

# NEWSLETTER TRANSPLANT

International figures  
on donation and  
transplantation  
2016



**EDQM**  
Volume 22  
2017



GOBIERNO  
DE ESPAÑA

MINISTERIO  
DE SANIDAD, SERVICIOS SOCIALES  
E IGUALDAD



European Directorate  
for the Quality  
of Medicines  
& HealthCare

Direction européenne  
de la qualité  
du médicament  
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# 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 2016.

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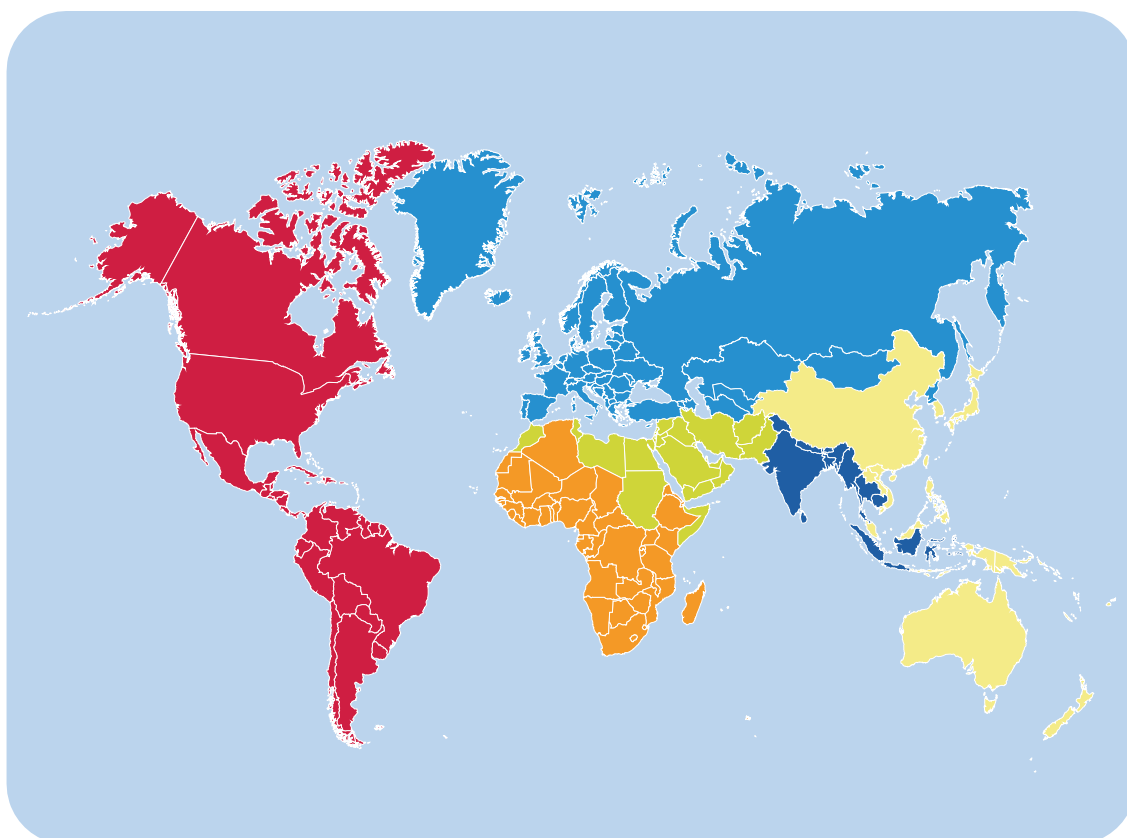
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# NEWSLETTER TRANSPLANT 2017



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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:

1<sup>st</sup> Degree Genetic Relative: Parent, Sibling, Offspring

2<sup>nd</sup> Degree genetic relative, e.g. grandparent, grandchild, aunt, uncle, niece, nephew,

Other than 1<sup>st</sup> or 2<sup>nd</sup> 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 1/1/2016 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 2016	100
Total number of patients ever active on the WL during 2016	300
Patients awaiting for a transplant (only active candidates) on 31/12/2016	50
Patients who died while on the WL during 2016	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 2016**

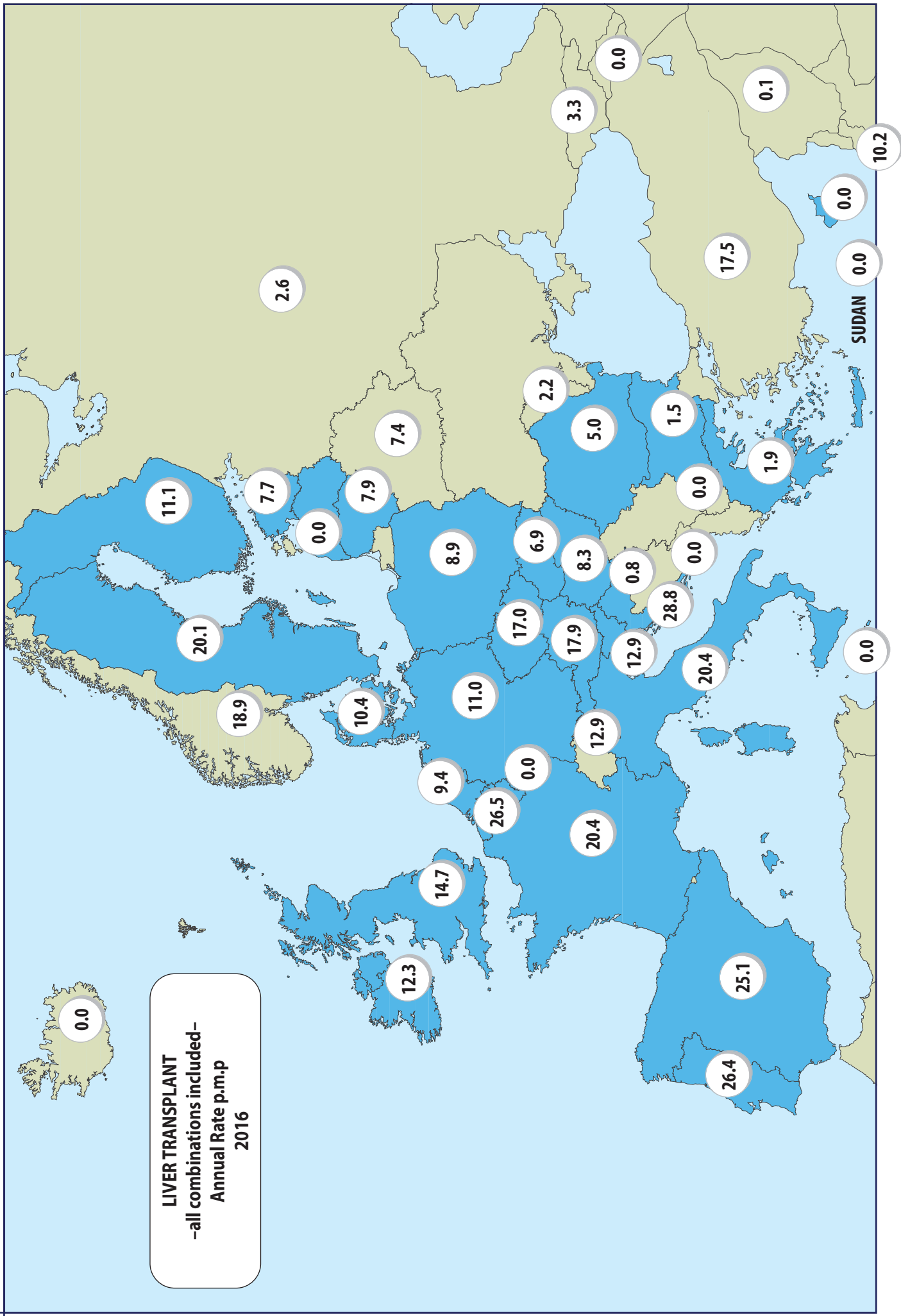




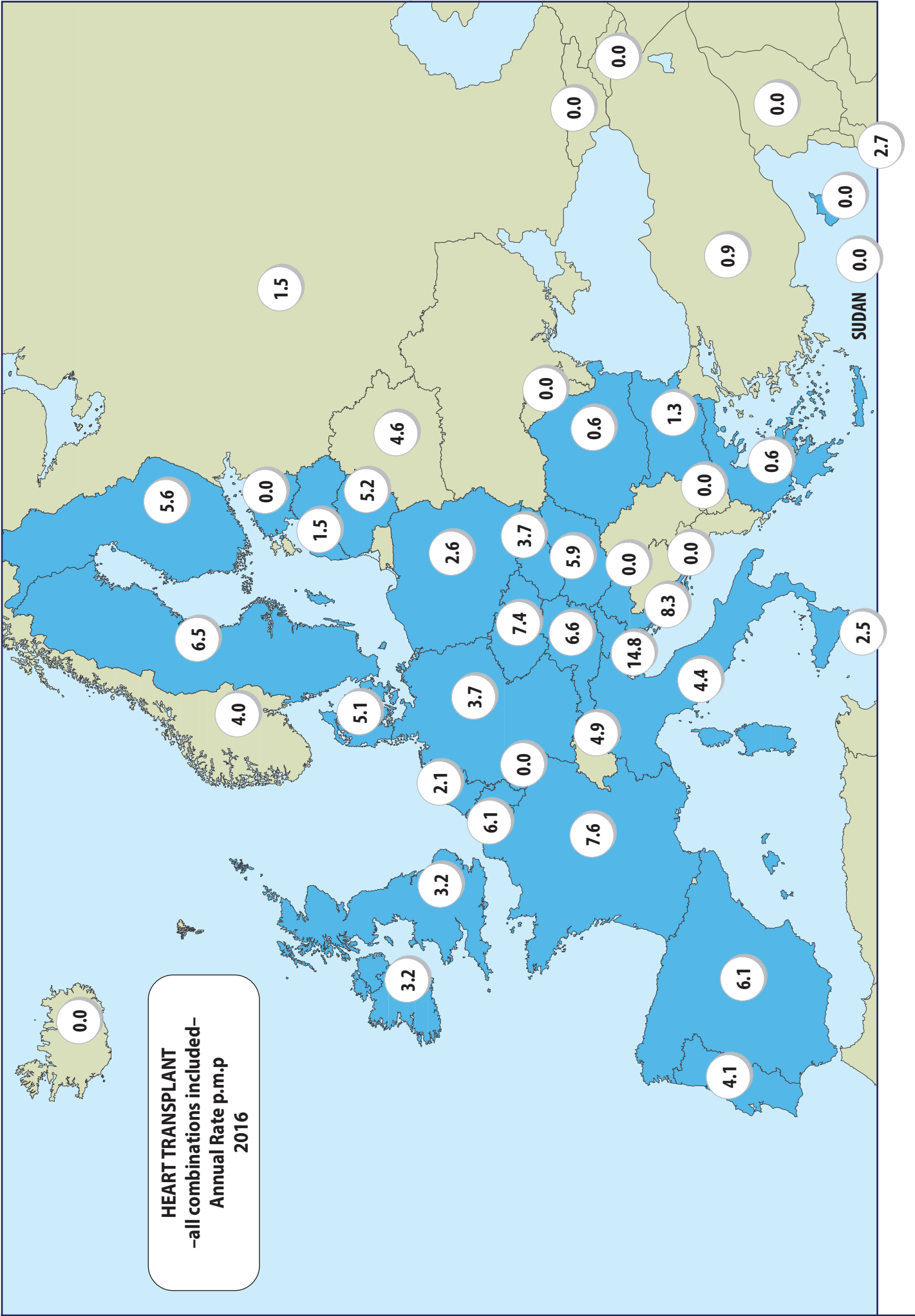






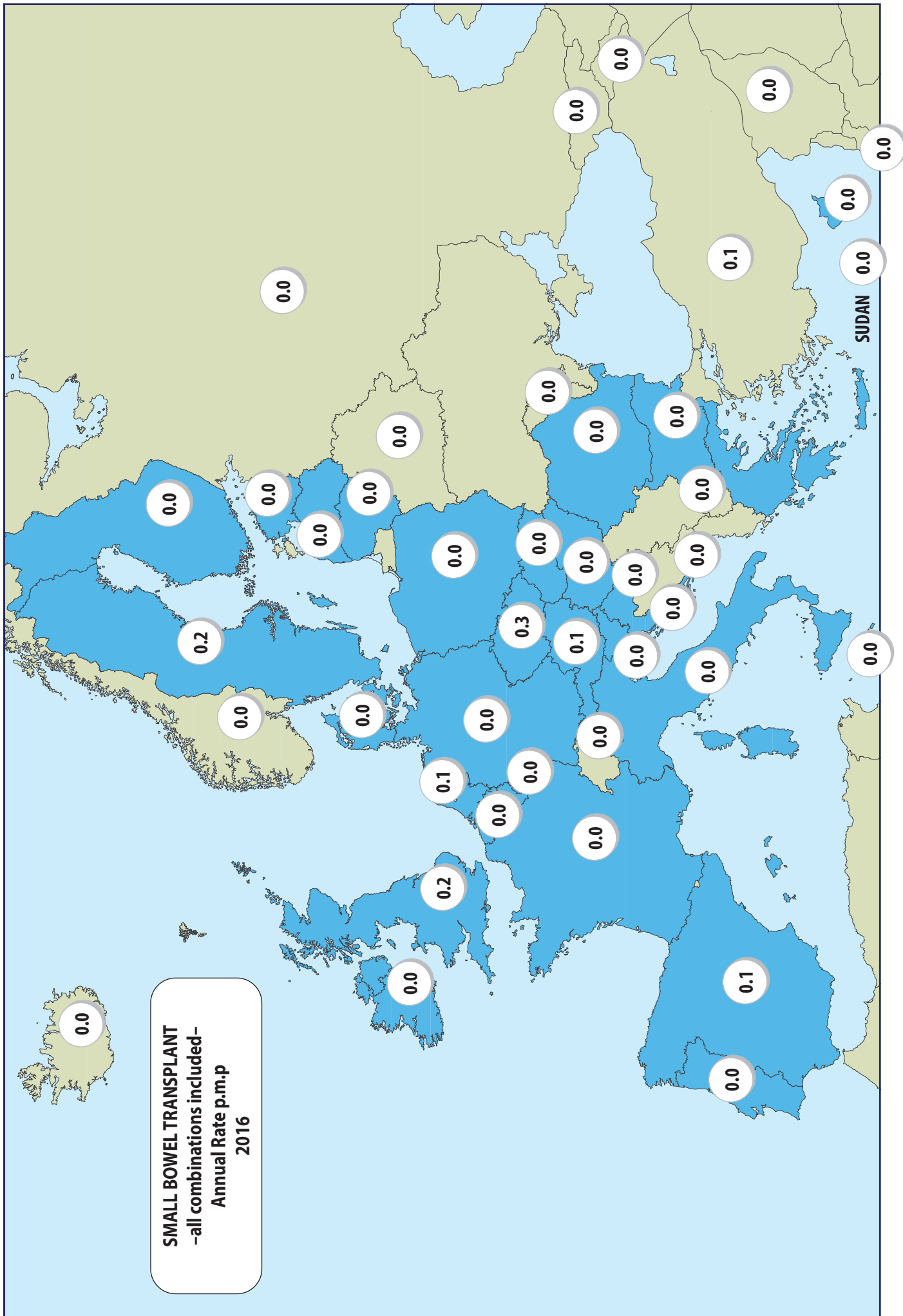






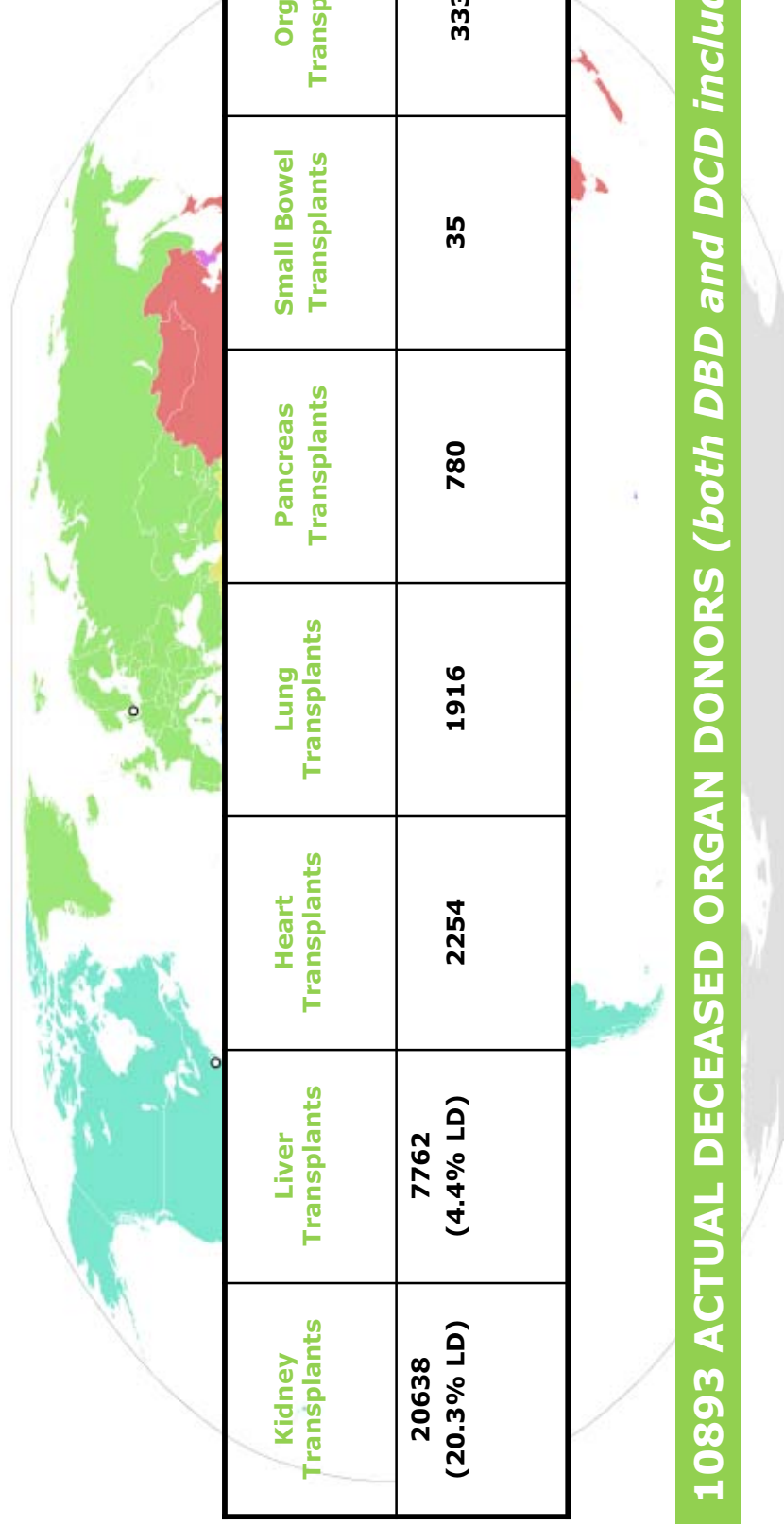








## EUROPEAN UNION DATA



**10893 ACTUAL DECEASED ORGAN DONORS (both DBD and DCD included)**

**2016 data**

**N= 28 COUNTRIES (505.9 million inhabitants)**



**Population (million inhabitants): UNFPA**

Actual deceased organ donors – both DBD and DCD included –	Number	PMP
<b>KIDNEY</b>	731	20.1
Total TX. – all combinations included –	1730	47.7
TX. from living donors	471	13.0
Total TX. – all combinations included –	580	16.0
Total TX. – all combinations included –	204	5.6
Total TX.	5	0.1
Total TX. – all combinations included –	302	8.3
Total TX. – all combinations included –	95	2.6
Total TX. – all combinations included –	5	0.1
Total number of patients transplanted	2897	79.8

**Population (million inhabitants): UNFPA**

Actual deceased organ donors – both DBD and DCD included –	Number	PMP
<b>KIDNEY</b>	9970	30.8
Total TX. – all combinations included –	19858	61.3
TX. from living donors	5629	17.4
Total TX. – all combinations included –	7841	24.2
Total TX. – all combinations included –	3209	9.9
Total TX.	18	0.1
Total TX. – all combinations included –	2345	7.2
Total TX. – all combinations included –	1013	3.1
Total TX. – all combinations included –	147	0.5
Total number of patients transplanted	32356	99.8

**Population (million inhabitants): UNFPA**

Actual deceased organ donors – both DBD and DCD included –	Number	PMP
<b>KIDNEY</b>	503	20.7
Total TX. – all combinations included –	1086	44.7
TX. from living donors	265	10.9
Total TX. – all combinations included –	314	12.9
Total TX. – all combinations included –	125	5.1
Total TX.	7	0.3
Total TX. – all combinations included –	199	8.2
Total TX. – all combinations included –	51	2.1
Total TX. – all combinations included –	1	0.0
Total number of patients transplanted	1716	70.6

**Population (million inhabitants): UNFPA**

Actual deceased organ donors – both DBD and DCD included –	Number	PMP
<b>KIDNEY</b>	61	13.3
Total TX. – all combinations included –	172	37.4
TX. from living donors	82	17.8
Total TX. – all combinations included –	59	12.8
Total TX. – all combinations included –	11	2.4
Total TX.	0	0.0
Total TX. – all combinations included –	17	3.7
Total TX. – all combinations included –	4	0.9
Total TX. – all combinations included –	0	0.0
Total number of patients transplanted	255	55.4

**Population (million inhabitants): UNFPA**

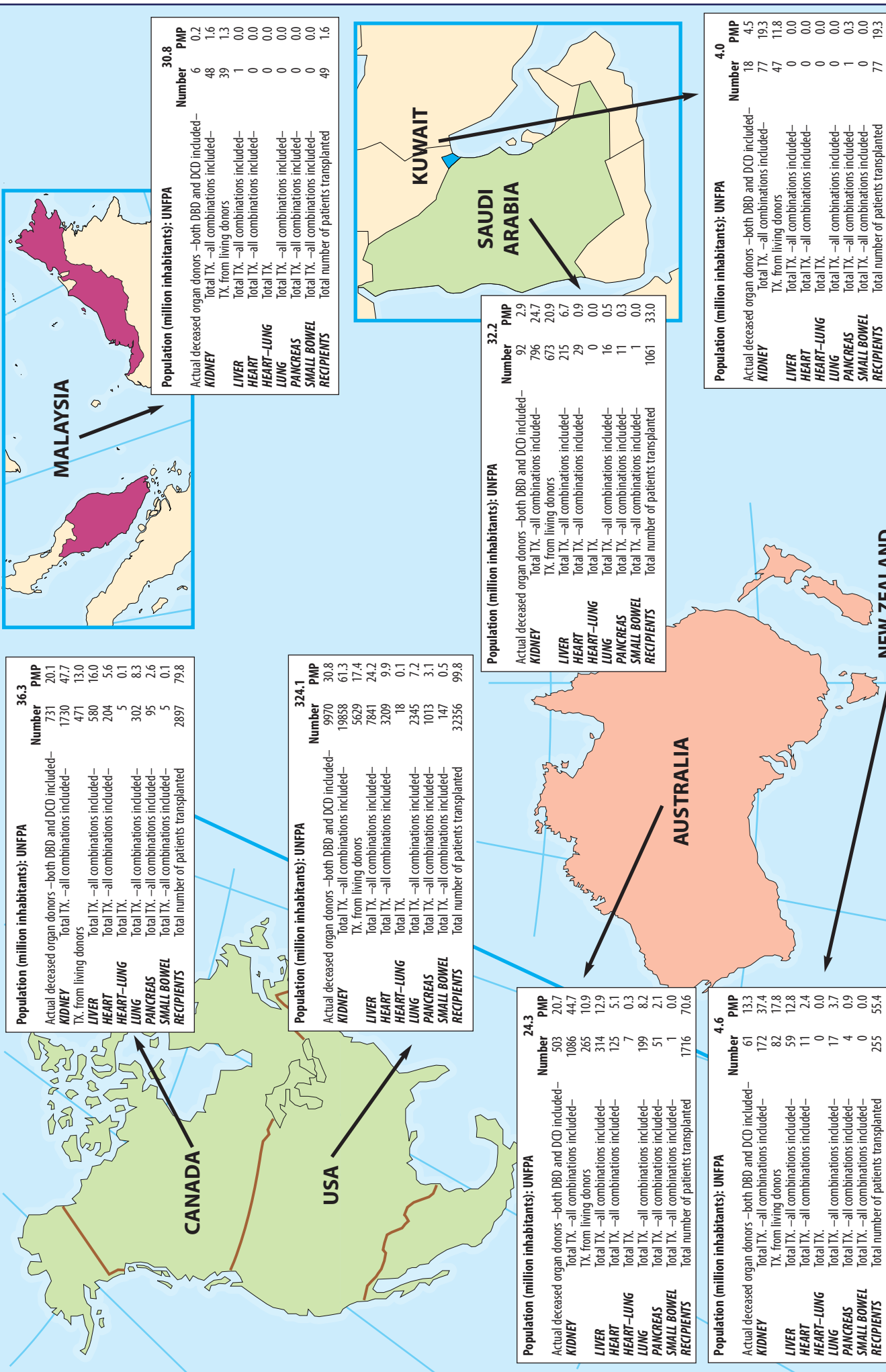
Actual deceased organ donors – both DBD and DCD included –	Number	PMP
<b>KIDNEY</b>	6	0.2
Total TX. – all combinations included –	48	1.6
TX. from living donors	39	1.3
Total TX. – all combinations included –	1	0.0
Total TX. – all combinations included –	0	0.0
Total TX.	0	0.0
Total TX. – all combinations included –	0	0.0
Total TX. – all combinations included –	0	0.0
Total TX. – all combinations included –	0	0.0
Total number of patients transplanted	49	1.6

