 year(s)	100.00	-	-	2

A MORTALITY IN PATIENTS WITH RARE TPX

Tpx	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
-	3 year(s)	100.00	-	-	2
-	4 year(s)	100.00	-	-	2
-	5 year(s)	100.00	-	-	2
-	6 year(s)	100.00	-	-	2
-	7 year(s)	100.00	-	-	2
-	Overall	100.00	-	-	2
Kidney - Kidney - Pancreas	Baseline	0.00	-	2	0
-	1 month	0.00	-	2	0
-	6 months	0.00	-	2	0
-	1 year(s)	0.00	-	2	0
-	2 year(s)	0.00	-	2	0
-	3 year(s)	0.00	-	2	0
-	4 year(s)	0.00	-	2	0
-	5 year(s)	0.00	-	-	0
-	6 year(s)	0.00	-	-	0
-	7 year(s)	0.00	-	-	0
-	Overall	0.00	-	-	0
Kidney - Islets - Liver	Baseline	0.00	-	1	0
-	1 month	0.00	-	1	0
-	6 months	0.00	-	1	0
-	1 year(s)	0.00	-	1	0
-	2 year(s)	0.00	-	1	0
-	3 year(s)	0.00	-	1	0
-	4 year(s)	0.00	-	-	0
-	5 year(s)	0.00	-	-	0
-	6 year(s)	0.00	-	-	0
-	7 year(s)	0.00	-	-	0
-	Overall	0.00	-	-	0
Islets - Liver - Lung	Baseline	0.00	-	1	0
-	1 month	0.00	-	1	0
-	6 months	0.00	-	1	0
-	1 year(s)	0.00	-	1	0
-	2 year(s)	0.00	-	-	0
-	3 year(s)	0.00	-	-	0
-	4 year(s)	0.00	-	-	0
-	5 year(s)	0.00	-	-	0
-	6 year(s)	0.00	-	-	0
-	7 year(s)	0.00	-	-	0
-	Overall	0.00	-	-	0

A MORTALITY IN PATIENTS WITH RARE TPX

Table 31: Overall mortality by rare Tpx scenarios and centre

Tpx - centre	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
Pancreas - USZ	Baseline	0.0	-	5	0
-	1 month	0.0	-	5	0
-	6 months	0.0	-	5	0
-	1 year(s)	0.0	-	5	0
-	2 year(s)	0.0	-	4	0
-	3 year(s)	0.0	-	2	0
-	4 year(s)	0.0	-	-	0
-	5 year(s)	0.0	-	-	0
-	6 year(s)	0.0	-	-	0
-	7 year(s)	0.0	-	-	0
-	Overall	0.0	-	-	0
Pancreas - HUG	Baseline	0.0	-	5	0
-	1 month	0.0	-	5	0
-	6 months	0.0	-	5	0
-	1 year(s)	0.0	-	5	0
-	2 year(s)	0.0	-	5	0
-	3 year(s)	0.0	-	5	0
-	4 year(s)	0.0	-	4	0
-	5 year(s)	0.0	-	4	0
-	6 year(s)	0.0	-	3	0
-	7 year(s)	0.0	-	-	0
-	Overall	0.0	-	-	0
Small bowel - HUG	Baseline	0.0	-	1	0
-	1 month	0.0	-	1	0
-	6 months	0.0	-	1	0
-	1 year(s)	0.0	-	1	0
-	2 year(s)	0.0	-	1	0
-	3 year(s)	100.0	-	-	1
-	4 year(s)	100.0	-	-	1
-	5 year(s)	100.0	-	-	1
-	6 year(s)	100.0	-	-	1
-	7 year(s)	100.0	-	-	1
-	Overall	100.0	-	-	1
Kidney - Liver - USZ	Baseline	0.0	-	9	0
-	1 month	11.1	(0, 29.4)	8	1
-	6 months	22.2	(0, 45.1)	7	2
-	1 year(s)	22.2	(0, 45.1)	7	2
-	2 year(s)	22.2	(0, 45.1)	6	2
-	3 year(s)	22.2	(0, 45.1)	5	2
-	4 year(s)	22.2	(0, 45.1)	4	2
-	5 year(s)	22.2	(0, 45.1)	3	2
-	6 year(s)	22.2	(0, 45.1)	2	2
-	7 year(s)	22.2	(0, 45.1)	-	2
-	Overall	22.2	(0, 45.1)	-	2
Kidney - Liver - BE	Baseline	0.0	-	7	0
-	1 month	0.0	-	7	0
-	6 months	0.0	-	7	0
-	1 year(s)	0.0	-	7	0
-	2 year(s)	0.0	-	5	0
-	3 year(s)	0.0	-	4	0

