

NEWSLETTER TRANSPLANT

International figures
on donation and
transplantation
2014



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Volume 20
2015

INTERNATIONAL FIGURES ON ORGAN, TISSUE & HEMATOPOIETIC STEM CELL DONATION & TRANSPLANTATION ACTIVITIES. DOCUMENTS PRODUCED BY THE COUNCIL OF EUROPE EUROPEAN COMMITTEE (PARTIAL AGREEMENT) ON ORGAN TRANSPLANTATION (CD-P-TO). YEAR 2014

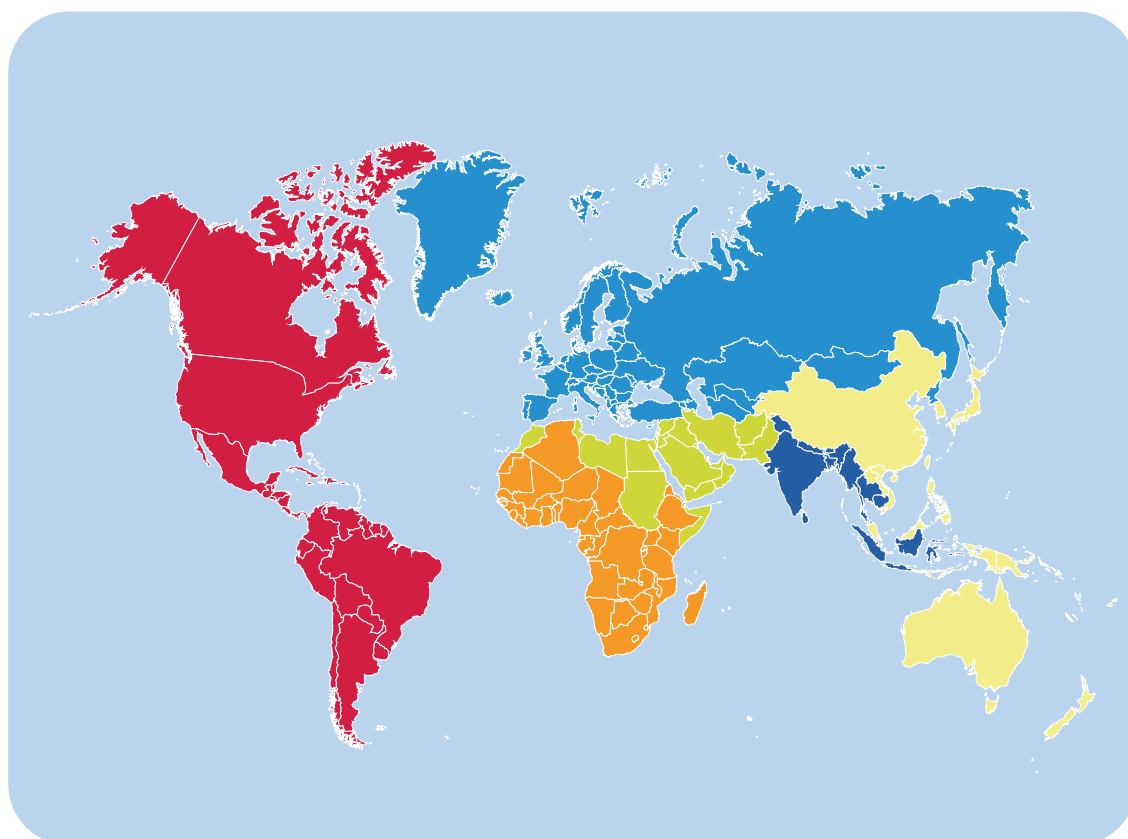
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NEWSLETTER TRANSPLANT 2015



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FOR THE PURPOSES OF THIS NEWSLETTER THE FOLLOWING DEFINITIONS WERE USED:

Actual deceased organ donor

An actual deceased organ donor is a person from whom at least one organ has been recovered for the purpose of transplantation, in contrast to a utilised donor, who is an actual donor from whom at least one organ has been transplanted. The number of utilised donors is therefore lower or equal than the number of actual donors.

Donor after brain death

A donor after brain death (DBD) is a deceased organ donor in whom death has been determined by neurologic criteria.

Donor after circulatory death

A donor after circulatory death (DCD) is a deceased organ donor in whom death has been determined by circulatory and respiratory criteria.

Multiorgan donor

A multiorgan donor is an actual donor from whom at least two different types of organs have been recovered for the purpose of transplantation.

Total TX. (all combinations included)

Includes the transplantation of the corresponding organ with or without the simultaneous transplant of a different type of organ (s).

Double-kidney TX.

One double-kidney TX. is counted as 1 TX.

TX. from living donors

A living donor is a living human being from whom organs have been recovered for the purpose of transplantation. A Living Donor has one of the following three possible relationships with the recipient:

A/ Related:

A1/ Genetically Related:

1st Degree Genetic Relative: Parent, Sibling, Offspring

2nd Degree genetic relative, e.g. grandparent, grandchild, aunt, uncle, niece, nephew,

Other than 1st or 2nd degree genetically related, for example cousin

A2/ Emotionally Related: Spouse (if not genetically related); in-laws; Adopted; Friend

B/ Unrelated = Non Related: Not Genetically or Emotionally Related

Heart-lung TX.

One heart-lung TX. is counted as 1 lung TX., 1 heart TX. and 1 heart-lung TX.

Double-lung TX.

One double-lung TX. is counted as 1 TX.

Total number of patients transplanted

For more than one organ transplanted into the same recipient: kidney-liver-heart TX. = counted as one recipient.

Absolute number

Include all figures corresponding to all donors/ patients adults and children.

Paediatric

Includes only paediatric activity (patients aged < 15 years).

Waiting List

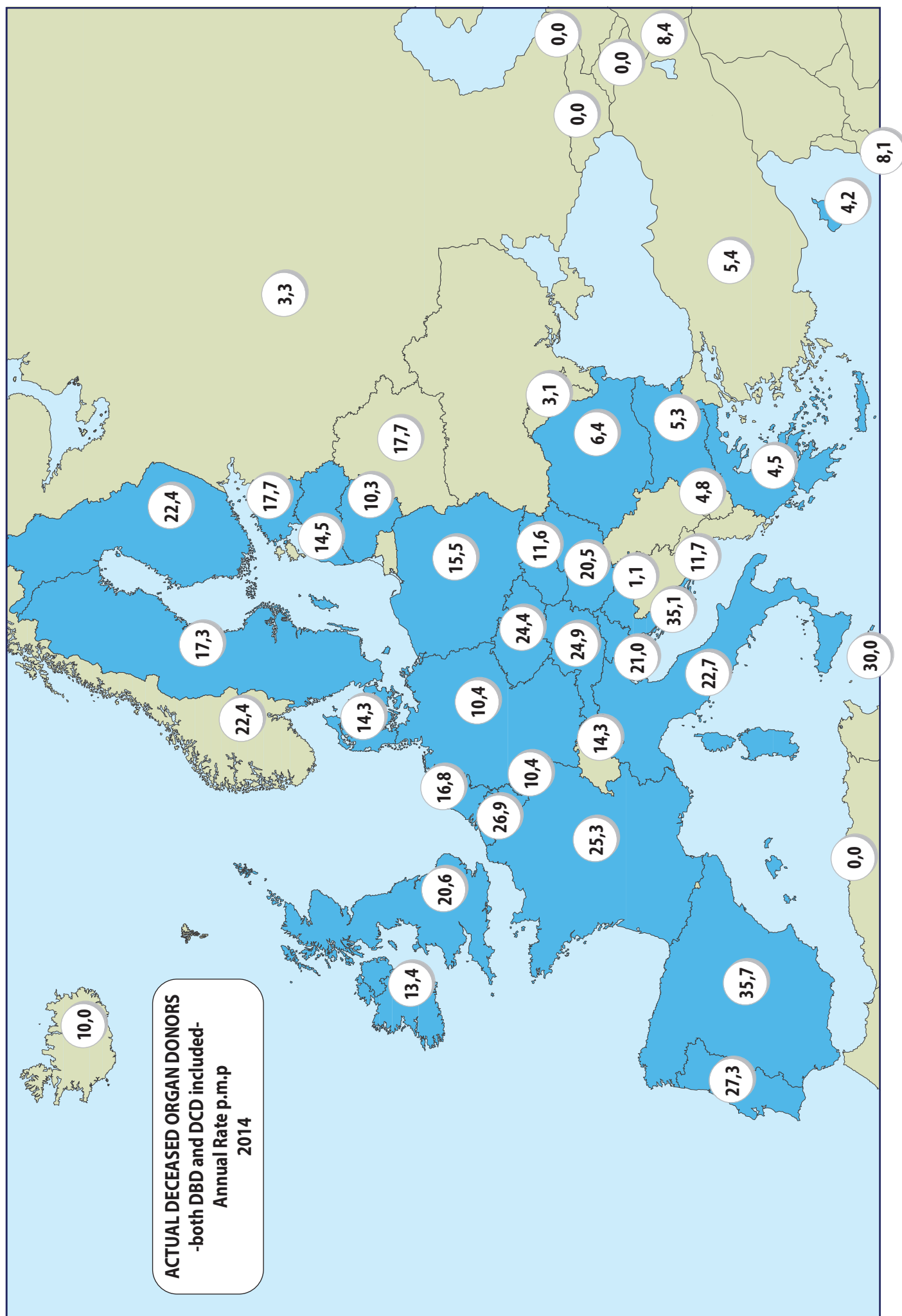
Example: At 1/1/2011 there were 200 patients active on the WL. Along the year, 100 patients are newly included on the WL (first row). In total, 300 patients have been ever active on the WL during the year (second row). Along the year, 200 patients were transplanted (number recorded in a different questionnaire), 50 patients remain active at the end of the year (third row), 25 patients died (fourth row) and 25 patients were excluded (number not to be reported, but derived from previous figures).

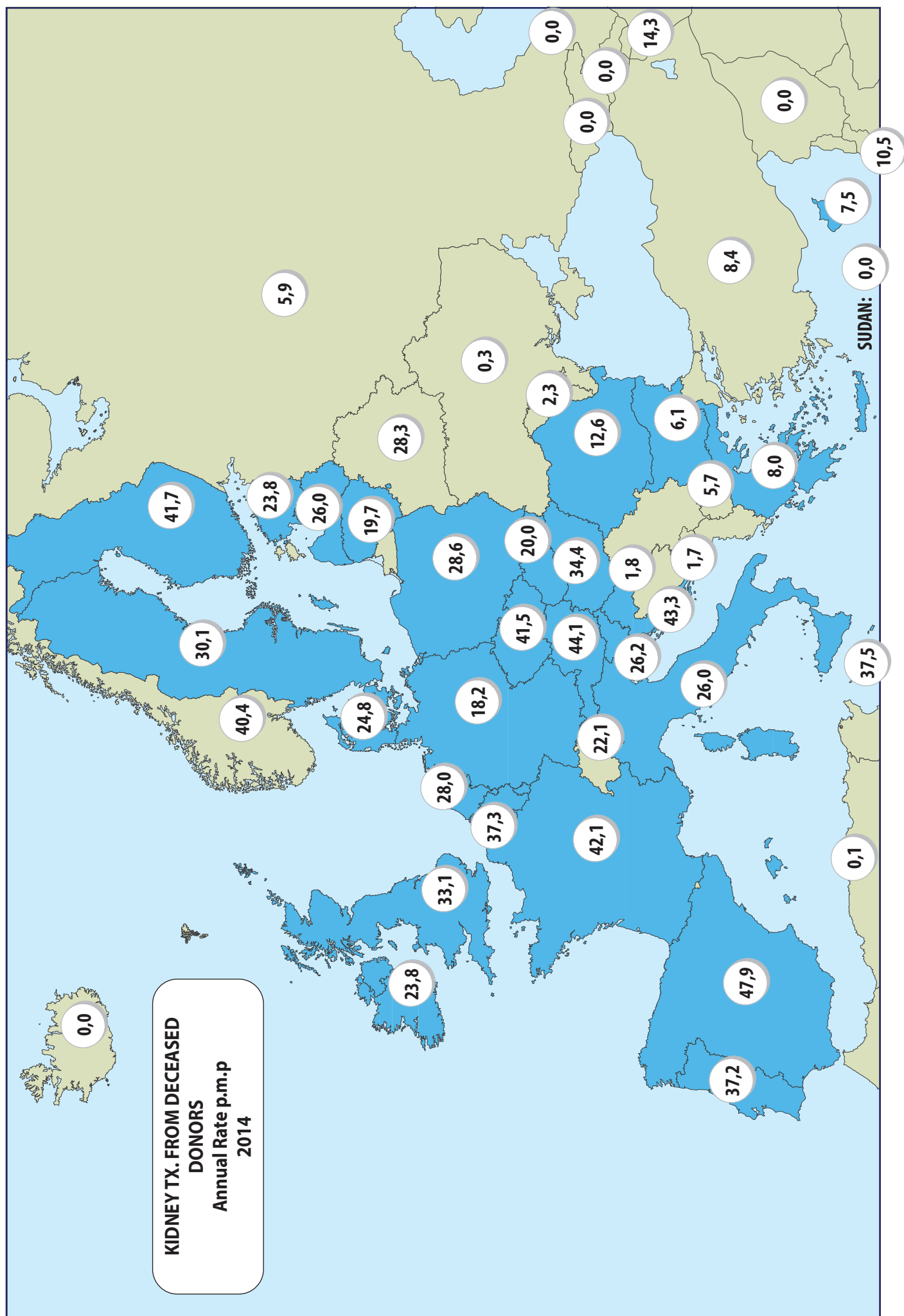
Patients included on the WL for the first time in the course of 2014	100
Total number of patients ever active on the WL during 2014	300
Patients awaiting for a transplant (only active candidates) on 31/12/2014	50
Patients who died while on the WL during 2014	25

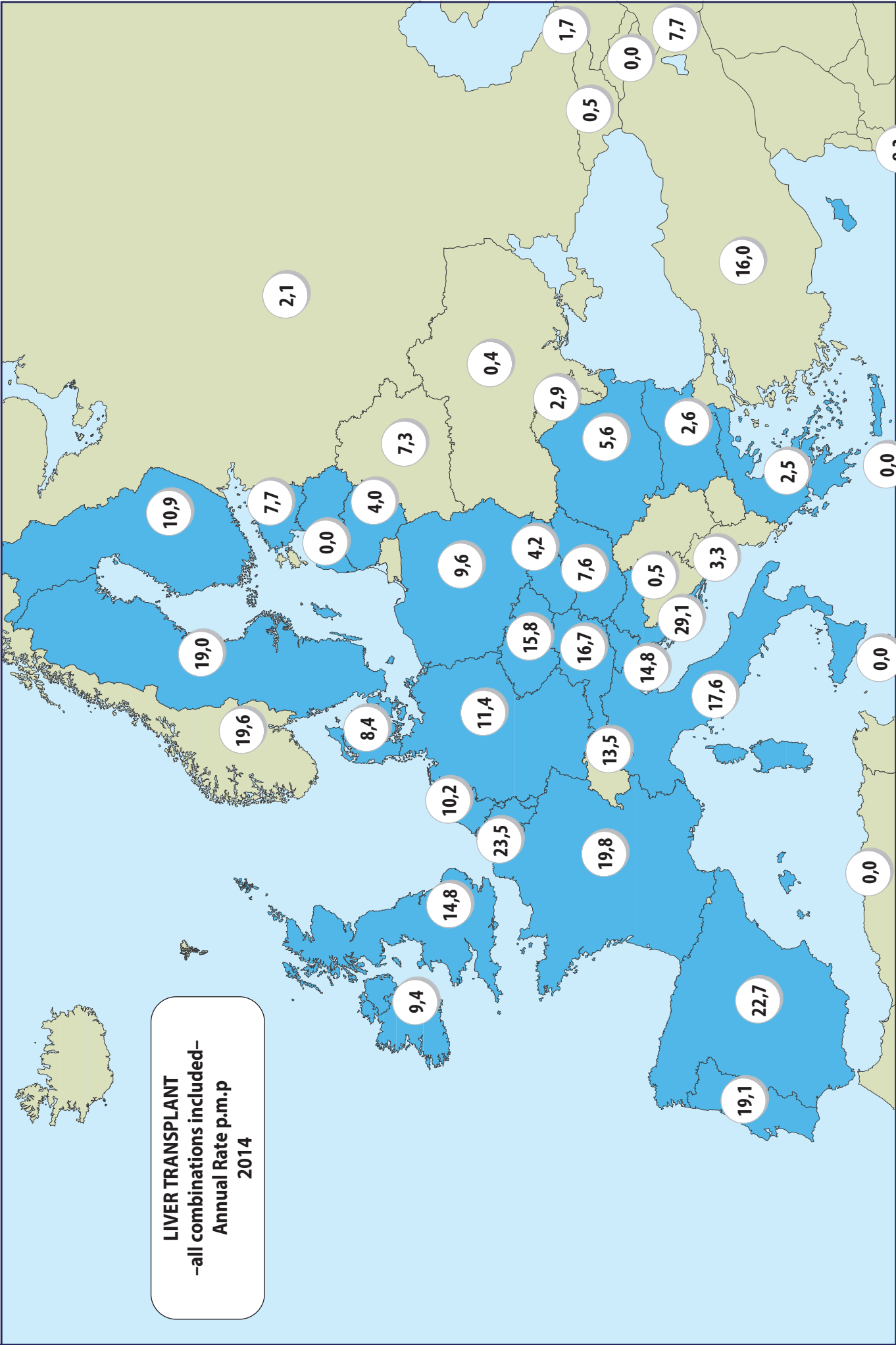
(*The United Nations Fund report (UNFPA: <http://www.unfpa.org/public/>) is used as the data source for estimates of population size)

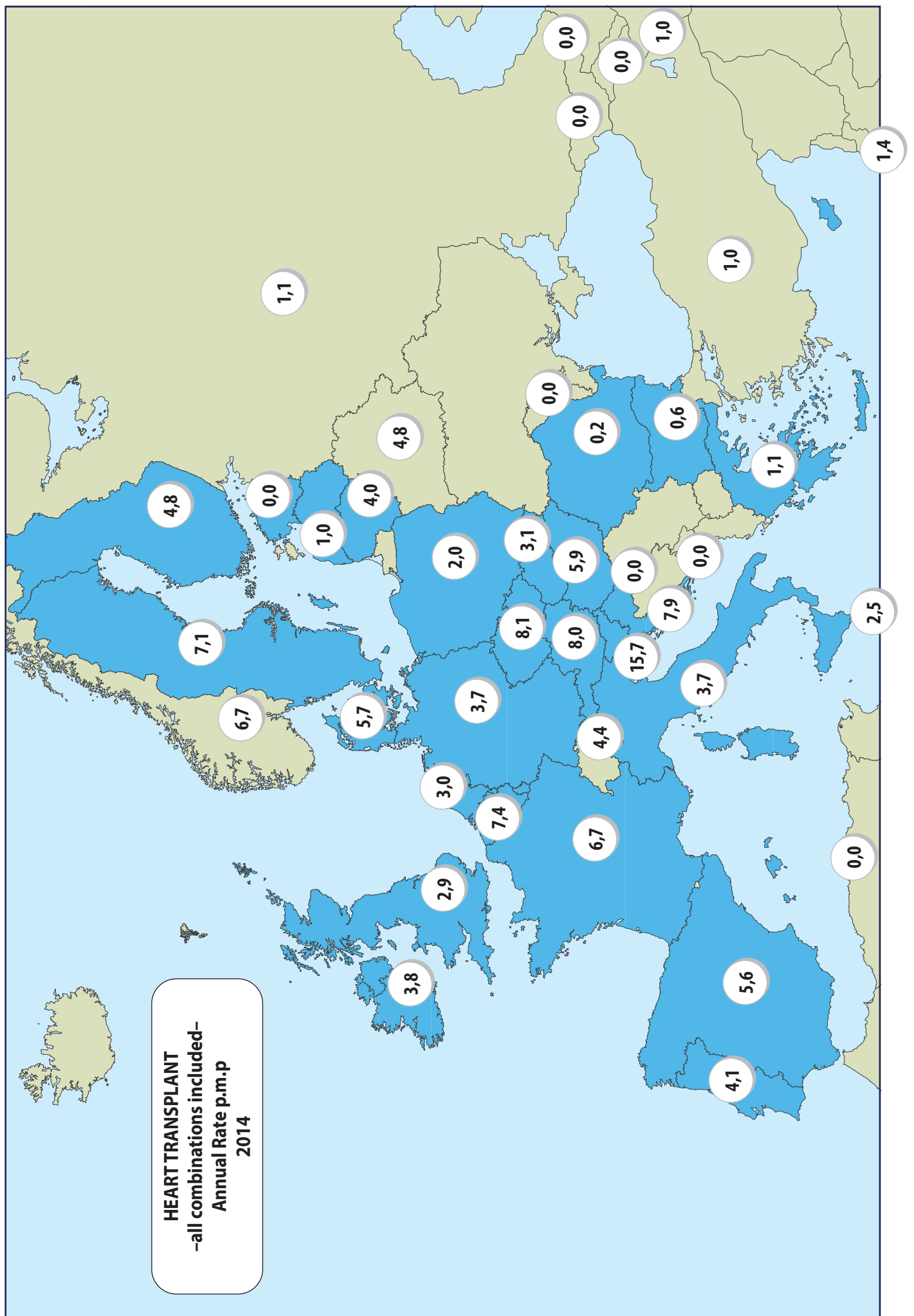
**International Figures
On Organ Donation
And Transplantation Activity.
Year 2014.**