**Population (million inhabitants): UNFPA**

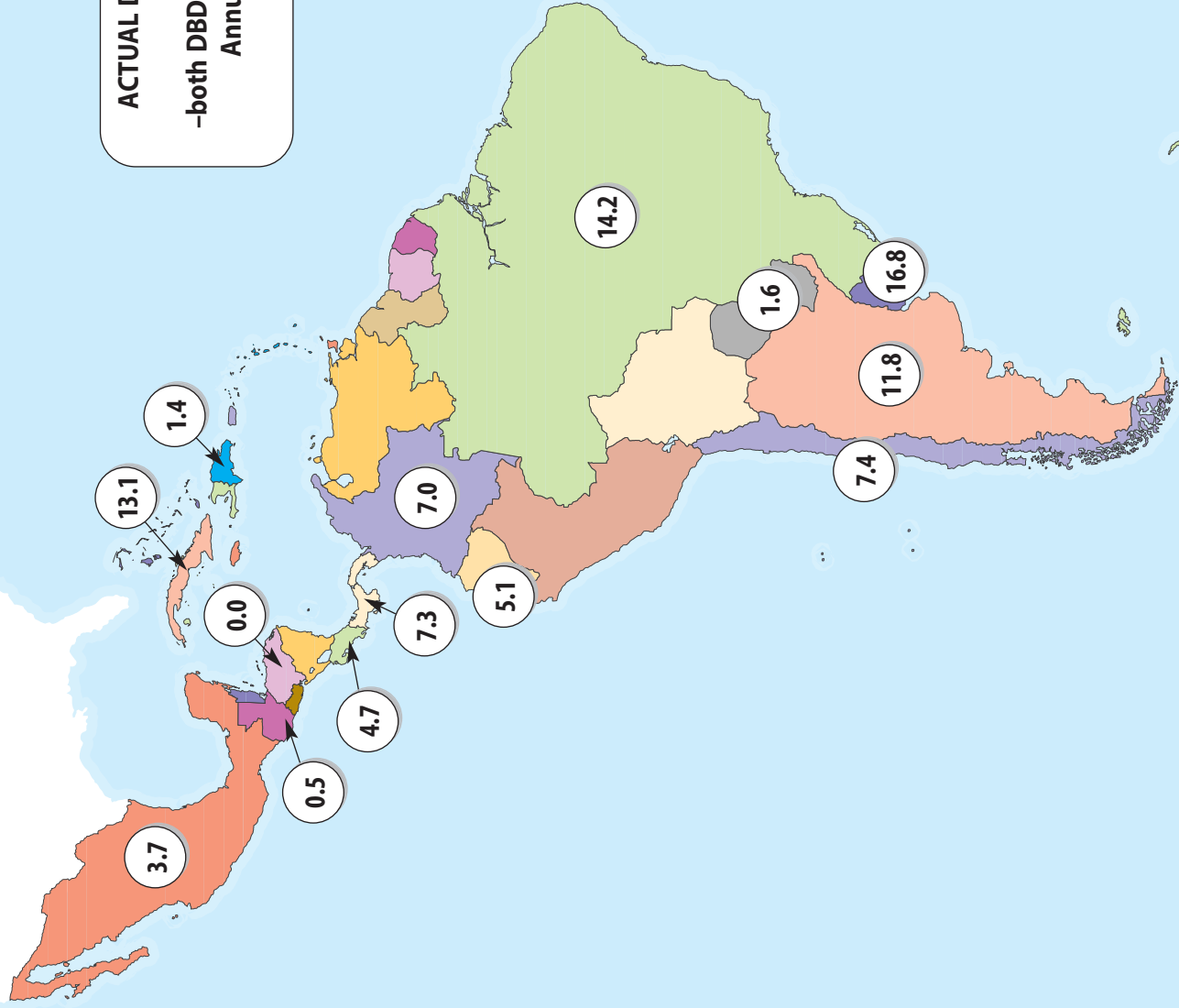
Actual deceased organ donors – both DBD and DCD included –	Number	PMP
<b>KIDNEY</b>	92	2.9
Total TX. – all combinations included –	796	24.7
TX. from living donors	673	20.9
Total TX. – all combinations included –	215	6.7
Total TX. – all combinations included –	29	0.9
Total TX.	0	0.0
Total TX. – all combinations included –	16	0.5
Total TX. – all combinations included –	11	0.3
Total TX. – all combinations included –	1	0.0
Total number of patients transplanted	1061	33.0

**Population (million inhabitants): UNFPA**

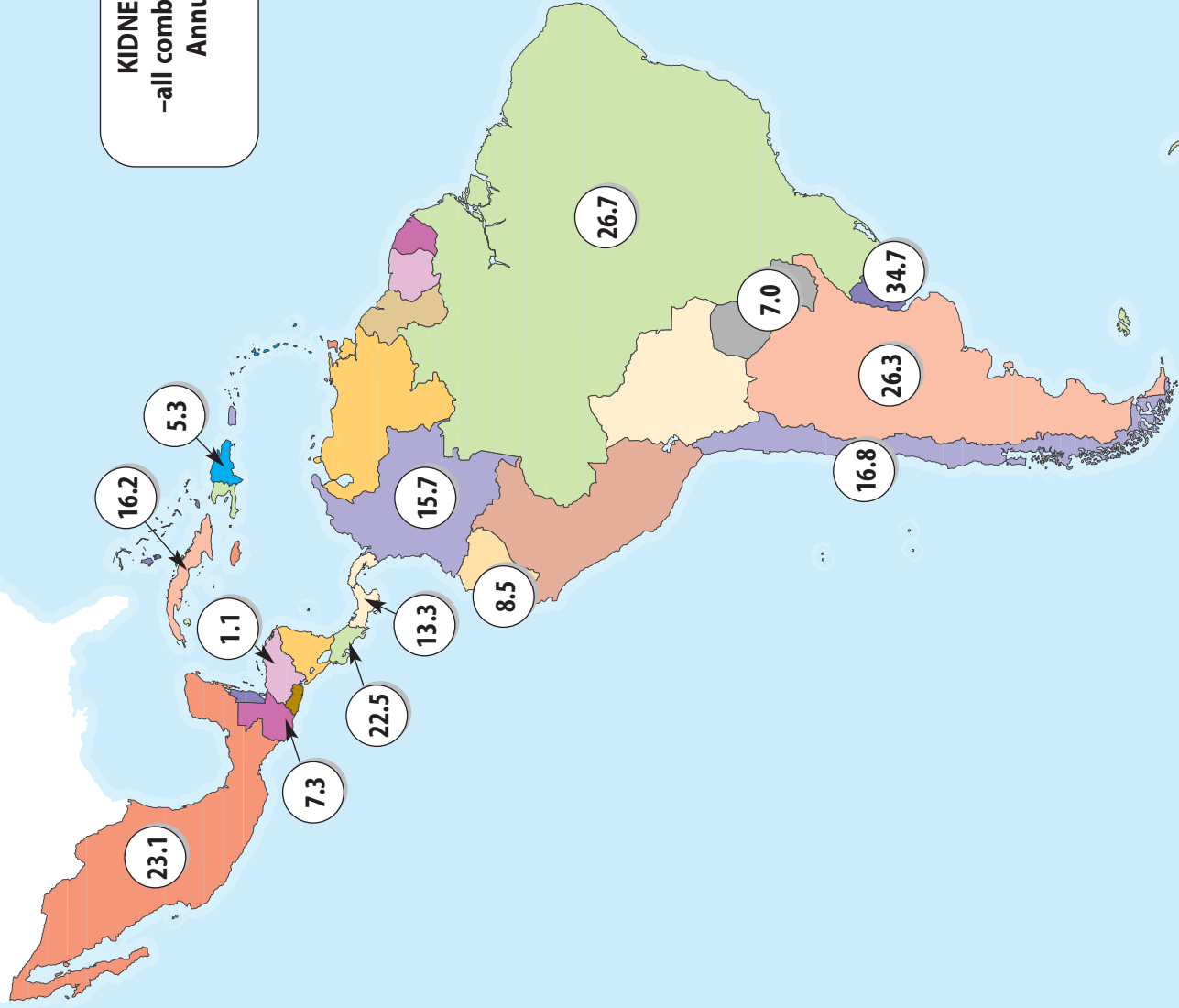
Actual deceased organ donors – both DBD and DCD included –	Number	PMP
<b>KIDNEY</b>	18	4.5
Total TX. – all combinations included –	77	19.3
TX. from living donors	47	11.8
Total TX. – all combinations included –	0	0.0
Total TX. – all combinations included –	0	0.0
Total TX.	0	0.0
Total TX. – all combinations included –	0	0.0
Total TX. – all combinations included –	1	0.3
Total TX. – all combinations included –	0	0.0
Total number of patients transplanted	77	19.3



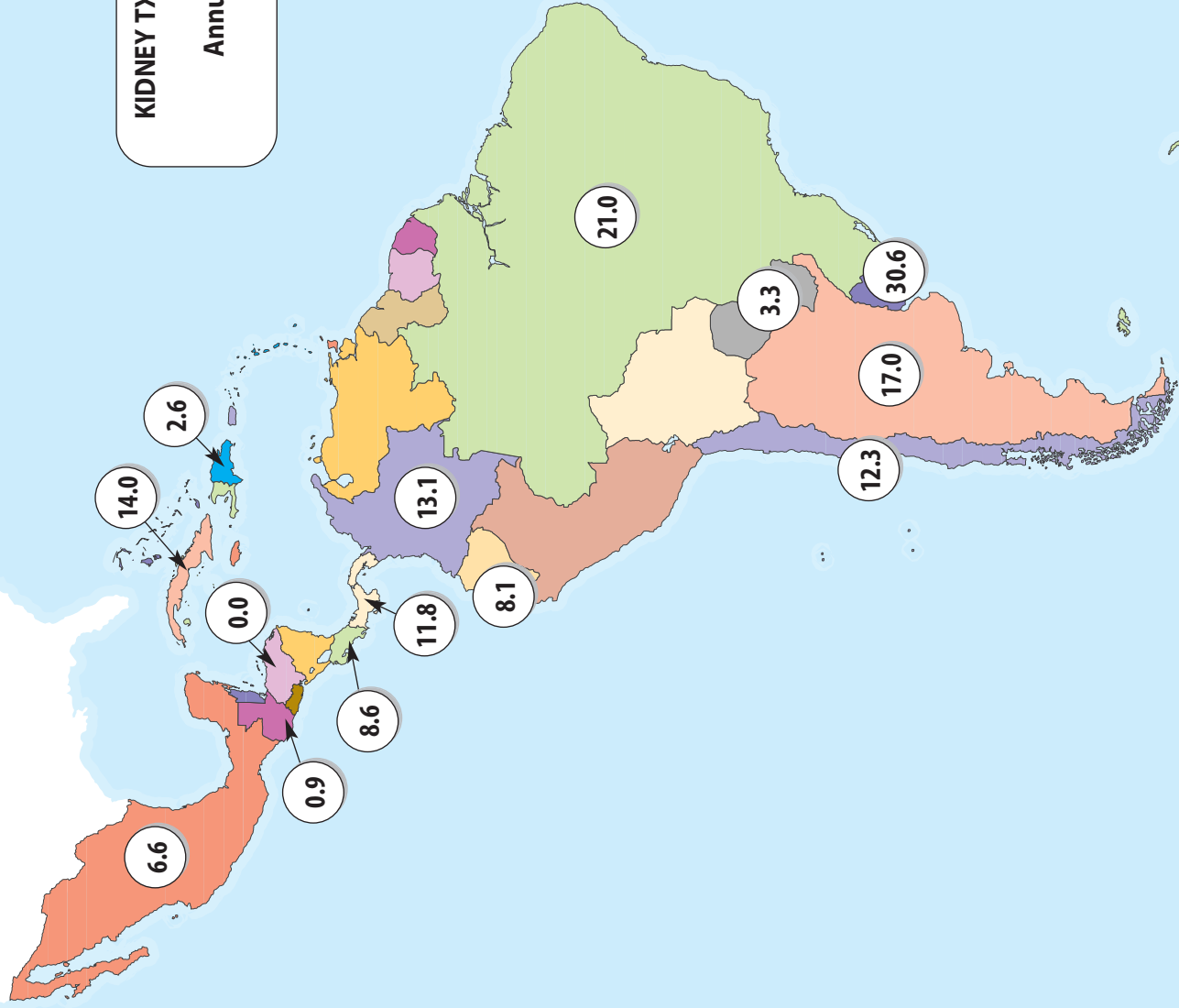
**ACTUAL DECEASED ORGAN DONORS**  
 -both DBD and DCD included-  
 Annual Rate p.m.p  
 2016



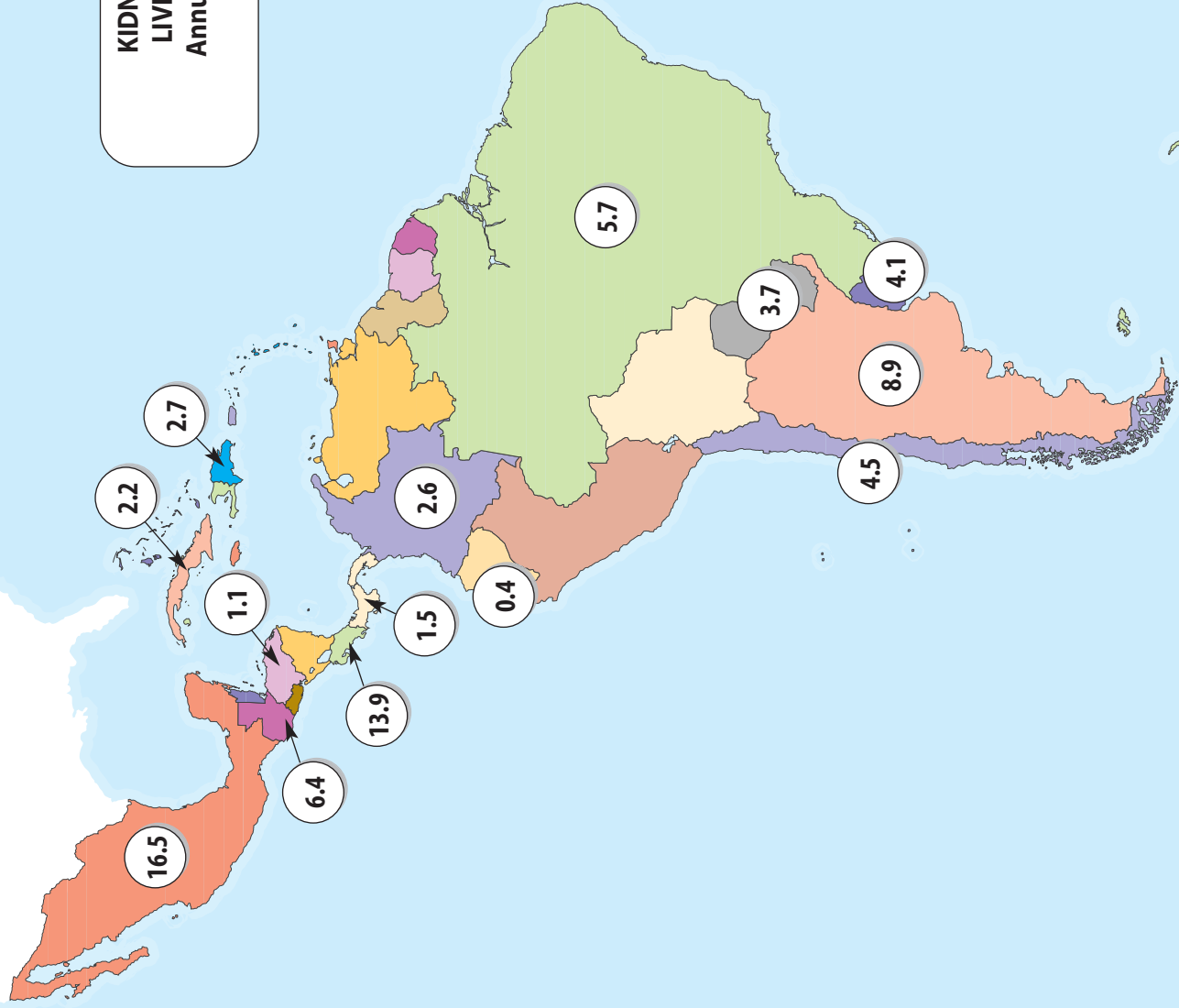
**KIDNEY TRANSPLANT**  
-all combinations included-  
Annual Rate p.m.p  
2016



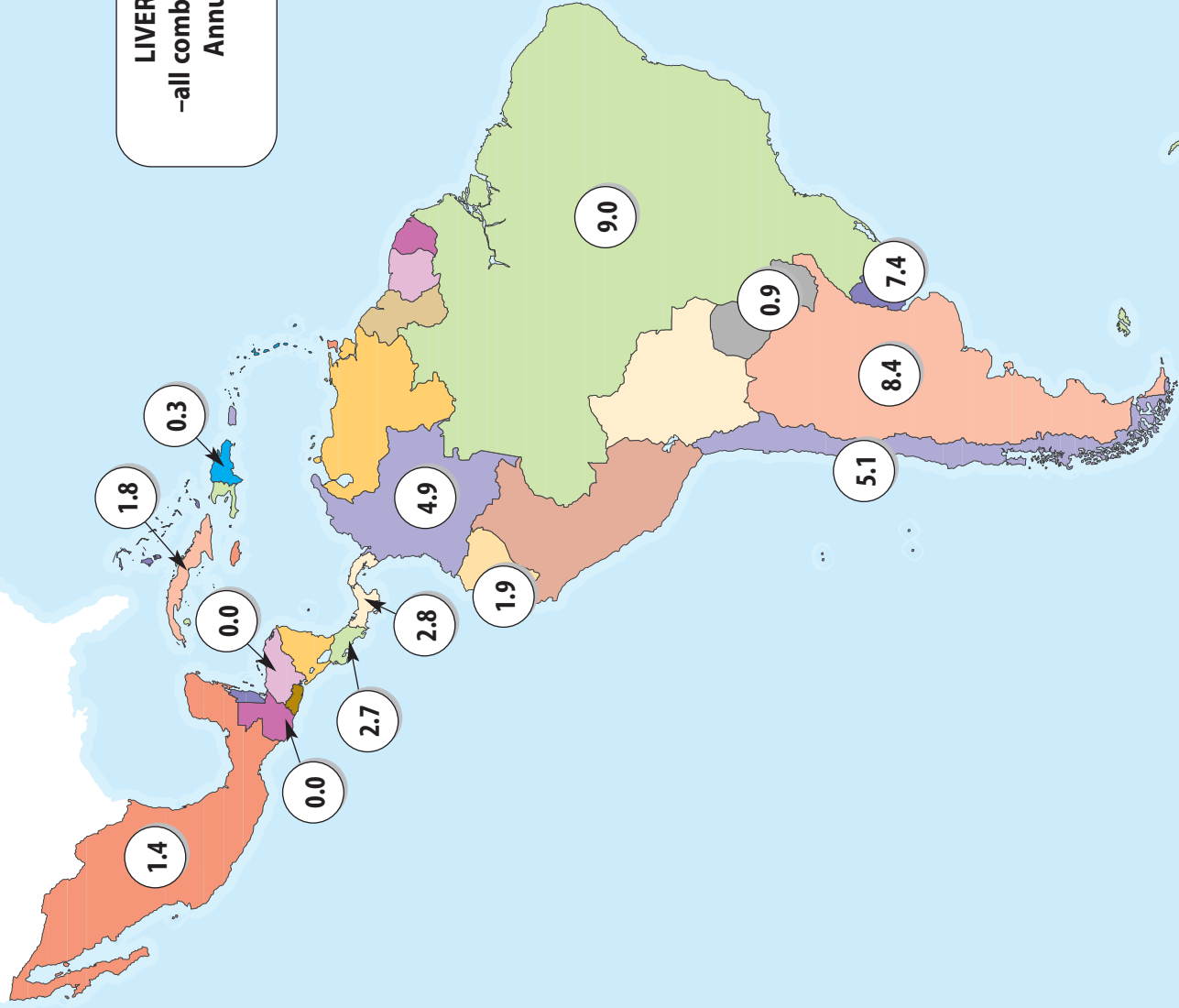
**KIDNEY TX. FROM DECEASED  
DONORS  
Annual Rate p.m.p  
2016**