A MORTALITY IN PATIENTS WITH RARE TPX

Tpx - centre	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
-	4 year(s)	0.0	-	3	0
-	5 year(s)	0.0	-	3	0
-	6 year(s)	100.0	-	-	1
-	7 year(s)	100.0	-	-	1
-	Overall	100.0	-	-	1
Kidney - Liver - HUG	Baseline	0.0	-	12	0
-	1 month	16.7	(0, 35.3)	10	2
-	6 months	16.7	(0, 35.3)	10	2
-	1 year(s)	16.7	(0, 35.3)	10	2
-	2 year(s)	16.7	(0, 35.3)	5	2
-	3 year(s)	16.7	(0, 35.3)	5	2
-	4 year(s)	16.7	(0, 35.3)	5	2
-	5 year(s)	33.3	(0, 59.8)	2	3
-	6 year(s)	33.3	(0, 59.8)	2	3
-	7 year(s)	33.3	(0, 59.8)	-	3
-	Overall	33.3	(0, 59.8)	-	3
Kidney - Islets - USZ	Baseline	0.0	-	6	0
-	1 month	0.0	-	6	0
-	6 months	0.0	-	6	0
-	1 year(s)	0.0	-	6	0
-	2 year(s)	0.0	-	5	0
-	3 year(s)	0.0	-	4	0
-	4 year(s)	0.0	-	4	0
-	5 year(s)	0.0	-	3	0
-	6 year(s)	0.0	-	-	0
-	7 year(s)	0.0	-	-	0
-	Overall	0.0	-	-	0
Kidney - Islets - HUG	Baseline	0.0	-	4	0
-	1 month	0.0	-	4	0
-	6 months	0.0	-	4	0
-	1 year(s)	0.0	-	4	0
-	2 year(s)	0.0	-	4	0
-	3 year(s)	0.0	-	4	0
-	4 year(s)	0.0	-	2	0
-	5 year(s)	0.0	-	1	0
-	6 year(s)	0.0	-	-	0
-	7 year(s)	0.0	-	-	0
-	Overall	0.0	-	-	0
Kidney - Heart - USZ	Baseline	0.0	-	1	0
-	1 month	100.0	-	-	1
-	6 months	100.0	-	-	1
-	1 year(s)	100.0	-	-	1
-	2 year(s)	100.0	-	-	1
-	3 year(s)	100.0	-	-	1
-	4 year(s)	100.0	-	-	1
-	5 year(s)	100.0	-	-	1
-	6 year(s)	100.0	-	-	1
-	7 year(s)	100.0	-	-	1
-	Overall	100.0	-	-	1
Kidney - Heart - CHUV	Baseline	0.0	-	3	0
-	1 month	0.0	-	3	0