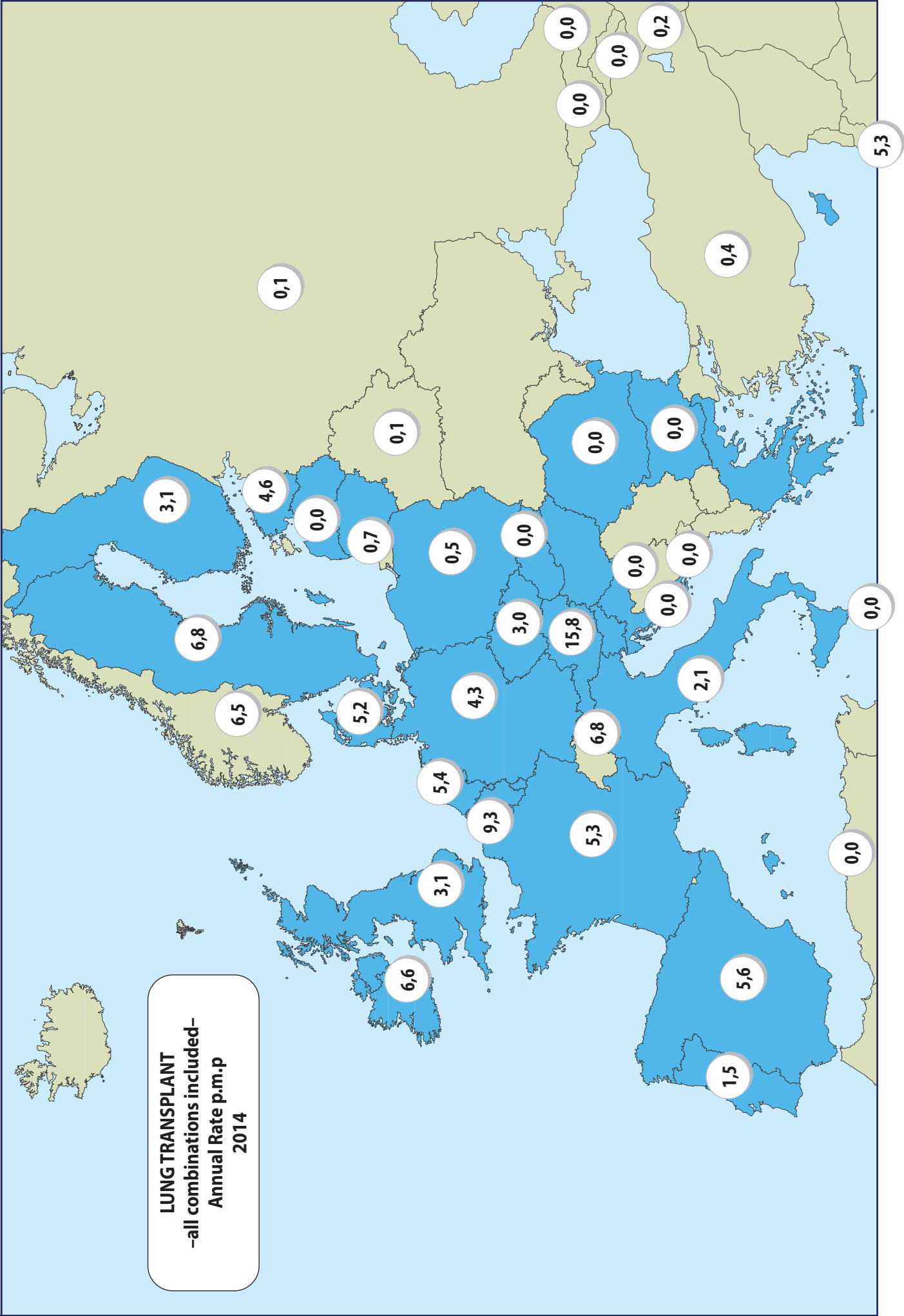


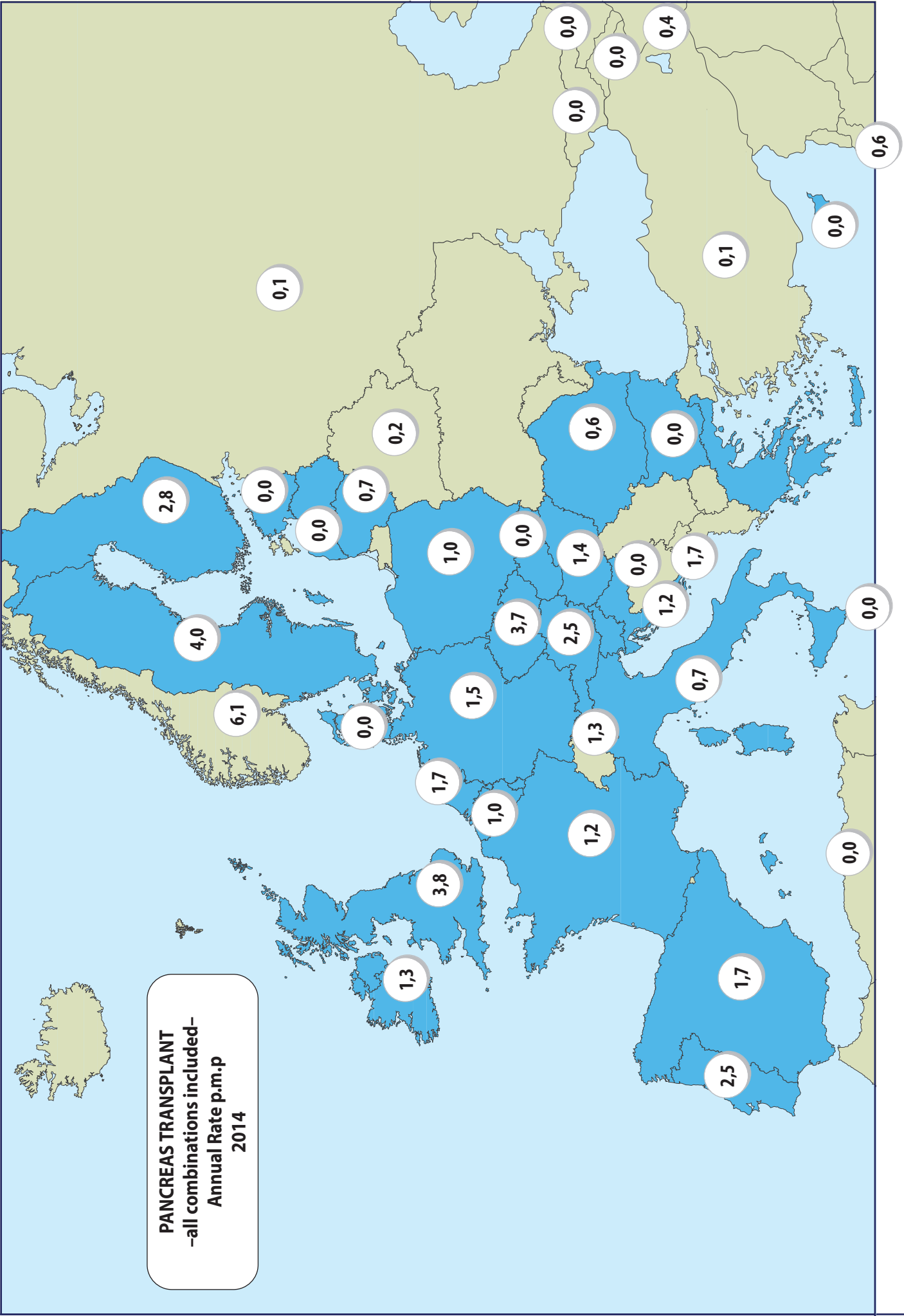


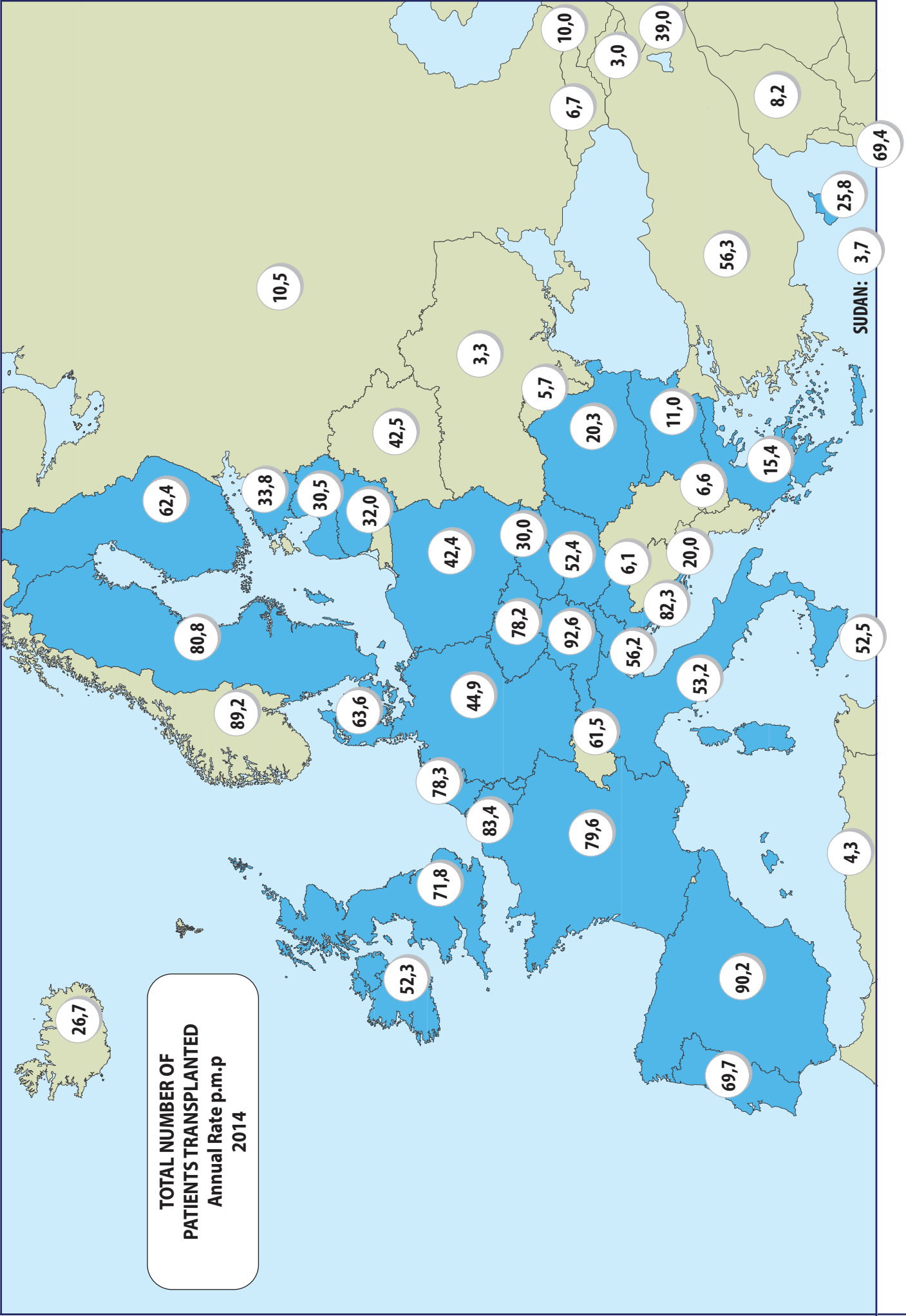




LUNG TRANSPLANT
 -all combinations included-
 Annual Rate p.m.p
 2014









Global Observatory on
Donation & Transplantation

In collaboration with
World Health
Organization

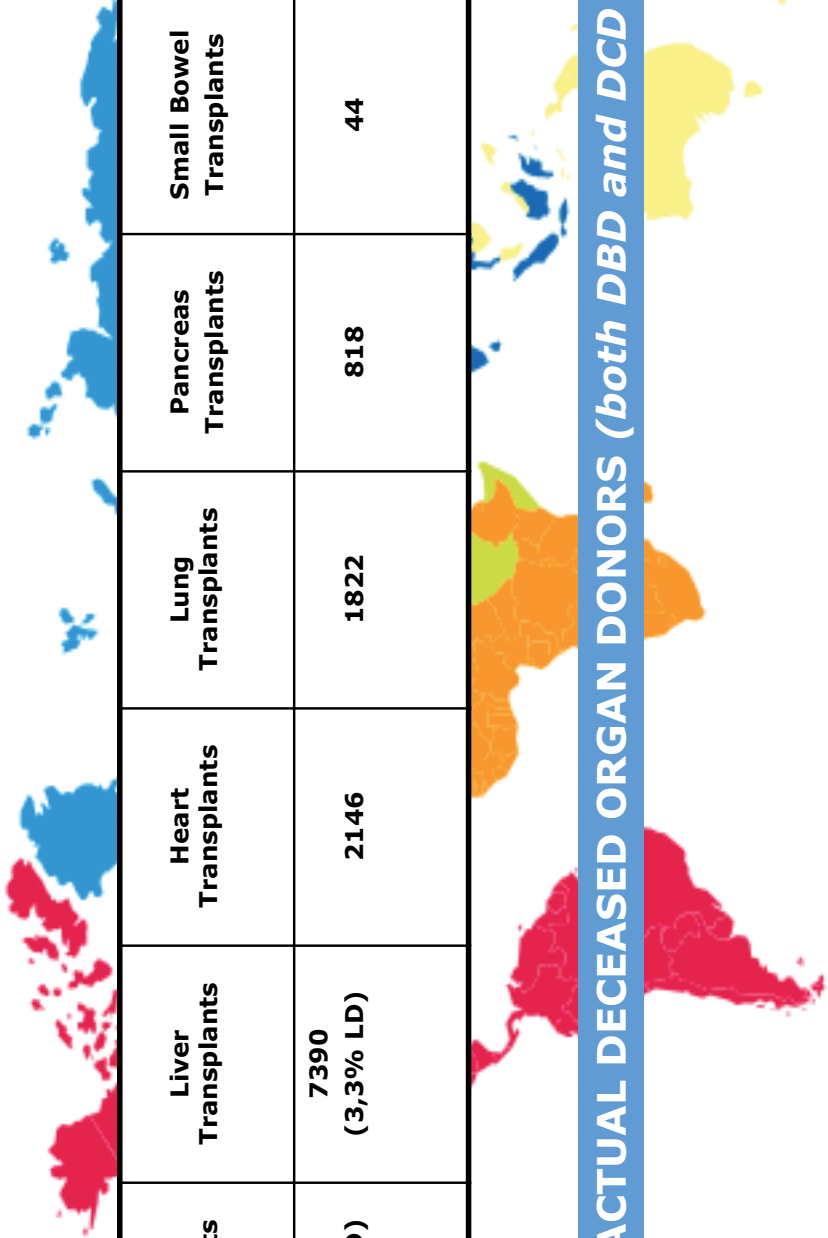


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E IGUALDAD



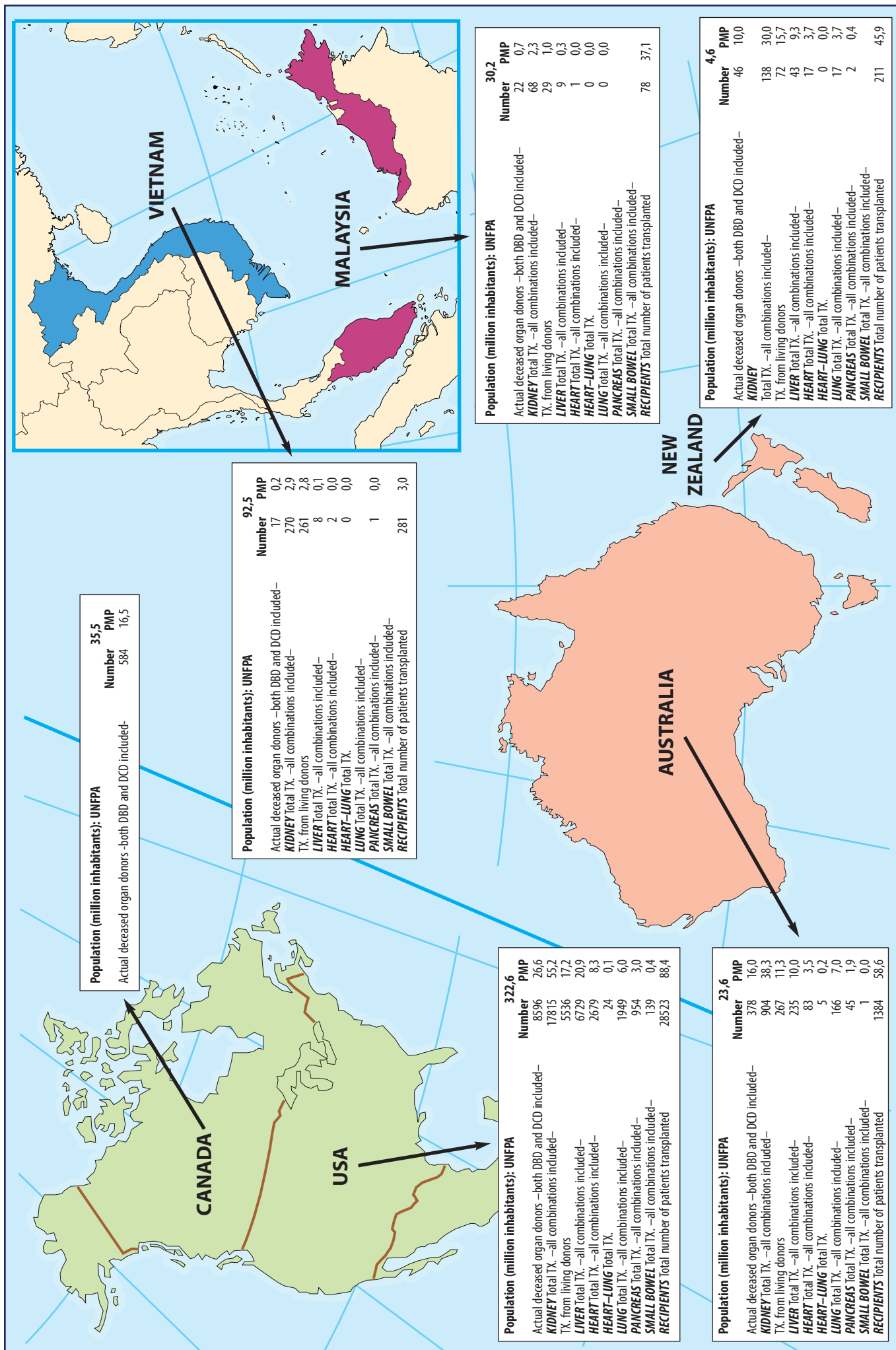
EUROPEAN UNION DATA



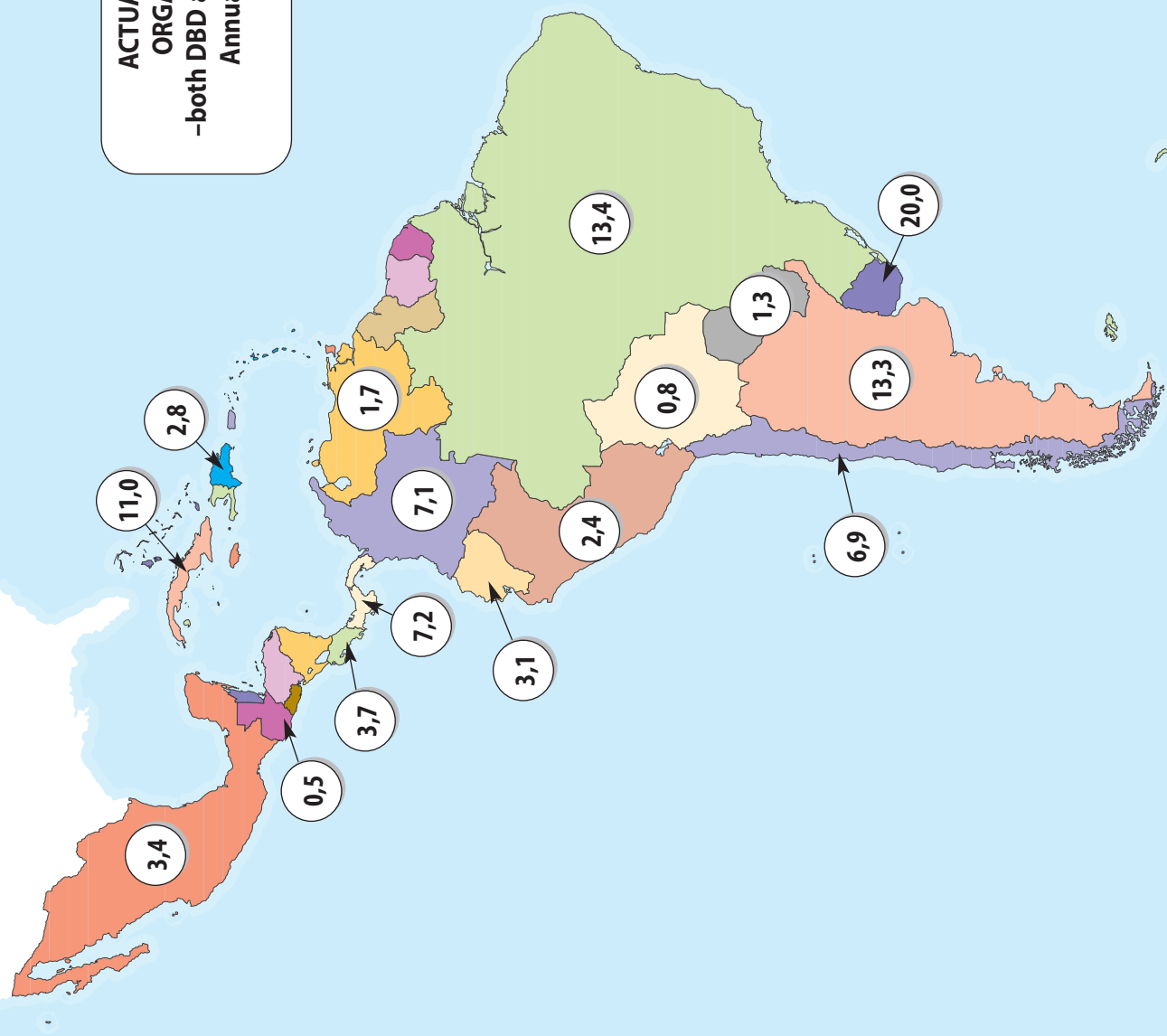
Kidney Transplants	Liver Transplants	Heart Transplants	Lung Transplants	Pancreas Transplants	Small Bowel Transplants	Transplants
19670 (21,7% LD)	7390 (3,3% LD)	2146	1822	818	44	31890

10033 ACTUAL DECEASED ORGAN DONORS (both DBD and DCD included)

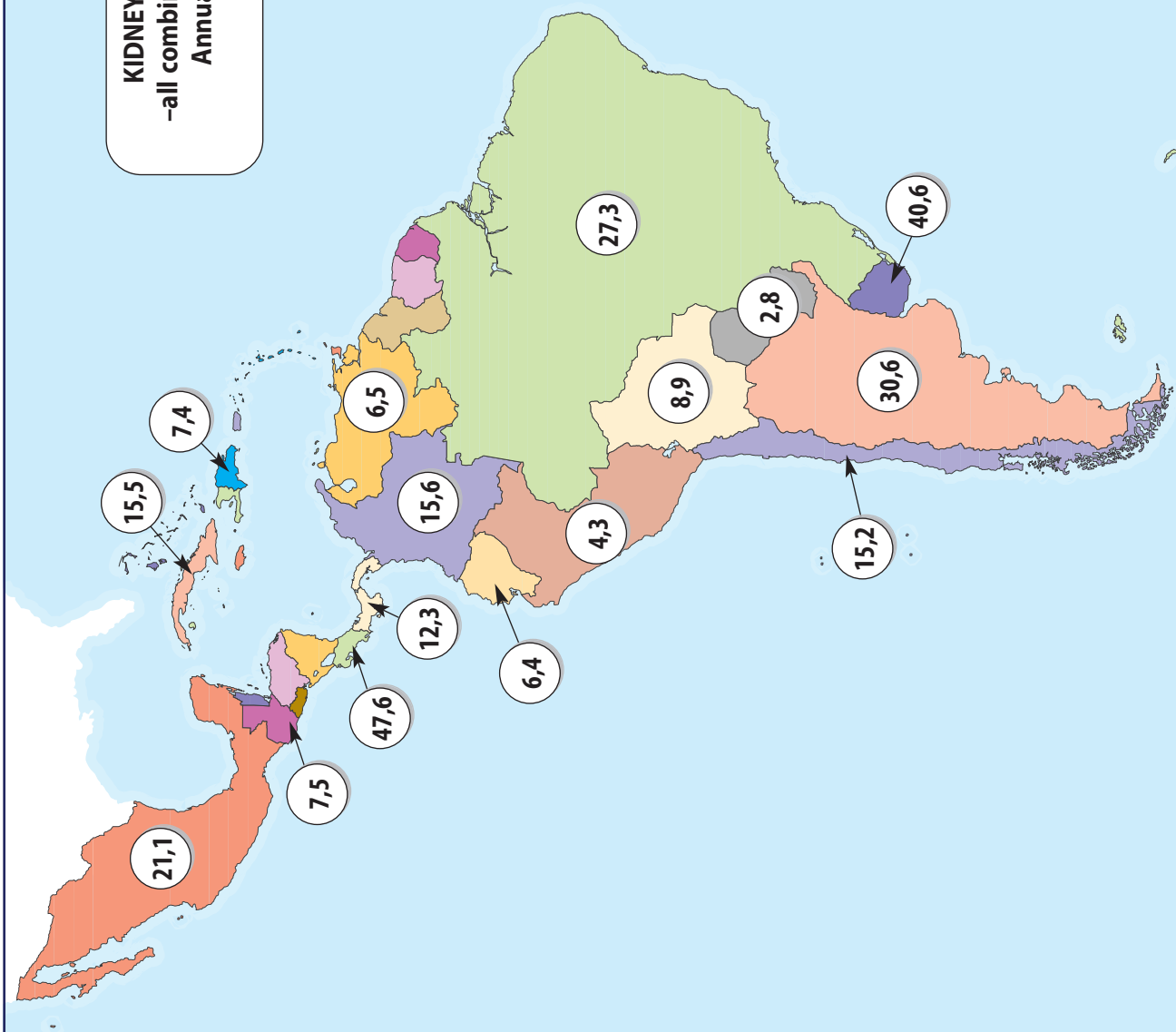
***2014 data**
N= 28 COUNTRIES (510,3 million inhabitants)