**KIDNEY TX. FROM  
LIVING DONORS  
Annual Rate p.m.p  
2016**

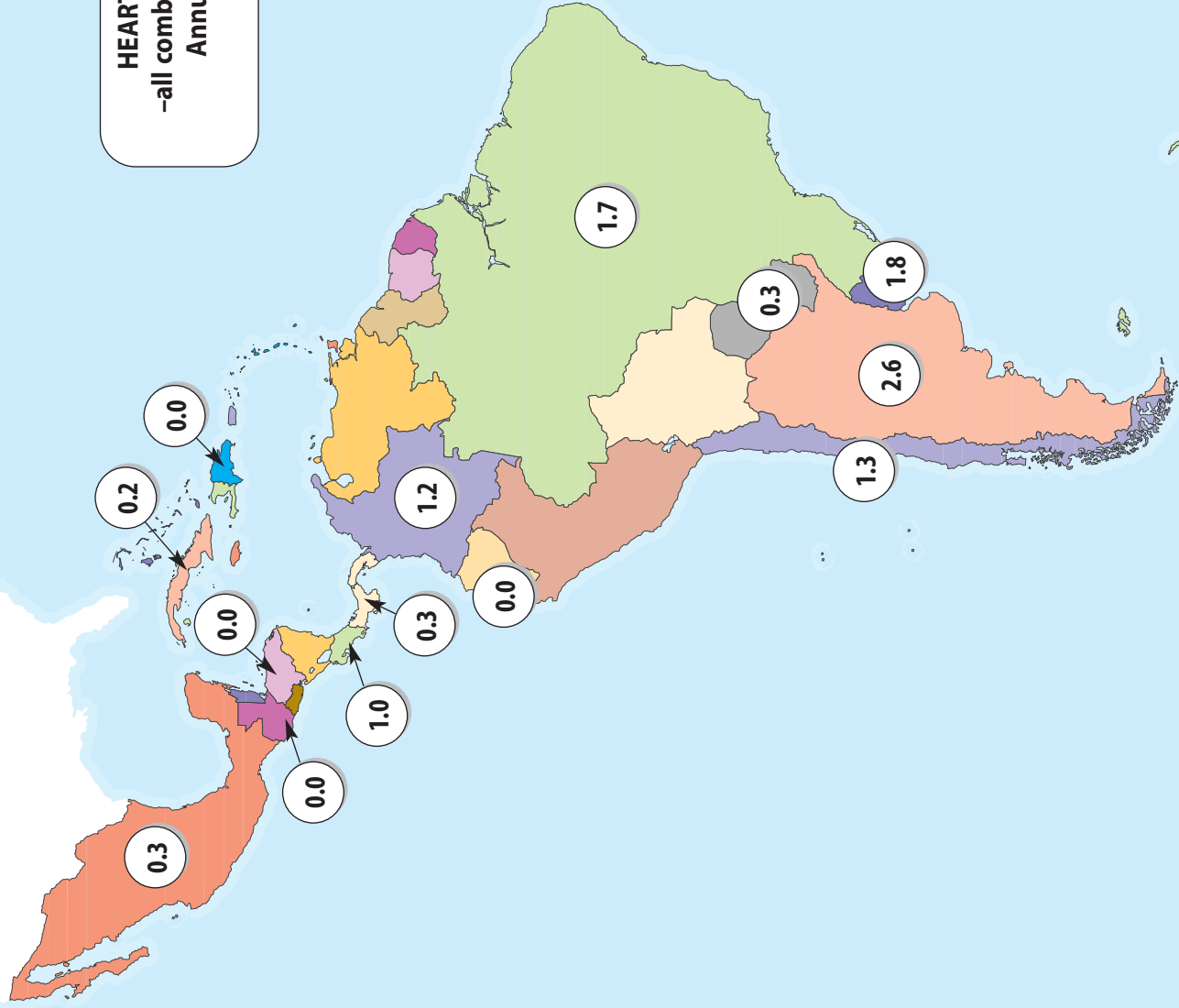


**LIVER TRANSPLANT**  
--all combinations included--  
Annual Rate p.m.p  
2016

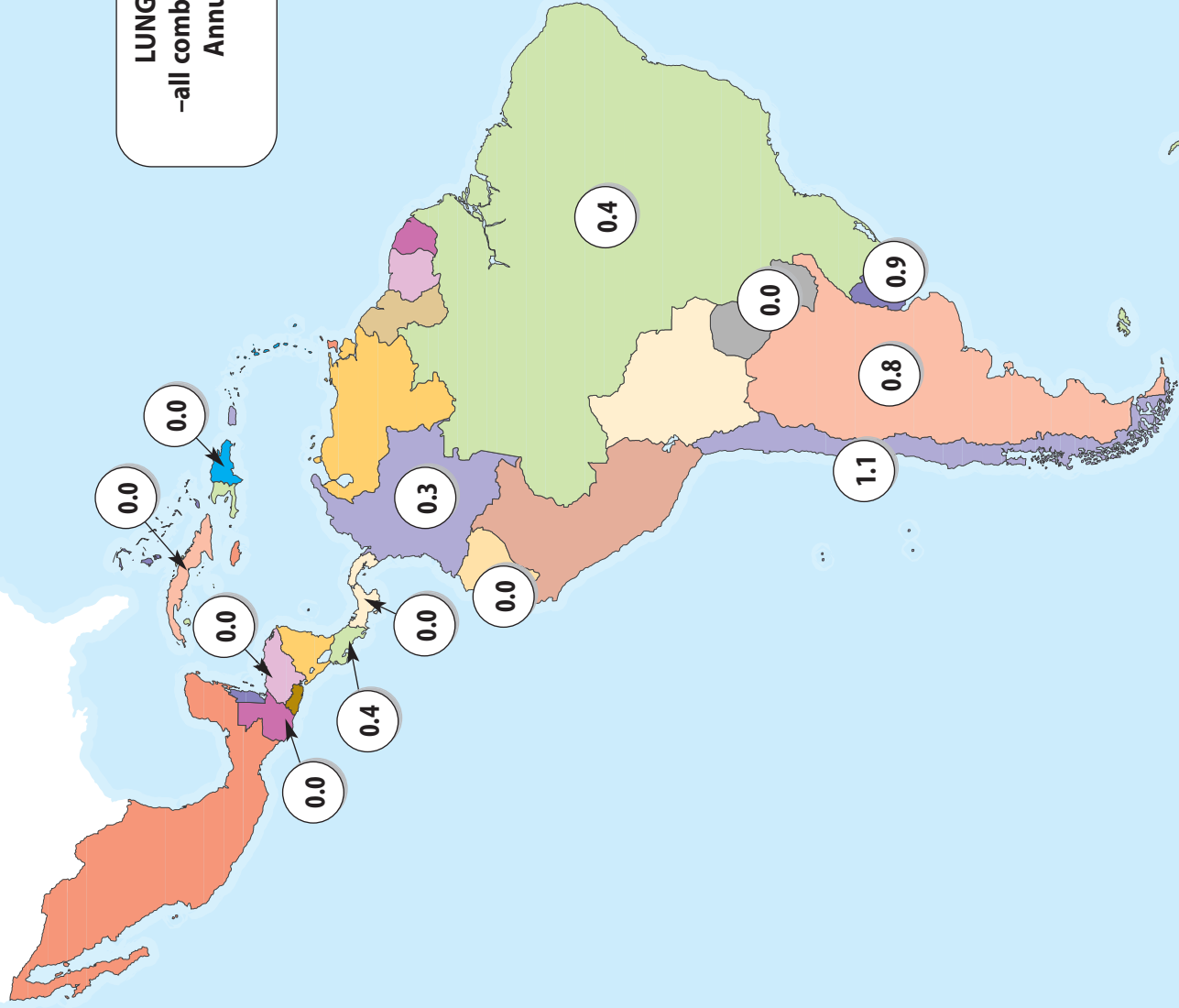




**HEART TRANSPLANT**  
-all combinations included-  
Annual Rate p.m.p  
2016

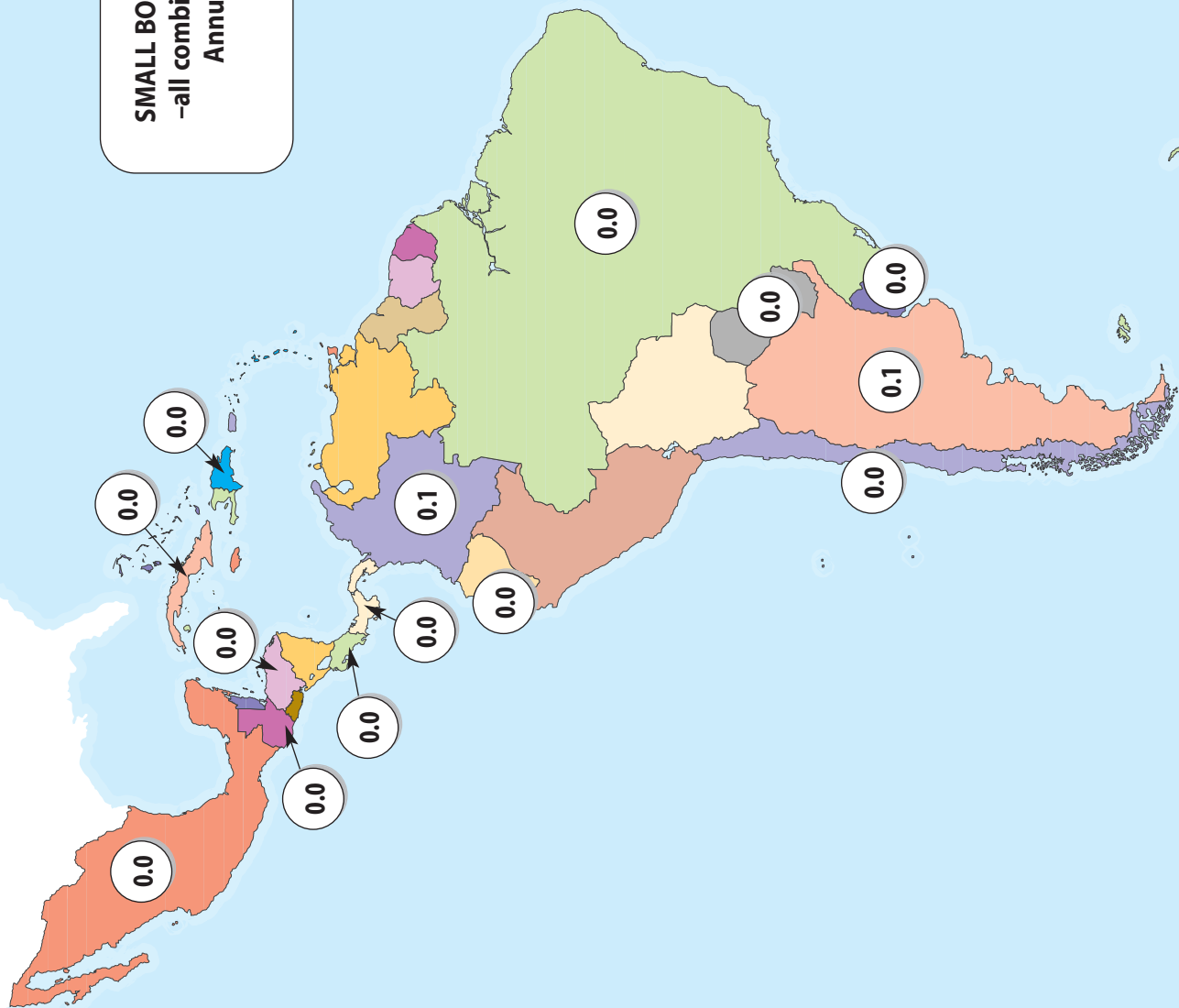


LUNG TRANSPLANT  
--all combinations included--  
Annual Rate p.m.p  
2016

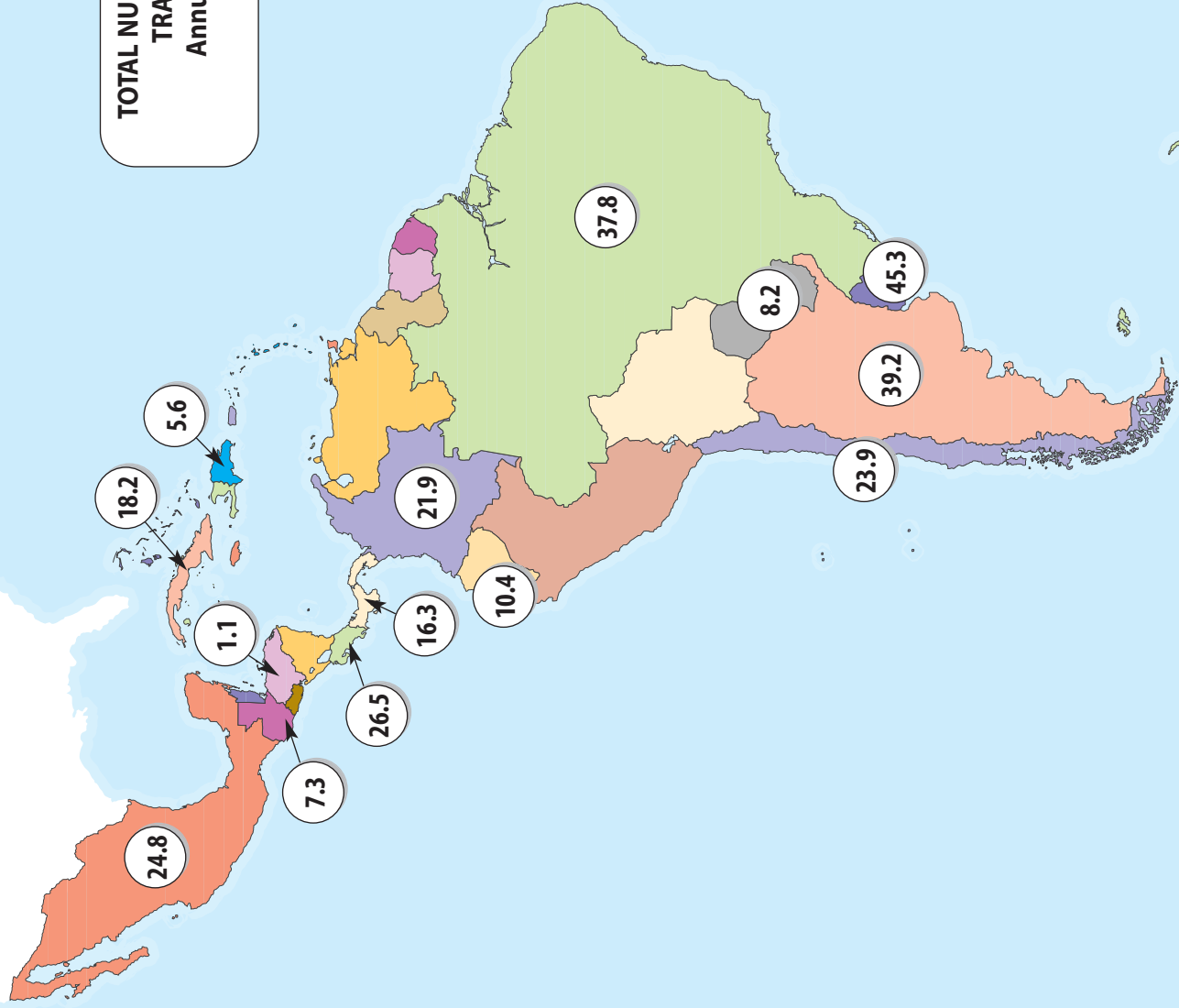




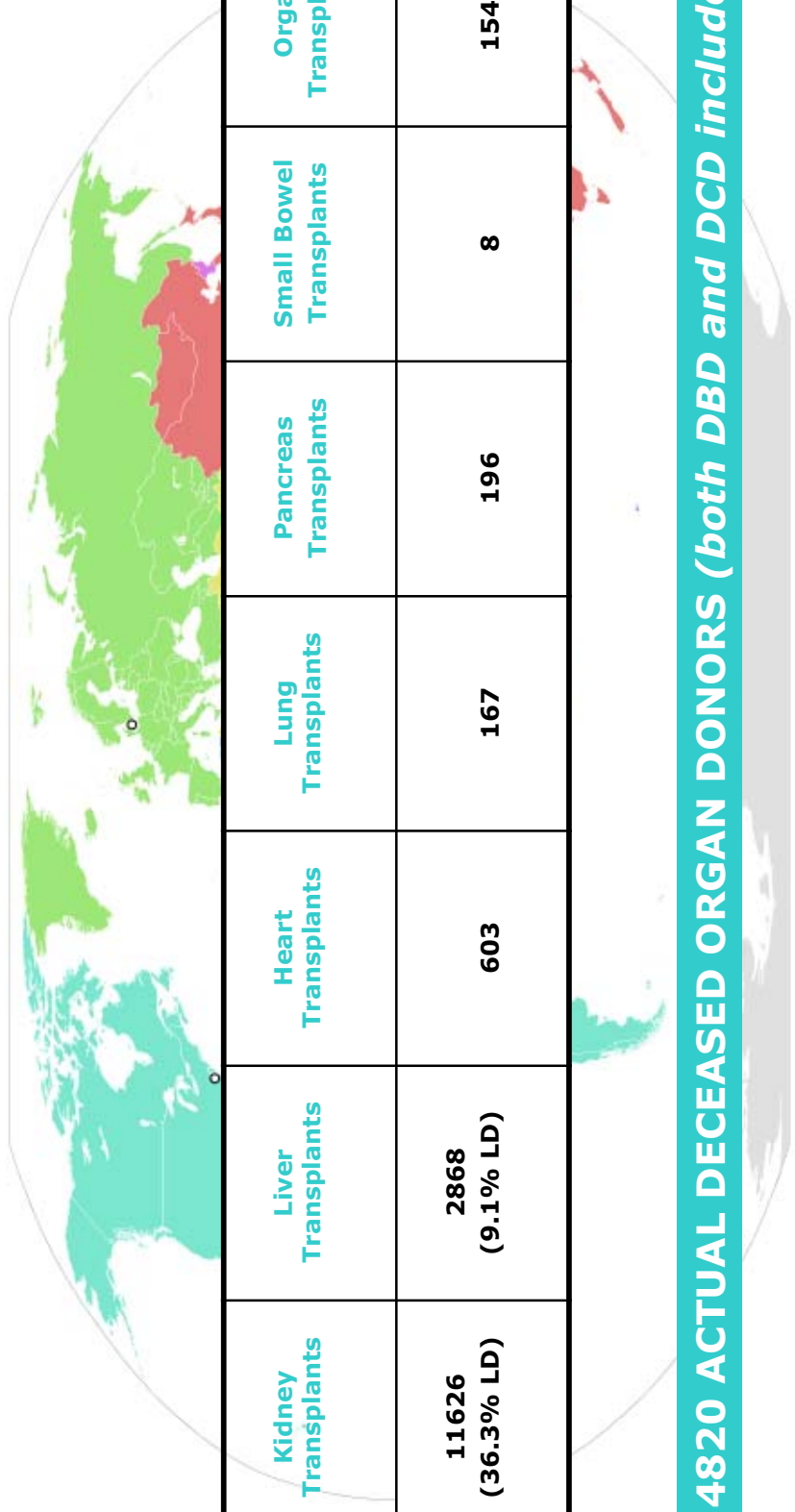
**SMALL BOWEL TRANSPLANT**  
--all combinations included--  
Annual Rate p.m.p  
2016



**TOTAL NUMBER OF PATIENTS  
TRANSPLANTED  
Annual Rate p.m.p  
2016**



**LATINAMERICAN COUNTRIES**



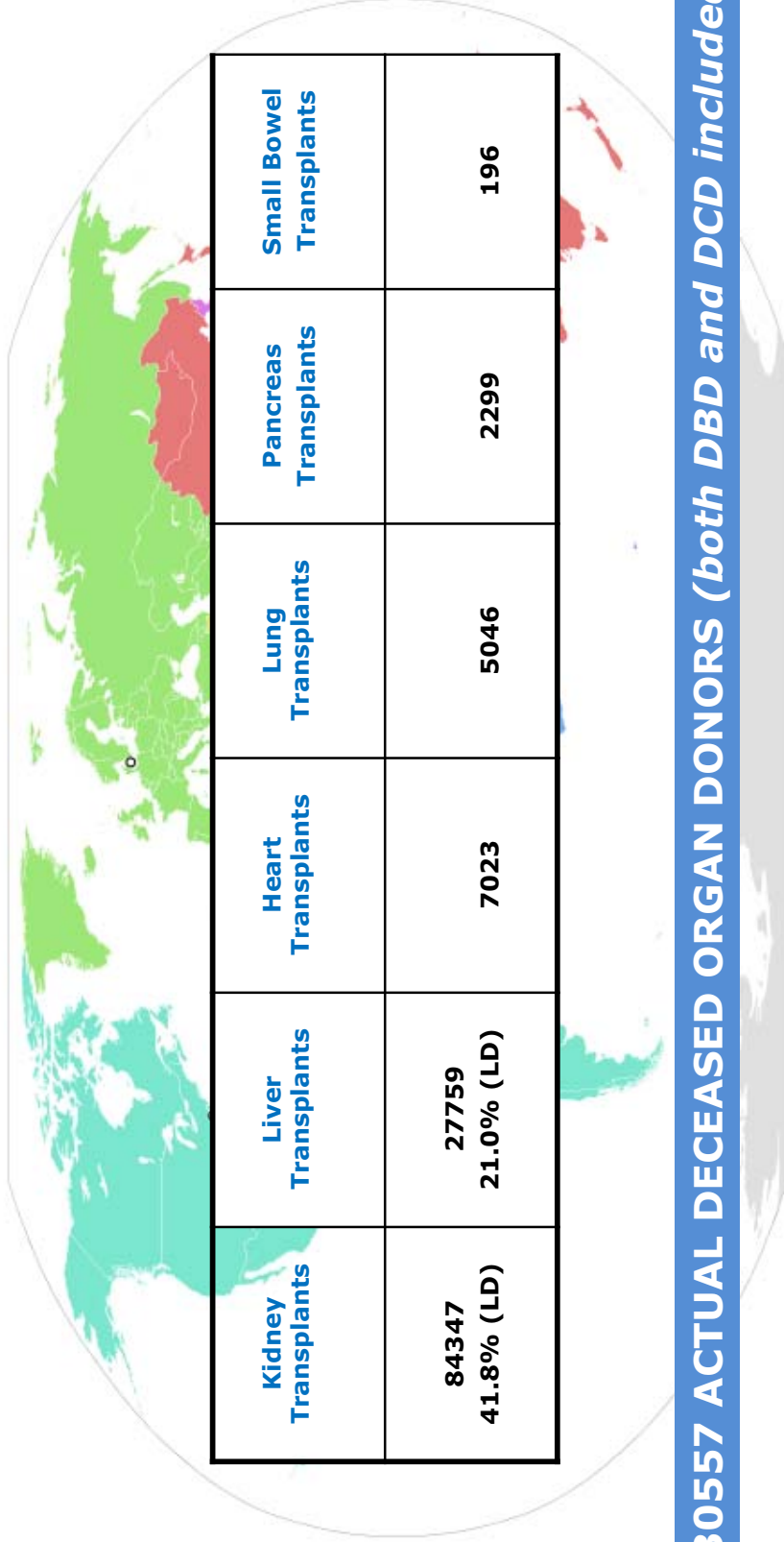
Kidney Transplants	Liver Transplants	Heart Transplants	Lung Transplants	Pancreas Transplants	Small Bowel Transplants	Organs Transplanted
11626 (36.3% LD)	2868 (9.1% LD)	603	167	196	8	15468

**4820 ACTUAL DECEASED ORGAN DONORS (both DBD and DCD included)**

**2016 data**  
**N= 14 COUNTRIES (531.1 million inhabitants)**



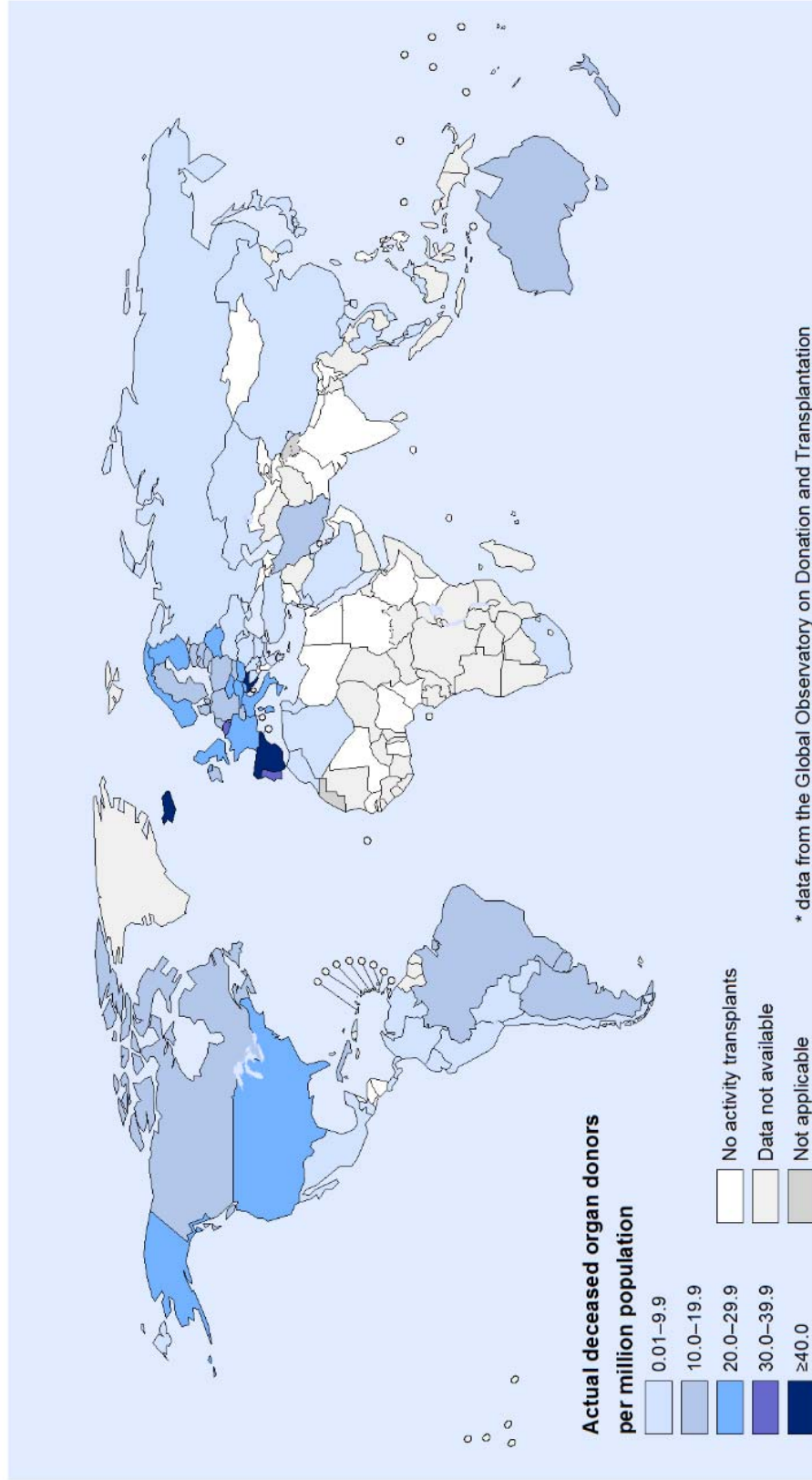
## GLOBAL ACTIVITY IN ORGAN TRANSPLANTATION 2015 ESTIMATES



**30557 ACTUAL DECEASED ORGAN DONORS (both DBD and DCD included)**

- Information of 111 Member States on organ transplantation activities is included in the GODT: 89 of 2015, 9 of 2014, 7 of 2013, 2 of 2012, 3 of 2011 and 1 of 2010.