A MORTALITY IN PATIENTS WITH RARE TPX

Tpx - centre	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
-	6 months	0.0	-	3	0
-	1 year(s)	0.0	-	3	0
-	2 year(s)	0.0	-	3	0
-	3 year(s)	0.0	-	2	0
-	4 year(s)	0.0	-	-	0
-	5 year(s)	0.0	-	-	0
-	6 year(s)	0.0	-	-	0
-	7 year(s)	0.0	-	-	0
-	Overall	0.0	-	-	0
Kidney - Lung - CHUV	Baseline	0.0	-	1	0
-	1 month	0.0	-	1	0
-	6 months	0.0	-	1	0
-	1 year(s)	0.0	-	1	0
-	2 year(s)	0.0	-	1	0
-	3 year(s)	0.0	-	1	0
-	4 year(s)	0.0	-	1	0
-	5 year(s)	0.0	-	1	0
-	6 year(s)	0.0	-	-	0
-	7 year(s)	0.0	-	-	0
-	Overall	0.0	-	-	0
Liver - Lung - HUG	Baseline	0.0	-	1	0
-	1 month	0.0	-	1	0
-	6 months	0.0	-	1	0
-	1 year(s)	0.0	-	1	0
-	2 year(s)	0.0	-	1	0
-	3 year(s)	0.0	-	1	0
-	4 year(s)	0.0	-	1	0
-	5 year(s)	0.0	-	1	0
-	6 year(s)	0.0	-	-	0
-	7 year(s)	0.0	-	-	0
-	Overall	0.0	-	-	0
Heart - Lung - USZ	Baseline	0.0	-	1	0
-	1 month	0.0	-	1	0
-	6 months	0.0	-	1	0
-	1 year(s)	100.0	-	-	1
-	2 year(s)	100.0	-	-	1
-	3 year(s)	100.0	-	-	1
-	4 year(s)	100.0	-	-	1
-	5 year(s)	100.0	-	-	1
-	6 year(s)	100.0	-	-	1
-	7 year(s)	100.0	-	-	1
-	Overall	100.0	-	-	1
Pancreas - Small bowel - USZ	Baseline	0.0	-	1	0
-	1 month	0.0	-	1	0
-	6 months	0.0	-	1	0
-	1 year(s)	0.0	-	1	0
-	2 year(s)	100.0	-	-	1
-	3 year(s)	100.0	-	-	1
-	4 year(s)	100.0	-	-	1
-	5 year(s)	100.0	-	-	1
-	6 year(s)	100.0	-	-	1

A MORTALITY IN PATIENTS WITH RARE TPX

Tpx - centre	Time	Mortality (%)	95% CI	No at risk	Cum. deaths
-	7 year(s)	100.0	-	-	1
-	Overall	100.0	-	-	1
Pancreas - Small bowel - HUG	Baseline	0.0	-	1	0
-	1 month	0.0	-	1	0
-	6 months	0.0	-	1	0
-	1 year(s)	0.0	-	1	0
-	2 year(s)	100.0	-	-	1
-	3 year(s)	100.0	-	-	1
-	4 year(s)	100.0	-	-	1
-	5 year(s)	100.0	-	-	1
-	6 year(s)	100.0	-	-	1
-	7 year(s)	100.0	-	-	1
-	Overall	100.0	-	-	1
Kidney - Kidney - Pancreas - USZ	Baseline	0.0	-	2	0
-	1 month	0.0	-	2	0
-	6 months	0.0	-	2	0
-	1 year(s)	0.0	-	2	0
-	2 year(s)	0.0	-	2	0
-	3 year(s)	0.0	-	2	0
-	4 year(s)	0.0	-	2	0
-	5 year(s)	0.0	-	-	0
-	6 year(s)	0.0	-	-	0
-	7 year(s)	0.0	-	-	0
-	Overall	0.0	-	-	0
Kidney - Islets - Liver - HUG	Baseline	0.0	-	1	0
-	1 month	0.0	-	1	0
-	6 months	0.0	-	1	0
-	1 year(s)	0.0	-	1	0
-	2 year(s)	0.0	-	1	0
-	3 year(s)	0.0	-	1	0
-	4 year(s)	0.0	-	-	0
-	5 year(s)	0.0	-	-	0
-	6 year(s)	0.0	-	-	0
-	7 year(s)	0.0	-	-	0
-	Overall	0.0	-	-	0
Islets - Liver - Lung - HUG	Baseline	0.0	-	1	0
-	1 month	0.0	-	1	0
-	6 months	0.0	-	1	0
-	1 year(s)	0.0	-	1	0
-	2 year(s)	0.0	-	-	0
-	3 year(s)	0.0	-	-	0
-	4 year(s)	0.0	-	-	0
-	5 year(s)	0.0	-	-	0
-	6 year(s)	0.0	-	-	0
-	7 year(s)	0.0	-	-	0
-	Overall	0.0	-	-	0