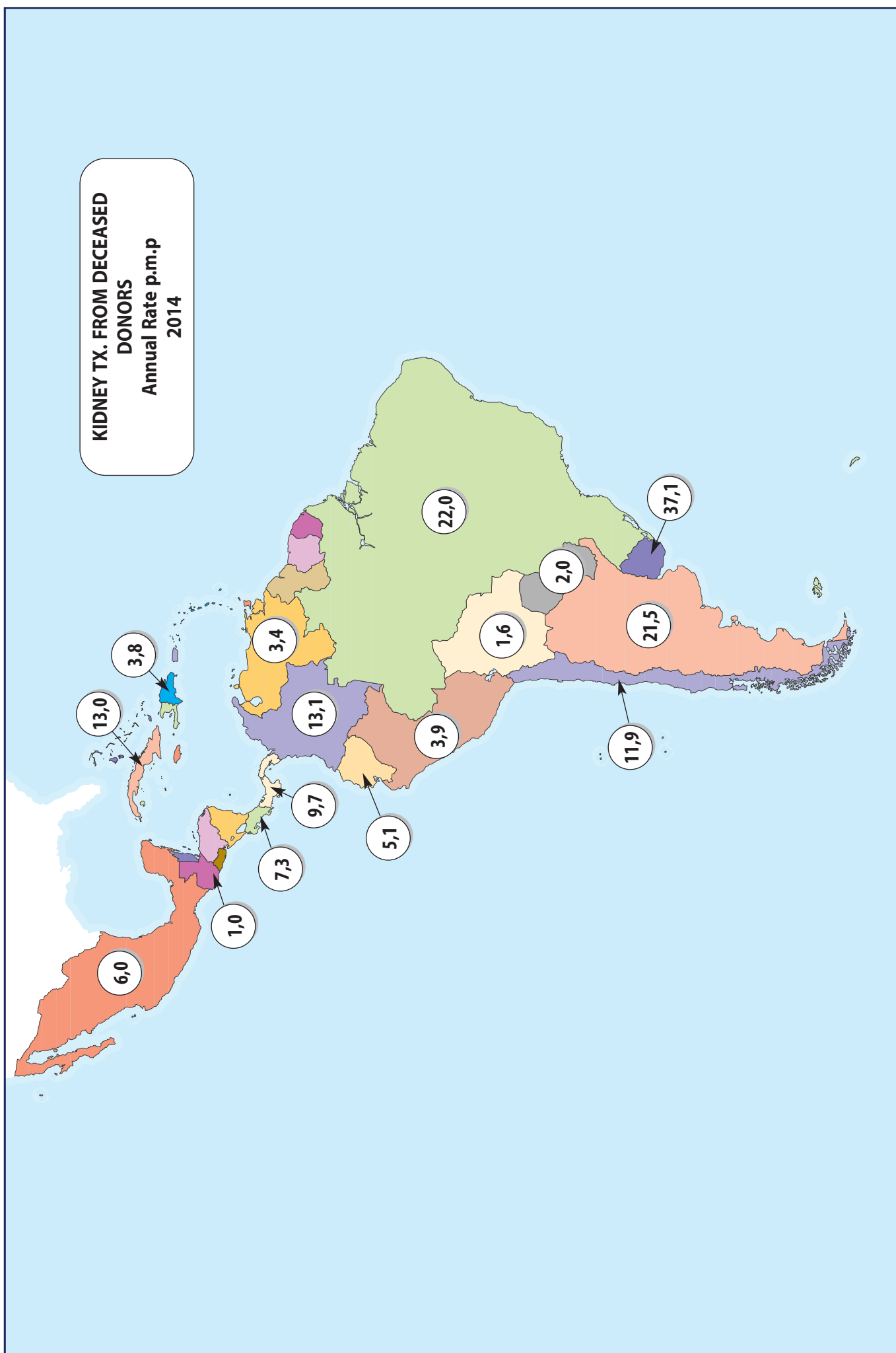


ACTUAL DECEASED
ORGAN DONORS
-both DBD and DCD included-
Annual Rate p.m.p
2014

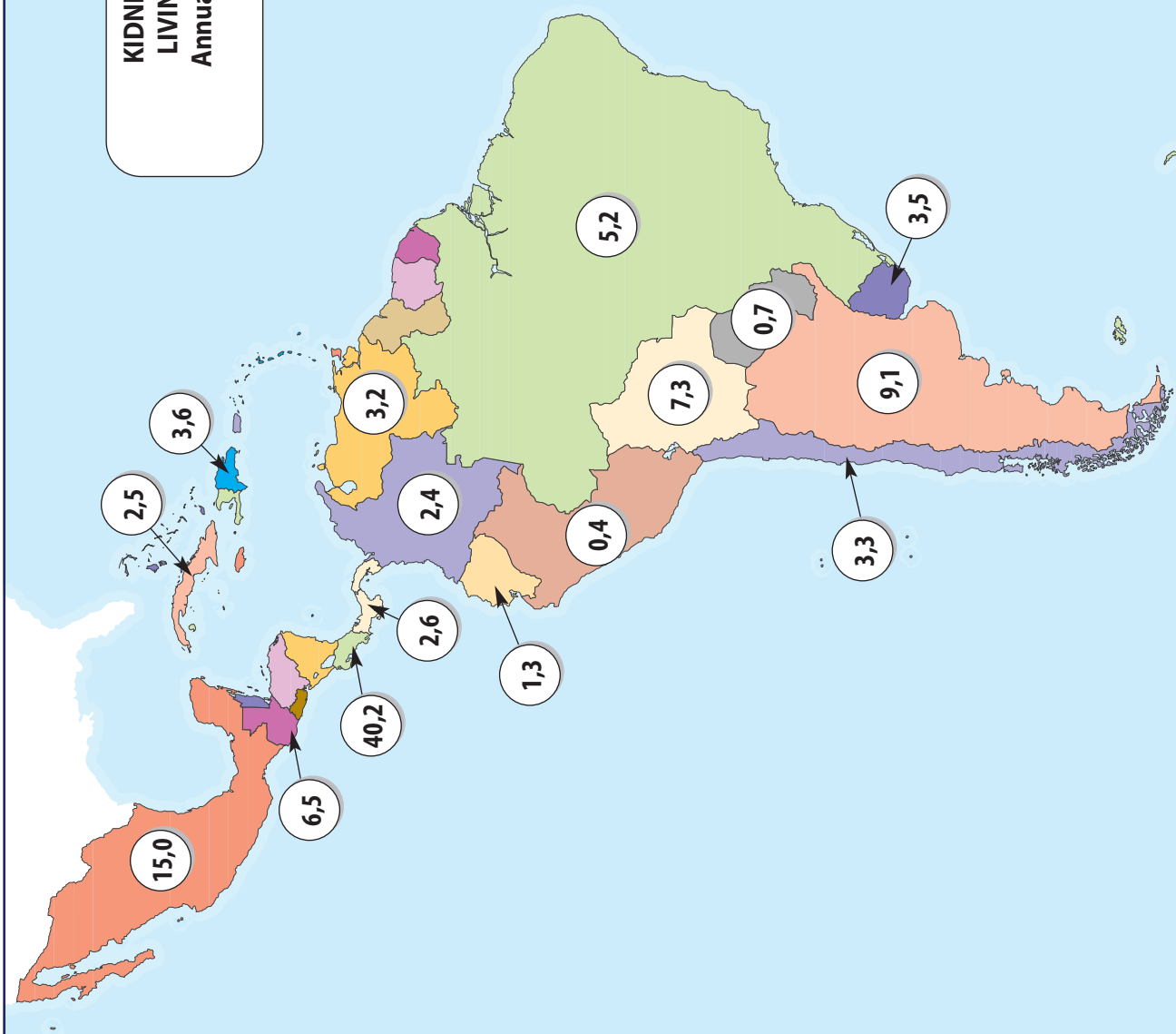


KIDNEY TRANSPLANT
-all combinations included-
Annual Rate p.m.p
2014

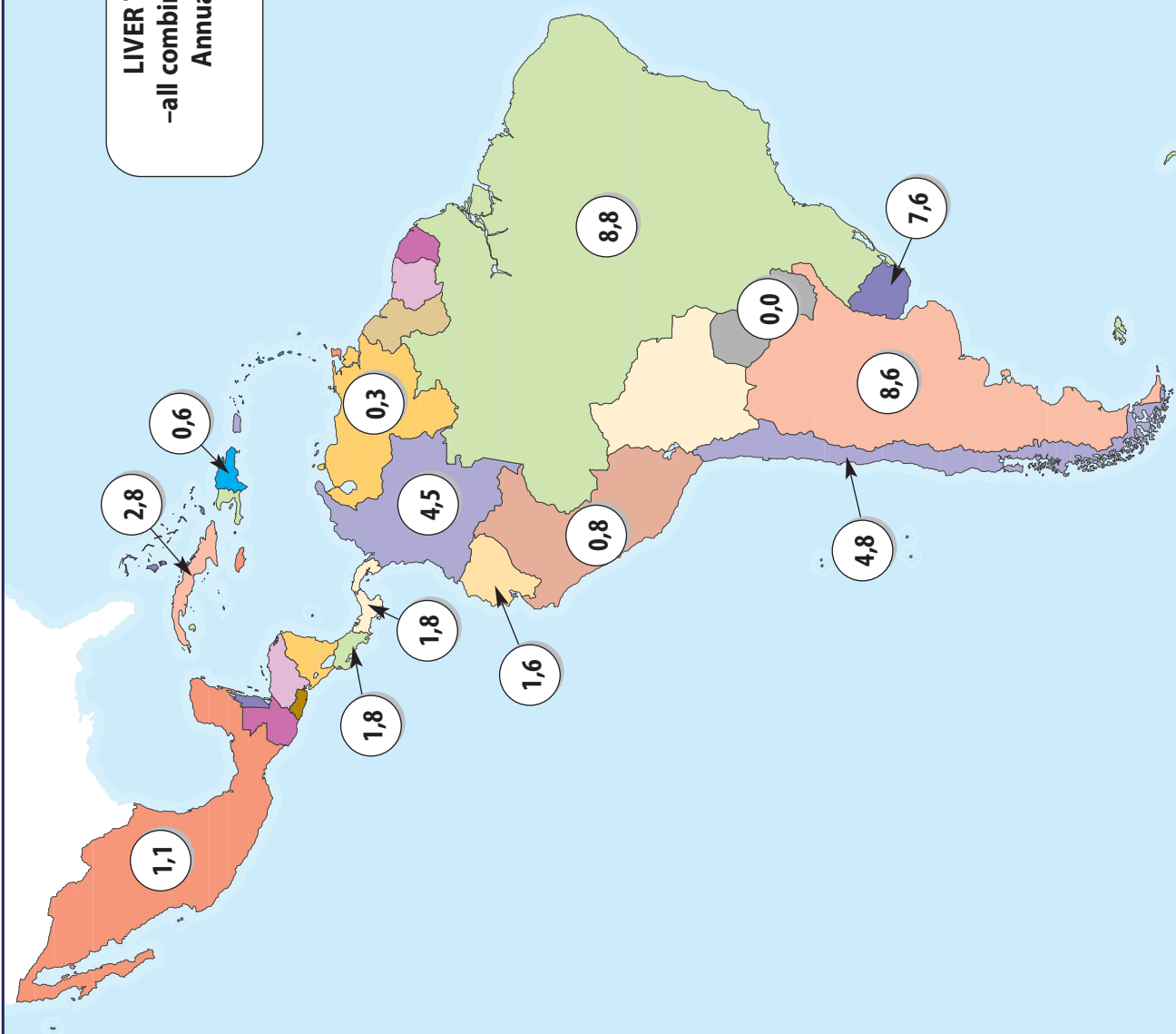




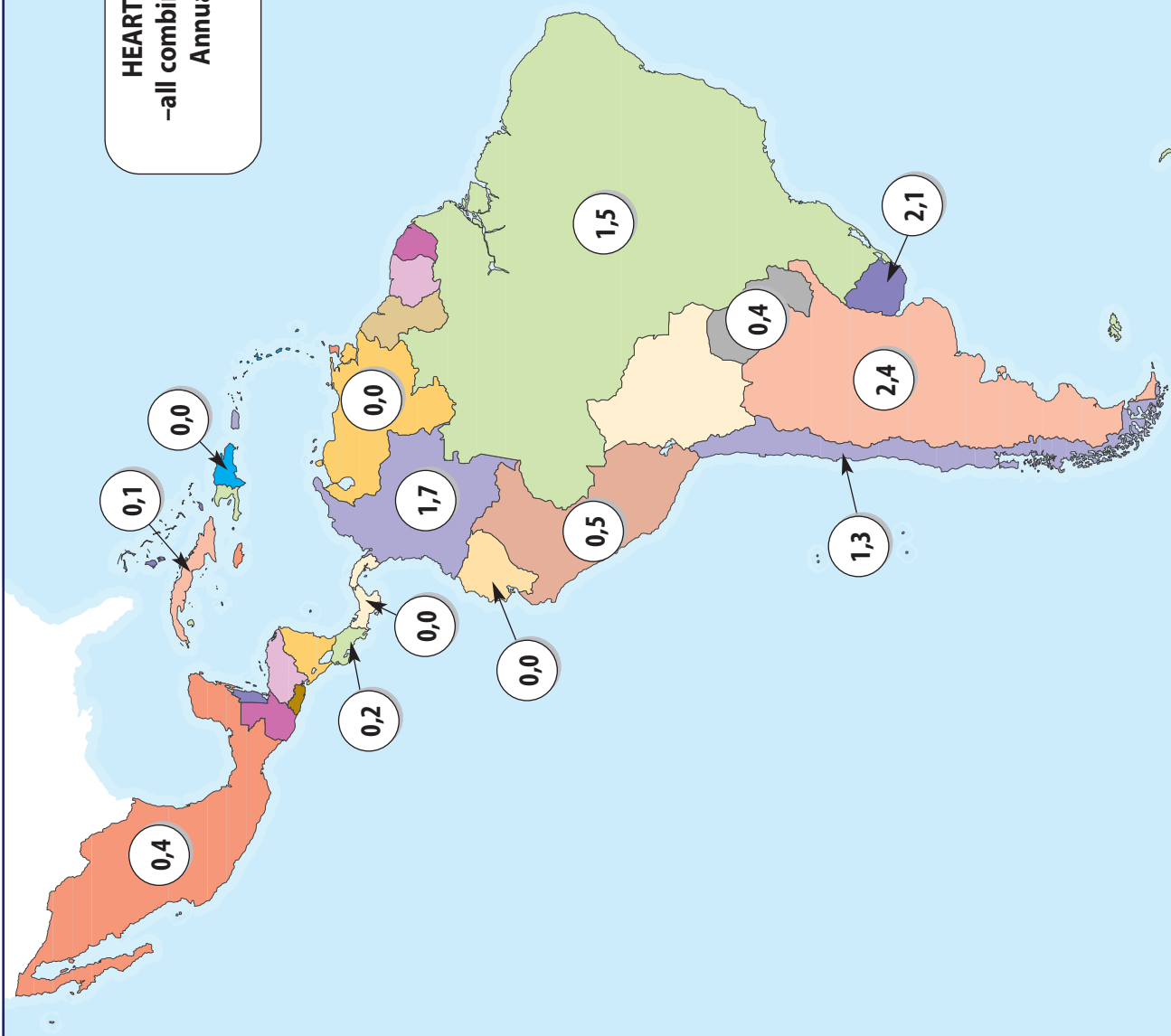
KIDNEY TX. FROM
LIVING DONORS
Annual Rate p.m.p
2014



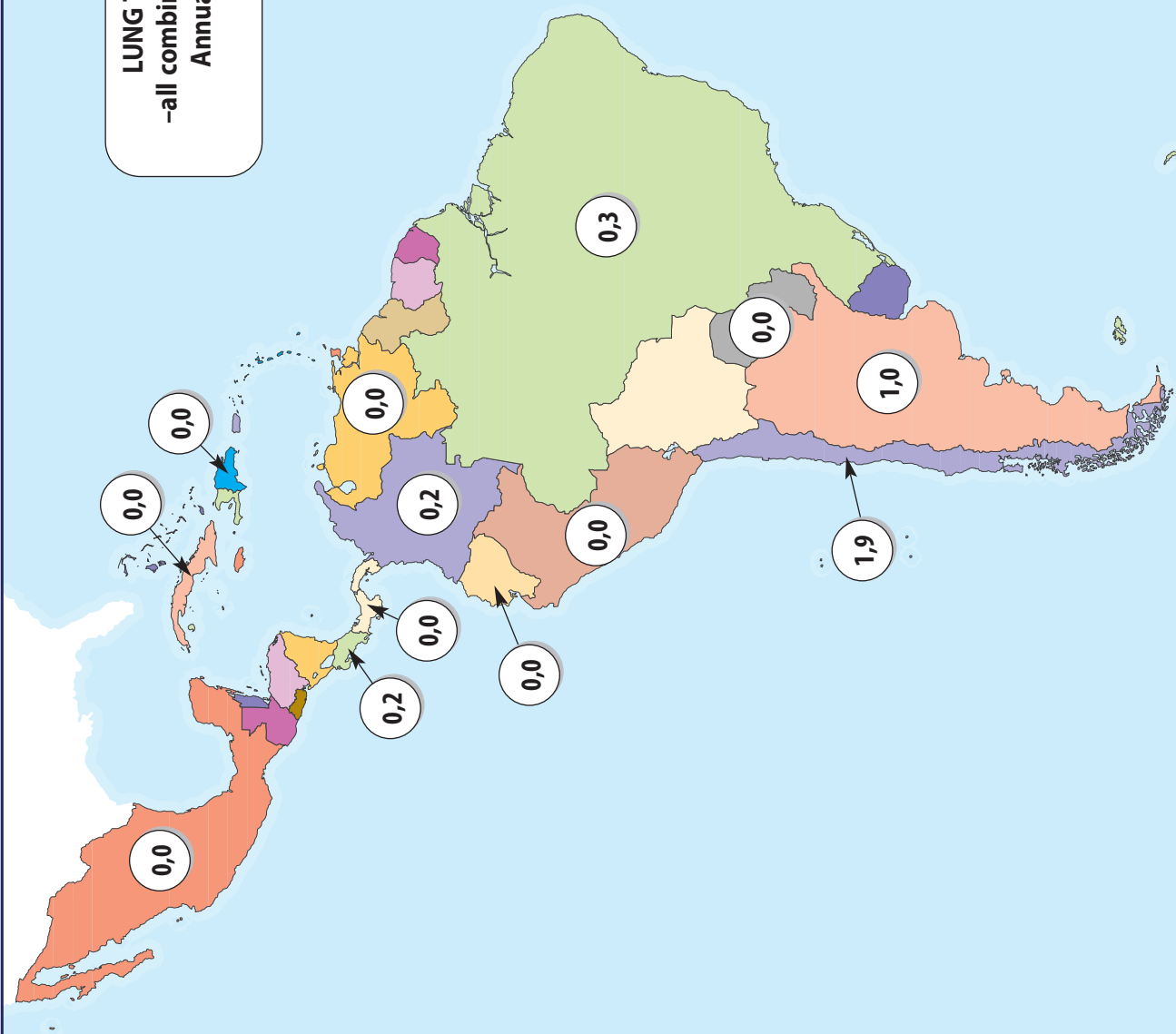
LIVER TRANSPLANT
-all combinations included-
Annual Rate p.m.p
2014



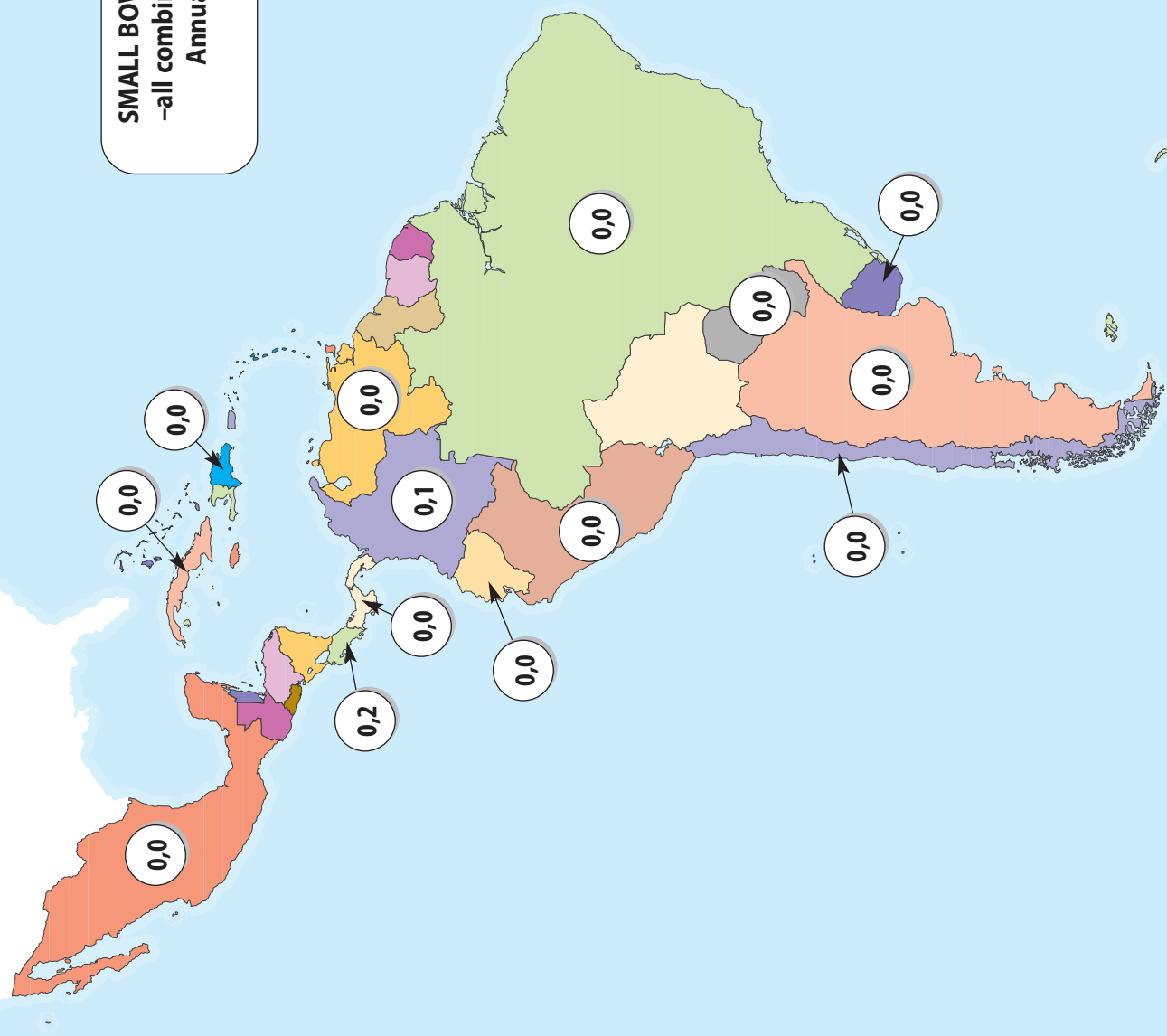
HEART TRANSPLANT
-all combinations included-
Annual Rate p.m.p
2014



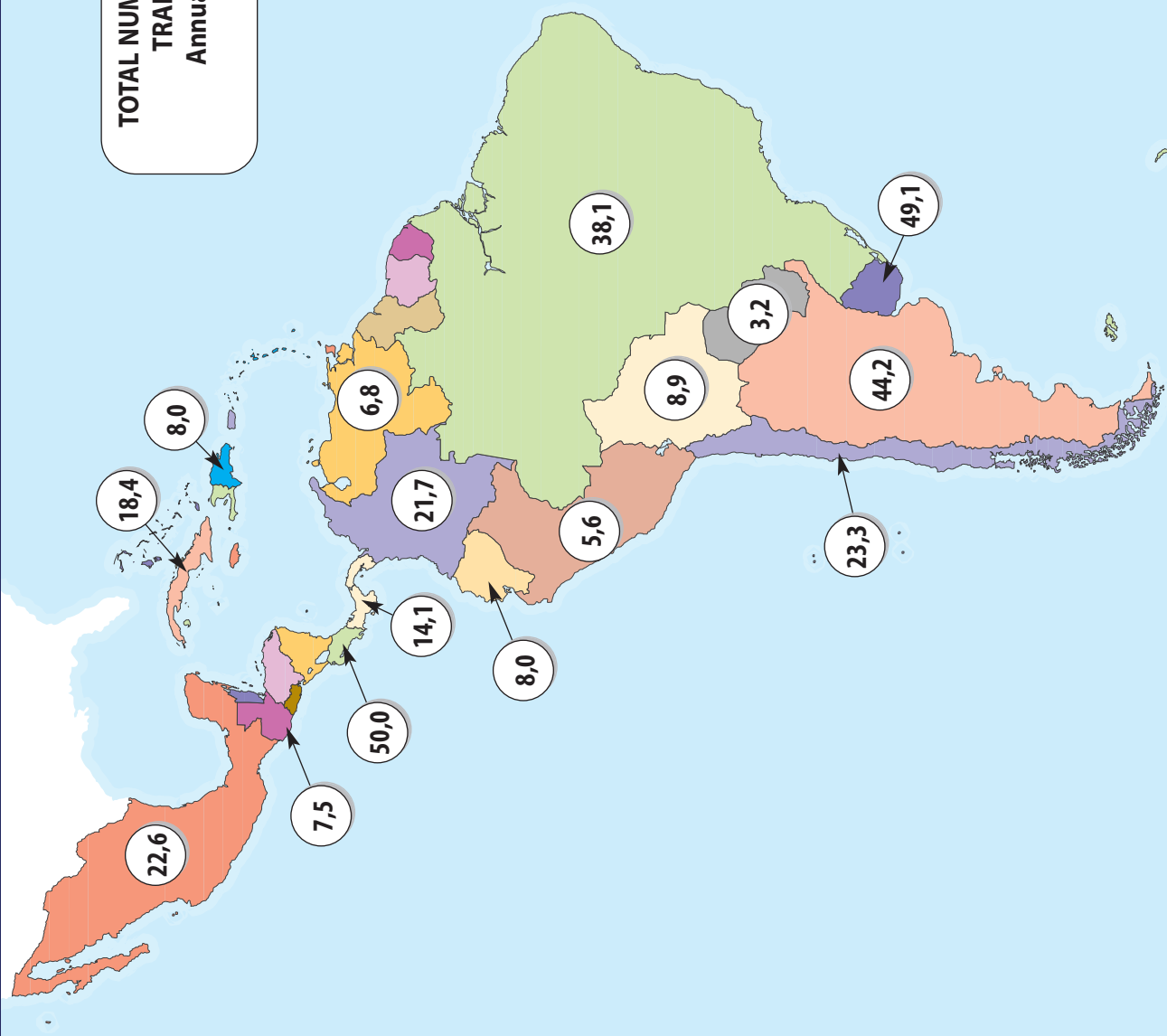
LUNG TRANSPLANT
-all combinations included-
Annual Rate p.m.p
2014