## Actual donors from deceased persons, 2015\*



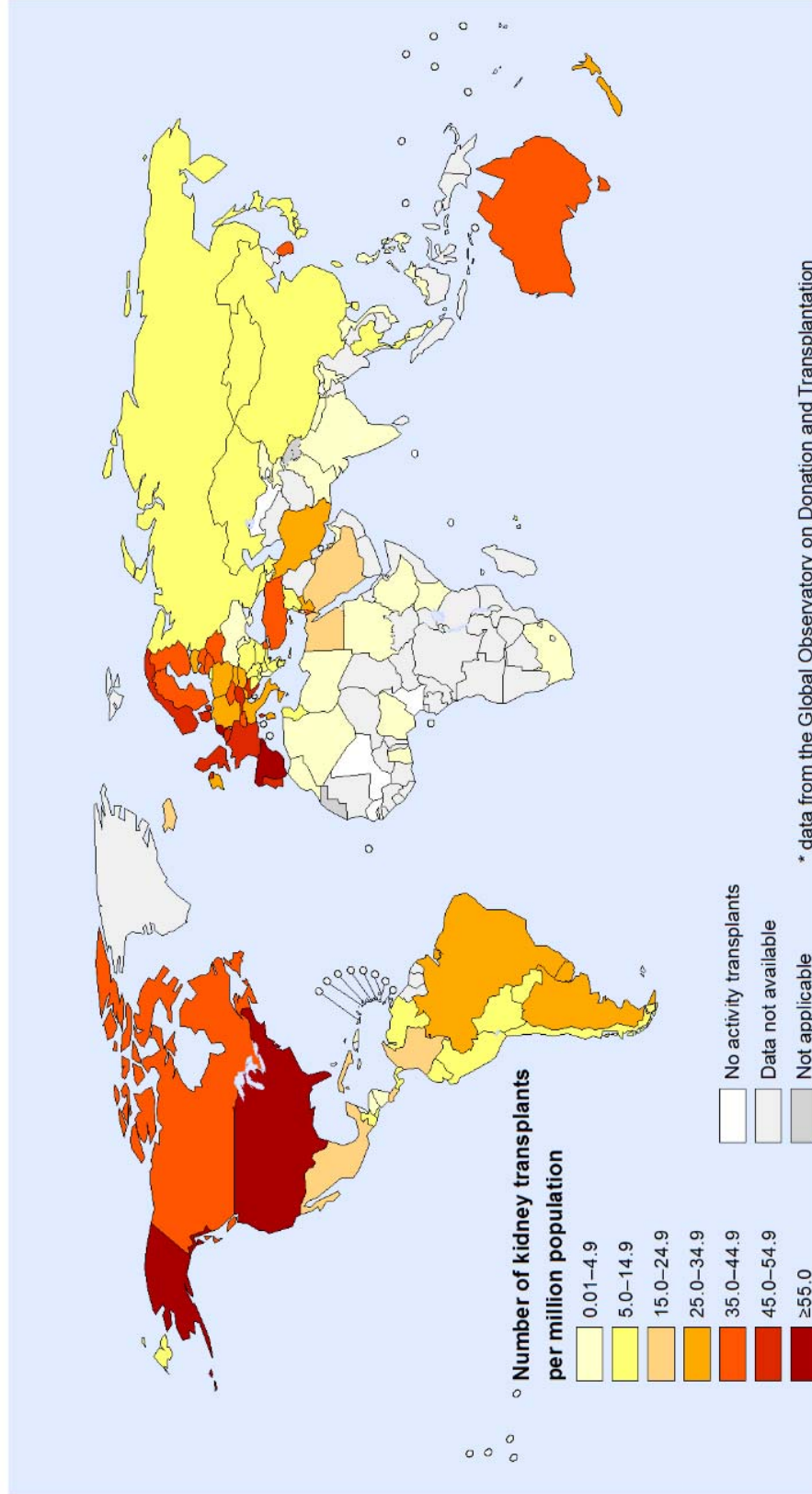
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Data Source: Global Observatory on Donation & Transplantation. Map Production: Information Evidence and Research (IER) World Health Organization



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## Kidney transplantation activities, 2015\*

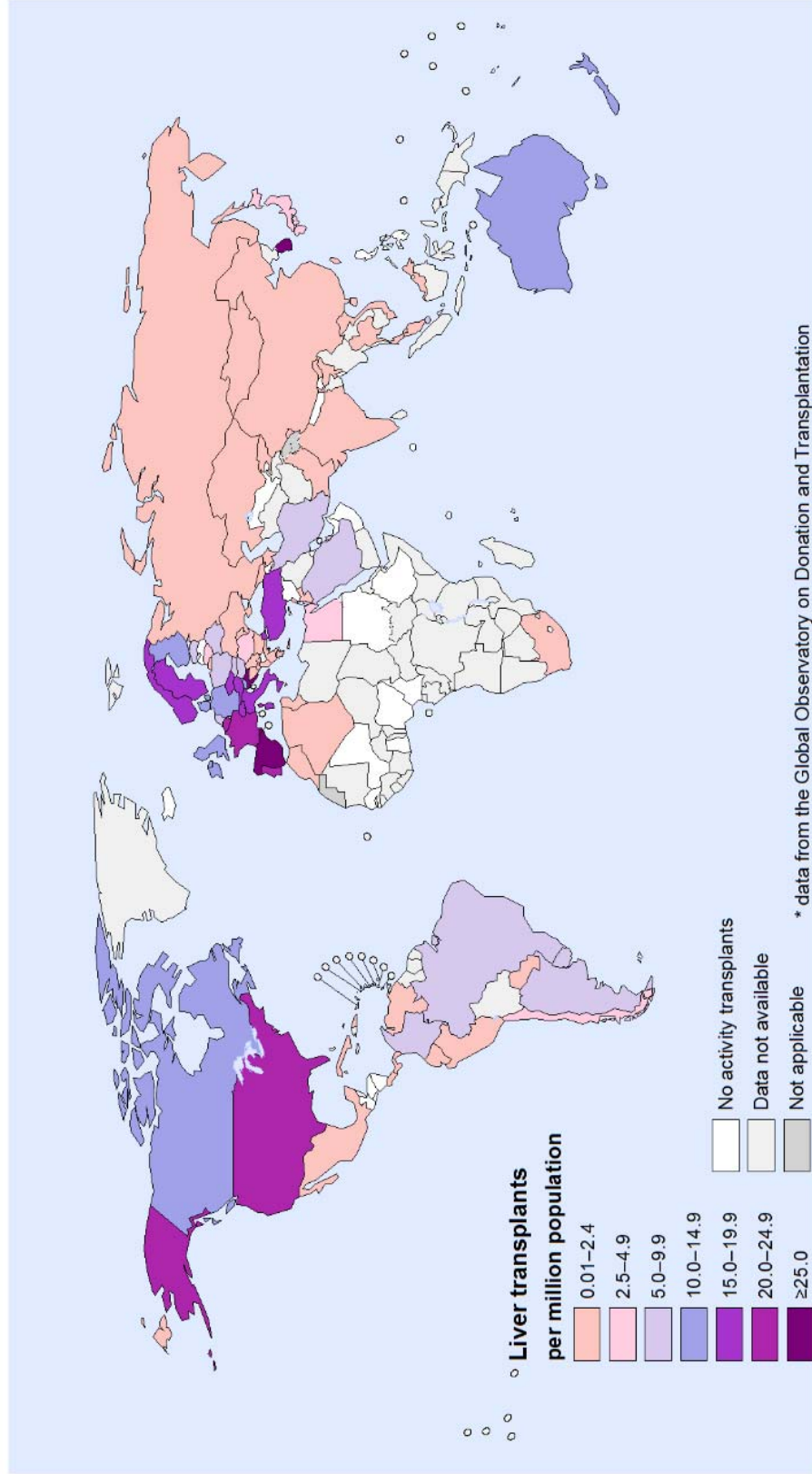


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## Liver transplantation activities, 2015\*



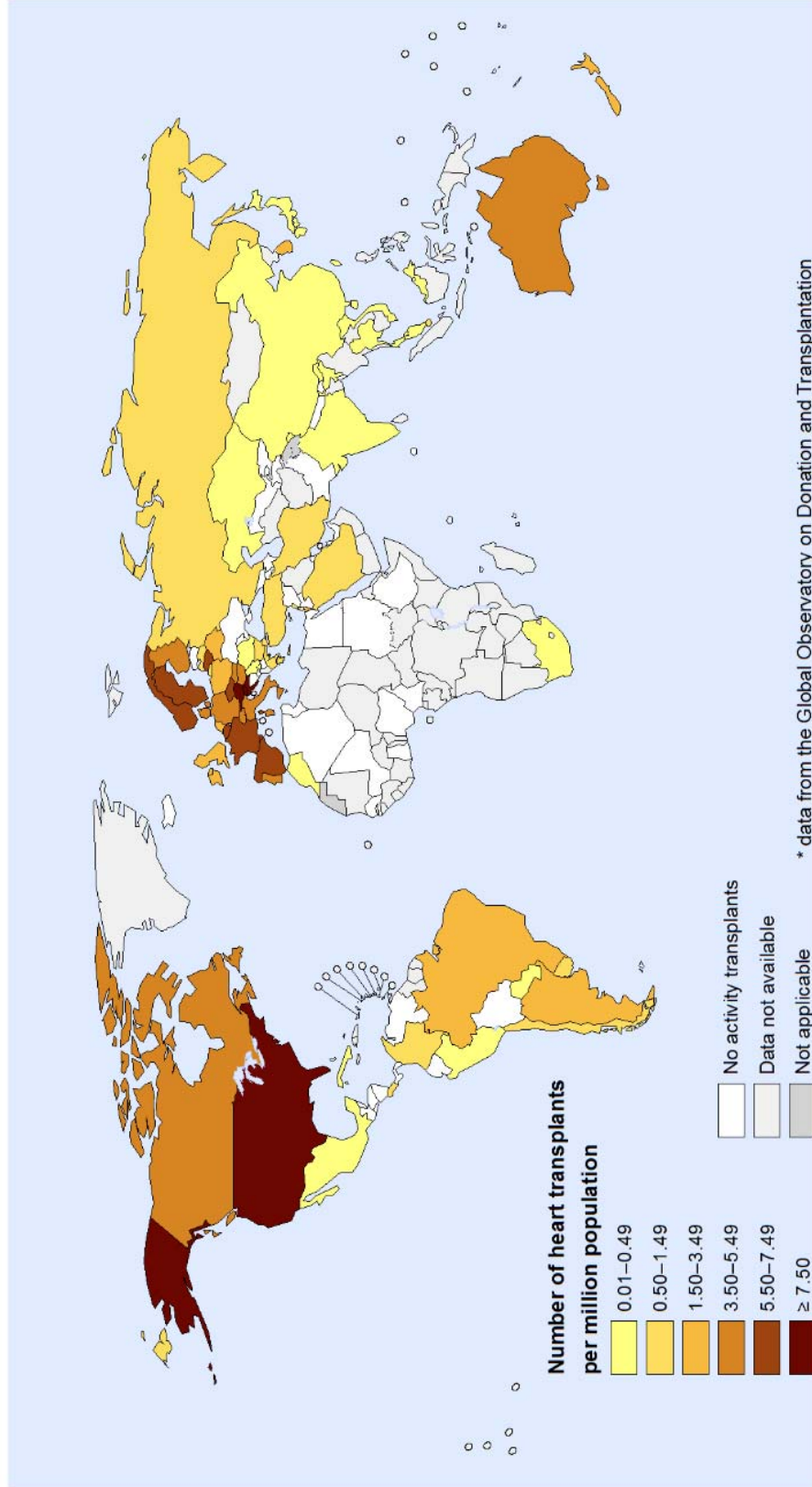
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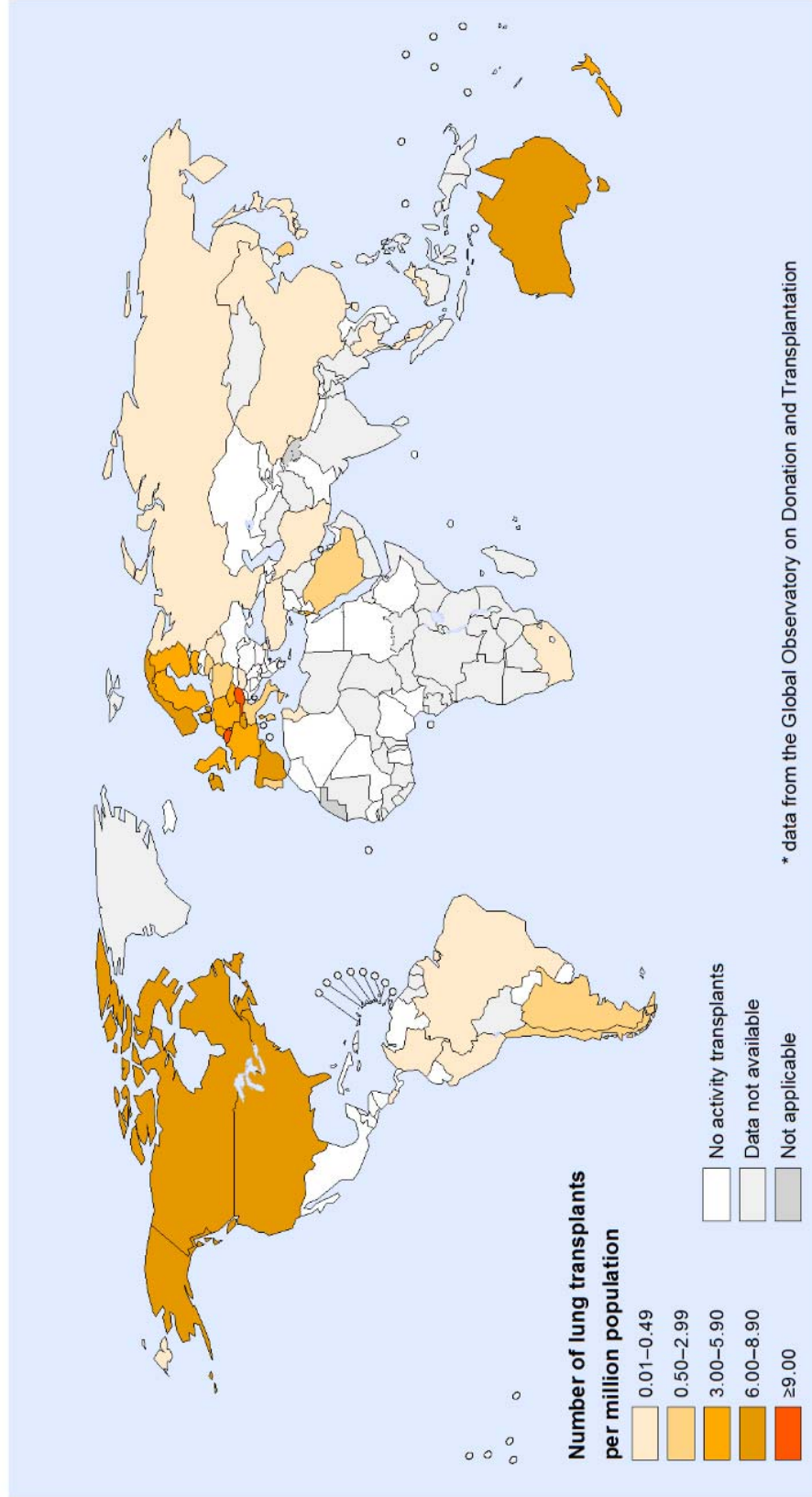
## Heart transplantation activities, 2015\*



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## Lung transplantation activities, 2015\*

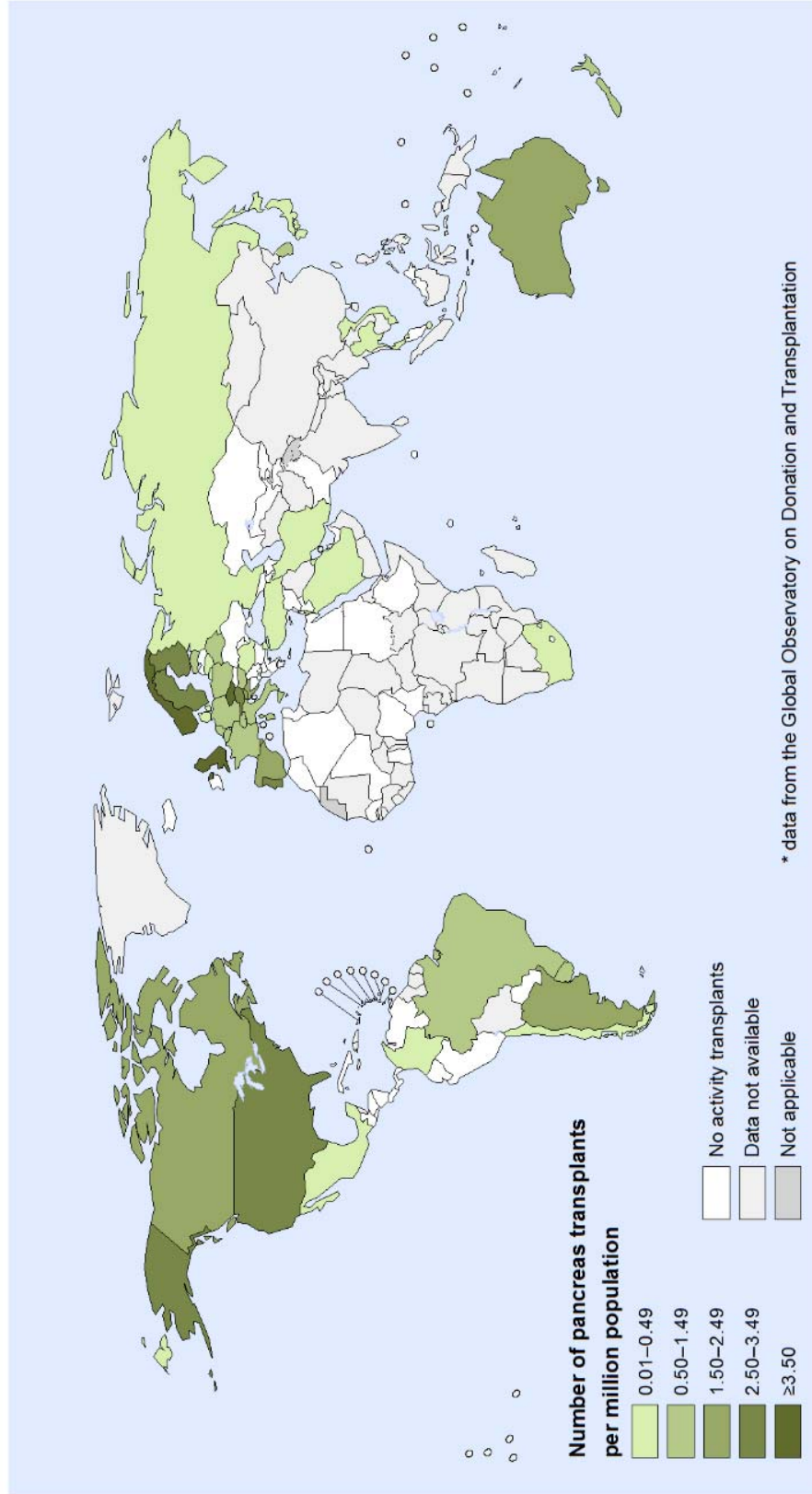


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Data Source: Global Observatory on Donation & Transplantation. Map Production: Information Evidence and Research (IER)  
World Health Organization



## Pancreas transplantation activities, 2015\*

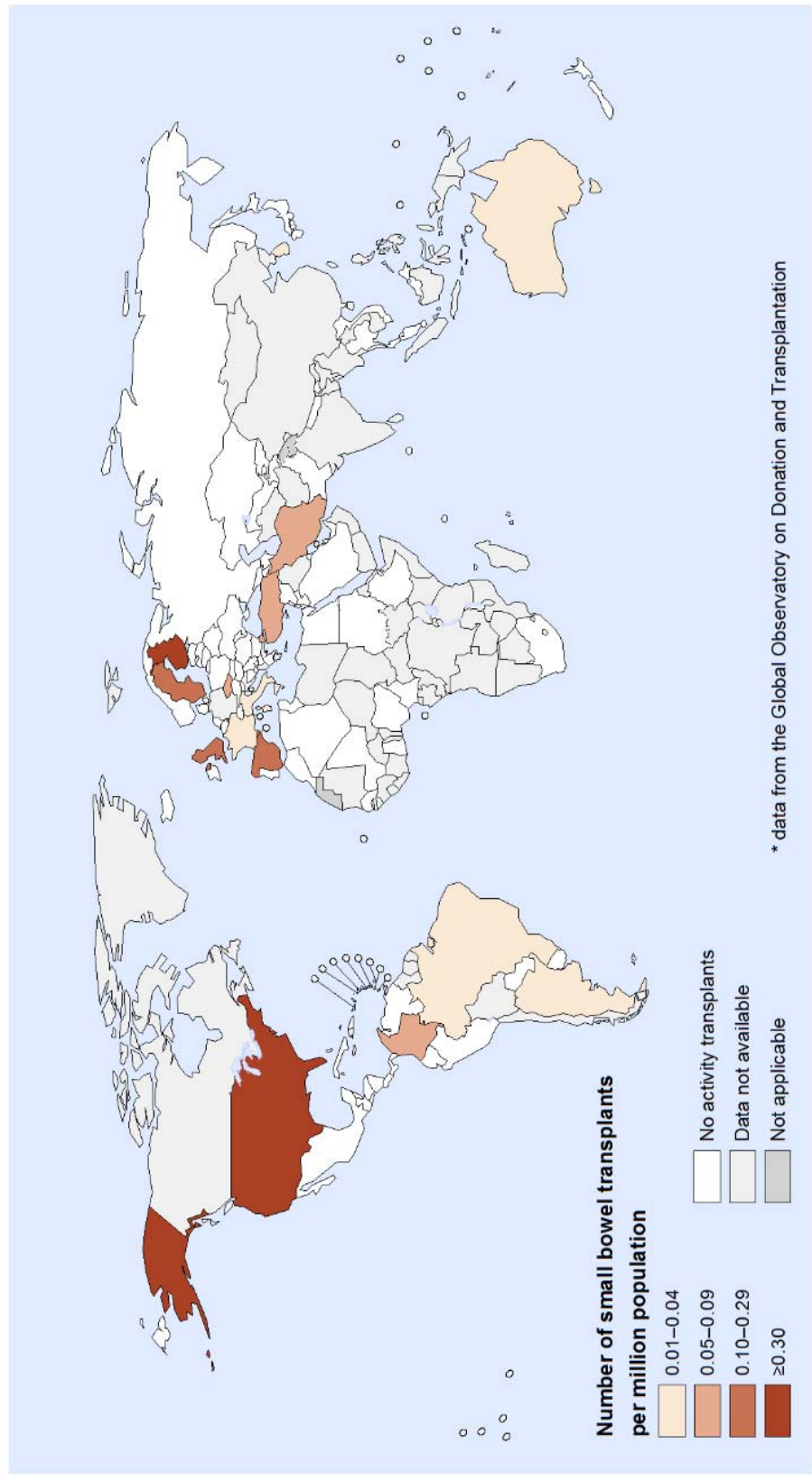


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## Small bowel transplantation activities, 2015\*



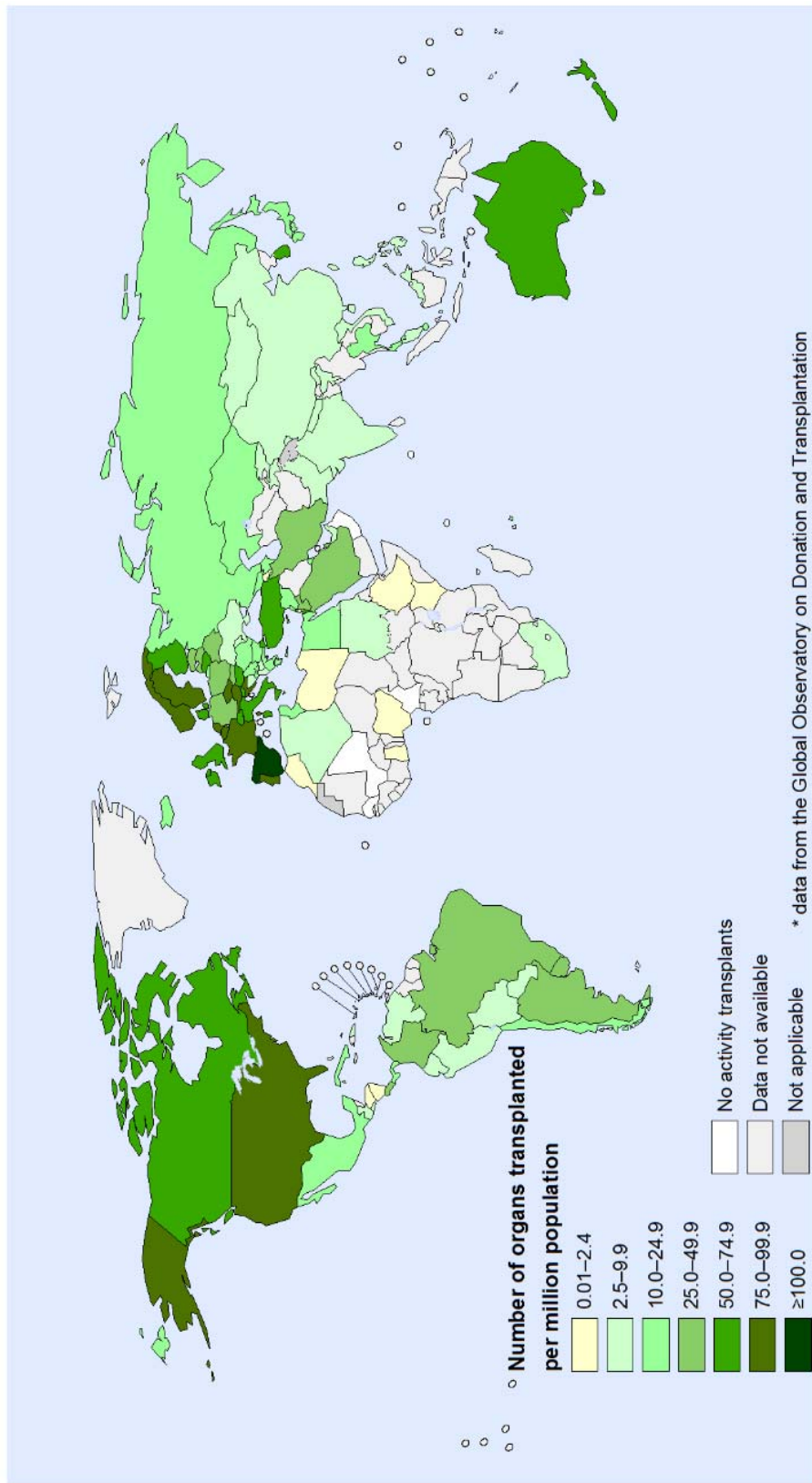
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Data Source: Global Observatory on Donation & Transplantation. Map Production: Information Evidence and Research (IER) World Health Organization



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## Global transplantation activities of solid organs, 2015\*



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Data Source: Global Observatory on Donation & Transplantation; Map Production: Information Evidence and Research (IER)  
 World Health Organization