SMALL BOWEL TRANSPLANT
-all combinations included-
Annual Rate p.m.p
2014



TOTAL NUMBER OF PATIENTS
TRANSPLANTED
Annual Rate p.m.p
2014





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ONT

LATINAMERICAN COUNTRIES



Kidney Transplants	Liver Transplants	Heart Transplants	Lung Transplants	Pancreas Transplants	Small Bowel Transplants	Transplants
11770 (34,6% LD)	2708 (8,7% LD)	594	153	224	12	15461

4620 ACTUAL DECEASED ORGAN DONORS (both DBD and DCD included)

*2014 data

N= 16 COUNTRIES (579,6 million inhabitants)

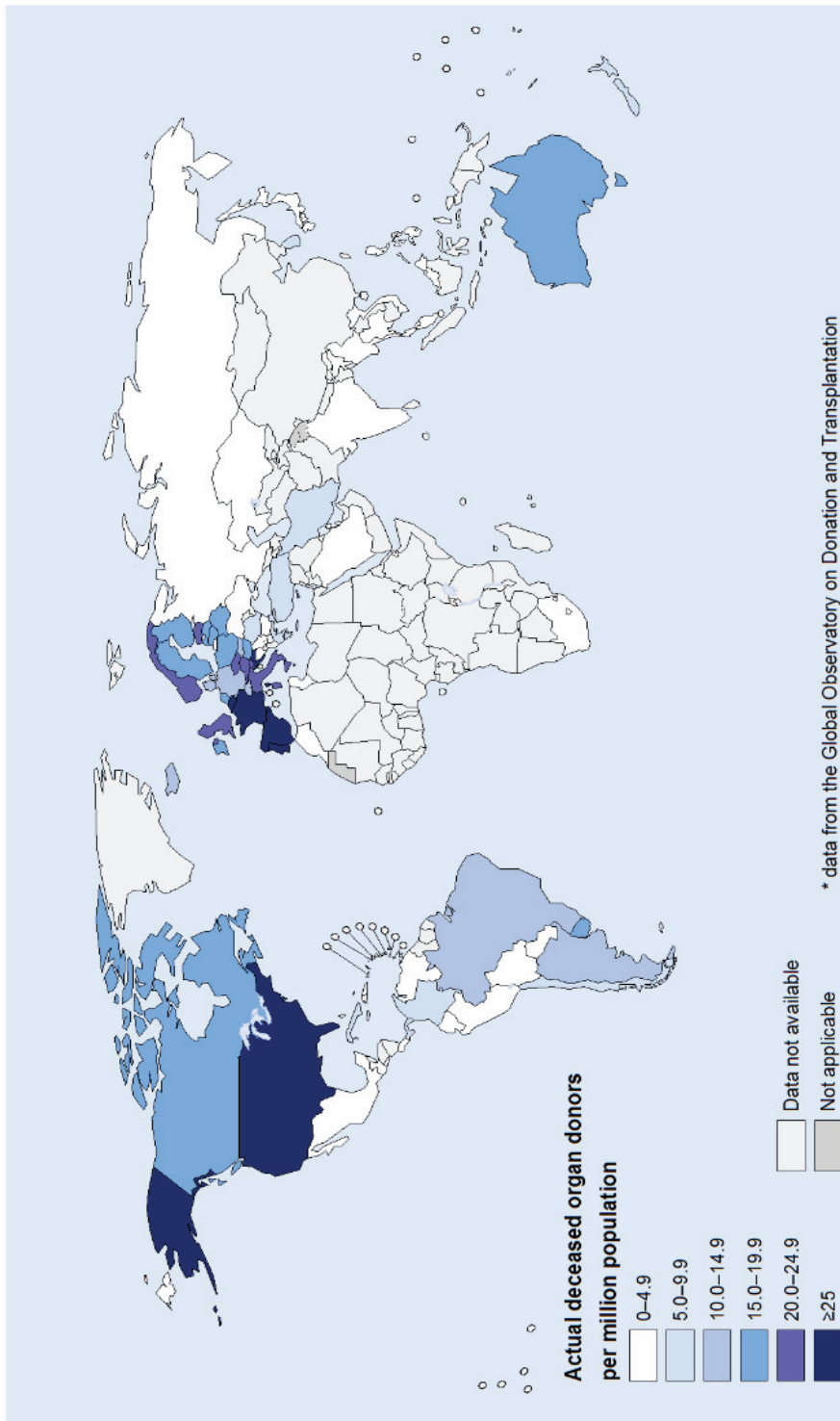
GLOBAL ACTIVITY IN ORGAN TRANSPLANTATION
2013 ESTIMATES

Kidney Transplants	Liver Transplants	Heart Transplants	Lung Transplants	Pancreas Transplants	Small Bowel Transplants
79325 (41,9% LD)	25050 (18,3% LD)	6270	4834	2474	174

118127 SOLID ORGANS REPORTED TO BE TRANSPLANTED

- Information of 112 Member States on organ transplantation activities is included in the GODT: 95 of 2013, 3 of 2012, 5 of 2011, 3 of 2010, 2 of 2009, 4 of 2008.

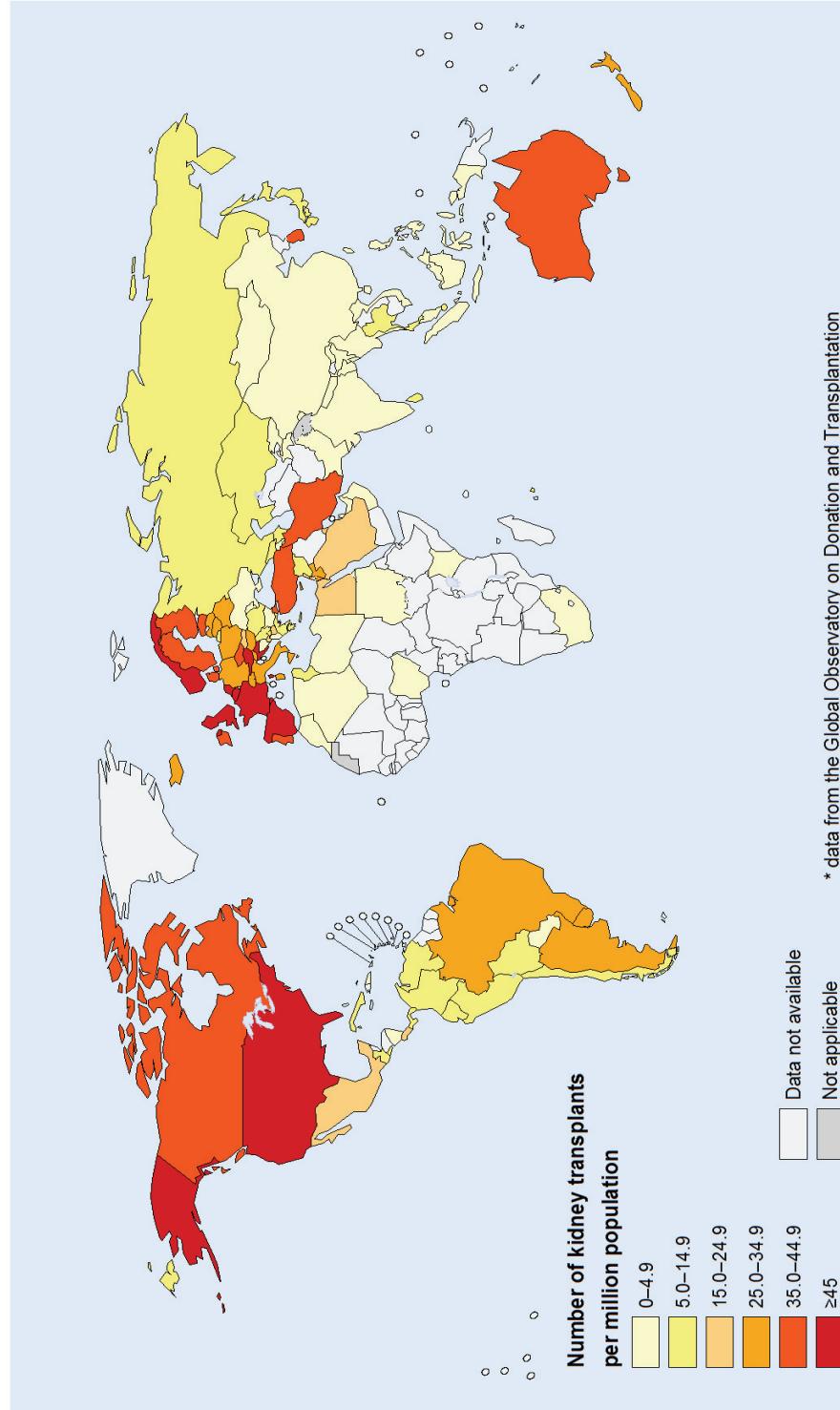
Actual donors from deceased persons, 2013*



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Global Observatory on Donation & Transplantation. Map Production: Health Statistics and Information Systems (HSI), World Health Organization

Kidney transplantation activities, 2013*

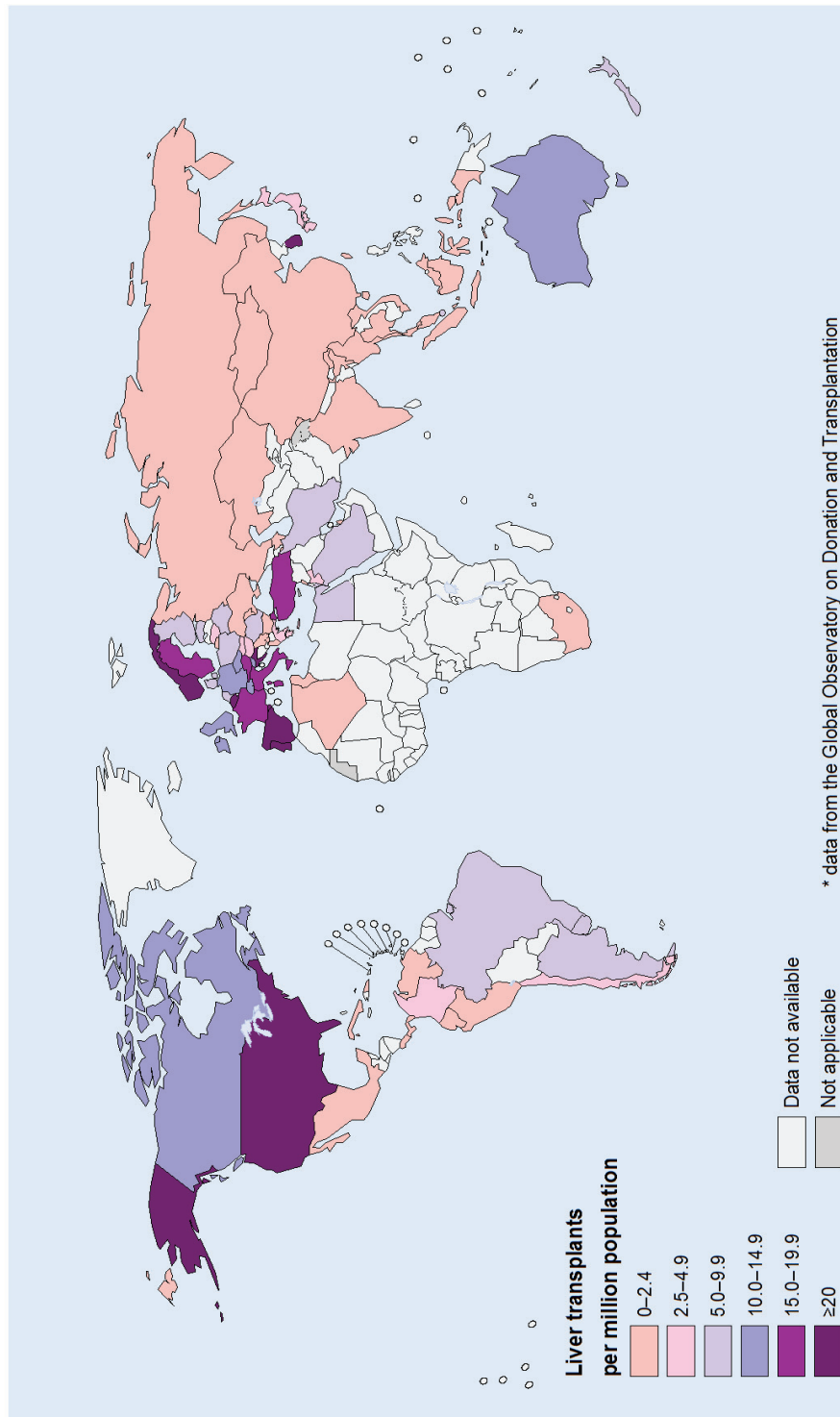


The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Global Observatory on Donation & Transplantation. Map Production: Health Statistics and Information Systems (HSI), World Health Organization

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Liver transplantation activities, 2013*



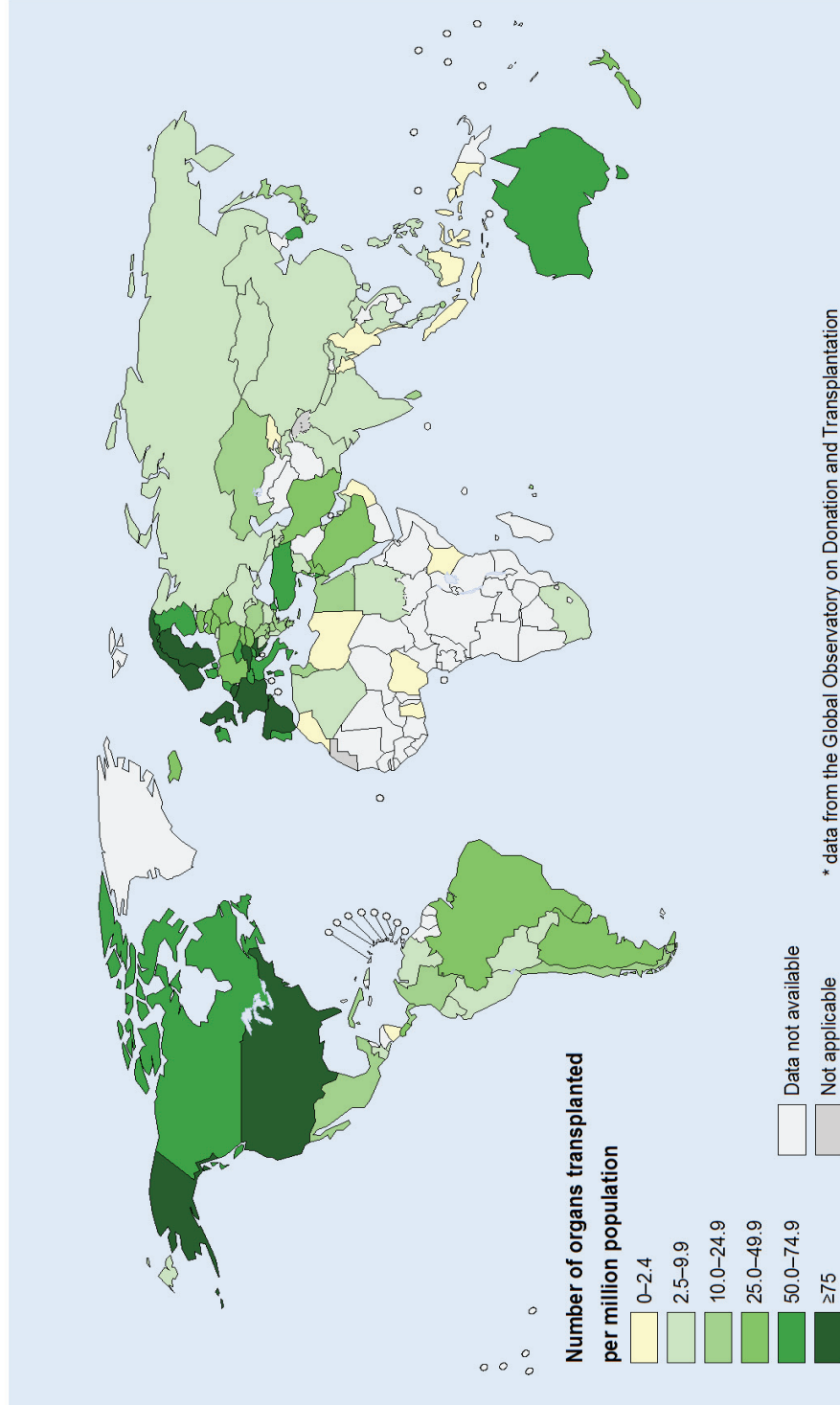
The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Global Observatory on Donation & Transplantation. Map Production: Health Statistics and Information Systems (HSI), World Health Organization



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Global transplantation activities of solid organs, 2013*



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Data Source: Global Observatory on Donation & Transplantation. Map Production: Health Statistics and Information Systems (HSI), World Health Organization

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International Data On Organ Donation And Transplantation Activity, Waiting List And Family Refusals. Year 2014.



DONATION AND TRANSPLANTATION ACTIVITY

EUROPEAN UNION COUNTRIES														
COUNTRIES	AUSTRIA	BELGIUM	BULGARIA	CROATIA	CYPRUS	CZECH. R.	DENMARK	ESTONIA	FINLAND	FRANCE				
Population (million inhabitants): UNFPA	8,5	11,1	7,2	4,3	1,2	10,7	5,6	1,3	5,4	64,6				
DONATION														
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Actual deceased organ donors	212	24,9	299	26,9	38	5,3	151	35,1	5	4,2	261	24,4	80	14,3
-both DBD and DCD included-	4	0,5	83	7,5	0	0,0	0	0,0	0	0,0	4	0,4	0	0,0
Actual donors after circulatory death –DCD-	175	20,6	230	20,7	22	3,1	22	5,0	0	0,0	163	15,2	64	11,4
Multiorgan donors														
TRANSPLANTATION														
KIDNEY														
Total TX. -all combinations included-	446	52,5	481	43,3	56	7,8	197	45,8	31	25,8	507	47,4	249	44,5
% (TX. from living d. / Total TX.)	15,9		13,9		21,4		5,6		71,0		3		44,2	
Paediatric <15 years	7	0,8	13	1,2	0	0,0	0	0,0	1	0,8	3	0,3	7	1,3
TX. from deceased donors	375	44,1	414	37,3	44	6,1	186	43,3	9	7,5	444	41,5	139	24,8
-TX. from DCD	26	3,1	76	6,8	0	0,0	0	0,0	0	0,0	6	0,6	0	0,0
-Single TX.	367	43,2	412	37,1	44	6,1	0	0,0	9	7,5	442	41,3	138	24,6
-Double TX.	8	0,9	2	0,2	0	0,0	0	0,0	0	0,0	2	0,2	1	0,2
TX. from living donors	71	8,4	67	6,0	12	1,7	11	2,6	22	18,3	63	5,9	110	19,6
-TX. from Related living donors	71	8,4	42	3,8	12	1,7	11	2,6	22	18,3	40	3,7	110	19,6
-TX. from Unrelated living donors	0	0,0	25	2,3	0	0,0	0	0,0	0	0	23	2,1	0	0,0
LIVER														
Total TX. -all combinations included-	142	16,7	261	23,5	19	2,6	125	29,1	0	0,0	169	15,8	47	8,4
Paediatric <15 years	9	1,1	38	3,4	0	0,0	0	0,0	0	0,0	7	0,7	4	0,7
Split TX.	0	0,0	10	0,9	0	0,0	0	0,0	0	0,0	7	0,7	2	0,4
Domino TX.	0	0,0	2	0,2	0	0,0	0	0,0	0	0,0	1	0,1	0	0,0
TX. from living donors	6	0,7	40	3,6	1	0,1	1	0,2	0	0,0	2	0,2	0	0,0
TX. from DCD	0	0,0	50	4,5	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
HEART														
Total TX. -all combinations included-	68	8,0	82	7,4	4	0,6	34	7,9	0	0,0	87	8,1	32	5,7
Paediatric <15 years	4	0,5	2	0,2	0	0,0	0	0,0	0	0,0	2	0,2	2	0,4
HEART-LUNG														
Total TX.	0	0,0	0	0,0	0,0	0,0	0	0,0	0	0,0	1	0,1	0	0,0
Paediatric <15 years	0	0,0	0	0,0	0,0	0,0	0	0,0	0	0,0	0,0	0,0	0	0,0
LUNG														
Total TX. -all combinations included-	134	15,8	103	9,3	0	0,0	0	0,0	0	0,0	32	3,0	29	5,2
Paediatric <15 years	7	0,8	1	0,1	0	0,0	0	0,0	0	0,0	2	0,2	0	0,0
-Single TX.	2	0,2	5	0,5	0	0,0	0	0,0	0	0,0	1	0,1	0	0,0
-Double TX. (heart-lung TX. included)	132	15,5	98	8,8	0	0,0	0	0,0	0	0,0	31	2,9	29	5,2
TX. from living donors	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
TX. from DCD (double + single)	3	0,4	17	1,5	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
PANCREAS														
Total TX. -all combinations included-	21	2,5	11	1,0	0	0,0	5	1,2	0	0,0	40	3,7	0	0,0
Paediatric <15 years	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Pancreas TX. Alone	2	0,2	1	0,1	0	0,0	1	0,2	0	0,0	7	0,7	0	0,0
Kidney – Pancreas TX.	19	2,2	7	0,6	0	0,0	4	0,9	0	0,0	33	3,1	0	0,0
TX. from DCD	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
SMALL BOWEL														
Total TX. -all combinations included-	0	0,0	4	0,4	0	0,0	0	0,0	0	0,0	2	0,2	0	0,0
Paediatric <15 years	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Small bowel TX. Alone	0	0,0	4	0,4	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
RECIPIENTS														
Total number of patients transplanted	787	92,6	926	83,4	79	11,0	354	82,3	31	25,8	837	78,2	356	63,6
Paediatric <15 years	27	3,2	54	4,9	0	0,0	0	0,0	1	0,8	14	1,3	13	2,3
Patients transplanted from living donors	77	9,1	107	9,6	13	1,8	12	2,8	22	18,3	65	6,1	110	19,6

DONATION AND TRANSPLANTATION ACTIVITY

EUROPEAN UNION COUNTRIES

COUNTRIES Population (million inhabitants): UNEFA	GERMANY 82,7	GREECE 11,1	HUNGARY 9,9	IRELAND 4,7	ITALY 61,1	LATVIA 2,0	LITHUANIA 3,0	LUXEMBOURG 0,5	MALTA 0,4
DONATION									
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
Actual deceased organ donors	864	10,4	50	4,5	1384	22,7	29	14,5	12
-Both DBD and DCD included-	0	0,0	0	0,0	2	0,0	9	4,5	0
Actual donors after circulatory death –DCD-	779	9,4	42	3,8	790	12,9	2	1,0	7
Multiorgan donors									
TRANSPLANTATION									
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
KIDNEY									
Total TX. -all combinations included-	2128	25,7	131	11,8	1840	30,1	59	29,5	20
% (TX. from living d. / Total TX.)	29,1		32,3		13,6		11,9		25,0
Paediatric <15 years	81	1,0	6	0,5	36	0,6	1	0,5	0
TX. from deceased donors	1508	18,2	89	8,0	1589	26,0	52	26,0	15
-TX. from DCD			0	0,0	0	0,0	18	9,0	0
-Single TX.	1489	18,0			1494	24,5	51	25,5	15
-Double TX.	19	0,2			95	1,6	1	0,5	0
TX. from living donors	620	7,5	42	3,8	251	4,1	7	3,5	5
-TX. from Related living donors	620	7,5			145	2,4	7	3,5	4
-TX. from Unrelated living donors	0	0,0			106	1,7	0	0,0	1
LIVER									
Total TX. -all combinations included-	941	11,4	28	2,5	1075	17,6	0	0,0	0
Paediatric <15 years	122	1,5			50	0,8	0	0,0	0
Split TX.	90	1,1			57	0,9	0	0,0	0
Domino TX.	4	0,0			0	0,0	0	0,0	0
TX. from living donors	58	0,7	0	0,0	16	0,3	0	0,0	0
TX. from DCD					0	0,0	0	0,0	0
HEART									
Total TX. -all combinations included-	304	3,7	12	1,1	227	3,7	2	1,0	1
Paediatric <15 years	27	0,3			21	0,3	0	0,0	0
HEART-LUNG									
Total TX.	9	0,1	0	0,0	1	0,0	0	0,0	0
Paediatric <15 years			0	0,0	0	0,0	0	0,0	0
LUNG									
Total TX. -all combinations included-	352	4,3			126	2,1	0	0,0	0
Paediatric <15 years	3	0,0			2	0,0	0	0,0	0
-Single TX.	46	0,6			33	0,5	0	0,0	0
-Double TX. (heart-lung TX. included)	297	3,6			93	1,5	0	0,0	0
TX. from living donors					0	0,0	0	0,0	0
TX. from DCD (double + single)					1	0,0	0	0,0	0
PANCREAS									
Total TX. -all combinations included-	120	1,5	14	1,4	43	0,7	0	0,0	0
Paediatric <15 years					0	0,0	0	0,0	0
Pancreas TX. Alone	14	0,2			14	0,2	0	0,0	0
Kidney – Pancreas TX.	104	1,3	14	1,4	29	0,5	0	0,0	0
TX. from DCD					0	0,0	0	0,0	0
SMALL BOWEL									
Total TX. -all combinations included-	6	0,1			0	0,0	0	0,0	0
Paediatric <15 years					0	0,0	0	0,0	0
Small bowel TX. Alone					0	0,0	0	0,0	0
RECIPIENTS									
Total number of patients transplanted	3710	44,9	171	15,4	3252	53,2	61	30,5	21
Paediatric <15 years	230	2,8	6		106	1,7	1	0,5	0
Patients transplanted from living donors	682	8,2	42	3,8	267	4,4	7	3,5	5