# **International Data On Organ Donation And Transplantation Activity, Waiting List And Family Refusals. Year 2016**





**DONATION AND TRANSPLANTATION ACTIVITY**

**EUROPEAN UNION COUNTRIES**

COUNTRIES Population (million inhabitants): UNFPA	Germany 80.7		Greece 10.9		Hungary 9.8		Ireland 4.7		Italy 59.8		Latvia 2.0		Lithuania 2.9		Luxembourg 0.6		Malta 0.4	
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	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	857	10.6	51	4.7	182	18.6	77	16.4	1478	24.7	30	15.0	63	21.7	3	5.2	10	25.0
	0	0.0	0	0.0	0	0.0	3	0.6	20	0.3	11	5.5	2	0.7	0	0.0	0	0.0
	757	9.4	46	4.2	128	13.1	53	11.3	914	15.3	4	2.0	32	11.0	3	5.2	10	25.0
<b>DONATION</b>																		
<b>TRANSPLANTATION</b>																		
<b>KIDNEY</b>	2094	25.9	124	11.4	342	34.9	172	36.6	2076	34.7	59	29.5	111	38.3	0	0.0	20	50.0
Total TX. –all combinations included– % (TX. from living d. / Total TX.)	64	0.8	3	0.3	10	1.0	7	1.5	59	1.0	0	0.0	3	1.0	0	0.0	0	0.0
Paediatric <15 years	1497	18.6	75	6.9	308	31.4	122	26.0	1796	30.0	49	24.5	105	36.2	0	0.0	15	37.5
TX. from deceased donors	0	0.0	0	0.0	0	0.0	6	1.3	24	0.4	11	5.5	3	1.0	0	0.0	0	0.0
–TX. from DCD	1482	18.4	75	6.9	307	31.3	122	26.0	1668	27.9	49	24.5	105	36.2	0	0.0	15	37.5
–Single TX.	15	0.2	0	0.0	1	0.1	0	0.0	128	2.1	0	0.0	0	0.0	0	0.0	0	0.0
–Double TX.	597	7.4	49	4.5	34	3.5	50	10.6	280	4.7	10	5.0	6	2.1	0	0.0	5	12.5
TX. from living donors	593	7.3	49	4.5	34	3.5	50	10.6	278	4.6	10	5.0	6	2.1	0	0.0	4	10.0
–TX. from Related living donors	4	0.0	0	0.0	0	0.0	0	0.0	2	0.0	0	0.0	0	0.0	0	0.0	1	2.5
–TX. from Unrelated living donors																		
<b>LIVER</b>	888	11.0	21	1.9	81	8.3	58	12.3	1221	20.4	0	0.0	23	7.9	0	0.0	0	0.0
Total TX. –all combinations included–	109	1.4	0	0.0	3	0.3	0	0.0	78	1.3	0	0.0	0	0.0	0	0.0	0	0.0
Paediatric <15 years	73	0.9	0	0.0	0	0.0	0	0.0	98	1.6	0	0.0	0	0.0	0	0.0	0	0.0
Split TX.	12	0.1	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Domino TX.	50	0.6	0	0.0	0	0.0	0	0.0	7	0.1	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	10	0.2	0	0.0	0	0.0	0	0.0	0	0.0
TX. from DCD																		
<b>HEART</b>	297	3.7	6	0.6	58	5.9	15	3.2	266	4.4	3	1.5	15	5.2	0	0.0	1	2.5
Total TX. –all combinations included–	33	0.4	0	0.0	2	0.2	0	0.0	26	0.4	1	0.5	2	0.7	0	0.0	0	0.0
Paediatric <15 years																		
<b>HEART-LUNG</b>	7	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0
Total TX.	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
Paediatric <15 years																		
<b>LUNG</b>	328	4.1	0	0.0	17	1.7	35	7.4	147	2.5	0	0.0	3	1.0	0	0.0	0	0.0
Total TX. –all combinations included–	7	0.1	0	0.0	0	0.0	0	0.0	5	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Paediatric <15 years	38	0.5	0	0.0	1	0.1	20	4.3	19	0.3	0	0.0	0	0.0	0	0.0	0	0.0
–Single TX.	290	3.6	0	0.0	16	1.6	15	3.2	128	2.1	0	0.0	3	1.0	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	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	0	0.0	0	0.0	0	0.0
TX. from DCD (double + single)																		
<b>PANCREAS</b>	97	1.2	0	0.0	6	0.6	0	0.0	67	1.1	0	0.0	2	0.7	0	0.0	0	0.0
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	0	0.0	0	0.0
Paediatric <15 years	10	0.1	0	0.0	0	0.0	0	0.0	10	0.2	0	0.0	0	0.0	0	0.0	0	0.0
Pancreas TX. Alone	85	1.1	0	0.0	6	0.6	0	0.0	56	0.9	0	0.0	2	0.7	0	0.0	0	0.0
Kidney – Pancreas TX.	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
TX. from DCD																		
<b>SMALL BOWEL</b>	4	0.0	0	0.0	0	0.0	0	0.0	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total TX. –all combinations included–	2	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Paediatric <15 years																		
Small bowel TX. Alone																		
<b>RECIPIENTS</b>	3586	44.4	151	13.9	492	50.2	280	59.6	3698	61.8	62	31.0	151	52.1	0	0.0	21	52.5
Total number of patients transplanted	3	0.3	15	1.5	15	1.5	7	1.5	167	2.8	1	0.5	5	1.7	0	0.0	0	0.0
Paediatric <15 years	647	8.0	49	4.5	34	3.5	50	10.6	287	4.8	10	5.0	6	2.1	0	0.0	5	12.5
Patients transplanted from living donors																		



## DONATION AND TRANSPLANTATION ACTIVITY

COUNTRIES Population (million inhabitants): UNFPA	EUROPEAN UNION COUNTRIES										United Kingdom 65.1							
	Netherlands 17.0	Poland 38.6	Portugal 10.3	Romania 19.4	Slovakia 5.4	Slovenia 2.1	Spain 46.1	Sweden 9.9										
Actual deceased organ donors –both DBD and DCD included– Actual donors after circulatory death –DCD– Multiorgan donors	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP						
		250	14.7	542	14.0	337	32.7	124	6.4	72	13.3	42	20.0	2019	43.8	195	19.7	1401
	132	7.8	7	0.2	10	1.0	0	0.0	0	0.0	0	0.0	495	10.7	0	0.0	603	9.3
	187	11.0	356	9.2	223	21.7	93	4.8	46	8.5	32	15.2	1403	30.4	141	14.2	1019	15.7
	991	58.3	1108	28.7	499	48.4	265	13.7	143	26.5	46	21.9	2997	65.0	425	42.9	3328	51.1
<b>KIDNEY</b>																		
Total TX, –all combinations included– % (TX, from living d. / Total TX.)	57.0		4.5		13.0		100.0		13.3		4.3		11.4		31.8		30.6	
Paediatric <15 years	20	1.2	37	1.0	13	1.3	2	0.1	2	0.4	1	0.5	53	1.1	13	1.3	109	1.7
TX, from deceased donors	426	25.1	1058	27.4	434	42.1	224	11.5	124	23.0	44	21.0	2654	57.6	290	29.3	2310	35.5
–TX, from DCD	210	12.4	12	0.3	12	1.2	0	0.0	0	0.0	0	0.0	677	14.7	0	0.0	954	14.7
–Single TX.	425	25.0	1057	27.4	407	39.5	224	11.5	123	22.8	44	21.0	2642	57.3	287	29.0	2256	34.7
–Double TX.	1	0.1	1	0.0	27	2.6	0	0.0	1	0.2	0	0.0	12	0.3	3	0.3	54	0.8
TX, from living donors	565	33.2	50	1.3	65	6.3	41	2.1	19	3.5	2	1.0	343	7.4	135	13.6	1018	15.6
–TX, from Related living donors	442	26.0	48	1.2	65	6.3	41	2.1	19	3.5	2	1.0	319	6.9	133	13.4	819	12.6
–TX, from Unrelated living donors	123	7.2	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	24	0.5	2	0.2	199	3.1
	159	9.4	345	8.9	272	26.4	97	5.0	37	6.9	27	12.9	1159	25.1	199	20.1	956	14.7
<b>LIVER</b>																		
Total TX, –all combinations included–	26	1.5	39	1.0	10	1.0	0	0.0	0	0.0	0	0.0	59	1.3	18	1.8	99	1.5
Paediatric <15 years	2	0.1	0	0.0	5	0.5	0	0.0	0	0.0	0	0.0	2	0.0	24	2.4	101	1.6
Split TX.	0	0.0	0	0.0	15	1.5	0	0.0	0	0.0	0	0.0	5	0.1	0	0.0	3	0.0
Domino TX.	12	0.7	28	0.7	0	0.0	5	0.3	0	0.0	0	0.0	28	0.6	2	0.2	32	0.5
TX, from living donors	44	2.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	134	2.9	0	0.0	213	3.3
	35	2.1	101	2.6	42	4.1	11	0.6	20	3.7	31	14.8	281	6.1	64	6.5	209	3.2
<b>HEART</b>																		
Total TX, –all combinations included–	2	0.1	6	0.2	0	0.0	1	0.1	0	0.0	0	0.0	20	0.4	7	0.7	34	0.5
Paediatric <15 years	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1	0	0.0	2	0.0
<b>HEART-LUNG</b>																		
Total TX.	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
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	0.0	0	0.0
	73	4.3	35	0.9	26	2.5	0	0.0	0	0.0	0	0.0	307	6.7	62	6.3	168	2.6
<b>LUNG</b>																		
Total TX, –all combinations included–	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7	0.2	1	0.1	7	0.1
Paediatric <15 years	9	0.5	15	0.4	7	0.7	0	0.0	0	0.0	0	0.0	109	2.4	8	0.8	21	0.3
–Single TX.	64	3.8	20	0.5	19	1.8	0	0.0	0	0.0	0	0.0	198	4.3	54	5.5	147	2.3
–Double TX. (heart–lung TX. included)	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
TX, from living donors	31	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	33	0.7	0	0.0	22	0.3
TX, from DCD (double + single)																		
<b>PANCREAS</b>																		
Total TX, –all combinations included–	25	1.5	38	1.0	25	2.4	1	0.1	0	0.0	5	2.4	73	1.6	24	2.4	177	2.7
Paediatric <15 years	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.1	1	0.1	3	0.0
Pancreas TX, Alone	5	0.3	7	0.2	1	0.1	0	0.0	0	0.0	0	0.0	7	0.2	8	0.8	16	0.2
Kidney – Pancreas TX.	19	1.1	31	0.8	24	2.3	1	0.1	0	0.0	5	2.4	63	1.4	16	1.6	147	2.3
TX, from DCD	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.0	0	0.0	45	0.7
<b>SMALL BOWEL</b>																		
Total TX, –all combinations included–	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1	2	0.2	15	0.2
Paediatric <15 years	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.1	0	0.0	4	0.1
Small bowel TX, Alone	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	1	0.0
<b>RECIPIENTS</b>																		
Total number of patients transplanted	1265	74.4	1545	40.0	814	79.0	374	19.3	200	37.0	103	49.0	4714	102.3	759	76.7	4692	72.1
Paediatric <15 years	48	2.8	82	2.1	23	2.2	4	0.2	2	0.4	1	0.5	139	3.0	39	3.9	244	3.7
Patients transplanted from living donors	577	33.9	78.00	2.0	65	6.3	46	2.4	19	3.5	2	1.0	371	8.0	137	13.8	1050	16.1



**DONATION AND TRANSPLANTATION ACTIVITY**

**OTHER COUNTRIES**

COUNTRIES	Armenia		Australia		Belarus		Bosnia and Herzegovina		Canada		Georgia		Iceland		Israel		Kuwait		Malaysia		Montenegro	
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
<b>Population (million inhabitants): UNFPA</b>	<b>3.0</b>		<b>24.3</b>		<b>9.5</b>		<b>3.8</b>		<b>36.3</b>		<b>4.0</b>		<b>0.3</b>		<b>8.2</b>		<b>4.0</b>		<b>30.8</b>		<b>0.6</b>	
Actual deceased organ donors	0	0.0	503	20.7	222	23.4	5	1.3	731	20.1	0	0.0	9	30.0	85	10.4	18	4.5	6	0.2	0	0.0
-both DBD and DCD included-	0	0.0	128	5.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Actual donors after circulatory death -DCD-	0	0.0	0	0.0	154	16.2	5	1.3	0	0.0	0	0.0	5	16.7	63	7.7	1	0.3	1	0.0	0	0.0
Multiorgan donors	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
<b>DONATION</b>																						
<b>TRANSPLANTATION</b>																						
<b>KIDNEY</b>	7	2.3	1086	44.7	384	40.4	18	4.7	1730	47.7	19	4.8	5	16.7	352	42.9	77	19.3	48	1.6	2	3.3
Total TX, -all combinations included-	100.0		24.4		4.7		44.4		27.2		100.0		100.0		63.1		61.0		81.3		0.0	
% (TX, from living d. / Total TX.)																						
Paediatric <15 years	0	0.0	19	0.8	16	1.7	0	0.0	0	0.0	0	0.0	0	0.0	19	2.3	2	0.5	0	0.0	0	0.0
TX, from deceased donors	0	0.0	821	33.8	366	38.5	10	2.6	1259	34.7	0	0.0	0	0.0	130	15.9	30	7.5	9	0.3	0	0.0
-TX, from DCD	0	0.0	195	8.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.5	0	0.0	0	0.0	0	0.0
-Single TX.	0	0.0	801	33.0	366	38.5	0	0.0	0	0.0	0	0.0	0	0.0	124	15.1	30	7.5	9	0.3	0	0.0
-Double TX.	0	0.0	20	0.8	0	0.0	8	2.1	471	13.0	0	0.0	0	0.0	6	0.7	0	0.0	0	0.0	0	0.0
TX, from living donors	7	2.3	265	10.9	18	1.9	0	0.0	0	0.0	19	4.8	5	16.7	222	27.1	47	11.8	39	1.3	2	3.3
-TX, from Related living donors	7	2.3	219	9.0	18	1.9	0	0.0	0	0.0	19	4.8	5	16.7	93	11.3	47	11.8	39	1.3	2	3.3
-TX, from Unrelated living donors	0	0.0	46	1.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	129	15.7	0	0.0	0	0.0	0	0.0
<b>LIVER</b>	0	0.0	314	12.9	70	7.4	3	0.8	580	16.0	13	3.3	0	0.0	84	10.2	0	0.0	1	0.0	0	0.0
Total TX, -all combinations included-																						
Paediatric <15 years	0	0.0	56	2.3	9	0.9	0	0.0	0	0.0	0	0.0	0	0.0	15	1.8	0	0.0	0	0.0	0	0.0
Split TX.	0	0.0	65	2.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	0.6	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	0	0.0	0	0.0	0	0.0	0	0.0
TX, from living donors	0	0.0	2	0.1	6	0.6	0	0.0	73	2.0	13	3.3	0	0.0	8	1.0	0	0.0	0	0.0	0	0.0
TX, from DCD	0	0.0	15	0.6	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
<b>HEART</b>	0	0.0	125	5.1	44	4.6	0	0.0	204	5.6	0	0.0	0	0.0	22	2.7	0	0.0	0	0.0	0	0.0
Total TX, -all combinations included-																						
Paediatric <15 years	0	0.0	16	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.4	0	0.0	0	0.0	0	0.0
<b>HEART-LUNG</b>	0	0.0	7	0.3	1	0.1	0	0.0	5	0.1	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Total TX.	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	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	0	0.0	0	0.0	0	0.0	0	0.0
<b>LUNG</b>	0	0.0	199	8.2	2	0.2	0	0.0	302	8.3	0	0.0	0	0.0	50	6.1	0	0.0	0	0.0	0	0.0
Total TX, -all combinations included-																						
Paediatric <15 years	0	0.0	16	0.7	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
-Single TX.	0	0.0	6	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	23	2.8	0	0.0	0	0.0	0	0.0
-Double TX. (heart-lung TX. included)	0	0.0	193	7.9	2	0.2	0	0.0	0	0.0	0	0.0	0	0.0	27	3.3	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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TX, from DCD (double + single)	0	0.0	44	1.8	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
<b>PANCREAS</b>	0	0.0	51	2.1	2	0.2	0	0.0	95	2.6	0	0.0	0	0.0	12	1.5	1	0.3	0	0.0	0	0.0
Total TX, -all combinations included-																						
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	0.0	0	0.0	0	0.0	0	0.0
Pancreas TX. Alone	0	0.0	5	0.2	0	0.0	0	0.0	34	0.9	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0
Kidney - Pancreas TX.	0	0.0	46	1.9	2	0.2	0	0.0	61	1.7	0	0.0	0	0.0	10	1.2	1	0.3	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	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SMALL BOWEL</b>	0	0.0	1	0.0	0	0.0	0	0.0	5	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total TX, -all combinations included-																						
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	0.0	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	0	0.0	0	0.0	0	0.0	0	0.0
<b>RECIPIENTS</b>	7	2.3	1716	70.6	497	52.3	21	5.5	2897	79.8	32	8.0	5	16.7	504	61.5	77	19.3	49	1.6	2	3.3
Total number of patients transplanted																						
Paediatric <15 years	0	0.0	107	4.4	25	2.6	0	0.0	0	0.0	0	0.0	0	0.0	37	4.5	2	0.5	0	0.0	0	0.0
Patients transplanted from living donors	7	2.3	268	11.03	24	2.5	8	2.1	544	15.0	32	8.0	5	16.7	230	28.0	47	11.8	39	1.3	2	3.3



**DONATION AND TRANSPLANTATION ACTIVITY**

**LATINAMERICAN COUNTRIES**

COUNTRIES Population (million inhabitants): UNFPA	Argentina 43.8		Brazil 209.6		Chile 18.1		Colombia 48.7		Costa Rica 4.9		Cuba 11.4		Dominican Republic 10.6	
	Number	PMP	Number	PMP	Number	PMP	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	515 0 327	11.8 0.0 7.5	2983 0 2086	14.2 0.0 10.0	134 0 76	7.4 0.0 4.2	343 0 272	7.0 0.0 5.6	23 0 10	4.7 0.0 2.0	149 0 19	13.1 0.0 1.7	15 0 3	1.4 0.0 0.3
<b>DONATION</b>														
<b>TRANSPLANTATION</b>														
<b>KIDNEY</b>														
Total TX. –all combinations included– % (TX. from living d. / Total TX.)	1150	26.3	5600	26.7	304	16.8	762	15.6	110	22.4	185	16.2	56	5.3
Paediatric <15 years	63	1.4	310	1.5	19	1.0	27	0.6	7	1.4	3	0.3	0	0.0
TX. from deceased donors	746	17.0	4400	21.0	222	12.3	637	13.1	42	8.6	160	14.0	27	2.5
–TX. from DCD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
–Single TX.	743	16.9	4362	20.8	221	12.2	636	13.1	42	8.6	160	14.0	27	2.5
–Double TX.	3	0.1	38	0.2	1	0.1	1	0.0	0	0.0	0	0.0	0	0.0
TX. from living donors	404	9.2	1200	5.7	82	4.5	125	2.6	68	13.9	25	2.2	29	2.7
–TX. from Related living donors	392	8.9	1120	5.3	82	4.5	116	2.4	54	11.0	23	2.0	20	1.9
–TX. from Unrelated living donors	12	0.3	80	0.4	0	0.0	9	0.2	14	2.9	2	0.2	9	0.8
<b>LIVER</b>														
Total TX. –all combinations included–	368	8.4	1880	9.0	93	5.1	240	4.9	13	2.7	20	1.8	3	0.3
Paediatric <15 years	71	1.6	180	0.9	22	1.2	37	0.8	4	0.8	7	0.6	0	0.0
Split TX.	41	0.9	0	0.0	0	0.0	6	0.1	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	38	0.9	157	0.7	14	0.8	41	0.8	3	0.6	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	0	0.0
<b>HEART</b>														
Total TX. –all combinations included–	115	2.6	357	1.7	23	1.3	58	1.2	5	1.0	2	0.2	0	0.0
Paediatric <15 years	10	0.2	32	0.2	1	0.1	2	0.0	0	0.0	0	0.0	0	0.0
<b>HEART-LUNG</b>														
Total TX.	1	0.0	0	0.0	1	0.1	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
<b>LUNG</b>														
Total TX. –all combinations included–	34	0.8	92	0.4	19	1.0	16	0.3	2	0.4	0	0.0	0	0.0
Paediatric <15 years	1	0.0	5	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
–Single TX.	16	0.4	31	0.1	15	0.8	3	0.1	0	0.0	0	0.0	0	0.0
–Double TX. (heart-lung TX. included)	18	0.4	61	0.3	4	0.2	13	0.3	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	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	0	0.0
<b>PANCREAS</b>														
Total TX. –all combinations included–	48	1.1	134	0.6	4	0.2	5	0.1	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
Pancreas TX. Alone	2	0.0	26	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Kidney – Pancreas TX.	46	1.1	108	0.5	4	0.2	5	0.1	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	0	0.0
<b>SMALL BOWEL</b>														
Total TX. –all combinations included–	4	0.1	1	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0
Paediatric <15 years	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Small bowel TX. Alone	4	0.1	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0
<b>RECIPIENTS</b>														
Total number of patients transplanted	1719	39.2	7924	37.8	432	23.9	1068	21.9	130	26.5	207	18.2	59	5.6
Paediatric <15 years	148	3.4	527	2.5	41	2.3	66	1.4	11	2.2	10	0.9	0	0.0
Patients transplanted from living donors	442	10.1	1357	6.5	96	5.3	166	3.4	71	14.5	27	2.4	29	2.7

## DONATION AND TRANSPLANTATION ACTIVITY

## LATINAMERICAN COUNTRIES

COUNTRIES Population (million inhabitants): UNFPA	Ecuador 16.4		Guatemala 16.7		Honduras 8.2		Mexico 128.6		Panama 4.0		Paraguay 6.7		Uruguay 3.4	
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Actual deceased organ donors –both DBD and DCD included–	83	5.1	8	0.5	0	0.0	470	3.7	29	7.3	11	1.6	57	16.8
Actual donors after circulatory death –DCD–	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Multiorgan donors	31	1.9			0	0.0	452	3.5	10	2.5	6	0.9	22	6.5
<b>DONATION</b>														
<b>TRANSPLANTATION</b>														
<b>KIDNEY</b>														
Total TX. –all combinations included–	139	8.5	122	7.3	9	1.1	2971	23.1	53	13.3	47	7.0	118	34.7
% (TX. from living d. / Total TX.)		4.3		87.7		100.0		71.4		11.3		53.2		11.9
Paediatric <15 years	4	0.2	14	0.8	5	0.6	150	1.2	0	0.0	3	0.4	0	0.0
TX. from deceased donors	133	8.1	15	0.9	0	0.0	851	6.6	47	11.8	22	3.3	104	30.6
–TX. from DCD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
–Single TX.							844	6.6			22	3.3	104	30.6
–Double TX.							7	0.1			0	0.0		0.0
TX. from living donors	6	0.4	107	6.4	9	1.1	2120	16.5	6	1.5	25	3.7	14	4.1
–TX. from Related living donors	6	0.4	94	5.6	9	1.1	1795	14.0	6	1.5	25	3.7	14	4.1
–TX. from Unrelated living donors	0	0.0	13	0.8	0	0.0	325	2.5	0	0.0	0	0.0	0	0.0
<b>LIVER</b>														
Total TX. –all combinations included–	31	1.9	0	0.0	0	0.0	178	1.4	11	2.8	6	0.9	25	7.4
Paediatric <15 years	0	0.0	0	0.0	0	0.0	20	0.2	0	0.0	0	0.0	6	1.8
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	0	0.0	0	0.0	0	0.0	3	0.0	0	0.0	0	0.0	2	0.6
TX. from DCD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>HEART</b>														
Total TX. –all combinations included–	0	0.0	0	0.0	0	0.0	34	0.3	1	0.3	2	0.3	6	1.8
Paediatric <15 years	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	1	0.3
<b>HEART-LUNG</b>														
Total TX.	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
<b>LUNG</b>														
Total TX. –all combinations included–	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	3	0.9
Paediatric <15 years	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
–Single TX.														
–Double TX. (heart–lung TX. included)	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	0	0.0	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	0	0.0
<b>PANCREAS</b>														
Total TX. –all combinations included–	0	0.0	0	0.0	0	0.0	3	0.0	0	0.0	0	0.0	2	0.6
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	0	0.0	0	0.0	3	0.0	0	0.0	0	0.0	0	0.0
Kidney – Pancreas TX.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.6
TX. from DCD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>SMALL BOWEL</b>														
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
<b>RECIPIENTS</b>														
Total number of patients transplanted	170	10.4	122	7.3	9	1.1	3186	24.8	65	16.3	55	8.2	154	45.3
Paediatric <15 years	4	0.2	14	0.8	5	0.6	171	1.3	0	0.0	3	0.4	7	2.1
Patients transplanted from living donors	6	0.4	107	6.4	9	1.1	2123	16.5	6	1.5	25	3.7	16	4.7

**WAITING LIST**

**EUROPEAN UNION COUNTRIES**

<b>COUNTRIES</b>	<b>Austria</b>	<b>Belgium</b>	<b>Bulgaria</b>	<b>Croatia</b>	<b>Cyprus</b>	<b>Czech Republic</b>	<b>Denmark</b>	<b>Estonia</b>	<b>Finland</b>	<b>France</b>
<b>Population (million inhabitants): UNFPA</b>	<b>8.6</b>	<b>11.4</b>	<b>7.1</b>	<b>4.2</b>	<b>1.2</b>	<b>10.5</b>	<b>5.7</b>	<b>1.3</b>	<b>5.5</b>	<b>64.7</b>
<b>KIDNEY</b>										
<b>N° TX CENTRES</b>	4	7	4	4	1	7	3	1	1	44
Patients included on the WL for the first time in the course of 2016	465	498	190	260	12	492	348	60	319	5181
Total number of patients ever active on the WL during 2016	1090	579	1151	371	68	504	710	112	639	17698
Patients awaiting for a transplant (only active candidates) on 31/12/2016	587	797	1019	171	52	402	402	50	310	7669
Patients who died while on the WL during 2016	25	34	91	4	5	40	21	5	4	297
Patients on dialyses on 31/12/2016	4451		973	2550	600			347		
<b>LIVER</b>										
<b>N° TX CENTRES</b>	3	6	3	2	0	2	1	1	1	21
Patients included on the WL for the first time in the course of 2016	171	345	31	162	0	208	65	12	67	1824
Total number of patients ever active on the WL during 2016	235	376	75	224	0	61	88	15	71	3089
Patients awaiting for a transplant (only active candidates) on 31/12/2016	50	174	55	61	0	79	22	2	6	702
Patients who died while on the WL during 2016	14	45	8	24	0	9	1	2	2	162
<b>HEART</b>										
<b>N° TX CENTRES</b>	3	7	2	2	0	2	2	0	1	24
Patients included on the WL for the first time in the course of 2016	79	105	19	59	0	122	31	0	38	573
Total number of patients ever active on the WL during 2016	131	223	45	83	0	77	47	0	74	951
Patients awaiting for a transplant (only active candidates) on 31/12/2016	55	117	21	34	0	68	16	0	32	237
Patients who died while on the WL during 2016	8	20	14	9	0	12	2	0	3	79
<b>LUNG</b>										
<b>N° TX CENTRES</b>	2	5		0	0	1	1	1	1	12
Patients included on the WL for the first time in the course of 2016	161	162	6	0	0	62	41	7	41	359
Total number of patients ever active on the WL during 2016	235	171	14	0	0	49	63	14	51	519
Patients awaiting for a transplant (only active candidates) on 31/12/2016	90	122	6	0	0	50	28	7	30	94
Patients who died while on the WL during 2016	15	7	5	0	0	21	5	3	0	11
<b>PANCREAS</b>										
<b>N° TX CENTRES</b>	3	6		1	1	1	1	1	1	10
Patients included on the WL for the first time in the course of 2016	20	29	2	13	0	50	4	4	22	116
Total number of patients ever active on the WL during 2016	34	97	10	23	3	14	18	7	33	337
Patients awaiting for a transplant (only active candidates) on 31/12/2016	9	65	10	14	2	23	9	5	4	121
Patients who died while on the WL during 2016	1	2	0	1	1	0	1	0	0	1
<b>SMALL BOWEL</b>										
<b>N° TX CENTRES</b>	1	6		1	0	1	0	0	1	2
Patients included on the WL for the first time in the course of 2016	0	0	0	0	0	2	0	0	2	2
Total number of patients ever active on the WL during 2016	1	0	1	0	0	1		0	2	6
Patients awaiting for a transplant (only active candidates) on 31/12/2016	0	0	0	0	0	0		0	1	1
Patients who died while on the WL during 2016	0	0	0	0	0	0		0	0	