DONATION AND TRANSPLANTATION ACTIVITY

EUROPEAN UNION COUNTRIES

COUNTRIES Population (million inhabitants): UNFPA	NETHERLANDS 16,8	POLAND 38,2	PORTUGAL 10,6	ROMANIA 21,6	SLOVAKIA 5,5	SLOVENIA 2,1	SPAIN 47,1	SWEEDEN 9,6	U. K. 63,5
Actual deceased organ donors -both DBD and DCD included- Actual donors after circulatory death –DCD- Multiorgan donors	DONATION								
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
282	168	15,5	289	27,3	138	6,4	1682	35,9	1309
132	7,9	0	0	0,0	0	0,0	193	4,1	505
221	13,2	379	194	18,3	107	5,0	1276	27,0	946
Actual deceased organ donors -both DBD and DCD included- Actual donors after circulatory death –DCD- Multiorgan donors	TRANSPLANTATION								
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
1004	59,8	1149	448	42,3	310	14,3	2678	57,1	3201
19	1,1	30	6	0,6	1	0,0	58	1,2	98
470	28,0	1094	394	37,2	273	12,6	2255	47,9	2104
220	13,1	0	0	0,0	0	0,0	251	5,3	760
465	27,7	1090	366	34,5	273	12,6	2246	47,7	1845
5	0,3	4	28	2,6	0	0,0	9	0,2	73
534	31,8	55	54	5,1	37	1,7	423	9,0	1097
534	31,8	55	54	5,1	37	1,7	379	8,0	908
0	0,0	0	0	0,0	0	0,0	44	0,9	189
172	10,2	366	202	19,1	122	5,6	1068	22,7	937
22	1,3	45	20	1,9	7	0,3	51	1,1	85
9	0,5	0	0	0,0	4	0,2	12	0,3	112
0	0,0	0	8	0,8	0	0,0	6	0,1	3
3	0,2	30	5	0,5	14	0,6	21	0,4	32
47	2,8	0	0	0,0	0	0,0	32	0,7	172
51	3,0	76	43	4,1	4	0,2	265	5,6	186
2	0,1	7	2	0,2	0	0,0	11	0,2	29
0	0,0	0	0	0,0	0	0,0	3	0,1	4
0	0,0	0	0	0,0	0	0,0	0	0,0	0
91	5,4	19	19	1,8	0	0,0	262	5,6	194
0	0,0	0	0	0,0	0	0,0	1	0,0	6
13	0,8	8	14	1,3	0	0,0	101	2,1	32
78	4,6	11	5	0,5	0	0,0	161	3,4	162
0	0,0	0	0	0,0	0	0,0	0	0,0	0
20	1,2	0	0	0,0	0	0,0	7	0,1	35
28	1,7	37	27	2,5	12	0,6	81	1,7	239
0	0,0	0	0	0,0	0	0,0	6	0,1	6
1	0,1	9	3	0,3	2	0,1	9	0,2	27
27	1,6	28	24	2,3	10	0,5	66	1,4	171
4	0,2	0	0	0,0	0	0,0	0	0,0	53
0	0,0	0	0	0,0	0	0,0	6	0,1	21
0	0,0	0	0	0,0	0	0,0	2	0,0	6
0	0,0	0	0	0,0	0	0,0	0	0,0	3
1315	78,3	1619	739	69,7	438	20,3	4247	90,2	4561
43	2,6	82	28	2,6	8	0,4	118	2,5	219
537	32,0	85	59	5,6	52	2,4	444	9,4	1129

DONATION AND TRANSPLANTATION ACTIVITY

OTHER COUNTRIES

COUNTRIES	ALGERIA	ARMENIA	AUSTRALIA	AZERBAIJAN	BELARUS	BOSNIA AND HERZEGOVINA	CANADA	GEORGIA	ICELAND	IRAN	ISRAEL	MACEDONIA	MALAYSIA
Population (million inhabitants): UNFPA	39,9	3,0	23,6	9,5	9,3	3,8	35,5	4,3	0,3	78,5	7,8	2,1	30,2
DONATION													
Actual deceased organ donors	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
-Both DBD and DCD included-	PMP	PMP	PMP	PMP	PMP	PMP	PMP	PMP	PMP	PMP	PMP	PMP	PMP
Actual donors after circulatory death -DCD-	1	0	378	0	165	17,7	584	0	3	659	63	10	22
Multiorgan donors	0	0	107	0	126	13,5	0	0	10,0	0	8,4	4,8	0,7
	0	0	284	0	0	4	1,1	0	0,0	0	3	0,4	1
	0	0	0	0	0	0	0,0	0	0,0	0	45	5,8	0,3
TRANSPLANTATION													
KIDNEY													
Total TX. -all combinations included-	170	9	904	95	286	30,8	21	27	8	2325	217	41	68
% (TX. from living d. / Total TX.)	98,8	100,0	29,5	100,0	8,0	66,7	0	100,0	100,0	51,7	62,2	70,7	42,6
Paediatric <15 years	12	0	31	0	14	1,5	0	2	0	0	17	1	4
TX. from deceased donors	2	0	637	0	263	28,3	7	0	0	0	82	12	39
-TX. from DCD	0	0	172	0	0	0,0	0	0	0	0	4	4	1,3
-Single TX.	2	0	615	0	263	28,3	7	0	0	1122	77	12	38
-Double TX.	0	0	22	0	0	0,0	0	0	0	0	5	0	1
TX. from living donors	168	9	267	95	23	2,5	14	27	8	1203	135	29	29
-TX. from Related living donors	168	9	219	95	22	2,4	14	27	8	105	105	25	29
-TX. from Unrelated living donors	0	0	48	0	1	0,1	0	0	0	30	30	4	0
LIVER													
Total TX. -all combinations included-	1	0	235	16	68	7,3	2	2		605	65		9
Paediatric <15 years	0	0	28	0	7	0,8	0	0		18	18		1
Split TX.	0	0	33	0	2	0,2	0	0		12	5		0
Domino TX.	0	0	0	0	0	0,0	0	0		0	0		0
TX. from living donors	1	0	1	16	5	0,5	0	2		35	14		0
TX. from DCD	0	0	14	0	0	0,0	0	0		0	0		0
HEART													
Total TX. -all combinations included-	0	0	83	0	45	4,8	0	0		82	11		1
Paediatric <15 years	0	0	8	0	0	0,0	0	0		0	3		0
HEART-LUNG													
Total TX.	0	0	5	0	0	0,0	0	0		0	1		0
Paediatric <15 years	0	0	0	0	0	0,0	0	0		0	1		0
LUNG													
Total TX. -all combinations included-	0	0	166	0	1	0,1	0	0		14	41		0
Paediatric <15 years	0	0	2	0	0	0,0	0	0		8	1		0
-Single TX.	0	0	7	0	0	0,0	0	0		6	25		0
-Double TX. (heart-lung TX. included)	0	0	159	0	0	0,0	0	0		0	16		0
TX. from living donors	0	0	0	0	0	0,0	0	0		0	0		0
TX. from DCD (double + single)	0	0	41	0	0	0,0	0	0		0	0		0
PANCREAS													
Total TX. -all combinations included-	0	0	44	0	2	0,2	0	0		31	5		
Paediatric <15 years	0	0	1	0	0	0,0	0	0		8	0		
Pancreas TX. Alone	0	0	1	0	0	0,0	0	0		23	5		
Kidney – Pancreas TX.	0	0	43	1,8	2	0,2	0	0		0	0		
TX. from DCD	0	0	1	0	0	0,0	0	0		0	0		
SMALL BOWEL													
Total TX. -all combinations included-	0	0	1	0	0	0,0	0	0		7	1		
Paediatric <15 years	0	0	1	0	0	0,0	0	0		0	0		
Small bowel TX. Alone	0	0	0	0	0	0,0	0	0		0	0		
RECIPIENTS													
Total number of patients transplanted	171	9	1384	95	395	42,5	23	29	8	3064	333	41	78
Paediatric <15 years	12	0	68	0	21	2,3	0	0	0	38	38	1	5
Patients transplanted from living donors	169	9	268	95	28	3,0	14	29	8	1238	149	29	29

DONATION AND TRANSPLANTATION ACTIVITY

OTHER COUNTRIES

COUNTRIES Population (million inhabitants): UNFPA	MOLDOVA 3,5	MONTENEGRO 0,6	NEW ZEALAND 4,6	NORWAY 5,1	RUSSIAN F. 142,5	SUDAN 38,8	SWITZERLAND 8,2	SYRIA 22	TURKEY 75,8	UKRAINE 44,9	USA 322,6	VIETNAM 92,5
Actual deceased organ donors -both DBD and DCD included- Actual donors after circulatory death –DCD- Multiorgan donors	DONATION											
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
11 3,1	7 11,7	46 10,0	114 22,4	465 3,3	0 0,0	117 14,3	0 0,0	407 5,4	8596 26,6	17 0,2		
0 0,0	0 0,0	6 1,3	2 0,4	106 0,7	0 0,0	18 2,2	0 0,0		1291 4,0	0 0,0		
3 0,9	1 1,7	0,0		235 1,6	0 0,0	117 14,3	0 0,0		7894 24,5	0 0,0		
KIDNEY Total TX. -all combinations included- % (TX. from living d. / Total TX.) Paediatric <15 years TX. from deceased donors -TX. from DCD -Single TX. -Double TX. TX. from living donors -TX. from Related living donors -TX. from Unrelated living donors	TRANSPLANTATION											
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
10 2,9	9 15,0	138 30,0	274 53,7	1026 7,2	143 3,7	301 36,7	180 8,2	2932 38,7	131 2,9	17815 55,2	270 2,9	
20,0	88,9	52,2	24,8	18,5	100,0	39,9	100,0	78,6	89,3	31,1	96,7	
0 0,0	1 1,7	3 0,7	8 1,6	73 0,5	8 0,2	8 1,0	15 0,7	150 2,0		466 1,4	17 0,2	
8 2,3	1 1,7	66 14,3	206 40,4	836 5,9	0 0,0	181 22,1	0 0,0	634 8,4	14 0,3	12279 38,1	9 0,1	
0 0,0	0 0,0	8 1,7	4 0,8	0 0,0	0 0,0	24 2,9	0 0,0			2033 6,3	0 0,0	
8 2,3	0 0,0	65 14,1	204 40,0	836 5,9	0 0,0	176 21,5	0 0,0			11988 37,2	9 0,1	
0 0,0	0 0,0	1 0,2	2 0,4	0 0,0	0 0,0	5 0,6	0 0,0			0 0,0	0 0,0	
2 0,6	8 13,3	72 15,7	68 13,3	190 1,3	143 3,7	120 14,6	180 8,2	2298 30,3	117 2,6	5536 17,2	261 2,8	
0 0,0	8 13,3	67 14,6	68 13,3	190 1,3	141 3,6	120 14,6	76 3,5	2094 27,6	117 2,6	4683 14,5	7 0,1	
	0 0,0	5 1,1	0 0,0	0 0,0	2 0,1	0 0,0	104 4,7	204 2,7	0 0,0	853 2,6	254 2,7	
LIVER Total TX. -all combinations included- Paediatric <15 years Split TX. Domino TX. TX. from living donors TX. from DCD												
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
10 2,9	2 3,3	43 9,3	100 19,6	302 2,1		111 13,5		1212 16,0	17 0,4	6729 20,9	8 0,1	
0 0,0	0 0,0	12 2,6	2 0,4	76 0,5		6 0,7		185 2,4		466 1,4	0 0,0	
0 0,0	0 0,0	3 0,7	6 1,2			2 0,2		20 0,3		135 0,4	0 0,0	
4 1,1	0 0,0	0 0,0	0 0,0	126 0,9		1 0,1				12 0,0	0 0,0	
0 0,0	0 0,0	1 0,2	0 0,0			3 0,4		892 11,8	17 0,4	268 0,8	3 0,0	
	0 0,0					12 1,5				360 1,1	0 0,0	
HEART Total TX. -all combinations included- Paediatric <15 years												
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
0 0,0	0 0,0	17 3,7	34 6,7	162 1,1		36 4,4		78 1,0		2679 8,3	2 0,0	
0 0,0	0 0,0	1 0,2	4 0,8	3 0,0		3 0,4		7 0,1		342 1,1	0 0,0	
HEART-LUNG Total TX. Paediatric <15 years												
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
0 0,0	0 0,0	0 0,0	0 0,0	0 0,0		1 0,1				24 0,1	0 0,0	
						0 0,0				5 0,0	0 0,0	
LUNG Total TX. -all combinations included- Paediatric <15 years -Single TX. -Double TX. (heart-lung TX. included) TX. from living donors TX. from DCD (double + single)												
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
0 0,0	0 0,0	17 3,7	33 6,5	12 0,1		56 6,8		33 0,4		1949 6,0		
0 0,0	0 0,0	0 0,0	0 0,0	0 0,0		1 0,1		0 0,0		33 0,1		
0 0,0	0 0,0	1 0,2	0 0,0	0 0,0		0 0,0		33 0,4		613 1,9		
0 0,0	0 0,0	16 3,5	33 6,5	12 0,1		56 6,8		0 0,0		1336 4,1		
0 0,0	0 0,0	0 0,0	0 0,0	0 0,0		0 0,0		0 0,0		0 0,0		
0 0,0	0 0,0	0 0,0	0 0,0	0 0,0		5 0,6		0 0,0		44 0,1		
PANCREAS Total TX. -all combinations included- Paediatric <15 years Pancreas TX. Alone Kidney – Pancreas TX. TX. from DCD												
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
1 1,7	0 0,0	2 0,4	31 6,1	19 0,1		11 1,3		10 0,1		954 3,0	1 0,0	
0 0,0	0 0,0	0 0,0	0 0,0	0 0,0		0 0,0		0 0,0		35 0,1		
0 0,0	0 0,0	0 0,0	14 2,7	0 0,0		3 0,4		8 0,1		168 0,5		
0 0,0	0 0,0	2 0,4	17 3,3	19 0,1		8 1,0		2 0,0		709 2,2	0 0,0	
0 0,0	0 0,0	0 0,0	0 0,0			0 0,0				26 0,1	0 0,0	
SMALL BOWEL Total TX. -all combinations included- Paediatric <15 years Small bowel TX. Alone												
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
0 0,0	0 0,0			1 0,0		0 0,0		5 0,1		139 0,4		
0 0,0	0 0,0			1 0,0		0 0,0		0 0,0		52 0,2		
0 0,0	0 0,0					0 0,0		5 0,1		57 0,2		
RECIPIENTS Total number of patients transplanted Paediatric <15 years Patients transplanted from living donors												
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
20 5,7	12 20,0	211 45,9	455 89,2	1503 10,5	143 3,7	504 61,5	180 8,2	4264 56,3	148 3,3	28523 88,4	281 3,0	
0 0,0	1 1,7	16 3,5	14 2,7	0 0,0	8 0,2	17 2,1	15 0,7	342 4,5		1288 4,0	17 0,2	
6 1,7	10 16,7	77 16,7	68 13,3	317 2,2	143 3,7	123 15,0	180 8,2	3190 42,1	117 2,6	5805 18,0	264 2,9	

DONATION AND TRANSPLANTATION ACTIVITY

LATINAMERICAN COUNTRIES

COUNTRIES Population (million inhabitants): UNFPA	ARGENTINA 41,8	BOLIVIA 10,8	BRAZIL 202,0	CHILE 17,8	COLOMBIA 48,9	COSTA RICA 4,9	CUBA 11,3	DOMINICANA 10,5				
DONATION												
	Number	PMP	Number	PMP	Number	PMP	Number	PMP				
Actual deceased organ donors -both DBD and DCD included- Actual donors after circulatory death –DCD- Multiorgan donors	555 0 319	13,3 0,0 7,6	2710 0 1797	13,4 0,0 8,9	123 0 80	6,9 0,0 4,5	18 0 38	3,7 0,0 3,4	29 0 8	2,8 0,0 0,8		
TRANSPLANTATION												
KIDNEY	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP		
Total TX. -all combinations included- % (TX. from living d. / Total TX.)	1277 29,8	30,6	5507 19,1	27,3	271 21,8	15,2	233 84,5	47,6	175 16,0	15,5	78 48,7	7,4
Paediatric <15 years	69	1,7	4453	22,0	21	1,2	3	0,6	5	0,4	0	0,0
TX. from deceased donors	897	21,5	0	0,0	212	11,9	36	7,3	147	13,0	40	3,8
-TX. from DCD	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
-Single TX.	892	21,3	4427	21,9	200	11,2	627	12,8	147	13,0	0	0,0
-Double TX.	5	0,1	26	0,1	12	0,7	16	0,3	0	0,0	0	0,0
TX. from living donors	380	9,1	1054	5,2	59	3,3	197	40,2	28	2,5	38	3,6
-TX. from Related living donors	371	8,9	0	0,0	59	3,3	0	0,0	28	2,5	29	2,8
-TX. from Unrelated living donors	9	0,2	12	1,1	0	0,0	0	0,0	0	0,0	9	0,9
LIVER	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX. -all combinations included- Paediatric <15 years	361 73	8,6 1,7	1769	8,8	86 17	4,8	9	1,8	32	2,8	6	0,6
Split TX.	12	0,3	0	0,0	0	0,0	0	0,0	8	0,7	0	0,0
Domino TX.	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
TX. from living donors	34	0,8	154	0,8	9	0,5	0	0,0	2	0,2	0	0,0
TX. from DCD	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
HEART	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX. -all combinations included- Paediatric <15 years	101 4	2,4 0,1	309	1,5	24 3	1,3 0,2	1	0,2	1	0,1	0	0,0
HEART-LUNG	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX. Paediatric <15 years	1 0	0,0 0,0	0 0	0,0 0,0	0 0	0,0 0,0	0 0	0,0 0,0	0 0	0,0 0,0	0 0	0,0 0,0
LUNG	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX. -all combinations included- Paediatric <15 years	42 1	1,0 0,0	67	0,3	33 0	1,9 0,0	1	0,2	0	0,0	0	0,0
-Single TX.	17	0,4	19	0,1	33	1,9	0	0,0	0	0,0	0	0,0
-Double TX. (heart-lung TX. included)	25	0,6	47	0,2	0	0,0	1	0,2	0	0,0	0	0,0
TX. from living donors	0	0,0	1	0,0	0	0,0	0	0,0	0	0,0	0	0,0
TX. from DCD (double + single)	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
PANCREAS	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX. -all combinations included- Paediatric <15 years	69 0	1,7 0,0	140	0,7	7 0	0,4 0,0	0	0,0	0	0,0	0	0,0
Pancreas TX. Alone	6	0,1	42	0,2	0	0,0	0	0,0	0	0,0	0	0,0
Kidney – Pancreas TX.	63	1,5	98	0,5	7	0,4	0	0,0	0	0,0	0	0,0
TX. from DCD	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
SMALL BOWEL	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX. -all combinations included- Paediatric <15 years	2 1	0,0 0,0	4	0,0	0 0	0,0 0,0	1	0,2	0	0,0	0	0,0
Small bowel TX. Alone	1	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
RECIPIENTS	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total number of patients transplanted	1847	44,2	7694	38,1	414	23,3	245	50,0	208	18,4	84	8,0
Paediatric <15 years	148	3,5	0	0,0	41	2,3	3	0,6	13	1,2	0	0,0
Patients transplanted from living donors	414	9,9	1209	6,0	68	3,8	197	40,2	30	2,7	38	3,6

DONATION AND TRANSPLANTATION ACTIVITY

LATINAMERICAN COUNTRIES																
COUNTRIES	ECUADOR	GUATEMALA	MEXICO	PANAMA	PARAGUAY	PERU	URUGUAY	VENEZUELA								
Population (million inhabitants): UNFPA	16,0	15,9	123,8	3,9	6,9	30,8	3,4	30,9								
DONATION																
	Number	PMP	Number	PMP	Number	PMP	Number	PMP								
Actual deceased organ donors	50	3,1	8	0,5	416	3,4	28	7,2	9	1,3	73	2,4	68	20,0	54	1,7
-both DBD and DCD included-	0	0,0	0	0,0	29	0,2	0	0,0	2	0,3	0	0,0	0	0,0	1	0,0
Multiorgan donors	0	0,0	0	0,0	155	1,3	4	1,0	3	0,4	31	1,0	28	8,2	1	0,0
TRANSPLANTATION																
	Number	PMP	Number	PMP	Number	PMP	Number	PMP								
KIDNEY																
Total TX. -all combinations included-	103	6,4	120	7,5	2610	21,1	48	12,3	19	2,8	132	4,3	138	40,6	202	6,5
% (TX. from living d. / Total TX.)	20,4		86,7		71,3		20,8		26,3		9,8		8,7		48,5	
Paediatric <15 years	9	0,6	14	0,9	142	1,1	0	0,0	1	0,1	7	0,2	4	1,2	19	0,6
TX. from deceased donors	82	5,1	16	1,0	748	6,0	38	9,7	14	2,0	119	3,9	126	37,1	104	3,4
-TX. from DCD	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
-Single TX.	82	5,1	16	1,0	743	6,1	38	9,7	14	2,0	118	3,8	104	3,4	104	3,4
-Double TX.	0	0,0	0	0,0	5	0,0	0	0,0	0	0,0	1	0,0	0	0,0	0	0,0
TX. from living donors	21	1,3	104	6,5	1862	15,0	10	2,6	5	0,7	13	0,4	12	3,5	98	3,2
-TX. from Related living donors	21	1,3	98	6,2	1347	10,9	10	2,6	5	0,7	13	0,4	12	3,5	98	3,2
-TX. from Unrelated living donors	0	0,0	6	0,4	515	4,2	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
LIVER																
Total TX. -all combinations included-	25	1,6			131	1,1	7	1,8	0	0,0	26	0,8	26	7,6	8	0,3
Paediatric <15 years	4	0,3			17	0,1	0	0,0	0	0,0	1	0,0	1	0,3	3	0,1
Split TX.	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Domino TX.	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
TX. from living donors	2	0,1			6	0,0	0	0,0	0	0,0	0	0,0	0	0,0	7	0,2
TX. from DCD	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
HEART																
Total TX. -all combinations included-	0	0,0			51	0,4	0	0,0	3	0,4	15	0,5	7	2,1	0	0,0
Paediatric <15 years	0	0,0			6	0,0	0	0,0	3	0,4	1	0,0			0	0,0
HEART-LUNG																
Total TX.	0	0,0			0	0,0	0	0,0	0	0,0					0	0,0
Paediatric <15 years	0	0,0			0	0,0	0	0,0	0	0,0					0	0,0
LUNG																
Total TX. -all combinations included-	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0			0	0,0
Paediatric <15 years	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0			0	0,0
-Single TX.	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0			0	0,0
-Double TX. (heart-lung TX. included)	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0			0	0,0
TX. from living donors	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0			0	0,0
TX. from DCD (double + single)	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0			0	0,0
PANCREAS																
Total TX. -all combinations included-	0	0,0			2	0,0	0	0,0	0	0,0	1	0,0	2	0,6	0	0,0
Paediatric <15 years	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Pancreas TX. Alone	0	0,0			1	0,0	0	0,0	0	0,0	0	0,0			0	0,0
Kidney – Pancreas TX.	0	0,0			1	0,0	0	0,0	0	0,0	1	0,0	2	0,6	0	0,0
TX. from DCD	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0			0	0,0
SMALL BOWEL																
Total TX. -all combinations included-	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Paediatric <15 years	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Small bowel TX. Alone	0	0,0			0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
RECIPIENTS																
Total number of patients transplanted	128	8,0	120	7,5	2794	22,6	55	14,1	22	3,2	173	5,6	167	49,1	210	6,8
Paediatric <15 years	13	0,8	14	0,9	165	1,3	0	0,0	4	0,6	9	0,3	5	1,5	22	0,7
Patients transplanted from living donors	23	1,4	104	6,5	1868	15,1	10	2,6	5	0,7	13	0,4	12	3,5	105	3,4