## WAITING LIST

## EUROPEAN UNION COUNTRIES

COUNTRIES	Germany 80.7	Greece 10.9	Hungary 9.8	Ireland 4.7	Italy 59.8	Latvia 2.0	Lithuania 2.9	Luxembourg 0.6	Malta 0.4
<b>Population (million inhabitants): UNFPA</b>									
<b>KIDNEY</b>									
<b>N° TX CENTRES</b>	38	5	4	1	42	1	2	0	1
Patients included on the WL for the first time in the course of 2016	2901	196	444	221	2138	44	125	0	26
Total number of patients ever active on the WL during 2016	11129	1344	1182	705	9093	94	237	0	85
Patients awaiting for a transplant (only active candidates) on 31/12/2016	7876	1193	748	481	6830	19	104	0	24
Patients who died while on the WL during 2016	438	21	33	12	163	0	11	0	20
Patients on dialyses on 31/12/2016		10548	6281	2075		1000	1400	0	285
<b>LIVER</b>									
<b>N° TX CENTRES</b>	22	1	1	1	21	0	2	0	0
Patients included on the WL for the first time in the course of 2016	1284	64	124	80	1464	0	49	0	2
Total number of patients ever active on the WL during 2016	2730	196	229	109	2479	0	77	0	4
Patients awaiting for a transplant (only active candidates) on 31/12/2016	1157	146	118	33	1022	0	34	0	
Patients who died while on the WL during 2016	369	28	18	8	102	0	7	0	1
<b>HEART</b>									
<b>N° TX CENTRES</b>	24	1	2	1	17	1	2	0	1
Patients included on the WL for the first time in the course of 2016	450	12	78	18	412	7	18	0	
Total number of patients ever active on the WL during 2016	1248	48	121	37	1106	13	52	0	
Patients awaiting for a transplant (only active candidates) on 31/12/2016	725	36	48	16	742	7	30	0	
Patients who died while on the WL during 2016	114	6	10	3	70	2	6	0	
<b>LUNG</b>									
<b>N° TX CENTRES</b>	16		1	1	11	0	1	0	0
Patients included on the WL for the first time in the course of 2016	415		26	64	196	0	6	0	2
Total number of patients ever active on the WL during 2016	841		36	96	570	0	20	0	3
Patients awaiting for a transplant (only active candidates) on 31/12/2016	390		7	42	347	0	10	0	2
Patients who died while on the WL during 2016	61		6	11	56	0	7	0	1
<b>PANCREAS</b>									
<b>N° TX CENTRES</b>	27		2	1	17	0	1	0	0
Patients included on the WL for the first time in the course of 2016	196		22		87	0	3	0	0
Total number of patients ever active on the WL during 2016	456		36		330	0	7	0	0
Patients awaiting for a transplant (only active candidates) on 31/12/2016	275		23		251	0	3	0	0
Patients who died while on the WL during 2016	22		1		6	0	1	0	0
<b>SMALL BOWEL</b>									
<b>N° TX CENTRES</b>	9		0	0	3	0	0	0	0
Patients included on the WL for the first time in the course of 2016			0	0	2	0	0	0	0
Total number of patients ever active on the WL during 2016			0	0	22	0	0	0	0
Patients awaiting for a transplant (only active candidates) on 31/12/2016	9		0	0	12	0	0	0	0
Patients who died while on the WL during 2016			0	0	0	0	0	0	0

**WAITING LIST**

**EUROPEAN UNION COUNTRIES**

<b>COUNTRIES</b>	<b>Netherlands</b>	<b>Poland</b>	<b>Portugal</b>	<b>Romania</b>	<b>Slovakia</b>	<b>Slovenia</b>	<b>Spain</b>	<b>Sweden</b>	<b>United Kingdom</b>
<b>Population (million inhabitants): UNFPA</b>	<b>17.0</b>	<b>38.6</b>	<b>10.3</b>	<b>19.4</b>	<b>5.4</b>	<b>2.1</b>	<b>46.1</b>	<b>9.9</b>	<b>65.1</b>
<b>KIDNEY</b>									
<b>N° TX CENTRES</b>									
Patients included on the WL for the first time in the course of 2016	1415	21	8	5	4	1	40	4	24
Total number of patients ever active on the WL during 2016	1991	1268	342	693	152	41	399	399	2395
Patients awaiting for a transplant (only active candidates) on 31/12/2016	629	2720	2395	4826	465	91	837	837	8937
Patients who died while on the WL during 2016	66	1069	2011	4276	278	44	4309	446	5215
Patients on dialyses on 31/12/2016		78	30	11	27	1	11	11	301
		21000	12458	9800	3300	1450	27727		3032
<b>LIVER</b>									
<b>N° TX CENTRES</b>									
Patients included on the WL for the first time in the course of 2016	219	8	3	3	2	1	25	2	7
Total number of patients ever active on the WL during 2016	329	398	249	174	37	31	1324	228	335
Patients awaiting for a transplant (only active candidates) on 31/12/2016	125	569	404	550	102	49	2115	280	1734
Patients who died while on the WL during 2016	28	173	110	372	27	17	645	57	549
		41	25	27	17	3	78	3	71
<b>HEART</b>									
<b>N° TX CENTRES</b>									
Patients included on the WL for the first time in the course of 2016	59	6	4	3	1	1	16	2	7
Total number of patients ever active on the WL during 2016	161	235	61	44	28	53	372	69	148
Patients awaiting for a transplant (only active candidates) on 31/12/2016	101	599	73	154	63	95	527	102	574
Patients who died while on the WL during 2016	3	388	17	18	26	50	152	30	261
		78	10	5	8	6	23	1	35
<b>LUNG</b>									
<b>N° TX CENTRES</b>									
Patients included on the WL for the first time in the course of 2016	121	5	1	1	0	0	8	2	6
Total number of patients ever active on the WL during 2016	298	69	4	4	0	0	352	71	212
Patients awaiting for a transplant (only active candidates) on 31/12/2016	195	112	59	3	0	0	668	106	627
Patients who died while on the WL during 2016	18	57	18	1	0	0	289	31	380
		18	1	1	0	0	19	6	72
<b>PANCREAS</b>									
<b>N° TX CENTRES</b>									
Patients included on the WL for the first time in the course of 2016	51	5	2	2	1	1	13	3	11
Total number of patients ever active on the WL during 2016	103	50	46	20	0	1	82	24	154
Patients awaiting for a transplant (only active candidates) on 31/12/2016	58	113	83	132	0	10	160	46	464
Patients who died while on the WL during 2016	3	48	34	89	0	5	76	13	203
		7	1	6	0	0	4	0	19
<b>SMALL BOWEL</b>									
<b>N° TX CENTRES</b>									
Patients included on the WL for the first time in the course of 2016		1	0	0	0	0	3	1	4
Total number of patients ever active on the WL during 2016		0	0	0	0	0	8	2	2
Patients awaiting for a transplant (only active candidates) on 31/12/2016	0	2	0	0	0	0	18	4	26
Patients who died while on the WL during 2016		0	0	0	0	0	11	1	7
		0	0	0	0	0	3	0	3

## WAITING LIST

## OTHER COUNTRIES

COUNTRIES	Armenia	Australia	Belarus	Bosnia and Herzegovina	Canada	Georgia	Iceland	Israel	Kuwait	Malaysia	Montenegro
Population (million inhabitants): UNFPA	3.0	24.3	9.5	3.8	36.3	4.0	0.3	8.2	4.0	30.8	0.6
<b>KIDNEY</b>											
<b>N° TX CENTRES</b>	1	20	6	2	25	3	1	6	1	3	1
Patients included on the WL for the first time in the course of 2016		760	315			0	0	363	106	1414	3
Total number of patients ever active on the WL during 2016		1901	779			0	0	847	205	7031	38
Patients awaiting for a transplant (only active candidates) on 31/12/2016		1061	380	219	2260	0	0	37	111	5941	
Patients who died while on the WL during 2016		8	15		100	0	0	4	4	457	2
Patients on dialyses on 31/12/2016	800	12461	1999			0	0	6542	1800	39683	197
<b>LIVER</b>											
<b>N° TX CENTRES</b>	0	8	1	1	9	2	0	3	0	1	0
Patients included on the WL for the first time in the course of 2016		336	84			0	0	174		5	3
Total number of patients ever active on the WL during 2016		523	175	24		0	0	104		12	7
Patients awaiting for a transplant (only active candidates) on 31/12/2016		136	95		354	0	0	50		7	5
Patients who died while on the WL during 2016		8	4		90	0	0			0	1
<b>HEART</b>											
<b>N° TX CENTRES</b>	0	5	3	0	11	0	0	2	0	1	0
Patients included on the WL for the first time in the course of 2016		133	80	7		0	0	51		1	1
Total number of patients ever active on the WL during 2016		186	144			0	0	69		7	3
Patients awaiting for a transplant (only active candidates) on 31/12/2016		44	67		139	0	0	10		5	2
Patients who died while on the WL during 2016		4	13		26	0	0			0	1
<b>LUNG</b>											
<b>N° TX CENTRES</b>	0	5	2	0	6	0	0	2	0	1	0
Patients included on the WL for the first time in the course of 2016		234	22			0	0	95		7	1
Total number of patients ever active on the WL during 2016		319	29			0	0	89		14	1
Patients awaiting for a transplant (only active candidates) on 31/12/2016		77	25		215	0	0	25		10	0
Patients who died while on the WL during 2016		11	1		45	0	0			3	1
<b>PANCREAS</b>											
<b>N° TX CENTRES</b>	0	2	1	0	8	0	0	2	1	0	0
Patients included on the WL for the first time in the course of 2016		69	15			0	0	2		0	0
Total number of patients ever active on the WL during 2016		157	60			0	0	7		0	0
Patients awaiting for a transplant (only active candidates) on 31/12/2016		81	56		25	0	0	0		0	0
Patients who died while on the WL during 2016		4	2		0	0	0			0	0
<b>SMALL BOWEL</b>											
<b>N° TX CENTRES</b>	0	1	1	0	3	0	0	1	0	0	0
Patients included on the WL for the first time in the course of 2016		5	0			0	0			0	0
Total number of patients ever active on the WL during 2016		5	1			0	0			0	0
Patients awaiting for a transplant (only active candidates) on 31/12/2016		4	0		5	0	0			0	0
Patients who died while on the WL during 2016		0	1		0	0	0			0	0



WAITING LIST

OTHER COUNTRIES

COUNTRIES	New Zealand	Norway	Republic of Moldova	Russian Federation	Saudi Arabia	Sudan	Switzerland	Syrian Arab Republic	The former Yugoslav Republic of Macedonia	Turkey	United States of America
<b>Population (million inhabitants): UNFPA</b>	<b>4.6</b>	<b>5.3</b>	<b>4.1</b>	<b>143.4</b>	<b>32.2</b>	<b>41.2</b>	<b>8.4</b>	<b>18.6</b>	<b>2.1</b>	<b>79.6</b>	<b>324.1</b>
<b>KIDNEY</b>											
<b>N° TX CENTRES</b>	3	1	1	35	13	7	6	8	2	70	240
Patients included on the WL for the first time in the course of 2016		307	28	1372	721	65	418			6232	35976
Total number of patients ever active on the WL during 2016		611	69	4818	4851	345				28430	102454
Patients awaiting for a transplant (only active candidates) on 31/12/2016		350	37	3606	2708	44	531			21914	61446
Patients who died while on the WL during 2016		14	4	77	324	14	26			1804	5147
Patients on dialyses on 31/12/2016			502	35000	16315	7010	450				723413
<b>LIVER</b>											
<b>N° TX CENTRES</b>	1	1	1	22	4		3	1	0	38	143
Patients included on the WL for the first time in the course of 2016	70	111	47	573	180		207			2098	12305
Total number of patients ever active on the WL during 2016	94	131	108	1409	625					4447	24604
Patients awaiting for a transplant (only active candidates) on 31/12/2016	24	17	74	899	200		114			2317	11631
Patients who died while on the WL during 2016	4	7	25	85	210		29			706	1883
<b>HEART</b>											
<b>N° TX CENTRES</b>	1	1	0	11	2		3		0	13	136
Patients included on the WL for the first time in the course of 2016	18	26	3	342	32		73			387	4360
Total number of patients ever active on the WL during 2016	31	43	3	497	75					1042	7731
Patients awaiting for a transplant (only active candidates) on 31/12/2016	14	14	3	240	23		56			750	3124
Patients who died while on the WL during 2016	2	2	0	37	25		13			215	477
<b>LUNG</b>											
<b>N° TX CENTRES</b>	1	1	0	2	1		2		0	6	70
Patients included on the WL for the first time in the course of 2016	24	38		21	30		45			37	2762
Total number of patients ever active on the WL during 2016	29	94		66	55					97	4046
Patients awaiting for a transplant (only active candidates) on 31/12/2016	8	44		45	22		19			46	1144
Patients who died while on the WL during 2016	2	10		5	17		9			24	273
<b>PANCREAS</b>											
<b>N° TX CENTRES</b>	1	1	0	4	2		2		0	10	137
Patients included on the WL for the first time in the course of 2016	4	23		72	15		24			33	1514
Total number of patients ever active on the WL during 2016	11	51		145	31					302	2956
Patients awaiting for a transplant (only active candidates) on 31/12/2016	4	28		137	15		16			278	1140
Patients who died while on the WL during 2016	0	0		2	5		1			14	139
<b>SMALL BOWEL</b>											
<b>N° TX CENTRES</b>	0	0	0	0	1		2		0	1	40
Patients included on the WL for the first time in the course of 2016		0		0	0		0			4	199
Total number of patients ever active on the WL during 2016		0		0	0		0			7	396
Patients awaiting for a transplant (only active candidates) on 31/12/2016		0		0	0		0			1	203
Patients who died while on the WL during 2016		0		0	0		0			4	18

## WAITING LIST

## LATINAMERICAN COUNTRIES

COUNTRIES	Argentina 43.8	Brazil 209.6	Chile 18.1	Colombia 48.7	Costa Rica 4.9	Cuba 11.4	Dominican Republic 10.6
<b>POPULATION (million inhabitants): UNFPA</b>							
<b>KIDNEY</b>							
<b>N° TX CENTRES</b>	53	130	22	23	4	9	8
Patients included on the WL for the first time in the course of 2016	2005	11408	618			500	85
Total number of patients ever active on the WL during 2016	8250	29772	1912			800	123
Patients awaiting for a transplant (only active candidates) on 31/12/2016	6245	19927	1271	2368		385	94
Patients who died while on the WL during 2016	482	1265	26	63			2
Patients on dialyses on 31/12/2016	29246	93606	21134			3205	2300
<b>LIVER</b>							
<b>N° TX CENTRES</b>	23	58	9	9	3	3	1
Patients included on the WL for the first time in the course of 2016	740	3365	147			20	12
Total number of patients ever active on the WL during 2016	2008	4673	256			32	20
Patients awaiting for a transplant (only active candidates) on 31/12/2016	1268	1230	96	130		25	9
Patients who died while on the WL during 2016	204	772	31	33			2
<b>HEART</b>							
<b>N° TX CENTRES</b>	20	41	7	8	1	1	2
Patients included on the WL for the first time in the course of 2016	36	572	31		7	5	0
Total number of patients ever active on the WL during 2016	184	823	51			5	0
Patients awaiting for a transplant (only active candidates) on 31/12/2016	148	271	21	23	4	3	0
Patients who died while on the WL during 2016	40	120	3	6	1		0
<b>LUNG</b>							
<b>N° TX CENTRES</b>	7	6	5	4	1	0	0
Patients included on the WL for the first time in the course of 2016	50	139	29		3	0	0
Total number of patients ever active on the WL during 2016	241	345	78			0	0
Patients awaiting for a transplant (only active candidates) on 31/12/2016	191	175	40	28	2	0	0
Patients who died while on the WL during 2016	46	45	7		1	0	0
<b>PANCREAS</b>							
<b>N° TX CENTRES</b>	17	15	3	5	1	0	0
Patients included on the WL for the first time in the course of 2016	1	342	14			0	0
Total number of patients ever active on the WL during 2016	14	843	27			0	0
Patients awaiting for a transplant (only active candidates) on 31/12/2016	15	496	23		2	0	0
Patients who died while on the WL during 2016	1	56	0			0	0
<b>SMALL BOWEL</b>							
<b>N° TX CENTRES</b>	2	2	2	4	1	0	0
Patients included on the WL for the first time in the course of 2016	3	3	1			0	0
Total number of patients ever active on the WL during 2016	10	9	2			0	0
Patients awaiting for a transplant (only active candidates) on 31/12/2016	4	1	1	3	1	0	0
Patients who died while on the WL during 2016	0	0	1			0	0

WAITING LIST

LATINAMERICAN COUNTRIES

COUNTRIES	Ecuador	Guatemala	Honduras	Mexico	Panama	Paraguay	Uruguay
Population (million inhabitants): UNFPA	16.4	16.7	8.2	128.6	4.0	6.7	3.4
<b>KIDNEY</b>							
<b>N° TX CENTRES</b>	6		3	248	1	4	3
Patients included on the WL for the first time in the course of 2016	119			4681	74	38	167
Total number of patients ever active on the WL during 2016	567			17002	238	64	597
Patients awaiting for a transplant (only active candidates) on 31/12/2016	153			12743	157	42	425
Patients who died while on the WL during 2016	8			297	25	0	28
Patients on dialyses on 31/12/2016	567		2300		2115	1100	3038
<b>LIVER</b>							
<b>N° TX CENTRES</b>	6		0	74	1	1	1
Patients included on the WL for the first time in the course of 2016	8			288		10	31
Total number of patients ever active on the WL during 2016	34			681		10	54
Patients awaiting for a transplant (only active candidates) on 31/12/2016	3			410		2	23
Patients who died while on the WL during 2016	0			29		2	5
<b>HEART</b>							
<b>N° TX CENTRES</b>	0		0	50	1	3	3
Patients included on the WL for the first time in the course of 2016				60		4	19
Total number of patients ever active on the WL during 2016				104		10	39
Patients awaiting for a transplant (only active candidates) on 31/12/2016				53		7	28
Patients who died while on the WL during 2016				6		1	4
<b>LUNG</b>							
<b>N° TX CENTRES</b>	0		0	10	0	0	1
Patients included on the WL for the first time in the course of 2016				1		0	8
Total number of patients ever active on the WL during 2016				2		1	19
Patients awaiting for a transplant (only active candidates) on 31/12/2016				1		1	17
Patients who died while on the WL during 2016				0		0	0
<b>PANCREAS</b>							
<b>N° TX CENTRES</b>	0		0	22	0	0	1
Patients included on the WL for the first time in the course of 2016				4		0	
Total number of patients ever active on the WL during 2016				23		0	
Patients awaiting for a transplant (only active candidates) on 31/12/2016				19		0	
Patients who died while on the WL during 2016				0		0	
<b>SMALL BOWEL</b>							
<b>N° TX CENTRES</b>	0		0	3	0	0	0
Patients included on the WL for the first time in the course of 2016				0		0	
Total number of patients ever active on the WL during 2016				0		0	
Patients awaiting for a transplant (only active candidates) on 31/12/2016				0		0	
Patients who died while on the WL during 2016				0		0	

## FAMILY REFUSALS

## EUROPEAN UNION COUNTRIES

COUNTRIES	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Rep.	Denmark	Estonia	Finland	France	
<b>Population (million inhabitants): UNFPA</b>	8.6	11.4	7.1	4.2	1.2	10.5	5.7	1.3	5.5	64.7	
Number of interviews, asking for consent to donation	294	402	26	186	10			41			
Number of family refusals (%)	80 (27.2)	51 (12.7)	9 (34.6)	20 (10.8)	4 (40.0)			11 (26.8)			
COUNTRIES	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta		
<b>Population (million inhabitants): UNFPA</b>	80.7	10.9	9.8	4.7	59.8	2.0	2.9	0.6	0.4		
Number of interviews, asking for consent to donation	242	2488	72	25	2488	103					
Number of family refusals (%)	16 (6.6)	807 (32.4)	36 (50.0)	9 (36.0)	26 (25.2)						
COUNTRIES	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom		
<b>Population (million inhabitants): UNFPA</b>	17.0	38.6	10.3	19.4	5.4	2.1	46.1	9.9	65.1		
Number of interviews, asking for consent to donation	677	112	352	112	2391						
Number of family refusals (%)	71 (10.5)	11 (9.8)	57 (16.2)	13 (23.6)	372 (15.6)						
COUNTRIES	Armenia	Australia	Belarus	Bosnia and Herzegovina	Canada	Georgia	Iceland	Israel	Kuwait	Malaysia	Montenegro
<b>Population (million inhabitants): UNFPA</b>	3.0	24.3	9.5	3.8	36.3	4.0	0.3	8.2	4.0	30.8	0.6
Number of interviews, asking for consent to donation	0	1074	17	12 (70.6)	352	112	55	137	227	15	
Number of family refusals (%)	0	428 (39.9)	9	57 (16.2)	11 (9.8)	13 (23.6)	137	52 (38.0)	168 (74.0)	15 (100.0)	
COUNTRIES	New Zealand	Norway	Republic of Moldova	Russian Federation	Saudi Arabia	Sudan	Switzerland	Syrian Arab Republic	The former Yugoslav Republic of Macedonia	Turkey	United States of America
<b>Population (million inhabitants): UNFPA</b>	4.6	5.3	4.1	143.4	32.2	41.2	8.4	18.6	2.1	79.6	324.1
Number of interviews, asking for consent to donation	168	46	333	0	0	0	0	1988			
Number of family refusals (%)	13 (28.3)	230 (69.1)	230 (69.1)	0	0	0	0	1425 (71.7)			
COUNTRIES	Argentina	Brazil	Chile	Colombia	Costa Rica	Cuba	Dominican Republic				
<b>Population (million inhabitants): UNFPA</b>	43.8	209.6	18.1	48.7	4.9	11.4	10.6				
Number of interviews, asking for consent to donation	1177	5921	272	714	42	161	72				
Number of family refusals (%)	434 (36.9)	2561 (43.3)	139 (51.1)	286 (40.1)	6 (14.3)	12 (7.5)	40 (55.6)				
COUNTRIES	Ecuador	Guatemala	Honduras	Mexico	Panama	Paraguay	Uruguay				
<b>Population (million inhabitants): UNFPA</b>	16.4	16.7	8.2	128.6	4.0	6.7	3.4				
Number of interviews, asking for consent to donation				28	96						
Number of family refusals (%)				17 (60.7)	2 (2.1)						

## LATINAMERICAN COUNTRIES

# **International Data On Tissues And Hematopoietic Stem Cell Donation And Transplantation Activity. Year 2016**



**Data provided by National Competent Authorities:**

**EUROPE**

**Austria**

**Belgium**

**Bulgaria**

Yordan Peev

**Cyprus**

Carolina Stylianou

**Czech Republic**

Eva Křemenová

**Germany**

Ralf Tönjes

**Denmark**

**Estonia**

Siim Suutre

**Spain**

Bibiana Ramos  
Esteban Molano

**Finland**

Anne Tammiruusu

**France**

Samuel Arrabal

**Greece**

**Croatia**

Milena Ivanković

**Hungary**

János Sajtos

**Ireland**

**Italy**

Fiorenza Bariani  
Letizia Lombardini

**Lithuania**

Justina Davainytė

**Luxembourg**

Martine Debacker

**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**

Gorazd Čebulc

**Slovakia**

Magdaléna Krátka  
Daniel Kuba

**Turkey**

**United Kingdom**

**LATIN AMERICA**

**Argentina**

M<sup>a</sup> del Carmen Bacqué

**Brasil**

Heder Murari Borba

**Chile**

Jose Luis Rojas

**Colombia**

**Costa Rica**

Martha Romero P.  
Roselyn Serrano V.  
Juan Carlos Valverde M.

**Cuba**

Alexander Mármol

**Dominican Republic**

Fernando R. Morales  
Alexander Altman

**Ecuador**

José Javier Bermúdez

**Guatemala**

**Honduras**

**Mexico**

J. Salvador Aburto  
José Madrigal

**Panama**

Cesar J. Cuero  
Camilo Chong

**Paraguay**

Hugo A. Espinoza C.

**Uruguay**

Milka Bengochea

PRELIMINARY DATA ON TISSUES - YEAR 2016

EUROPEAN UNION COUNTRIES

Country	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy		
Population (Source: eurostat)	8,690,076	11,311,117	7,153,784	4,190,669	848,319	10,553,843	5,659,715	1,315,944	5,487,308	66,759,950	82,175,684	10,783,748	9,830,485	4,724,720	60,665,551		
TYPE OF TISSUE	NO DATA																
CORNEA	N. of tissue donations	57	293	0	0	851	19	188	5,601	0	0	NO DATA	NO DATA	NO DATA	NO DATA	8,089	
	Tissue donation PMP	8.0	69.9	0.0	0.0	80.6	14.4	34.3	83.9	0.0	0.0	NA	NA	NA	NA	133.3	
	N° of tissue retrieved	113	579	0	0	1,804	38	390	11,136	51.79	5.11	NA	NA	NA	NA	16,178	
	N° tissue processed (units)	113	587	0	0	670	41	390	11,136	9,358	485	NA	NA	NA	NA	NA	
	N° tissue distributed (units)	109	340	0	0	735	40	259	0	6,668	421	NA	NA	NA	NA	7,277	
	N° tissue imported (units)	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NA
	N° tissue exported (units)	109	330	0	0	157	0	0	0	178	0	0	0	0	0	0	533
	N° of tissues transplanted	109	310	0	0	493	36	2	0	4,459	NA	NA	NA	NA	NA	NA	NA
	N° of patients transplanted	109	310	0	0	493	45	0	0	4,166	NA	NA	NA	NA	NA	NA	NA
	N° of transplants	109	320	0	0	494	48	0	0	4,166	NA	NA	NA	NA	NA	NA	6,029
BLOOD VESSELS	N. of tissue donations	0	7	0	0	9	21	19	8,635	0	0	NO DATA	NO DATA	NO DATA	NO DATA	578	
	Tissue donation PMP	0.0	1.7	0.0	0.0	0.9	16.0	3.5	129.3	0.0	0.0	NA	NA	NA	NA	9.5	
	N° of tissue retrieved	0	10	0	0	9	33	47	9,313	162	7	NA	NA	NA	NA	770	
	N° tissue processed (units)	0	10	0	0	16	36	NA	9,313	206	12	NA	NA	NA	NA	NA	
	N° tissue distributed (units)	0	5	0	0	26	32	0	2,508	88	19	NA	NA	NA	NA	409	
	N° tissue imported (units)	0	0	0	0	0	0	0	42	2	0	NA	NA	NA	NA	NA	
	N° tissue exported (units)	0	0	0	0	0	0	0	54	0	0	NA	NA	NA	NA	7	
	N° of tissues transplanted	0	5	0	0	26	11	NA	2,508	NA	NA	NA	NA	NA	NA	NA	
	N° of patients transplanted	0	4	0	0	21	4	NA	1,683	NA	NA	NA	NA	NA	NA	NA	
	N° of transplants	0	4	0	0	26	32	NA	1,683	NA	NA	NA	NA	NA	NA	NA	254
CARDIAC TISSUE	N. of tissue donations	0	4	0	0	124	0	49	347	0	0	NO DATA	NO DATA	NO DATA	NO DATA	241	
	Tissue donation PMP	0.0	1.0	0.0	0.0	11.7	0.0	8.9	5.2	0.0	0.0	NA	NA	NA	NA	4.0	
	N° of tissue retrieved	0	5	0	0	124	0	35	805	111	20	NA	NA	NA	NA	446	
	N° tissue processed (units)	0	5	0	0	124	0	NA	805	285	26	NA	NA	NA	NA	NA	
	N° tissue distributed (units)	0	3	0	0	114	NE	33	199	77	44	NA	NA	NA	NA	202	
	N° tissue imported (units)	0	0	0	0	0	0	0	41	115	0	NA	NA	NA	NA	NA	
	N° tissue exported (units)	0	0	0	0	0	0	6	103	90	0	NA	NA	NA	NA	15	
	N° of tissues transplanted	0	3	0	0	111	NE	NA	199	NA	NA	NA	NA	NA	NA	NA	
	N° of patients transplanted	0	3	0	0	111	NE	NA	160	NA	NA	NA	NA	NA	NA	NA	
	N° of transplants	0	3	0	0	113	NE	NA	160	NA	NA	NA	NA	NA	NA	NA	169
MUSCULOSKELETAL	N. of tissue donations	6,402	172	0	0	1,699	158	931	26,837	0	0	NO DATA	NO DATA	NO DATA	NO DATA	4,259	
	Tissue donation PMP	894.9	41.0	0.0	0.0	167.0	120.1	1,678	409.7	0.0	0.0	NA	NA	NA	NA	70.3	
	N° of tissue retrieved	6,402	252	0	0	4,936	163	1,339	27,174	20,283	646	NA	NA	NA	NA	9,857	
	N° tissue processed (units)	245	248	0	0	4,278	347	NA	26,070	37,603	5,997	NA	NA	NA	NA	14,858	
	N° tissue distributed (units)	177	142	0	0	3,639	341	NA	47,528	71,566	4,956	NA	NA	NA	NA	NA	
	N° tissue imported (units)	0	57	0	0	0	0	0	381	12,268	0	NA	NA	NA	NA	NA	
	N° tissue exported (units)	5,704	0	0	0	1,019	0	0	4,952	38,829	0	NA	NA	NA	NA	146	
	N° of tissues transplanted	130	202	8	8	766	208	NA	47,528	NA	NA	NA	NA	NA	NA	NA	
	N° of patients transplanted	117	160	8	8	585	246	NA	35,909	NA	NA	NA	NA	NA	NA	NA	
	N° of transplants	130	162	8	8	750	283	NA	35,909	NA	NA	NA	NA	NA	NA	NA	7,654
PLACENTA/AMNIOTIC MEMBRANE	N. of tissue donations	14	9	0	0	12	23	7	111	0	0	NO DATA	NO DATA	NO DATA	NO DATA	279	
	Tissue donation PMP	2.0	2.1	0.0	0.0	1.1	17.5	1.3	1.7	0.0	0.0	NA	NA	NA	NA	4.6	
	N° of tissue retrieved	14	9	0	0	18	23	126	111	143	0	NA	NA	NA	NA	268	
	N° tissue processed (units)	57	277	0	0	3,272	121	NA	5,497.5	4,306	131	NA	NA	NA	NA	1,119	
	N° tissue distributed (units)	58	170	0	0	2,267	78	258	3,159	4,066	102	NA	NA	NA	NA	NA	
	N° tissue imported (units)	0	0	0	0	0	0	0	0	81	0	NA	NA	NA	NA	NA	
	N° tissue exported (units)	0	0	0	0	119	0	0	17	813	0	NA	NA	NA	NA	5	
	N° of tissues transplanted	184	170	0	0	54	4	NA	3,159	NA	NA	NA	NA	NA	NA	NA	
	N° of patients transplanted	141	101	0	0	54	67	NA	2,359	NA	NA	NA	NA	NA	NA	NA	
	N° of transplants	177	127	0	0	54	78	NA	2,359	NA	NA	NA	NA	NA	NA	NA	888
SKIN	N. of tissue donations	77	10	0	0	36	6	28	266	0	0	NO DATA	NO DATA	NO DATA	NO DATA	389	
	Tissue donation PMP	10.8	2.4	0.0	0.0	3.4	4.6	5.1	266	0.0	0.0	NA	NA	NA	NA	6.4	
	N° of tissue retrieved (cm.)	126,346	73	0	0	36	143,993	NA	511,685.5	59,877	225	NA	NA	NA	NA	1,042,458	
	N° tissue processed (units)	0	482	0	0	1,513	15	0	UK	720	594	NA	NA	NA	NA	5,818	
	N° tissue distributed (units)	0	18	0	0	1,42,200	0	0	30,000	254	0	NA	NA	NA	NA	0	
	N° tissue imported (units)	62	0	0	0	0	0	0	0	666	0	NA	NA	NA	NA	0	
	N° of tissues transplanted	0	500	0	0	1,444	0	0	454,347.5	NA	NA	NA	NA	NA	NA	NA	
	N° of patients transplanted	0	6	0	0	0	7	NA	158	NA	NA	NA	NA	NA	NA	NA	
	N° of transplants	0	14	0	0	0	15	NA	158	NA	NA	NA	NA	NA	NA	NA	1,540
	OTHERS	N. of tissue donations	63	6	0	0	60	0	0	UK	0	0	NO DATA	NO DATA	NO DATA	NO DATA	114
Tissue donation PMP		8.8	1.4	0.0	0.0	5.7	0.0	0.0	UK	0.0	0.0	NA	NA	NA	NA	1.9	
N° of tissue retrieved		63	6	0	0	60	0	0	UK	229	26	NA	NA	NA	NA	114	
N° tissue processed (units)		0	6	1,557	0	0	0	NA	UK	218	26	NA	NA	NA	NA	NA	
N° tissue distributed (units)		0	1	0	0	0	0	0	UK	32,604	4	NA	NA	NA	NA	27	
N° tissue imported (units)		36	0	1,377	0	0	0	36	UK	146	0	NA	NA	NA	NA	NA	
N° tissue exported (units)		0	1	0	0	1	0	0	UK	166	0	NA	NA	NA	NA	0	
N° of tissues transplanted		0	1	0	0	1	0	0	UK	NA	NA	NA	NA	NA	NA	NA	
N° of patients transplanted		0	1	0	0	1	0	0	UK	NA	NA	NA	NA	NA	NA	NA	
N° of transplants		0	1	0	0	1	0	0	UK	NA	NA	NA	NA	NA	NA	NA	21

## PRELIMINARY DATA ON TISSUES - YEAR 2016

Country	EUROPEAN UNION COUNTRIES											OTHER COUNTRIES			
	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	Norway	Republic of Moldova
<b>Population (Source: eurostat)</b>	1.968.957	2.888.558	576.249	434.403	16.979.120	37.967.209	10.341.330	19.760.314	5.426.252	2.064.188	46.445.828	9.851.017	65.382.556	5.210.721	3.553.056
<b>TYPE OF TISSUE</b>	TYPE OF DATA														
<b>CORNEA</b>	14	38	128	15	1.476	747	528	89	128	104	3827	667	NO DATA	207	21
N. of tissue donations	7.1	13.2	222.1	34.5	86.9	19.7	51.1	4.5	23.6	50.4	82.4	67.7		397	5.9
Tissue donation PMP	14	75	128	16	2.944	1.417	1.029	99	245	104	7.511	1.442		317	42
N. of tissue retrieved	6	76	NA	NE	3.489	1.417	1.037	0	245	0	6.824	1.444		304	42
N. of tissue processed (units)	11	73	NA	NE	2.999	1.083	919	0	172	0	3.818	1.091		84	28
N. of tissue distributed (units)	5	NE	NA	NE	28	0	188	62	54	0	69	0		103	0
N. of tissue imported (units)	5	NE	NA	NE	257	0	0	0	0	0	71	11		0	0
N. of tissue exported (units)	NA	73	128	15	1.510	NA	905	141	226	105	4.207	1.091		280	28
N. of tissues transplanted	NA	73	85	15	1.504	NA	901	141	222	82	0	997		275	28
N. of patients transplanted	NA	73	128	15	1.505	NA	915	141	226	82	4.052	1.017		285	28
<b>BLOOD VESSELS</b>	NE	UK	0	NE	31	28	0	0	0	39	149	144		0	10
N. of tissue donations	NE	UK	0.0	NE	1.8	0.7	0.0	0.0	0.0	0.0	2.8	14.6		0.0	2.8
Tissue donation PMP	NE	UK	0	NE	30	36	0	0	0	39	421	262		0	24
N. of tissue retrieved	NE	UK	NA	NE	31	0	0	0	0	39	414	263		0	0
N. of tissue processed (units)	NE	UK	NA	NE	5	19	0	0	0	28	260	2		0	0
N. of tissue distributed (units)	NE	UK	NA	NE	5	0	0	0	0	10	0	0		0	0
N. of tissue imported (units)	NE	UK	NA	NE	0	0	0	0	2.591	0	1	0		0	0
N. of tissue exported (units)	NE	UK	NA	NE	0	NA	0	0	0	0	158	0		0	34
N. of tissues transplanted	NE	UK	NA	NE	0	NA	0	0	0	26	0	0		0	22
N. of patients transplanted	NE	UK	NA	NE	0	NA	0	0	0	26	109	0		0	22
<b>CARDIAC TISSUE</b>	NE	0	2	NE	202	232	29	0	1	0	249	139		0	0
N. of tissue donations	NE	0.0	0.0	NE	11.9	6.1	5.4	0.0	0.2	0.0	5.4	14.1		0.0	0.0
Tissue donation PMP	NE	0	0	NE	202	232	58	0	1	0	465	445		0	0
N. of tissue retrieved	NE	0	NA	NE	151	170	17	0	2	0	465	445		0	0
N. of tissue processed (units)	NE	0	NA	NE	93	83	17	0	9	0	169	226		0	0
N. of tissue distributed (units)	NE	NE	2	NE	33	0	1	0	0	0	0	0		0	0
N. of tissue imported (units)	NE	NE	NA	NE	18	0	0	0	0	0	78	0		0	0
N. of tissue exported (units)	NE	0	NA	NE	108	NA	16	0	9	0	69	226		0	0
N. of tissues transplanted	NE	0	NA	NE	79	NA	16	0	9	0	0	221		0	0
N. of patients transplanted	NE	0	1	NE	108	NA	16	0	9	0	66	224		0	0
<b>MUSCULOSKELETAL</b>	43	33	0	NE	3.296	333	56	494	507	0	2.649	1.580		471	57
N. of tissue donations	21.8	11.4	0.0	NE	194.1	8.8	5.4	25.0	93.4	0.0	57.0	160.4		90.4	16.0
Tissue donation PMP	43	33	0	NE	3.732	3.287	299	632	3.511	0	2.2515	1.582		435	96
N. of tissue retrieved	69	NA	0	NE	33.454	11.402	550	284	3.946	0	24.606	1.653		299	518
N. of tissue processed (units)	78	0	NA	NE	6.098	11.112	411	216	3.189	0	16.248	1.270		172	339
N. of tissue distributed (units)	0	NE	NA	NE	612	0	69	10	0	NA	299	103		143	0
N. of tissue imported (units)	0	NE	NA	NE	41.608	0	0	0	2.591	NA	485	0		0	0
N. of tissue exported (units)	NA	NE	NA	NE	6.077	NA	424	510	504	5	17.892	1.270		248	330
N. of tissues transplanted	NA	0	NA	NE	6.058	NA	317	315	323	5	0	1.180		221	129
N. of patients transplanted	NA	0	0	NE	NA	NA	407	315	323	5	12.356	1.202		198	130
<b>PLACENTA/AMNIOTIC MEMBRANE</b>	0	15	NA	NE	8	0	7	0	30	1	73	6		79	16
N. of tissue donations	0.0	5.2	NA	NE	0.5	0.0	0.7	0.0	5.5	0.5	1.6	0.6		15.2	4.5
Tissue donation PMP	0	15	NA	NE	4	99	7	0	30	1	1.694	303		80	16
N. of tissue retrieved	NE	NA	NA	NE	4	1.183	174	0	410	1	1.954	303		151	114
N. of tissue processed (units)	NE	84	NA	NE	1.50	1.103	205	0	361	21	1.707	266		39	114
N. of tissue distributed (units)	NE	NE	NA	NE	0	0	0	0	0	NA	30	0		32	0
N. of tissue imported (units)	NE	NE	NA	NE	0	0	0	0	0	NA	0	0		0	0
N. of tissue exported (units)	NE	84	NA	NE	79	NA	203	0	368	21	1.816	266		102	114
N. of tissues transplanted	NE	UK	NA	NE	73	NA	157	0	265	18	0	244		92	62
N. of patients transplanted	NE	84	0	NE	73	NA	180	0	318	18	1.675	263		82	68
<b>SKIN</b>	NE	UK	0	NE	443	81	0	22	14	12	339	57		0	13
N. of tissue donations	NE	UK	0.0	NE	26.1	2.1	0.0	1.1	2.6	5.8	7.3	5.8		0.0	3.7
Tissue donation PMP	NE	UK	0	NE	1.908.000	246.308	0	38.565	56.438	12	650.020	80.032		0	33.183
N. of tissue retrieved (cm.)	NE	UK	NA	NE	15.264	0	0	0	95	12	NA	82.000		0	238
N. of tissue processed (units)	NE	UK	NA	NE	1.499	0	NA	0	89	48	NA	NA		0	133
N. of tissue distributed (units)	NE	NE	NA	NE	84	0	90	0	0	9	0	9		0	483
N. of tissue imported (units)	NE	NE	NA	NE	12.448	0	0	0	0	0	114.985	0		0	0
N. of tissue exported (units)	NE	UK	NA	NE	1.559	NA	81	18.500	89	28	0	59		0	133
N. of tissues transplanted	NE	UK	NA	NE	239	NA	9	8	33	NA	0	23		14	15
N. of patients transplanted	NE	UK	0	NE	NA	NA	15	8	45	28	63	52		2.5	15
<b>OTHERS</b>	201	29	0	NE	28	0	0	0	189	6	0	1		0	0
N. of tissue donations	102.1	10.0	0.0	NE	5.6	0.0	0.0	0.0	34.8	2.9	0.0	0.1		0.0	0.0
Tissue donation PMP	306	29	NA	NE	16	0	0	0	189	6	0	1.6		0	0
N. of tissue retrieved	38	27	NA	NE	41	0	0	0	39	52	0	0		0	0
N. of tissue processed (units)	0	NE	NA	NE	127	0	0	0	36	NA	0	1.2		0	0
N. of tissue distributed (units)	0	NE	NA	NE	164	0	0	0	0	NA	0	0		0	0
N. of tissue imported (units)	NA	27	NA	NE	61	0	0	0	45	52	0	12		0	0
N. of tissue exported (units)	NA	27	NA	NE	55	0	0	0	31	50	0	3		0	0
N. of tissues transplanted	NA	27	0	NE	55	0	0	0	35	50	0	3		0	0



PRELIMINARY DATA ON TISSUES - YEAR 2016

LATINAMERICAN COUNTRIES

Country	Argentina	Brazil	Chile	Colombia	Costa Rica	Cuba	Dominican Republic	Ecuador	Guatemala	Honduras	Mexico	Panama	Paraguay	Uruguay
<b>Population (Source: UNFPA, state of world population, 2016 - Million)</b>														
	43.8	209.6	18.1	48.7	4.9	11.4	10.6	16.4	16.7	8.2	128.6	4.0	6.7	3.4
TYPE OF TISSUE	NO DATA													
CORNEA	NO DATA													
	307,769	146,640	182	172	35.1	0	36	276			3,464	0	86	84
N. of tissue donations	146.8	10.1	0.0	0.6	0.0	0.0	0.0	0.1			26.9	0.0	12.8	24.7
Tissue donation PMP	0	143	0	182	0	0	3.4	16.8			3,464	0	76	173
N° of tissue retrieved	14,640	143	0	229	0	0	0	264			0	0	0	0
N° of tissues transplanted	0	143	0	0	0	0	0	0			3,484	0	76	198
N° of patients transplanted	14,640	143	0	0	0	0	0	478			3,484	0	76	188
N° of transplants								478			3,484	0	76	0
BLOOD VESSEL	NO DATA													
	0	0	0	3	0	0	0	2			0	0	0	9
N. of tissue donations	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.1			0.0	0.0	0.0	2.6
Tissue donation PMP	0	0	0	6	0	0	0	2			0	0	0	18
N° of tissue retrieved	0	0	0	12	0	0	0	0			0	0	0	12
N° of tissues transplanted	0	0	0	0	0	0	0	0			0	0	0	0
N° of patients transplanted	0	0	0	10	0	0	0	0			0	0	0	9
N° of transplants				12	0	0	0	0			0	0	0	0
CARDIAC TISSUE	NO DATA													
	220	2	2	3	0	0	0	0			2	0	0	0
N. of tissue donations	1.0	0.1	0.1	0.6	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0
Tissue donation PMP	0	4	0	6	0	0	0	2			0	0	0	0
N° of tissue retrieved	140	0	0	12	0	0	0	0			1	0	0	1
N° of tissues transplanted	0	0	0	0	0	0	0	0			1	0	0	1
N° of patients transplanted	140	0	0	12	0	0	0	0			1	0	0	0
N° of transplants														
MUSCULOSKELETAL	NO DATA													
	1,628	2	2	7	1.4	0	0	276			325	0	0	16
N. of tissue donations	7.8	0.1	0.1	1.4	0.0	0.0	0.0	16.8			2.5	0.0	0.0	4.7
Tissue donation PMP	0	4	0	12	0	0	0	0			325	0	0	27
N° of tissue retrieved	16,321	0	0	2	0	0	0	0			0	0	0	460
N° of tissues transplanted	0	0	0	2	0	0	0	0			0	0	0	104
N° of patients transplanted	16,321	0	0	2	0	0	0	0			0	0	0	0
N° of transplants														
PLACENTA/AMNIOTIC MEMBRANE	NO DATA													
	0	0	0	4	0.8	0	0	374			0	0	0	129
N. of tissue donations	0.0	0.0	0.0	0.8	0.0	0.0	0.0	22.8			0.0	0.0	0.0	37.9
Tissue donation PMP	0	0	0	3,428.7	0	0	0	0			0	0	0	54
N° of tissue retrieved	0	0	0	29	0	0	0	0			0	0	0	368
N° of tissues transplanted	0	0	0	16	0	0	0	0			0	0	0	66
N° of patients transplanted	0	0	0	27	0	0	0	0			0	0	0	0
N° of transplants														
SKIN	NO DATA													
	516	0	0	5	1.0	0	0	0			56	0	0	21
N. of tissue donations	2.5	0.0	0.0	1.0	0.0	0.0	0.0	0.0			0.4	0.0	0.0	6.2
Tissue donation PMP	88,865	0	0	12,272	0	0	0	0			56	0	0	40,200
N° of tissue retrieved (cm.)	0	0	0	9	1,4160	0	0	0			0	0	0	1,064
N° of tissues transplanted	88,865	0	0	9	0	0	0	0			0	0	0	30
N° of patients transplanted														0
N° of transplants														
OTHERS	NO DATA													
	0	0	0	0	0	0	0	0			0	0	0	5
N. of tissue donations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	1.5
Tissue donation PMP	0	0	0	0	0	0	0	0			0	0	0	9
N° of tissue retrieved	0	0	0	0	0	0	0	0			0	0	0	7
N° of tissues transplanted	0	0	0	0	0	0	0	0			0	0	0	6
N° of patients transplanted	0	0	0	0	0	0	0	0			0	0	0	0
N° of transplants														

## PRELIMINARY DATA ON HPC CELLS - YEAR 2016

## EUROPEAN UNION COUNTRIES

Country	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy
<b>Population (Source: eurostat)</b>	8.690.076	11.311.117	7.153.784	4.190.669	848.319	10.553.843	5.659.715	1.315.944	5.487.308	66.759.950	82.175.684	10.783.748	9.830.485	4.724.720	60.665.551
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	47.103	NA	144.890	94.720	NA	33.119	263.343	NA	NA	380.594				
N° of cord blood unit at 31.12	NA	3.237	NA	3.635	4.173	NE	3.344	35.103	NA	NA	34.453				
N° of searches requested	0	434	0	22.292	51.361	NA	24.451	26.105	NA	NA	3.279				
N° of unrelated donation	0	53	0	46	158	NA	0	1.261	NA	NA	818				
DONATIONS															
N° of donations - Autologous	1.946	495	21	134	329	56	3.328	4.417	374	4.542					
N° of donations - Allogenic	9	654	46	154	75	5	1.249	7.933	150	1.438					
N° of donations - Allogenic, related	0	37	2	46	44	0	890	7.001	77	1.190					
N° of donations - Allogenic, unrelated	9	617	44	108	31	5	359	932	73	248					
BANKING OF CORD BLOOD															
N° of unrelated cord blood units collected	0	610	344	95	NE	0	1.163	1.007	NE	14.661					
N° of unrelated cord blood units distributed	0	0	3	0	NE	0	154	0	NE	38					
N° of unrelated cord blood units at 31.12	0	3.319	3.635	4.631	NE	3.344	35.103	36.862	NE	983					
N° of related cord blood units collected	NA	6	3.400	5	NE	0	0	30	3.552	187					
N° of related cord blood units distributed	0	0	NA	0	NE	0	0	1	2	7					
N° of related cord blood units at 31.12	0	202	24.150	172	NE	0	0	595	39.257	184					
TRANSPLANTS															
N° of transplants - Autologous	64	171	21	470	52	NA	3.151	4.620	NA	2.896					
N° of patients transplanted - Autologous	53	134	21	368	NA	261	3.043	3.734	NA	2.355					
N° of transplants - Allogenic	19	75	0	270	20	NA	1.958	3.124	NA	1.778					
N° of patients transplanted - Allogenic	19	64	0	252	NA	171	UK	2.934	NA	1.694					
N° of transplants - Allogenic, related	9	26	0	100	5	NA	898	973	NA	1.010					
N° of patients transplanted - Allogenic, related	9	23	0	93	NA	NA	UK	906	NA	908					
N° of transplants - Allogenic, unrelated	10	49	0	170	15	NA	1.060	2.151	NA	786					
N° of patients transplanted - Allogenic, unrelated	10	41	0	159	NA	NA	UK	2.028	NA	755					