WAITING LIST

EUROPEAN UNION COUNTRIES

COUNTRIES	AUSTRIA	BELGIUM	BULGARIA	CROATIA	CYPRUS	CZECH. R.	DENMARK	ESTONIA	FINLAND	FRANCE
Population (million inhabitants): UNFPA	8,5	11,1	7,2	4,3	1,2	10,7	5,6	1,3	5,4	64,6
KIDNEY										
N° TX CENTRES	5	7	3	4	1	7	3	1	1	
Patients included on the WL for the first time in the course of 2014	366	566	157	226	8	444	328	29	251	4695
Total number of patients ever active on the WL during 2014	1211		1106	356	75	966	675	82	565	15470
Patients awaiting for a transplant (only active candidates) on 31/12/2014	673	878	998	117	55	409	342	41	304	6978
Patients who died while on the WL during 2014	41	26	40	8	3	29	16	1	11	257
Patients on dialyses on 31/12/2014			833	2658	591			350		
LIVER										
N° TX CENTRES	3	6	3	2		2	1	1	1	
Patients included on the WL for the first time in the course of 2014	188	323	44	138		172	49	8	60	1786
Total number of patients ever active on the WL during 2014	266		82	201		238	70	13	74	3053
Patients awaiting for a transplant (only active candidates) on 31/12/2014	86	187	35	62		54	16	3	8	1297
Patients who died while on the WL during 2014	24	41	21	14		18	3	1	2	214
HEART										
N° TX CENTRES	4	7	2	2		2	2		1	
Patients included on the WL for the first time in the course of 2014	65	108	11	41		102	33		34	570
Total number of patients ever active on the WL during 2014	152		46	64		174	54		55	906
Patients awaiting for a transplant (only active candidates) on 31/12/2014	57	89	32	14		74	21		25	253
Patients who died while on the WL during 2014	7	19	7	8		7	1		3	74
LUNG										
N° TX CENTRES	2	5		0		1	1	1	1	
Patients included on the WL for the first time in the course of 2014	130	108	6	0		57	31	7	20	361
Total number of patients ever active on the WL during 2014	224		12	0		110	60	9	28	527
Patients awaiting for a transplant (only active candidates) on 31/12/2014	72	82	10	0		61	26	6	7	142
Patients who died while on the WL during 2014	9	7	1	0		17	5	0	3	29
PANCREAS										
N° TX CENTRES	3	6		1	1	1	1	1	1	
Patients included on the WL for the first time in the course of 2014	22	29	7	10	0	29	0	1	14	128
Total number of patients ever active on the WL during 2014	61		7	16	4	100	0	1	19	306
Patients awaiting for a transplant (only active candidates) on 31/12/2014	33	70	7	7	4	38	0	1	4	94
Patients who died while on the WL during 2014	1	4	0	1	0	4	0		0	
SMALL BOWEL										
N° TX CENTRES		6		1		1	0		1	
Patients included on the WL for the first time in the course of 2014			1	0		2				2
Total number of patients ever active on the WL during 2014			1	0		0				11
Patients awaiting for a transplant (only active candidates) on 31/12/2014			1	0		1			1	5
Patients who died while on the WL during 2014			0	0		0				

WAITING LIST

EUROPEAN UNION COUNTRIES

COUNTRIES	GERMANY	GREECE	HUNGARY	IRELAND	ITALY	LATVIA	LITHUANIA	LUXEMBOURG	MALTA
Population (million inhabitants): UNFPA	82,7	11,1	9,9	4,7	61,1	2,0	3,0	0,5	0,4
KIDNEY									
N° TX CENTRES	42	5	4	1	41	1	2		
Patients included on the WL for the first time in the course of 2014	3096	182	468	226	1950	47	125		20
Total number of patients ever active on the WL during 2014	11004	1471	1290		8750	152	238		105
Patients awaiting for a transplant (only active candidates) on 31/12/2014	7961	1301	717	544	6670	37	147		80
Patients who died while on the WL during 2014	400	40	48	0	154	21	16		
Patients on dialyses on 31/12/2014		1289		3960		600	1400		265
LIVER									
N° TX CENTRES	24	1	1	1	21		2		
Patients included on the WL for the first time in the course of 2014	1530	59	103	74	1324		42		2
Total number of patients ever active on the WL during 2014	3064	139	238		2309		69		4
Patients awaiting for a transplant (only active candidates) on 31/12/2014	1351	75	108	39	1033		43		2
Patients who died while on the WL during 2014	322	37	31	3	154		9		0
HEART									
N° TX CENTRES	24	1	2	1	17	1	2		
Patients included on the WL for the first time in the course of 2014	517	24	76	18	377	5	35		2
Total number of patients ever active on the WL during 2014	1446	41	114		1063	18	55		5
Patients awaiting for a transplant (only active candidates) on 31/12/2014	858	17	34	16	707	9	33		2
Patients who died while on the WL during 2014	151	12	7	1	71	2	8		1
LUNG									
N° TX CENTRES	15	0		1	11		1		
Patients included on the WL for the first time in the course of 2014	412			46	200		4		1
Total number of patients ever active on the WL during 2014	906				561		13		2
Patients awaiting for a transplant (only active candidates) on 31/12/2014	432			37	373		9		2
Patients who died while on the WL during 2014	79			20	52		2		1
PANCREAS									
N° TX CENTRES	28	0	3	1	17		1		
Patients included on the WL for the first time in the course of 2014	141		18	4	63		6		
Total number of patients ever active on the WL during 2014	412		26		274		10		
Patients awaiting for a transplant (only active candidates) on 31/12/2014	244		8	6	222		7		
Patients who died while on the WL during 2014	22		2	0	4		4		
SMALL BOWEL									
N° TX CENTRES		0		0	3		0		
Patients included on the WL for the first time in the course of 2014				0	0		0		
Total number of patients ever active on the WL during 2014				0	26		0		
Patients awaiting for a transplant (only active candidates) on 31/12/2014	10			0	25		0		
Patients who died while on the WL during 2014				0	1		0		

WAITING LIST

EUROPEAN UNION COUNTRIES

COUNTRIES	NETHERLANDS	POLAND	PORTUGAL	ROMANIA	SLOVAKIA	SLOVENIA	SPAIN	SWEDEN	U. K.
Population (million inhabitants): UNFPA	16,8	38,2	10,6	21,6	5,5	2,1	47,1	9,6	63,5
KIDNEY									
N° TX CENTRES	11	21	8	4	4	1	40	4	28
Patients included on the WL for the first time in the course of 2014	1210	1278	609	739	166	77		508	2714
Total number of patients ever active on the WL during 2014	1945	2635	2519	4349	561	146	4530	951	9234
Patients awaiting for a transplant (only active candidates) on 31/12/2014	650	959	1970	4015	368	77		437	5664
Patients who died while on the WL during 2014	81	50	43	24	31	3		27	254
Patients on dialyses on 31/12/2014		20000	12085	9800	4000		27083		3358
LIVER									
N° TX CENTRES	3	6	3	2	2	1	25	2	7
Patients included on the WL for the first time in the course of 2014	166	437	142	241	30	34	1460	219	489
Total number of patients ever active on the WL during 2014	332	570	280	768	69	45	2127	247	1750
Patients awaiting for a transplant (only active candidates) on 31/12/2014	109	137	143	615	39	9	751	57	592
Patients who died while on the WL during 2014	25	28	22	31	5	2	97	1	80
HEART									
N° TX CENTRES	3	6	4	3	1	1	16	2	7
Patients included on the WL for the first time in the course of 2014	80	239	58	32	36	36	364	81	165
Total number of patients ever active on the WL during 2014	175	559	78	159	68	69	482	99	556
Patients awaiting for a transplant (only active candidates) on 31/12/2014	91	356	19	152	32	21	143	30	284
Patients who died while on the WL during 2014	11	90	12	3	9	5	21	2	36
LUNG									
N° TX CENTRES	3	5	1	0	0		8	2	6
Patients included on the WL for the first time in the course of 2014	121	52	17	0	0		365	69	206
Total number of patients ever active on the WL during 2014	305	97	62	0	0		601	92	588
Patients awaiting for a transplant (only active candidates) on 31/12/2014	180	55	40	0	0		287	22	318
Patients who died while on the WL during 2014	18	19	3	0	0		22	3	56
PANCREAS									
N° TX CENTRES	6	5	2	2	1	1	13	3	12
Patients included on the WL for the first time in the course of 2014	48	42	78	29	0	18	107	30	203
Total number of patients ever active on the WL during 2014	89	65	56	108	0	26	214	50	519
Patients awaiting for a transplant (only active candidates) on 31/12/2014	43	28	24	93	0	8	111	13	226
Patients who died while on the WL during 2014		0	1	3	0	2	3	0	23
SMALL BOWEL									
N° TX CENTRES		1	0	0	0		3	1	4
Patients included on the WL for the first time in the course of 2014		1	0	0	0			0	0
Total number of patients ever active on the WL during 2014		2	0	0	0				34
Patients awaiting for a transplant (only active candidates) on 31/12/2014	1	2	0	0	0				7
Patients who died while on the WL during 2014		0	0	0	0				1

WAITING LIST

OTHER COUNTRIES

COUNTRIES	ALGERIA	ARMENIA	AUSTRALIA	AZERBAIJAN	BELARUS	BOSNIA AND HERZEGOVINA	CANADA	GEORGIA	ICELAND	IRAN	ISRAEL	MACEDONIA	MALAYSIA
Population (million inhabitants): UNFPA	39,9	3,0	23,6	9,5	9,3	3,8	35,5	4,3	0,3	78,5	7,8	2,1	30,2
KIDNEY													
N° TX CENTRES													
Patients included on the WL for the first time in the course of 2014	12	1	20	4	5	2		3		29	6	2	3
Total number of patients ever active on the WL during 2014	16		762		351	39				2235	372		
Patients waiting for a transplant (only active candidates) on 31/12/2014	104		1835		1011	227				1065	867		18661
Patients who died while on the WL during 2014	0		3		16	230				11	35		
Patients on dialyses on 31/12/2014	21000	600	11774		1807					24142	6287		30000
LIVER													
N° TX CENTRES													
Patients included on the WL for the first time in the course of 2014	2	0	8	1	2	1		3		7	4		1
Total number of patients ever active on the WL during 2014		0	347		79	15					156		20
Patients waiting for a transplant (only active candidates) on 31/12/2014		0	492		169	15							39
Patients who died while on the WL during 2014		0	186		95	11					146		7
		0	16		6	2					44		11
HEART													
N° TX CENTRES													
Patients included on the WL for the first time in the course of 2014	0	0	5	0	2	0		0		8	4		1
Total number of patients ever active on the WL during 2014		0	127		79	3				138	26		2
Patients waiting for a transplant (only active candidates) on 31/12/2014		0	175		140	3							7
Patients who died while on the WL during 2014		0	60		68	3				254	73		6
		0	5		8					17	18		0
LUNG													
N° TX CENTRES													
Patients included on the WL for the first time in the course of 2014	0	0	5	0	1	0		0		2	2		1
Total number of patients ever active on the WL during 2014		0	223		8						64		2
Patients waiting for a transplant (only active candidates) on 31/12/2014		0	319		21								7
Patients who died while on the WL during 2014		0	110		14						74		7
		0	14		2						28		0
PANCREAS													
N° TX CENTRES													
Patients included on the WL for the first time in the course of 2014	0	0	2	0	1	0		0		2	3		
Total number of patients ever active on the WL during 2014		0	38		9						7		
Patients waiting for a transplant (only active candidates) on 31/12/2014		0	101		45								
Patients who died while on the WL during 2014		0	39		31						18		
		0	5		1								
SMALL BOWEL													
N° TX CENTRES													
Patients included on the WL for the first time in the course of 2014	0	0	1	0	1	0		0		1	1		
Total number of patients ever active on the WL during 2014		0	0		0								
Patients waiting for a transplant (only active candidates) on 31/12/2014		0	5		2								
Patients who died while on the WL during 2014		0	4		2						2		
		0	0		0								

WAITING LIST

OTHER COUNTRIES

COUNTRIES	MOLDOVA	MONTENEGRO	NEW ZEALAND	NORWAY	RUSSIAN F.	SUDAN	SWITZERLAND	SYRIA	TURKEY	UKRAINE	USA	VIETNAM
Population (million inhabitants): UNFPA	3,5	0,6	4,6	5,1	142,5	38,8	8,2	22,0	75,8	44,9	322,6	92,5
KIDNEY												
N° TX CENTRES												
Patients included on the WL for the first time in the course of 2014	2	1	3	1	36	7	6	8	65	7	240	13
Total number of patients ever active on the WL during 2014	26	12		362	1523		421		5265		32013	
Patients waiting for a transplant (only active candidates) on 31/12/2014	46	40		631	4636		1417			500	116343	
Patients who died while on the WL during 2014	33	29		298	3554		1062		21239		62752	
Patients on dialyses on 31/12/2014	1	2	2584	12	56		24	5000	1427	5000	5255	671851
	470	185			29000	7120	778		56205			
LIVER												
N° TX CENTRES												
Patients included on the WL for the first time in the course of 2014	2		1	1	14		3		40	2	141	5
Total number of patients ever active on the WL during 2014	59	12	56	131	623		171		1837		11042	
Patients waiting for a transplant (only active candidates) on 31/12/2014	68	12	75	147	949		311				26505	
Patients who died while on the WL during 2014	56	7	18	31	559		162		1929		12722	
	4	3	2	5	88		21		516		2456	
HEART												
N° TX CENTRES												
Patients included on the WL for the first time in the course of 2014	1	0	1	1	9		3		11	2	134	3
Total number of patients ever active on the WL during 2014		0	18	43	257		65		410		4167	
Patients waiting for a transplant (only active candidates) on 31/12/2014		0	28	61	428		124				7861	
Patients who died while on the WL during 2014		0	8	18	221		69		472		3127	
		0	0	0	45		8		197		572	
LUNG												
N° TX CENTRES												
Patients included on the WL for the first time in the course of 2014	0	0	1	1	3		2		6		67	0
Total number of patients ever active on the WL during 2014		0	18	37	4		62		68		2528	
Patients waiting for a transplant (only active candidates) on 31/12/2014		0	31	90	71		122				4201	
Patients who died while on the WL during 2014		0	13	47	49		54		22		1377	
		0	1	4	10		8		20		367	
PANCREAS												
N° TX CENTRES												
Patients included on the WL for the first time in the course of 2014	0	0	1	1	5		2		4		141	1
Total number of patients ever active on the WL during 2014		0	3	45	16		36		14		1503	
Patients waiting for a transplant (only active candidates) on 31/12/2014		0	10	78	82		95				3848	
Patients who died while on the WL during 2014		0	4	39	63		65		244		1319	
		0	1	0	0		1		13		196	
SMALL BOWEL												
N° TX CENTRES												
Patients included on the WL for the first time in the course of 2014	0	0	0	0	1		2		4		41	0
Total number of patients ever active on the WL during 2014		0					0		7		201	
Patients waiting for a transplant (only active candidates) on 31/12/2014		0					2				452	
Patients who died while on the WL during 2014		0					2		1		186	
		0					0		1		28	

WAITING LIST

LATINAMERICAN COUNTRIES

COUNTRIES	ARGENTINA	BOLIVIA	BRAZIL	CHILI	COLOMBIA	COSTA RICA	CUBA	DOMINICANA
Population (million inhabitants): UNFPA	41,8	10,8	202,0	17,8	48,9	4,9	11,3	10,5
KIDNEY								
N° TX CENTRES								
Patients included on the WL for the first time in the course of 2014	60	9	126	22	25	5	9	8
Total number of patients ever active on the WL during 2014	1961		7162	460	1327	60		61
Patients awaiting for a transplant (only active candidates) on 31/12/2014	8040		23826		2989	300		219
Patients who died while on the WL during 2014	6141		17696	1210	1991	244	406	169
Patients on dialyses on 31/12/2014	396		721		42	20		10
	28452	2231	100397	19350	23478	1200	3085	2264
LIVER								
N° TX CENTRES								
Patients included on the WL for the first time in the course of 2014	26	1	54	8	8	2	3	2
Total number of patients ever active on the WL during 2014	788		2317	146	266	26	30	4
Patients awaiting for a transplant (only active candidates) on 31/12/2014	1777		3697		363	78	40	10
Patients who died while on the WL during 2014	1152		1315	124	118	55	11	6
	180		613		20	14		2
HEART								
N° TX CENTRES								
Patients included on the WL for the first time in the course of 2014	26	0	36	7	8	1	1	2
Total number of patients ever active on the WL during 2014	184		414	34	104	6	5	0
Patients awaiting for a transplant (only active candidates) on 31/12/2014	288		666	60	135	11	6	9
Patients who died while on the WL during 2014	120		248	16	27	3	3	4
	42		109		10	5	3	5
LUNG								
N° TX CENTRES								
Patients included on the WL for the first time in the course of 2014	9	0	7	5	3	1	1	0
Total number of patients ever active on the WL during 2014	109		115	50		3	0	0
Patients awaiting for a transplant (only active candidates) on 31/12/2014	283		301	119		5	0	0
Patients who died while on the WL during 2014	188		205	60	16	2	0	0
	32		29		0	1	0	0
PANCREAS								
N° TX CENTRES								
Patients included on the WL for the first time in the course of 2014	16	0	18	3	6	0	1	0
Total number of patients ever active on the WL during 2014	111		37	11		0	0	0
Patients awaiting for a transplant (only active candidates) on 31/12/2014	248		61	16		0	0	0
Patients who died while on the WL during 2014	160		17	9	14	0	0	0
	13		2		0	0	0	0
SMALL BOWEL								
N° TX CENTRES								
Patients included on the WL for the first time in the course of 2014	4	0	2	1	3	1	0	0
Total number of patients ever active on the WL during 2014	6		3	1		2	0	0
Patients awaiting for a transplant (only active candidates) on 31/12/2014	15		8	1		2	0	0
Patients who died while on the WL during 2014	10		8	1	1	0	0	0
	1				0	1	0	0

WAITING LIST

LATINAMERICAN COUNTRIES

COUNTRIES	ECUADOR	GUATEMALA	MEXICO	PANAMA	PARAGUAY	PERU	URUGUAY	VENEZUELA
Population (million inhabitants): UNFPA	16,0	15,9	123,8	3,9	6,8	30,8	3,4	30,9
KIDNEY								
Nº TX CENTRES	7	3	237	1	5	9	3	15
Patients included on the WL for the first time in the course of 2014	338		4575	56	71	218	135	385
Total number of patients ever active on the WL during 2014	441		14641	210	148	512	610	1612
Patients awaiting for a transplant (only active candidates) on 31/12/2014	357		11320	170	129	375	438	1185
Patients who died while on the WL during 2014	2		138	2		1	35	79
Patients on dialyses on 31/12/2014	321		59754	2005	1152		2497	17723
LIVER								
Nº TX CENTRES	2		68	1	1	5	1	2
Patients included on the WL for the first time in the course of 2014	31		269	5		41	35	7
Total number of patients ever active on the WL during 2014	33		674	14		49	54	24
Patients awaiting for a transplant (only active candidates) on 31/12/2014	8		396	3		9	23	8
Patients who died while on the WL during 2014	2		39	4		3	4	8
HEART								
Nº TX CENTRES	1		45	0	3	4	3	1
Patients included on the WL for the first time in the course of 2014	2		66	0	12	17	11	0
Total number of patients ever active on the WL during 2014	4		116	0	16	22	37	0
Patients awaiting for a transplant (only active candidates) on 31/12/2014	4		43	0	11	4	19	0
Patients who died while on the WL during 2014	0		5	0	2	2	3	0
LUNG								
Nº TX CENTRES	0		8	0		3		0
Patients included on the WL for the first time in the course of 2014	0		0	0		0	8	0
Total number of patients ever active on the WL during 2014	0		1	0		0	12	0
Patients awaiting for a transplant (only active candidates) on 31/12/2014	0		1	0		0	9	0
Patients who died while on the WL during 2014	0		0	0		0	2	0
PANCREAS								
Nº TX CENTRES	1		19	0		2		0
Patients included on the WL for the first time in the course of 2014	0		4	0		1		0
Total number of patients ever active on the WL during 2014	0		23	0		1		0
Patients awaiting for a transplant (only active candidates) on 31/12/2014	0		17	0		0		0
Patients who died while on the WL during 2014	0		2	0		0		0
SMALL BOWEL								
Nº TX CENTRES	0		3	0		0		0
Patients included on the WL for the first time in the course of 2014	0		0	0		0		0
Total number of patients ever active on the WL during 2014	0		0	0		0		0
Patients awaiting for a transplant (only active candidates) on 31/12/2014	0		0	0		0		0
Patients who died while on the WL during 2014	0		0	0		0		0

FAMILY REFUSALS

EUROPEAN UNION COUNTRIES												
COUNTRIES	AUSTRIA	BELGIUM	BULGARIA	CROATIA	CYPRUS	CZECH. R.	DENMARK	ESTONIA	FINLAND	FRANCE		
Population (million inhabitants): UNFPA												
Number of interviews, asking for consent to donation												
Number of family refusals (%)	396 49 (12,4)	38 6 (15,8)	190 39 (20,5)	8 3 (37,5)	32 6 (18,8)						716	
COUNTRIES	GERMANY	GREECE	HUNGARY	IRELAND	ITALY	LATVIA	LITHUANIA	LUXEMBOURG	MALTA			
Population (million inhabitants): UNFPA												
Number of interviews, asking for consent to donation												
Number of family refusals (%)												
COUNTRIES	NETHERLANDS	POLAND	PORTUGAL	ROMANIA	SLOVAKIA	SLOVENIA	SPAIN	SWEDEN	U. K.			
Population (million inhabitants): UNFPA												
Number of interviews, asking for consent to donation												
Number of family refusals (%)	782 100 (12,8)	284 83 (29,2)	99 12 (12,1)	2049 367 (17,9)						3336 1401 (42,0)		
OTHER COUNTRIES												
COUNTRIES	ALGERIA	ARMENIA	AUSTRALIA	AZERBAIJAN	BELARUS	BOSNIA AND HERZEGOVINA	CANADA	GEORGIA	ICELAND	IRAN	ISRAEL	MACEDONIA
Population (million inhabitants): UNFPA												
Number of interviews, asking for consent to donation												
Number of family refusals (%)	10 4 (40,0)	488 200 (50,0)	12 8 (66,7)									
COUNTRIES	MOLDOVA	MONTENEGRO	NEW ZEALAND	NORWAY	RUSSIAN F.	SUDAN	SWITZERLAND	SYRIA	TURKEY	UKRAINE	USA	VIETNAM
Population (million inhabitants): UNFPA												
Number of interviews, asking for consent to donation												
Number of family refusals (%)	77 36 (46,8)	7 7 (100,0)	303 175 (57,8)									
LATINAMERICAN COUNTRIES												
COUNTRIES	ARGENTINA	BOLIVIA	BRAZIL	CHILI	COSTA RICA	CUBA	DOMINICANA					
Population (million inhabitants): UNFPA												
Number of interviews, asking for consent to donation												
Number of family refusals (%)	1174 571 (48,6)	8228 3457 (42,0)	259 135 (52,1)	21 3 (14,3)	43 29 (67,4)							
COUNTRIES	ECUADOR	GUATEMALA	MEXICO	PANAMA	PARAGUAY	PERU	URUGUAY	VENEZUELA				
Population (million inhabitants): UNFPA												
Number of interviews, asking for consent to donation												
Number of family refusals (%)	104 41 (39,4)	235	40 12 (30,0)	119 16 (13,4)	185 115 (62,2)							

**International Data On Tissue And
Hematopoietic Stem Cell Donation And
Transplantation Activity.
Year 2014.**



Data provided by National Competent Authorities:

EUROPE

Austria

Belgium

Bulgaria

Yordan Peev

Cyprus

Carolina Stylianou

Czech Republic

Eva Křemenová

Ivana Koblihová

Germany

Denmark

Estonia

Siim Suutre

Spain

Bibiana Ramos

Marina Álvarez

Finland

Anne Tammi

France

Candide Font-Sala

Greece

Croatia

Milena Ivanković

Hungary

Lilla Tokár

Ireland

Italy

Fiorenza Bariani

Letizia Lombardini

Lithuania

Dainora Medeisiene

Luxembourg

Gérard Scharl

Latvia

Ieva Bekere

The Republic of Moldova

Igor Codreanu

Tatiana Timbalari

Macedonia

Malta

Patricia Galea

Netherlands

Frank Van Linden

Norway

Zaheer Rana

Poland

Izabela Uhrynowska- Tyszkiewicz

Artur Kaminski

Portugal

Paulo Severino

Romania

Andrei Nica

Sweden

Mona Hansson

Slovenia

Slovakia

Magdaléna Krátka

Daniel Kuba

Turkey

Yavuz Elbaş

United Kingdom

Sarah Kelly

LATINAMERICA

Argentina

Carlos Soratti

Brasil

Heder Murari Borba

Chile

Jose Luis Rojas

Colombia

M^a Angélica Salinas

Costa Rica

Roselyn Serrano

Cesar Gamboa

Cuba

Antonio Enamorado

Dominicana

Fernando R. Morales

Ecuador

Diana Almeida

Mexico

J. Salvador Aburto

Panama

César J. Cuero

Paraguay

Hugo A. Espinoza C.

Peru

Mariela Delgado

Uruguay

Mika Bengochea

Venezuela

Xiomara Ramirez

PRELIMINARY DATA ON TISSUES - YEAR 2014

EUROPEAN UNION COUNTRIES

Country	AUSTRIA	BELGIUM	BULGARIA	CROATIA	CYPRUS	CZECH REPUBLIC	DENMARK	ESTONIA	FINLAND	FRANCE	GERMANY	GREECE	HUNGARY	IRELAND	ITALY
Population (Font: eurostat)	8.506.889	11.203.992	7.245.677	4.246.809	858.000	10.512.419	5.627.235	1.315.819	5.451.270	65.835.579	80.767.463	10.903.704	9.877.365	4.605.501	60.782.668
TYPE OF TISSUE	TYPE OF DATA														
CORNEA	N. of tissue donations	71	98	143	0	925	18	123	5.416	312	7.499		312		
	Tissue donation PMP	98	337	283	0,0	88,0	13,7	22,6	0,0	31,6	1.234		31,6		
	N° of tissue retrieved	136	288	288	0	1.122	37	246	10.742	623	14.435		623		
	N° tissue processed (units)	136	288	288	0	1.133	37	246	10.742	606	NA		606		
	N° tissue distributed (units)	108	186	186	0	763	38	173	4.804	395	6.453		395		
	N° tissue imported (units)	1	48	48	41	0	0	14	0	0	11		0		
	N° tissue exported (units)	0	0	0	0	203	0	0	175	76	619		76		
	N° of tissues transplanted	109	228	228	41	566	37	0	4.804	276	NA		276		
	N° of patients transplanted	109	228	228	41	550	43	NA	4.271	261	NA		261		
	N° of transplants	109	228	228	41	566	173	0	UK	276	5.279		276		
BLOOD VESSEL	N. of tissue donations	0	9	9	0	28	15	0	5.133	52	722		52		
	Tissue donation PMP	0,0	2,1	16	0,0	2,7	11,4	0,0	78,0	5,3	11,9		5,3		
	N° of tissue retrieved	0	16	16	0	84	19	0	5.685	52	1.174		52		
	N° tissue processed (units)	0	0	0	0	99	42	21	5.685	56	NA		56		
	N° tissue distributed (units)	0	0	0	0	33	36	19	1.694	7	396		7		
	N° tissue imported (units)	0	0	0	0	0	0	0	41	0	0		0		
	N° tissue exported (units)	0	0	0	0	0	0	0	19	0	0		0		
	N° of tissues transplanted	0	0	0	0	21	9	0	1.694	43	NA		43		
	N° of patients transplanted	0	0	0	0	21	36	NA	1.247	38	NA		38		
	N° of transplants	0	0	0	0	26	36	19	UK	38	254		38		
CARDIAC TISSUE	N. of tissue donations	0	10	10	0	127	0	54	238	65	249		65		
	Tissue donation PMP	0,0	2,4	15	0,0	12,1	0,0	9,9	3,6	6,6	4,1		6,6		
	N° of tissue retrieved	0	15	15	0	127	0	0	454	65	459		65		
	N° tissue processed (units)	0	0	0	0	127	0	152	454	65	NA		65		
	N° tissue distributed (units)	0	0	0	0	78	0	111	186	30	185		30		
	N° tissue imported (units)	0	0	0	0	0	0	0	57	0	0		0		
	N° tissue exported (units)	0	0	0	0	0	0	3	60	0	2		0		
	N° of tissues transplanted	0	0	0	0	78	0	0	186	14	NA		14		
	N° of patients transplanted	0	0	0	0	71	0	NA	146	14	NA		14		
	N° of transplants	0	0	0	0	78	0	111	UK	14	139		14		
MUSCULOSKELETAL	N. of tissue donations	1.811	209	209	0	905	151	1.086	23.376	161	3.102		161		
	Tissue donation PMP	249,9	49,2	367	0,0	86,1	114,8	199,2	355,1	163	51,0		163		
	N° of tissue retrieved	1.811	367	367	0	2.818	207	0	23.592	161	7.743		161		
	N° tissue processed (units)	716	229	229	0	2.427	325	1.662	23.592	1.244	NA		1.244		
	N° tissue distributed (units)	1.690	141	141	0	2.344	291	NA	33.003	1.127	12.252		1.127		
	N° tissue imported (units)	141	0	0	0	0	0	13	282	0	0		0		
	N° tissue exported (units)	2.216	0	0	0	452	0	0	4.661	0	0		0		
	N° of tissues transplanted	137	229	229	0	760	192	0	33.003	NA	NA		NA		
	N° of patients transplanted	132	213	213	0	646	254	NA	26.034	NA	NA		NA		
	N° of transplants	132	224	224	0	790	290	1.291	UK	NA	8.346		NA		
SKIN	N. of tissue donations	57	7	7	0	45	2	29	179	10	409		10		
	Tissue donation PMP	7,9	1,6	113	0,0	4,3	1,5	5,3	2,7	1,0	6,7		1,0		
	N° of tissue retrieved	91.039	113	113	0	45	0	0	325.930	10	1.094.329		10		
	N° tissue processed (units)	31	246	246	0	634	8	1.259	UK	37.140	NA		37.140		
	N° tissue distributed (units)	36	236	236	0	761	0	960	UK	37.080	4.844		37.080		
	N° tissue imported (units)	13	0	0	0	0	0	0	17.160	0	0		0		
	N° tissue exported (units)	0	0	0	0	761	0	0	0	0	0		0		
	N° of tissues transplanted	0	236	236	0	0	0	960	245.779	NA	NA		NA		
	N° of patients transplanted	0	4	19	0	0	0	19	97	NA	NA		NA		
	N° of transplants	0	5	5	0	0	0	NA	UK	NA	2.003		NA		
PLACENTA/AMNIOTIC MEMBRANE	N. of tissue donations	12	3	3	0	6	34	8	UK	0	214		0		
	Tissue donation PMP	1,7	0,7	3	0,0	0,6	25,8	1,5	0,0	0,0	3,5		0,0		
	N° of tissue retrieved	12	3	3	0	6	34	0	109	0	153		0		
	N° tissue processed (units)	53	145	145	0	60	104	193	3.203	117	NA		117		
	N° tissue distributed (units)	51	85	85	0	173	88	186	2.818	87	1.239		87		
	N° tissue imported (units)	0	0	0	0	0	0	0	0	0	0		0		
	N° tissue exported (units)	0	0	0	0	17	0	34	7	0	0		0		
	N° of tissues transplanted	76	118	118	0	14	3	0	2.818	81	NA		81		
	N° of patients transplanted	76	118	118	0	14	72	NA	1.850	67	NA		67		
	N° of transplants	76	118	118	0	14	88	186	UK	73	865		73		
OTHER TISSUES	N. of tissue donations	0	0	0	0	30	0	0	UK	137	111		137		
	Tissue donation PMP	0,0	0,0	0,0	0	2,9	0,0	0,0	0,0	139	1,8		139		
	N° of tissue retrieved	0	0	0	0	32	0	0	13	508	NA		137		
	N° tissue processed (units)	0	0	0	0	0	0	0	UK	151	NA		151		
	N° tissue distributed (units)	0	0	0	0	0	0	3	8	65	81		65		
	N° tissue imported (units)	0	0	0	0	0	0	0	0	0	0		0		
	N° tissue exported (units)	0	0	0	0	5	0	0	0	0	0		0		
	N° of tissues transplanted	0	0	0	0	0	0	0	8	NA	NA		NA		
	N° of patients transplanted	0	0	0	0	0	0	NA	UK	NA	NA		NA		
	N° of transplants	0	0	0	0	0	0	5	UK	NA	60		NA		

PRELIMINARY DATA ON TISSUES - YEAR 2014

EUROPEAN UNION COUNTRIES																OTHER COUNTRIES	
Country	LATVIA	LITHUANIA	LUXEMBOURG	MALTA	NETHERLANDS	POLAND	PORTUGAL	ROMANIA	SLOVAKIA	SLOVENIA	SPAIN	SWEDEN	UNITED KINGDOM	TURKEY	NORWAY		
Population (Font: eurostat)	2.001.468	2.943.472	549.680	425.384	16.829.289	38.017.856	10.427.301	19.947.311	5.415.949	2.061.085	46.512.199	9.644.864	64.308.261	76.667.864	5.107.970		
TYPE OF DATA																	
CORNEA	5	18	19	12	0	614	489	57	102	60	2.799	558	NA	1.632	61		
	2,5	6,1	34,6	28,2	0,0	1.629	46,9	2,9	18,8	29,1	60,2	57,9	NA	21,3	11,9		
	10	36	NA	12	0	1.219	937	11,4	19,4	2,0	5.575	1.134	6.076	3.264	122		
	0	36	0	0	3.531	1.185	629	0	194	118	4.625	1.134	5.901	3.264	122		
	0	35	0	10	2.950	988	677	0	143	89	3.191	870	3.896	2.968	60		
	0	0	0	0	0	102	0	0	0	0	0	0	852	624	135		
	0	0	0	0	2,16	0	883	174	197	89	3.539	869	3.896	NA	192		
	NA	35	0	10	2.216	0	880	174	176	89	3.488	777	NA	NA	130		
	NA	34	0	10	2.205	0	884	174	179	89	NA	NA	NA	NA	196		
	NA	35	0	10	2.216	0	884	174	179	89	NA	NA	NA	NA	196		
BLOOD VESSEL	NE	NE	4	0	0	0	0	0	0	38	130	164	NA	0	0		
	NE	NE	7,3	0,0	0	0,0	0,0	0	0,0	18,4	2,8	17,0	NA	0,0	0,0		
	NE	NE	4	0	71	0	0	0	0	38	313	234	NA	0	0		
	NE	NE	0	0	71	0	0	0	0	38	313	249	289	0	0		
	NE	NE	0	0	22	2	0	0	0	9	233	30	108	0	0		
	NE	NE	0	0	0	0	0	0	0	4	0	0	0	0	0		
	NE	NE	0	0	0	0	0	0	0	0	0	0	0	0	0		
	NE	NE	0	17	0	0	0	0	0	9	0	0	0	0	0		
	NE	NE	32	32	32	0	0	0	0	0	147	20	NA	0	0		
	NE	NE	0	0	0	0	0	0	0	0	98	13	NA	0	0		
CARDIAC TISSUE	NE	NE	4	0	0	153	22	0	3	0	153	178	NA	0	0		
	NE	NE	7,3	0,0	0	4,0	1,1	0,0	0,6	0,0	2,8	18,5	NA	0,0	0,0		
	NE	NE	4	0	398	319	22	0	6	0	283	319	564	0	0		
	NE	NE	0	0	398	187	20	0	0	0	283	321	564	0	0		
	NE	NE	0	0	90	147	8	0	11	0	134	181	450	0	0		
	NE	NE	0	0	0	0	0	0	0	0	0	0	0	0	0		
	NE	NE	0	0	18	2	0	0	0	1	0	0	0	0	0		
	NE	NE	0	0	97	0	9	0	11	0	76	182	NA	0	0		
	NE	NE	0	0	97	0	9	0	11	0	69	103	NA	0	0		
	NE	NE	0	0	97	0	9	0	11	0	NA	163	NA	0	0		
MUSCULOSKELETAL	4	NA	94	0	0	242	41	284	356	95	2.639	1.787	NA	0	596		
	2,0	NA	171,0	0,0	0	6,4	3,9	14,2	65,7	46,1	56,7	185,3	NA	0,0	116,7		
	16	NA	94	0	3.286	2.235	165	284	3.555	96	18.437	1.806	NA	0	481		
	44	NA	0	0	8.243	9.021	230	211	3.837	96	18.437	1.833	1.913	0	379		
	59	NA	0	0	8.488	9.144	249	140	3.340	84	16.712	1.030	26.744	0	163		
	0	NA	0	0	3.965	0	0	43	0	0	33	0	3.466	0	57		
	0	NA	0	0	3.965	0	0	43	0	0	33	0	3.466	0	57		
	0	NA	0	0	3.965	0	0	43	0	0	33	0	3.466	0	57		
	0	NA	0	0	3.965	0	0	43	0	0	33	0	3.466	0	57		
	0	NA	0	0	3.965	0	0	43	0	0	33	0	3.466	0	57		
SKIN	NA	NA	0	0	2.488	0	389	270	485	4	15.013	1.066	NA	0	269		
	NA	NA	0	0	2.488	0	389	270	485	4	15.013	1.066	NA	0	269		
	NA	NA	0	0	2.488	0	389	270	485	4	15.013	1.066	NA	0	269		
	NA	NA	0	0	2.488	0	389	270	485	4	15.013	1.066	NA	0	269		
	NA	NA	0	0	2.488	0	389	270	485	4	15.013	1.066	NA	0	269		
	NA	NA	0	0	2.488	0	389	270	485	4	15.013	1.066	NA	0	269		
	NA	NA	0	0	2.488	0	389	270	485	4	15.013	1.066	NA	0	269		
	NA	NA	0	0	2.488	0	389	270	485	4	15.013	1.066	NA	0	269		
	NA	NA	0	0	2.488	0	389	270	485	4	15.013	1.066	NA	0	269		
	NA	NA	0	0	2.488	0	389	270	485	4	15.013	1.066	NA	0	269		
PLACENTA/AMNIOTIC MEMBRANE	NE	NE	0	0	0	41	0,0	18	21	17	201	86	NA	0	0		
	NE	NE	0	0	0	1,1	0,0	0,9	3,9	8,2	4,3	8,9	NA	0,0	0,0		
	NE	NE	0	0	0	171,0	0,0	0,9	69	3,560	345,217	391	325	0	0		
	NE	NE	0	0	0	171,0	0,0	0,9	69	3,560	345,217	391	325	0	0		
	NE	NE	0	0	0	171,0	0,0	0,9	69	3,560	345,217	391	325	0	0		
	NE	NE	0	0	0	171,0	0,0	0,9	69	3,560	345,217	391	325	0	0		
	NE	NE	0	0	0	171,0	0,0	0,9	69	3,560	345,217	391	325	0	0		
	NE	NE	0	0	0	171,0	0,0	0,9	69	3,560	345,217	391	325	0	0		
	NE	NE	0	0	0	171,0	0,0	0,9	69	3,560	345,217	391	325	0	0		
	NE	NE	0	0	0	171,0	0,0	0,9	69	3,560	345,217	391	325	0	0		
OTHER TISSUES	59	16	0	0	0	128	17	0	20	2	72	6	NA	0	2		
	29,5	5,4	0,0	0,0	0,0	32,8	1,6	0,0	3,7	1,0	1,5	0,6	NA	0,0	0,4		
	59	16	0	0	2	128	17	0	20	2	72	6	NA	0	2		
	NE	NE	0	0	0	128	17	0	20	2	72	6	NA	0	2		
	NE	NE	0	0	0	128	17	0	20	2	72	6	NA	0	2		
	NE	NE	0	0	0	128	17	0	20	2	72	6	NA	0	2		
	NE	NE	0	0	0	128	17	0	20	2	72	6	NA	0	2		
	NE	NE	0	0	0	128	17	0	20	2	72	6	NA	0	2		
	NE	NE	0	0	0	128	17	0	20	2	72	6	NA	0	2		
	NE	NE	0	0	0	128	17	0	20	2	72	6	NA	0	2		

PRELIMINARY DATA ON TISSUES - YEAR 2014

LATINAMERICAN COUNTRIES

Country	ARGENTINA	BRAZIL	CHILI	COLOMBIA	COSTA RICA	CUBA	DOMINICANA	ECUADOR	MEXICO	PANAMA	PARAGUAY	PERU	URUGUAY	VENEZUELA
Population (Font: UNFPA, state of world population, Nov 2014 - Million)	41,8	202,0	17,8	48,9	4,9	11,3	10,5	16,0	123,8	3,9	6,9	30,8	3,4	30,9
TYPE OF TISSUE	TYPE OF DATA													
CORNEA	N. of tissue donations	12.460	93	981	143	NA	28	0	2.978	36	75	341	75	58
	Tissue donation PMP	38,0	61,7	20,1	29,2	NA	2,7	0,0	24,1	9,2	10,9	11,1	22,1	1,9
	N° of tissue retrieved	1.589	24.919	179	86	NA	28	0	2.978	NA	76	220	197	108
	N° of tissues transplanted	906	13.456	NA	1.510	NA	331	0	3.204	36	75	341	217	99
	N° of patients transplanted	906	NA	162	143	538	NA	0	3.204	36	75	341	NA	99
BLOOD VESSEL	N° of transplants	906	13.456	162	NA	538	331	0	3.204	36	75	341	205	99
	N. of tissue donations	0	0	0	NA	8	0	0	0	0	0	0	18	0
	Tissue donation PMP	0,0	0,0	0,0	NA	1,6	0,0	0,0	0,0	0,0	0,0	0,0	5,3	0,0
	N° of tissue retrieved	0	0	0	54	22	0	0	0	0	0	0	38	0
	N° of tissues transplanted	69	0	0	10	NA	0	0	0	0	0	0	32	0
CARDIAC TISSUE	N° of patients transplanted	69	0	0	NA	6	0	0	0	0	0	0	NA	0
	N° of transplants	69	0	0	NA	NA	0	0	0	0	0	0	24	0
	N. of tissue donations	176	167	7	80	6	0	0	5	0	0	0	0	5
	Tissue donation PMP	4,2	0,8	0,4	1,6	1,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,2
	N° of tissue retrieved	NA	277	14	97	8	0	0	38	0	0	0	0	20
MUSCULOSKELETAL	N° of tissues transplanted	230	207	0	113	NA	0	0	2	0	0	0	2	NA
	N° of patients transplanted	230	207	0	NA	1	0	0	2	0	0	0	NA	NA
	N° of transplants	230	207	0	NA	NA	0	0	2	0	0	0	2	NA
	N. of tissue donations	116	1.432	7	1.500	0	0	0	261	0	0	0	0	0
	Tissue donation PMP	2,8	7,1	0,4	30,7	0,0	0,0	0,0	2,1	0,0	0,0	0,0	0,0	0,0
SKIN	N° of tissue retrieved	NA	25.215	0	2.102	0	0	0	261	0	0	0	28	0
	N° of tissues transplanted	7.034	21.639	0	12.484	0	0	0	NA	0	0	0	718	0
	N° of patients transplanted	7.034	NA	0	NA	0	0	0	NA	0	0	0	NA	0
	N° of transplants	7.034	NA	0	NA	0	0	0	NA	0	0	0	151	0
	N. of tissue donations	11	191	1	23	14	0	0	38	0	0	0	11	0
PLACENTA/AMNIOTIC MEMBRANE	Tissue donation PMP	0,3	0,9	0,1	0,5	2,9	0,0	0,0	0,3	0,0	0,0	0,0	3,2	0,0
	N° of tissue retrieved	NA	74.528	0	23	11.184	0	0	NA	0	0	0	19.200	0
	N° of tissues transplanted	45	62.863	0	311	NA	0	0	NA	0	0	0	13.000	0
	N° of patients transplanted	45	NA	0	NA	36	107	0	NA	0	0	0	NA	0
	N° of transplants	45	NA	0	NA	NA	107	0	NA	0	0	0	6	0
OTHER TISSUES	N. of tissue donations	0	0	0	19	0	0	0	0	0	0	0	94	0
	Tissue donation PMP	0,0	0,0	0,0	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	27,6	0,0
	N° of tissue retrieved	0	0	0	19	0	0	0	0	0	0	0	42	0
	N° of tissues transplanted	531	0	0	218	NA	0	0	0	0	0	0	16.950	0
	N° of patients transplanted	531	0	0	NA	15	0	0	NA	0	0	0	NA	0
	N° of transplants	531	0	0	NA	NA	0	0	0	0	0	0	42	0
	N. of tissue donations	0	0	0	0	0	0	0	0	0	0	0	0	0
	Tissue donation PMP	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	N° of tissue retrieved	0	0	0	0	0	0	0	0	0	0	0	7	0
	N° of tissues transplanted	0	0	0	25	0	0	0	0	0	0	0	7	0
	N° of patients transplanted	0	0	0	NA	0	0	0	0	0	0	0	0	0
	N° of transplants	0	0	0	NA	0	0	0	0	0	0	0	7	0

PRELIMINARY DATA ON HPC CELLS - YEAR 2014

MEMBER STATES OF THE EUROPEAN UNION

Country	AUSTRIA	BELGIUM	BULGARIA	CROATIA	CYPRUS	CZECH REPUBLIC	DENMARK	ESTONIA	FINLAND	GERMANY	GREECE	FRANCE	HUNGARY	IRELAND	ITALY
Population (Font: eurostat)	8.506.889	11.203.992	7.245.677	4.246.809	858.000	10.512.419	5.627.235	1.315.819	5.451.270	80.767.463	10.903.704	65.835.579	9.877.365	4.605.501	60.782.668
CATEGORY OF DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
POTENTIAL DONATION AND SEARCHING IN THE NATIONAL REGISTRIES															
N° of potential donors at 31.12			NA	40.722	132.383	74.082		NA	25.660			235.486	NA		348.380
N° of cord blood unit at 31.12			NA	2.831	2.626	4.110		NE	3.358			33.519	31.495		33.009
N° of searches requested			33	554	19.929	34.607		NE	21.633			23.561	NA		3.327
N° of unrelated donation			6	31	30	186		NE	0			1.496	NA		744
DONATION															
N° of donation - Autologous			107	672	0	325		16	285			3.245	5.865		6.851
N° of donation - Allogenic			93	1.857	22	96		4	65			1.379	NA		21.466
N° of donation - Allogenic, related			9	49	0	62		4	23			819	NA		1.308
N° of donation - Allogenic, unrelated			84	1.808	22	34		0	42			560	NA		20.158
BANKING of CORD BLOOD															
N° of unrelated cord blood units collected			84	1.801	1.682	39		0	0			2.642	0		1.964
N° of unrelated cord blood units distributed			0	1	0	0		0	4			319	0		69
N° of unrelated cord blood units at 31.12			84	3.024	2.953	5.537		0	3.358			33.519	0		38.437
N° of related cord blood units collected			1.830	13	1.673	7		0	1			0	5.699		286
N° of related cord blood units distributed			1.172	0	1	0		0	0			0	1		11
N° of related cord blood units at 31.12			1.830	185	14.513	162		0	0			0	31.495		3.498
TRANSPLANT															
N° of transplants - Autologous			71	154	20	439		13	NA			3.119	123		3.199
N° of patients transplanted - Autologous			66	131	20	325		NA	NA			3.006	121		2.562
N° of transplants - Allogenic			29	56	0	257		19	NA			1.954	99		1.759
N° of patients transplanted - Allogenic			27	56	0	242		NA	NA			NA	82		1.656
N° of transplants - Allogenic, related			13	27	0	66		4	NA			844	36		1.020
N° of patients transplanted - Allogenic, related			11	27	0	62		NA	NA			NA	30		952
N° of transplants - Allogenic, unrelated			16	29	0	191		15	NA			1.110	63		739
N° of patients transplanted - Allogenic, unrelated			16	29	0	180		NA	NA			NA	52		704

PRELIMINARY ON HPC CELLS - YEAR 214																
		MEMBER STATES OF THE EUROPEAN UNION												OTHER COUNTRIES		
Country		LATVIA	LITHUANIA	LUXEMBOURG	MALTA	NETHERLANDS	POLAND	PORTUGAL	ROMANIA	SLOVAKIA	SLOVENIA	SPAIN	SWEDEN	UNITED KINGDOM	TURKEY	NORWAY
Population (Font: eurostat)		2.001.468	2.943.472	549.680	425.384	16.829.289	38.017.856	10.427.301	19.947.311	5.415.949	2.061.085	46.512.199	9.644.864	64.308.261	76.667.864	5.107.970
CATEGORY OF DATA	TYPE OF DATA															
POTENTIAL DONATION AND SEARCHING IN THE NATIONAL REGISTRIES																
	N° of potential donors at 31.12	UK	10.028	0	0	53.441	NA	362.424	15.432	5.851	16.032	164.749	NA	NA	2.000	31.143
	N° of coord blood unit at 31.12	UK	1.221	0	0	3.515	NA	8.747	14.773	1.734	245	60.437	4.467	NA	20.706	NA
	N° of searches requested	UK	72	0	0	549	NA	2.917	336	21.174	23	3.916	NA	NA	1.167	NA
	N° of unrelated donation	UK	38	0	0	306	NA	157	60	49	30	681	273	NA	NA	24
DONATION	N° of donation - Autologous	UK	293	0	0	15.101	NA	478	3.849	6.943	NA	1.843	696	NA	1.759	265
	N° of donation - Allogenic	UK	20	0	0	288	NA	1.014	19	61	NA	1.398	495	NA	1.344	89
	N° of donation - Allogenic, related	UK	13	0	0	234	NA	70	19	45	NA	721	102	NA	1.063	41
	N° of donation - Allogenic, unrelated	UK	7	0	0	54	NA	944	0	16	NA	677	393	NA	281	48
BANKING of CORD BLOOD	N° of unrelated coord blood units collected	UK	0	0	0	284	337	812	2.358	26	NA	3.124	337	20.943	332	NA
	N° of unrelated coord blood units distributed	UK	0	0	0	91	0	1	0	0	NA	286	9	4.123	NA	NA
	N° of unrelated coord blood units at 31.12	UK	0	0	0	NA	4.097	8.750	8.742	10	NA	60.437	4.467	238.794	241	NA
	N° of related coord blood units collected	UK	182	0	0	7	8	10.245	9.406	14	NA	3	1	0	3.038	104
	N° of related coord blood units distributed	UK	0	0	0	1	0	3	0	0	NA	3	0	0	NA	NA
	N° of related coord blood units at 31.12	UK	1.144	0	0	NA	135	111.687	93.536	14	NA	0	175	0	2.747	775
TRANSPLANT	N° of transplants - Autologous	UK	111	0	0	2.352	NA	382	162	157	0	1.843	523	NA	1.759	66
	N° of patients transplanted - Autologous	UK	87	0	0	652	NA	371	160	139	0	NA	466	NA	NA	19
	N° of transplants - Allogenic	UK	62	0	0	585	NA	136	74	83	29	1.167	278	NA	2.407	76
	N° of patients transplanted - Allogenic	UK	56	0	0	509	NA	136	44	82	27	NA	271	NA	NA	72
	N° of transplants - Allogenic, related	UK	15	0	0	218	NA	63	18	35	0	721	97	NA	2.126	12
	N° of patients transplanted - Allogenic, related	UK	14	0	0	184	NA	63	18	34	0	NA	87	NA	NA	11
	N° of transplants - Allogenic, unrelated	UK	47	0	0	367	NA	73	56	48	29	446	181	NA	281	64
	N° of patients transplanted - Allogenic, unrelated	UK	42	0	0	325	NA	73	26	48	27	NA	184	NA	NA	61

PRELIMINARY DATA ON HPC CELLS - YEAR 2014

LATINAMERICAN COUNTRIES

Country	ARGENTINA	BRAZIL	CHILI	COLOMBIA	COSTA RICA	CUBA	DOMINICANA	ECUADOR	MEXICO	PANAMA	PARAGUAY	PERU	URUGUAY	VENEZUELA
<i>Population (Font: UNFPA, state of world population, Nov 2014 - Million)</i>	41,8	202,0	17,8	48,9	4,9	11,3	10,5	16,0	123,8	3,9	6,9	30,8	3,4	30,9
POTENTIAL DONATION AND SEARCHING IN THE NATIONAL REGISTRIES														
N° of potential donors at 31.12	36.335	3.493.779	0	0	0	0	0	0	0	0	0	0	284	633
N° of coord blood unit at 31.12	2.672	11.572	0	0	0	0	0	0	0	0	0	0	0	0
N° of searches requested	625	20.150	0	0	0	0	0	0	0	0	0	0	42	0
N° of unrelated donation	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BANKING of CORD BLOOD														
N° of unrelated coord blood units at 31.12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N° of related coord blood units at 31.12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRANSPLANT														
N° of transplants - Autologous	522	0	0	331	16	0	0	0	0	26	16	59	21	34
N° of patients transplanted - Autologous	506	1.057	0	331	10	0	0	0	0	26	16	59	0	34
N° of transplants - Allogenic	295	NA	0	250	44	0	0	0	0	8	32	24	78	6
N° of patients transplanted - Allogenic	256	764	0	250	31	0	0	0	0	8	32	24	3	6
N° of transplants - Allogenic, related	188	NA	0	212	36	0	0	0	0	8	16	24	75	6
N° of patients transplanted - Allogenic, related	162	492	0	212	25	0	0	0	0	8	16	24	0	6
N° of transplants - Allogenic, unrelated	107	NA	0	38	8	0	0	0	0	0	16	0	3	0
N° of patients transplanted - Allogenic, unrelated	94	272	0	38	6	0	0	0	0	0	16	0	3	0

Council of Europe Reference Documents 2015



Position Paper on Transplantation and Physical Activity

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INTRODUCTION

Physical inactivity is an important risk factor for cardiovascular disease, which has recently been defined both as a pandemic threat with repercussions on health care, and as the fourth leading risk factor for global mortality⁽¹⁾. According to WHO, physical inactivity levels are rising in many countries⁽²⁾. This not only has major implications for the prevalence of non-communicable diseases (NCDs) and the general health of the population worldwide, but it also adds to the burden on Health-care Systems which now have to cope with the additional cost of treating NCDs. Several studies report the positive impact of regular physical activity in the prevention of primary and secondary cardiovascular disease as well as stroke, diabetes, hypertension, colon cancer, breast cancer and depression.

It has been demonstrated that transplant patients may develop medical complications such as metabolic syndrome, susceptibility to infection and chronic diseases which may compromise the outcome of transplantation and graft survival in the long-term. Immunosuppressive therapy may play a role in the development of such complications, but the psychological response to post-transplant treatments must also be taken into consideration when dealing with this type of complication.

The solid organ transplant population is characterised by an increased risk of developing cardiovascular disease after receiving a transplant, and the analysis of available post-transplant data shows a high number of complications including an increased incidence of diabetes, weight gain possibly leading to obesity, and dyslipidaemia. It is now known that the key factors affecting weight gain in transplant recipients are the post-transplant treatment itself, which alters metabolic function, and the hunger induced by the improvement patients experience in their physical condition after the transplant. Quality of life is known to have a major influence on the success of a transplant, and is evaluated by vari-

ous social indicators including returning to work or resuming studies, becoming a parent, participating in social activities in general, and social reintegration. Physical activity and exercise are meaningful indicators for social reintegration since they help organ transplant patients adjust to the changes in their lives brought about by a transplant, develop their body awareness and enhance their physical and mental condition.

From a public health standpoint, it is important to recognise that cardiovascular disorders are currently the leading cause of death in the transplant population and that, in order to reverse this trend, appropriate medical and behavioural counter measures are urgently required. Exercise capacity is a more powerful predictor of mortality among men than other established risk factors for cardiovascular disease⁽³⁾, with each 1MET (metabolic equivalent) increase in exercise capacity conferring a 12 percent improvement in survival (*Table1*). Another aspect to be taken into account is that regular exercise reduces the risk of chronic metabolic and cardiorespiratory diseases, in part because exercise exerts anti-inflammatory effects. The anti-inflammatory effects of regular exercise may be mediated via both a reduction in visceral fat mass (with a subsequent decrease in adipokine release) and the introduction of an anti-inflammatory environment with each bout of exercise^(4,5).

PRESENT SITUATION IN EUROPE

A survey was conducted among the Council of Europe member states to check for similar projects or programs on the quality of life of transplanted patients focussing on physical activity. Although follow-up data for transplanted patients are registered and monitored in all the countries surveyed there are no general national rules on how and what to measure apart from standard clinical parameters, blood values, immunosuppression levels, and general health status, etc.

Physical activity has been recognised as an added value but is not regularly included in most of the programmes. Physiotherapy is prescribed by National Health Systems when needed, with some countries providing a few weeks of rehabilitation after liver, heart and lung transplantation. However, no funding is provided for further physical activity as a means of improving quality of life.

While the importance of physical activity is widely recognised, the majority of National Health Systems have not yet been able to develop a system for promoting physical activity in general and for transplanted patients in particular.

The survey found that, in one member state, the national health insurance scheme covers the cost of physical activities prescribed by a follow-up physician, but that patients were required to pay for physiotherapy themselves. It also found that in many member states, rehabilitation with physiotherapy is provided after heart, liver and lung transplantation and, in most cases, is covered by national health insurance bodies.

OUR RECOMMENDATIONS

National Authorities should educate, advise and heighten the awareness of physicians performing transplants and caring for transplanted patients about the importance of prescribing regular physical activity after transplantation, depending on individual needs and health status. Such activities may be started very soon after surgery and should continue under supervision after the patient is discharged from hospital.

National Authorities should encourage research to develop a reliable and simple “rehabilitation after transplant” model programme for use by transplant recipients under the supervision of Sports Medicine doctors.

National Authorities should start specific campaigns for transplanted patients, through patient organisations, scientific societies and health foundations in both the public and private sectors, to promote regular physical activity as part of the social reintegration of transplanted patients.

Physicians should recommend regular physical activity for transplant recipients, even those with chronic disease, as a healthy habit that will improve their quality of life.

Health institutions, National Authorities and specialists should create common rehabilitation guidelines for post-transplant patients.

National Health Systems should recognise the importance of prescribing physical activity as an adjunct to

immunosuppressive therapy for transplanted patients and provide appropriate funding.

Health institutions, National Authorities and specialists should raise awareness on an international level of the importance and benefits of introducing prescribed physical activity in conjunction with immunosuppressive therapy for transplanted patients. This would be of benefit not only to the patients, whose quality of life would improve, but also to member states themselves since it would reduce the cost of post-transplant follow-up (economic impact), expedite patients’ return to the workplace (socio-economic impact), improve their quality of life, confirm the efficacy of transplantation as a life-saving therapy, increase confidence in the transplant system and raise awareness of donation culture (public and social impact), all of which are aspects that Governments should take into account.

THE ITALIAN EXPERIENCE

In 2008, the Italian National Transplant Centre (*Centro Nazionale Trapianti, CNT*) began a study on a group of transplant athletes taking part in national and international sports competitions in order to verify the effects of sporting activity on solid-organ transplant recipients⁽⁶⁾. The results for physiological response, energy expenditure, kidney function and endurance of physical strain in the group were comparable to those obtained for non-transplant athletes. On the basis of these results for athletes, a research protocol was established in 2010 to measure exercise effectiveness in transplant patients as post-transplant therapy for use alongside pharmacological treatments. This provided a unique opportunity to study the outcomes of a personalised prescription of organised and supervised physical activity for solid-organ transplant patients.

During the Italian Winter Transplant Games organised by the Italian Association of Dialysis and Transplant Patients (ANED sport) in 2009⁽⁷⁾, solid-organ transplant recipients’ abilities during physical activity and their perception of their physical and mental state were studied. A team of experts in sports medicine and transplants performed specific tests on 16 transplanted skiers to measure body mass index, body fat percentage (plicometer), explosive power in the lower limbs (the Bosco test), energy expenditure (armband) and the perception of personal state of health (SF-36).

Another study, the “NoveColli Life” study, involved transplanted cyclists and aimed to check certain aspects of renal function in transplant recipients during a 130-kilometre cycling-race, and to compare the data obtained with those of non-transplant cyclists competing in the

same event. Twenty transplanted athletes covered the in an average of six hours and 37 minutes versus six hours and 15 minutes for the 44 non-transplanted subjects. All the athletes gave venous blood and urine samples the day before the race (Pre), immediately after the race (Post) and 24 hours after competing (24h). Urea, creatinine, micro albuminuria, urinary proteins and urine specific gravity were measured to assess renal function. A significant increase was found between Pre and Post values and a significant decrease between Post and Post 24h values in both groups.

The results indicate a significant difference in renal function between transplanted cyclists and the non-transplant subjects at these three times (before, during and 24hrs after the race). Non-transplanted cyclist values remained within the normal range. A similar trend was observed in the transplant recipient cyclists and the variations were comparable to those measured in the non-transplanted group, although the values of the transplanted group were higher, slightly above the normal range.

CLINICAL TRIAL

To support scientific research and information on physical activity and transplants, the Italian National Transplant Centre and the University of Bologna, in collaboration with the Isokinetic Education & Research Department, sponsored the Research Protocol "A transplant...and now it's time for sport", the first scientific study designed to measure the effects of exercise in patients after solid organ transplantation. The primary endpoint of this study was to demonstrate, through scientific measurements, that physical activity is essential for all transplant recipients. Promoting the prescription of regular physical activity as supportive therapy for patients with chronic conditions would not only help prevent many diseases, but would also alleviate the financial burden of disease on public healthcare systems. In particular, supervised exercise can help control the overall physical (and mental) well-being of transplant recipients, leading to significant improvements in post-transplant quality of life⁽⁸⁾.

Preliminary data indicate that, twelve months after recruitment, transplanted patients who performed physical activity showed an improvement in body composition (decrease in the percentage of adipose tissue) and an increase in work capacity (+15% increase in muscle strength and +17% in cardio-respiratory endurance)⁽⁹⁾. These effects are accompanied by an improvement in the self-perception of physical health (+8%) and overall health (+10%). The preliminary results of the study are therefore very encouraging and

confirm the hypothesis that exercise has drug-like effects.

The "A transplant...and now it's time for sport" protocol was established in 2010 by a team of transplant experts and sport physicians employed by different Italian Local Health Authorities. The premise of this study was that cardiovascular disorders are the leading cause of death in transplant recipients and that physical exercise is essential not only for "transplant athletes" but for all transplant recipients receiving anti-rejection treatments (cortisone and immunosuppressive drugs) which encourage changes in lipid metabolism and can cause serious heart disorders.

The Italian National Transplant Centre and the FITOT foundation jointly trained 250 doctors and graduates in physical education and recruited 45 transplant clinicians in ten Italian regions to the study. A total of 148 Italian transplant patients were enrolled in the study, 83 in the clinical group and 54 in the control group. Twelve-month results were obtained from two pilot regions (Emilia Romagna and Veneto) where respectively 21 and 33 recipients were taking part in the study.

The parameters of the patients improved with physical activity, the percentage of body fat tended to decrease (-1% as a trend), lower and upper limbs strength increased by 3% up to 25% and aerobic capacity increased by an average 14%.

Over the one year period, the *improvement* in self-perception of health status was as follows: physical health status +8%, general health status +10%, psychological well-being +6%.

CONCLUSION

The Italian protocol "A transplant...and now it's time for sport" shows that, in transplanted patients, regular physical activity and supervised physical exercise are largely positive in terms of patient safety and have beneficial effects on quality of life.

Regular physical activity of moderate intensity, such as walking, cycling, or any kind of bodily movement produced by skeletal muscles that requires energy expenditure, has significant benefits for health⁽¹⁰⁾.

Furthermore the *Action Plan for the Global Strategy for the prevention and control of non-communicable diseases* (issued by WHO through Resolution WHA61.14) urges Member States to implement national guidelines on physical activity for health and encourages them to develop and put into practice policies and interventions targeting the importance of physical activity for health.

The CD-P-TO (European Committee – partial agreement – on organ transplantation) recommends that all Council of Europe countries promote specific physical activity programs as a complementary treatment for trans-

planted patients and a means of improving quality of life, and encourages Governments to act on this suggestion to improve the general health of their national population.

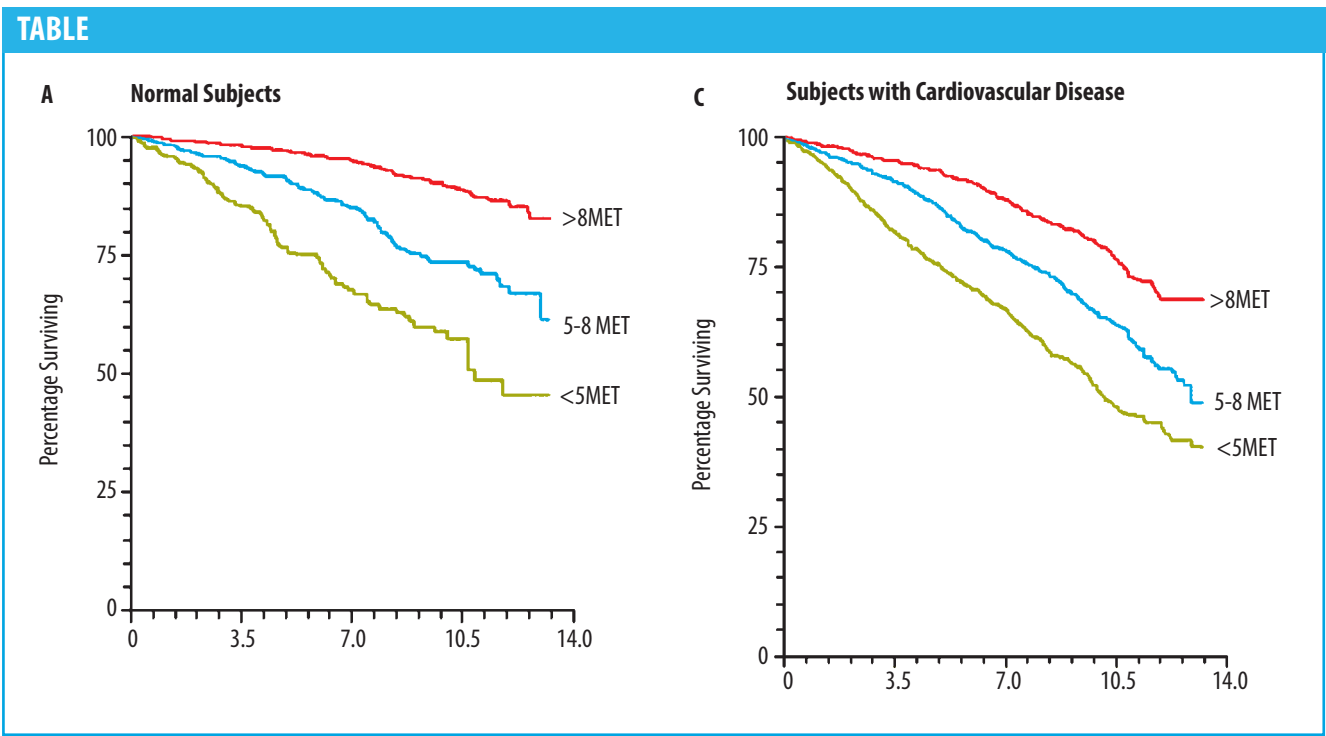


Table 1: Myers et al., NEJM 2002, 346:793-801

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Long-term outcome of living kidney donation

*Position paper of the European Committee on Organ Transplantation (CD-P-TO),
Council of Europe*

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With the endorsement of the European Society for Organ Transplantation (ESOT), the International Society of Nephrology (ISN) and The Transplantation Society (TTS)

Among the therapeutic options for end stage renal disease (ESRD), kidney transplantation from living donors currently represents the best treatment, giving superior results in terms of patient survival and quality of life when compared with deceased donor kidney transplantation or dialysis [1,2]. Organ shortage and limited expansion of the deceased donor pool in the last decade have multiplied demand for living kidney donation all over the world. Yearly, more than 27,000 living kidney donations are performed worldwide, accounting for almost 40% of all kidney transplants.

Living kidney donation requires a healthy volunteer to undergo nephrectomy, a procedure reported to have the extremely low perioperative mortality rate of 3.1 cases per 10,000 kidney donation procedures, which is 6 times lower than the surgical mortality reported for laparoscopic cholecystectomy [3]. However, the choice of life with a single kidney is also associated with an unavoidable degree of reduction in renal function [4].

Therefore, the European Committee on Organ Transplantation (CD-P-TO) believes that it is imperative for the transplant community to define precisely the risks associated with living donation, to identify potential living donors who are at increased risk of long term complications following kidney donation, and to communicate these shortcomings upfront and clearly to candidate donors primarily through direct doctor-patient relationship.

In all cases, the CD-P-TO emphasises that free life-long monitoring should be offered to all living donors following kidney donation. Particular consideration should be given to donors travelling from overseas to donate, especially those from developing countries, as these individuals may have limited resources or access to

health care in the longer term. In addition, the establishment of national or even supranational registries to monitor live donation and its consequences should be regarded as highly desirable [5].

To date, the risk of ESRD for living donors has been considered to be lower than, or no different to, that of the general population (180 vs 268 cases/10⁶ person-years) since living donors are thoroughly screened and reportedly healthier than controls who have had no screening [6].

However, two recent studies published in the last year where long-term risks have been analysed in large cohorts of healthy living kidney donors and compared to those of matched healthy controls, have come to challenge the conclusions of such earlier reports.

In a first study from Norway, 1,901 living kidney donors were compared to 32,621 potentially eligible kidney donors [7]. The study showed that, amongst donors there was a significantly increased long-term risk for ESRD (0.47% vs 0.067%; hazard ratio 11.38), cardiovascular, and all-cause mortality (cumulative incidence at 25 years of 18% in donors vs. 13% in controls). It should be noted, however, that in this study a considerable proportion of the living donors were on average 8 years older and had a longer follow up compared to controls, resulting in a potential age-derived bias with regard to the development of ESRD or the incidence of death in the donor group.

Moreover, all donors with ESRD (n=9) were biologically related to their recipients and the renal disease was immunologic, suggesting the possibility of a hereditary factor. In addition, the control group derived from a restricted geographic area within Norway and was selected in a survey conducted in a limited period of

time (1984-1987), raising doubts about the appropriateness of controls.

In a second study conducted in the USA, a cohort of 96,217 living kidney donors was compared with a population of 9,364 healthy-matched non-donor controls [8]. In this study, kidney donors had an increased risk of ESRD (7 times) over a median of 7.6 years, although the magnitude of the absolute risk increase was small (0.9% vs 0.14%). In this regard, however, the absolute risk for ESRD was not based on the actual number of ESRD cases recorded during the study but was the ultimate result of a complex statistical elaboration. The 15-year cumulative incidence of ESRD was higher among older donors and African-American donors. Increased incidence in the latter group could be due to either genetic factors or to increased risk of developing comorbidities after donation (e.g. hypertension). Nevertheless, when compared to the general unselected population, living donors had much lower estimated lifetime risk of ESRD (90 cases per 10,000 in living donors vs 326 cases per 10,000 in healthy matched controls, i.e. 3.6 times lower).

In summary, a higher risk of developing ESRD among kidney donors is documented in these recent studies conducted in two large cohorts of living donors compared to their matched non-donor counterparts. The chances for living donors to develop ESRD during their lifetime appear to be marginally increased (incidence lower than 1%) though the magnitude of the absolute risk increase is small and is much lower than that of the general population. In addition, the data suggest that such an increased risk may be primarily confined to African-American donors and to a selected subgroup of biologically related donors whose recipient's ESRD was the consequence of an immune-mediated process. Moreover, both these studies present several methodological shortcomings that may have contributed to a slight overestimation of the said risk.

However, the risk of developing ESRD among kidney donors evidenced by these reports cannot be hurriedly dismissed. Furthermore, the long-term mortality risk is still controversial among studies.

Prior to any intervention, living kidney donors must be given comprehensive information as to the purpose and nature of the surgery to remove a kidney, as well as on its consequences and risks, to enable the donor to give her/his informed and free consent. Therefore, based on these recent observations, the CD-P-TO believes that complete and updated information to living donors should reflect that:

- 1) Living kidney donation is the best option for ESRD in terms of patient and graft survival, and is supe-

prior to deceased-donor kidney transplantation or dialysis;

- 2) Among all types of surgical procedures, the peri-operative mortality of kidney donation is extremely rare, occurring in 3.1 per 10,000 cases, which is 6 times less than the surgical mortality for a low risk procedure such as laparoscopic cholecystectomy;
- 3) Analysis of large donor populations in North America and Europe are not conclusive in defining the possible adjunctive long-term risk of death for living kidney donors with respect to healthy-matched non-donors;
- 4) Living kidney donor candidates should be selected among the individuals who carry the lowest risk of developing ESRD in their lifetime. While two studies have shown that this risk may increase by several fold after kidney donation (7-11 fold compared with controls), the percentage of risk still remains low (0.47% vs 0.067% [7] and 0.9% vs 0.14% [8] in living donors and controls, respectively), the absolute risk being 3.6 times less than that of developing ESRD in the general population. Such a risk appears to be primarily confined to a selected portion of the donor population that includes donors who are biologically related to recipients with immune-mediated kidney disease and black donors.
- 5) Possible factors that may predict a risk of developing ESRD in the lifetime of living kidney donors include donor co-morbidities (such as obesity, hypertension and ethnic genetic association) and age at the time of nephrectomy. In this regard, it should be noted that predicting long term outcome is more difficult in younger donors compared with older donors where the assessment of residual renal function and subsequent decline over time is more predictable. Whatever the case, the possible impact of risk factors that were identified during the evaluation process must be carefully explained to the potential donor.

Based on these data, the current opinion at the CD-P-TO is that living kidney donation should continue to be considered as a safe, acceptable and effective procedure, allowing transplantation to go ahead against a background of profound shortage of organs from deceased donors. It should also be regarded as an expression of respect for the autonomy of the donor.

It is the view of the CD-P-TO that recent studies reinforce the need for life-long follow up of donors so that risk factors for ESRD that accumulate over a lifetime can be properly assessed. Health professionals and administrations should make all efforts to increase the available evidence on the risks of donating a kidney during one's lifetime to provide potential donors with the necessary

data for properly informed consent. It is only in a climate of complete trust and transparency that healthcare professionals will increase confidence in living donation.

In this light, the CD-P-TO recommends that the above information is incorporated into discussions with donors about the risks and benefits of this generous gift, and is included in the provisions of the informed consent.

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