PRELIMINARY DATA ON HPC CELLS - YEAR 2016

Country	EUROPEAN UNION COUNTRIES											OTHER COUNTRIES			
	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom	Norway	Republic of Moldova
<b>Population (Source: eurostat)</b>	1.968.957	2.888.558	576.249	434.403	16.979.120	37.967.209	10.341.330	19.760.314	5.426.252	2.064.188	46.445.828	9.851.017	65.382.556	5.210.721	3.553.056
CATEGORY OF DATA	TYPE OF DATA														
POTENTIAL DONATION AND SEARCHING IN THE NATIONAL REGISTRIES															
	UK	11.440	NA	NE	132.723	NA	395.568	22.386	10.491	17.033	147.049	NA	NO DATA	32.927	NE
	UK	1.472	NA	NE	4.237	NA	9.236	0	1.745	343	64.290	4.634	0	0	NE
	UK	NA	NA	NE	565	NA	2.701	301	22.967	0	2.244	NA	0	0	NE
	UK	57	NA	NE	392	NA	119	6	39	26	699	NA	27	0	NE
	UK	292	NA	NE	3.233	NA	457	2.947	3.658	0	1.975	769	24	0	NE
	UK	31	NA	NE	239	NA	1.904	26	40	101	1.064	987	84	0	NE
	UK	22	NA	NE	181	NA	87	20	37	15	760	103	30	0	NE
	UK	9	NA	NE	58	NA	1.817	6	3	86	304	884	54	0	NE
BANKING OF CORD BLOOD															
	UK	0	NA	NE	432	416	1.778	0	0	343	2.152	756	0	0	NE
	UK	0	NA	NE	105	26	4	0	0	NA	220	8	0	0	NE
	UK	0	NA	NE	NA	4.358	9.217	-6	0	343	64.290	4.634	0	0	NE
	UK	138	NA	NE	2	NA	0	11.094	17	NA	0	44	0	0	NE
	UK	0	NA	NE	0	NA	0	0	5	NA	0	0	0	0	NE
	UK	1.229	NA	NE	NA	NA	150	120.545	12	NA	0	118	0	0	NE
TRANSPLANTS															
	UK	154	NA	NE	3.433	NA	395	147	133	86	1.975	566	102	0	NE
	UK	154	NA	NE	990	NA	375	146	103	0	0	535	94	0	NE
	UK	64	NA	NE	579	NA	140	64	78	41	1.241	283	77	0	NE
	UK	64	NA	NE	569	NA	135	63	74	0	0	266	77	0	NE
	UK	16	NA	NE	170	NA	68	31	32	15	760	100	4	0	NE
	UK	16	NA	NE	162	NA	66	30	31	0	0	89	4	0	NE
	UK	48	NA	NE	409	NA	72	33	46	26	481	183	73	0	NE
	UK	48	NA	NE	407	NA	69	33	43	0	0	177	73	0	NE

## PRELIMINARY DATA ON HPC CELLS - YEAR 2016

## LATINAMERICAN COUNTRIES

Country	Argentina	Brazil	Chile	Colombia	Costa Rica	Cuba	Dominican Republic	Ecuador	Guatemala	Honduras	Mexico	Panama	Paraguay	Uruguay
<i>Population (Source: UNFPA, state of world population, 2016 - Million)</i>	43.8	209.6	18.1	48.7	4.9	11.4	10.6	16.4	16.7	8.2	128.6	4.0	6.7	3.4
CATEGORY OF DATA	NO DATA			NO DATA					NO DATA	NO DATA				
POTENTIAL DONATION AND SEARCHING IN THE NATIONAL REGISTRIES														
N° of potential donors at 31.12		4.210371	0	46	0	0	0	0	0	0	0	0	0	0
N° of cord blood units at 31.12		14.703	0	0	0	0	0	0	0	0	0	0	0	0
N° of searches requested		10.503	0	0	0	0	0	0	0	0	0	0	0	0
N° of unrelated donations		0	0	0	0	0	0	0	0	0	0	0	0	0
BANKING of CORD BLOOD														
N° of unrelated cord blood units at 31.12		14.703	0	0	0	0	0	0	0	0	0	0	0	0
N° of related cord blood units at 31.12		0	0	0	0	0	0	1.205	0	0	0	0	0	0
TRANSPLANTS														
N° of transplants - Autologous		1.149	0	0	0	0	0	0	0	0	0	32	8	0
N° of patients transplanted - Autologous		0	0	38	0	0	0	17	0	0	0	32	8	0
N° of transplants - Allogenic		853	0	46	0	0	0	9	0	0	0	60	1	0
N° of patients transplanted - Allogenic		0	0	46	0	0	0	9	0	0	0	60	1	0
N° of transplants - Allogenic, related		472	0	46	0	0	0	9	0	0	0	14	1	0
N° of patients transplanted - Allogenic, related		0	0	46	0	0	0	9	0	0	0	14	1	0
N° of transplants - Allogenic, unrelated		381	0	0	0	0	0	0	0	0	0	46	0	0
N° of patients transplanted - Allogenic, unrelated		0	0	0	0	0	0	0	0	0	0	46	0	0

# **Council Of Europe Resolutions. Year 2017**



# Resolution CM/Res(2017)1 on principles for the selection, evaluation, donation and follow-up of the non-resident living organ donors

*(Adopted by the Committee of Ministers on 14 June 2017  
at the 1289<sup>th</sup> meeting of the Ministers' Deputies)*

The Committee of Ministers, in its composition restricted to the representatives of States Parties to the Convention on the Elaboration of a European Pharmacopoeia (ETS No. 50),<sup>1</sup>

Considering that the aim of the Council of Europe is to achieve greater unity between its member States and that this aim may be pursued, *inter alia*, by the adoption of common action in the health field;

Having regard to Resolution Res(78)29 on the harmonisation of legislation of member States related to removal, grafting and transplantation of human substances and the final text of the 3<sup>rd</sup> Conference of European Health Ministers (Paris, 16-17 November 1987);

Having regard to the Convention on Human Rights and Biomedicine (ETS No. 164) and in particular to Articles 19 and 20 thereof;

Having regard to the Additional Protocol to the Convention on Human Rights and Biomedicine concerning the Transplantation of Organs and Tissues of Human Origin (ETS No. 186) and the Explanatory Report thereof, in particular Chapter III – Organ and tissue removal from living persons, Article 9 – General rule;

Having regard to the Convention on Action against Trafficking in Human Beings (CETS No. 197);

Having regard to the Convention against Trafficking in Human Organs (CETS No. 216);

Having regard to the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS No. 108) and its Additional Protocol on Supervisory Authorities and Transborder Data Flows (ETS No. 181);

Recalling Recommendation Rec(2004)7 on organ trafficking;

Recalling its Resolution CM/Res(2008)4 on adult-to-adult living donor liver transplantation;

Recalling its Resolution CM/Res(2008)6 on transplantation of kidneys from living donors who are not genetically related to the recipient and in particular the principles and measures laid down in its Appendix;

Recalling its Resolution CM/Res(2013)56 on the development and optimisation of live kidney donation programmes;

Recalling its Resolution CM/Res(2015)11 on establishing harmonised national living donor registries with a view to facilitating international data sharing;

Taking into account the Directive 2010/53/EU of the European Parliament and of the Council on standards of quality and safety of human organs intended for transplantation, in particular Article 15;

Taking into account Regulation (EU) 2016/679 of the European Parliament and the Council of 27 April 2016 *on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)*, and in particular Article 9 points (h) and (i), which contain provisions allowing for processing of health data “*for the purposes of preventive or occupational medicine, [...] medical diagnosis, the provision of health or social care or treatment or the management of health or social care systems and services [...] and “for reasons of public interest in the area of public health [...] or ensuring high standards of quality and safety of health care and of medicinal products or medical devices,*

1. Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Republic of Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, “the former Yugoslav Republic of Macedonia”, Turkey, Ukraine and United Kingdom.

on the basis of Union or member State law which provides for suitable and specific measures to safeguard the rights and freedoms of the data subject, in particular professional secrecy”;<sup>2</sup>

Taking into account the WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation adopted by the World Health Assembly in May 2010;<sup>3</sup>

Taking into account the Declaration of Istanbul on Organ Trafficking and Transplant Tourism, adopted in 2008;<sup>4</sup>

Taking into account the consensus statements made by the Amsterdam Forum on the Care of the Live Kidney Donor<sup>5,6</sup> and by the Vancouver Forum on the Live Lung, Liver, Pancreas, and Intestine Donor;<sup>7,8</sup>

Taking into account the consensus statements on living organ donation made by an executive group representing the American Societies of Transplantation, Transplant Surgeons and Nephrology, and the National Kidney Foundation;<sup>9</sup>

Taking into account the position paper of the European Committee on Organ Transplantation (CD-P-TO) on the long-term outcome of living kidney donation, with the endorsement of the European Society for Organ Transplantation (ESOT), the International Society of Nephrology (ISN) and The Transplantation Society (TTS);<sup>10</sup>

Taking into account the Council of Europe *Guide on the Quality and Safety of Organs for Transplantation*, in particular its chapter on living donation;<sup>11</sup>

Considering the large deficit of organs for transplantation compared to demand at present and in the foreseeable future, even after developing deceased donation to its maximum therapeutic potential;

Considering that many countries are developing living donation programmes as a way to pursue self-sufficiency in transplantation;

Taking into account that live kidney donation is a safe procedure, if performed according to recognised international standards, in terms of donor evaluation, selection and donor care;

Considering that living donation carries risks and requires robust legislative and operational procedures in place to safeguard the health of the living donor;

Aware that organ shortages, or lack of access to a deceased donor programme, have also encouraged organ trafficking, often involving patients seeking potential donors abroad;

Aware that many countries are accepting organ donation from non-resident living donors with or without a genetic or emotional link to the recipient who come lawfully (with a visa or other authorisation) to the country and wish to become living organ donors;

Considering that for a number of reasons – economic, emotional, cultural or physical – the detection of possible cases of human trafficking for the purpose of organ removal and/or trafficking in human organs may be particularly difficult when evaluating and accepting non-resident living donors;

Recognising that countries accepting non-resident living donors should ensure rigorous donor selection, evaluation and follow-up;

Considering that the non-resident living donor who travels from another country to donate is particularly vulnerable and that additional measures are needed to ensure their protection and care;

2. Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Republic of Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, “the former Yugoslav Republic of Macedonia”, Turkey, Ukraine and United Kingdom. Available at: [http://ec.europa.eu/justice/data-protection/reform/files/regulation\\_oj\\_en.pdf](http://ec.europa.eu/justice/data-protection/reform/files/regulation_oj_en.pdf)

3. Available at <http://www.who.int/transplantation/TxGP08-en.pdf>

4. Adopted at the International Summit on Transplant Tourism and Organ Trafficking organised by the Transplantation Society and the International Society of Nephrology, Istanbul, Turkey, 30 April - 2 May 2008. Available at [http://www.edqm.eu/medias/fichiers/The\\_Declaration\\_of\\_Istanbul.pdf](http://www.edqm.eu/medias/fichiers/The_Declaration_of_Istanbul.pdf)

5. The Ethics Committee of the Transplantation Society: The Consensus Statement of the Amsterdam Forum on the Care of the Live Kidney Donor. *Transplantation* 78(4):491-92, 2004. Available at: [http://journals.lww.com/transplantjournal/Fulltext/2004/08270/The\\_Consensus\\_Statement\\_of\\_the\\_Amsterdam\\_Forum\\_on.1.aspx](http://journals.lww.com/transplantjournal/Fulltext/2004/08270/The_Consensus_Statement_of_the_Amsterdam_Forum_on.1.aspx)

6. Report from the Amsterdam Forum On the Care of the Live Kidney Donor: Data and Medical Guidelines. Council of the Transplantation Society. *Transplantation* 79(6):S53-66, 2005. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/15785361>

7. Report of the Vancouver Forum on the Care of the Live Organ Donor: Lung, Liver, Pancreas, and Intestine Data and Medical Guidelines. Barr ML, Belghiti J, Villamil FG, Pomfret EA, Sutherland DS, Gruessner RW. Available at: <https://www.livingdonorassistance.org/documents/Report%20of%20Vancouver%20Forum.pdf>

8. The Ethics Statement of the Vancouver Forum on the Live Lung, Liver, Pancreas, and Intestine Donor. *Transplantation* 81(10):1386-7, 2006. Available at: <https://www.livingdonorassistance.org/documents/Ethics%20Statement%20of%20Vancouver%20Forum.pdf>

9. Abecassis et al.: Consensus statement on the live organ donor. *JAMA* 284(22):2219-26, 2000

10. Available at [https://www.edqm.eu/sites/default/files/position\\_paper\\_long\\_term\\_outcome\\_of\\_living\\_kidney\\_donation\\_2015.pdf](https://www.edqm.eu/sites/default/files/position_paper_long_term_outcome_of_living_kidney_donation_2015.pdf)

11. Available at <https://go.edqm.eu/OTg>



Considering that non-resident living donors, especially those from developing countries, may have limited resources or access to health care to ensure appropriate post-donation long term follow-up;

Recommends that the governments of States Parties to the Convention on the Elaboration of a European Pharmacopoeia take the necessary measures for the care and safeguard of the non-resident living donor, in accordance with the principles and practices set out in the appendix to this resolution.

### **Appendix to Resolution CM/Res(2017)1**

#### **INTRODUCTION**

As a way to pursue self-sufficiency in transplantation, many countries are developing and optimising living donor programmes to complement the limited availability of organs from deceased donors, or as the only source of organs.

However a lack of or delay in access to a suitable donor has encouraged human and organ trafficking. There are growing reports of donors being coerced to consent to donation; or who are offered financial or equivalent inducements to be an organ donor. Living donors also have a greater potential to develop medical and psychosocial conditions in the short and the longer term without adequate follow-up. This has prompted the development of international recommendations and standards for the care and protection of the living donor to encourage countries to develop their own national legislation, better regulatory oversight and any necessary changes to policy and operational protocols.

Non-resident donors may be particularly vulnerable and assessing the validity of their consent to donation – which must be free, specific and informed – is vital but can be especially challenging. The donor, in exchange for some form of financial inducement to give consent, may have been given inadequate or insufficient information about the donation procedure, risks and potential consequences or they may have been subject to coercion to agree to donation. The donor may be presented falsely as having a genetic or emotional relationship with the recipient. They may be given poor or no post-operative care and long term follow-up. In spite of these risks, specific international recommendations on how to safeguard the non-resident living donor have not been developed.

Although many countries allow non-resident living donation, there are recognised variations in approach,

such as the data collected, the screening and consent process, the reimbursement of loss of earnings and justifiable expenses (such as travel and medical costs) related to the donation procedure, and access to post-operative follow-up care.

These concerns have prompted the European Committee on Organ Transplantation (CD-P-TO) of the Council of Europe, using as a basis the legal instruments and guidelines of the Council of Europe and other relevant organisations, to prepare guidance for member States on the principles and practices to safeguard the non-resident living donor. These measures should be put in place in conjunction with the existing national provisions to ensure the safety and well-being of living donors.

#### ***Work-up of the potential non-resident living donor before travel for donation***

- The formal process of referral of the non-resident donor should be agreed between the transplant centre/hospital undertaking the donation and implantation procedure and the referring centre/hospital of the prospective living donor.
- Initial tests and evaluation to identify and rule out any obvious reasons that would contraindicate the donation should be performed preferably in the donor's own country. Exclusion criteria should include donor physical or mental health problems, social or behavioural issues or be based on ABO blood groups or Human Leukocyte Antigen (HLA) incompatibility between donor and recipient. These initial evaluations will reduce unnecessary travel or expenses if any obvious contraindications to donation are found.
- Arrangements for long-term follow-up once the living donor has returned home should be discussed to ensure that medical care is available. As recently stated in the CD-P-TO Position Paper on the long-term outcome of living kidney donation, if adequate long-term life-long follow-up cannot be guaranteed, the donor should not be accepted.<sup>12</sup>
- The process and level of reimbursement of justifiable expenses, including loss of income, incurred by the non-resident living donor should be discussed at an early stage to ensure the process is clear and cost-neutral for the donor. For the non-resident donor, reimbursement should include the initial assessment, testing and evaluation costs, travel, accommodation, loss of earnings, the cost of the donation procedure and the costs of any related treatment including that

12. Long-term Outcome of Living Kidney Donation: Position Paper of the European Committee on Organ Transplantation, Council of Europe. Transplantation. 2016 Feb;100(2):270.

of complications as a result of the donation.<sup>13</sup> It should be clear from whom the reimbursement will be made (e.g. insurance companies, State funders or social security schemes). Similarly, regimes for the protection and indemnification of the non-resident donor should be in place in the event of undue damage resulting from the donation on their territory, on equal conditions with resident donors.

- Unless such basic health-related and administrative requirements are satisfied, non-resident living donors should be discouraged from leaving their country of residence for the transplanting country.

#### ***Lawful entry of the non-resident living donor***

- Clear procedures should be established with relevant agencies for the lawful entry of the potential non-resident living donor (or the potential non-resident donor and recipient) into the country and exit post donation. In countries where authorisation or a visa is required, transplant centres/hospitals may need to work with the potential donor, recipient and referring centre/hospital to provide any necessary documentation to help facilitate entry into the country for a sufficient period of time to enable the living donor procedure and related post-operative recovery.

#### ***Further work-up of the potential non-resident living donor once in the country where the donation is expected to take place***

- The work-up for donation should continue in the country where the transplant will take place. Specific medical tests, particularly from the infectious disease point of view, may be needed according to the epidemiology of the country of residence of the non-resident living donor.<sup>14</sup>
- Specific psychosocial evaluation pre-donation, intended to prevent donation from non-resident donors with significant risk of developing mental health disorders or psychological/social problems, and to avoid worsening their quality of life, should also be undertaken. The psychosocial evaluation should be aimed at: the assessment of the donor-recipient relationship; competency; knowledge and understanding of donation risks and benefits; psychological functioning, motivations and expectations; and social support.
- Procedures should be in place to verify the claimed relationship between the potential donor and the recipient, and, where it cannot be proven, the donation

should not proceed. Such checks should include official documents (e.g. birth certificates or marriage certificates) and affidavits by embassies or consulates, as needed. If the genetic relationship is not conclusively established after evaluating the documentary evidence, HLA testing should be performed. National legislations should clearly establish which relationships are acceptable and, in the case of non-resident living donors, they should preferentially be limited to first- or second-degree genetic relatives or spouses (or equivalent). In exceptional cases, other relationships may be accepted when they can be unequivocally verified and in accordance with national legislations.

- Consent (free, specific and informed) should be given and fully recorded. It should be made clear to the potential donor that consent may be withdrawn at any time before donation with no need for a specific formal procedure. Authorisation of the donation by an independent body should take place in line with the clinical and regulatory framework in place in the country where the transplant procedure will take place.
- Living donors should be provided with detailed information on the short and long-term medical and psychological risks for their own health and well-being; the potential risks and complications for the intended recipient; alternative treatments for the intended recipient; any information about contraindications that might prevent donation; and information about the possible use of the organ if it is procured but cannot be used for the intended recipient (e.g. transplant of the organ into another patient on the waiting list).
- Information about the donation procedure should be provided in a manner able to be fully understood by the potential non-resident living donor, relying on interpreters and culturally competent advocates where required, to ensure that any outstanding issue or concern is thoroughly addressed. Should an interpreter be required, the services should not be provided or arranged by the donor, the recipient or anyone in their entourage.
- Countries should ensure that living donor programmes include procedures for living donor assessment or advocacy, independent of the transplant team. This is particularly important for the non-resident donor. The living donor advocate should be an independent medical, psychosocial and legal counsellor, with

13. Recommendation No. S1 of 15 March 2012 concerning financial aspects of cross-border living organ donations. Available at: [http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012H0810\(01\)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012H0810(01))

14. Guide to the Quality and Safety of Organs for Transplantation, available at <https://go.edqm.eu/OTg>

neither time constraints nor interests shared with any party. Donor advocacy has the dual purpose of supporting the potential donor and ensuring the legal safeguards are followed, for example by assessing the donor's motivation to donate. This will help confirm that the donor is giving free, specific and informed consent; ensuring that they fully understand the process and the risks; confirming that they are not being pressurised – emotionally, physically or economically – into consent for donation; and that the donor, or a third party, has not been offered or received any financial gain or comparable advantage for the donation. To undertake the assessment, the potential donor and recipient should be interviewed together and separately by a trained assessor independent of the transplant team, taking into account any language and cultural requirements.

- National protocols should specify the action(s) to be taken, in addition to deferral of donation, should a suspicion of organ trafficking or trafficking in human beings for the purpose of organ removal arise. This could include reporting the case to the national regulator and/or the law enforcement authority. Official international data sharing may prevent further attempts to perform the illicit organ procurement from the same donor or from a different unsuitable organ donor for the same recipient or by the same criminal network for a different donor-recipient pair at a different location.

#### ***Organ procurement from the non-resident living donor and follow-up***

- The initial follow-up of the non-resident living donor – both medical and psychosocial – should be undertaken by the transplant centre/hospital as part

of the post-surgery rehabilitation. Arrangements for long-term follow-up should have been discussed as part of the initial work-up and consent process, to ensure that medical care is available once the living donor has returned home.

- The non-resident living donor should be provided complete medical records to ensure continuity of care once they return to their country of residence.

#### **RECORDING THE DONATION**

National Living Donor Registries should be established in all countries to enable transparency, traceability, data analysis and improvement to clinical practice. These registries should include data on the donor and recipient, the hospital(s) involved, the surgical procedure and the follow-up of the donor.<sup>15,16</sup> All donation procedures, including those involving non-resident living donors, should be recorded in such Living Donor Registries.

For the non-resident living donor, donor information from the transplant centre/hospital that has performed the donation or from the Living Donor Registry of the country where the procedure took place should be shared with the country of origin of the non-resident living donor, for example, with the healthcare professional or hospital continuing the follow-up care of the non-resident living donor, the referring hospital, the national transplant organisation, the Ministry of Health and/or with the national Living Donor Registry. This data sharing, which should be done in conformity with national and international data protection rules and other applicable legislation, will ensure connection between traceability and biovigilance systems of both countries and continuity of care for the donor.

# Resolution CM/Res(2017)2 on establishing procedures for the management of patients having received an organ transplant abroad upon return to their home country to receive follow-up care

*(Adopted by the Committee of Ministers on 14 June 2017  
at the 1289th meeting of the Ministers' Deputies)*

The Committee of Ministers, in its composition restricted to the representatives of States Parties to the Convention on the Elaboration of the European Pharmacopoeia (ETS No. 50),<sup>1</sup>

Considering that the aim of the Council of Europe is to achieve greater unity between its member States and that this aim may be pursued, *inter alia*, by the adoption of common action in the health field;

Having regard to Resolution Res(78)29 on the harmonisation of legislation of member States related to removal, grafting and transplantation of human substances and the final text of the 3<sup>rd</sup> Conference of European Health Ministers (Paris, 16-17 November 1987);

Having regard to the Convention on Human Rights and Biomedicine (ETS No. 164) and in particular to Articles 19 and 20 thereof;

Having regard to the Additional Protocol to the Convention on Human Rights and Biomedicine concerning the Transplantation of Organs and Tissues of Human Origin (ETS No. 186) and the Explanatory Report thereof, in particular Chapter III – Organ and tissue removal from living persons, Article 9 – General rule;

Having regard to the Convention on Action against Trafficking in Human Beings (CETS No. 197);

Having regard to the Convention against Trafficking in Human Organs (CETS No. 216);

Having regard to the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS No. 108) and its Additional Protocol on Supervisory Authorities and Transborder Data Flows (ETS No. 181);

Recalling Recommendation Rec(2004)7 on organ trafficking;

Recalling its Resolution CM/Res(2013)55 on establishing procedures for the collection and dissemination of data on transplantation activities outside a domestic transplantation system;

Recalling its Resolution CM/Res(2015)11 on establishing harmonised national living donor registries with a view to facilitating international data sharing;

Taking into account the Directive 2010/53/EU of the European Parliament and of the Council on standards of quality and safety of human organs intended for transplantation;

Taking into account Commission Implementing Directive 2012/25/EU of 9 October 2012 laying down information procedures for the exchange, between member States, of human organs intended for transplantation;<sup>2</sup>

1. Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Republic of Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, "the former Yugoslav Republic of Macedonia", Turkey, Ukraine and United Kingdom.

2. Available at: [http://ec.europa.eu/health/blood\\_tissues\\_organ/docs/organs\\_impl\\_directive\\_2012\\_en.pdf](http://ec.europa.eu/health/blood_tissues_organ/docs/organs_impl_directive_2012_en.pdf)

Taking into account Regulation (EU) 2016/679 of the European Parliament and the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), and in particular Article 9 points (h) and (i), which contain provisions allowing for processing of health data “for the purposes of preventive or occupational medicine, [...] medical diagnosis, the provision of health or social care or treatment or the management of health or social care systems and services [...]” and “for reasons of public interest in the area of public health [...] or ensuring high standards of quality and safety of health care and of medicinal products or medical devices, on the basis of Union or member State law which provides for suitable and specific measures to safeguard the rights and freedoms of the data subject, in particular professional secrecy”;<sup>3</sup>

Taking into account the WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation adopted by the World Health Assembly in May 2010,<sup>4</sup> and in particular Guiding Principles 10 and 11, which call for health authorities to ensure traceability and vigilance and to monitor results of both living donation and transplantation;

Aware that, in exceptional circumstances, some patients may be properly referred for transplantation abroad by their treating physicians for medical, organisational (e.g. co-operation agreements between countries) or social reasons (e.g. to facilitate family support);

Aware that organ shortage, or lack of access to a deceased donor programme, have also encouraged organ trafficking and human trafficking for the purpose of organ removal, often involving patients seeking to receive an organ transplant abroad;

Taking into account the Declaration of Istanbul on Organ Trafficking and Transplant Tourism, adopted in 2008,<sup>5</sup> which defines that travel for transplantation becomes transplant tourism – and ethically unacceptable – if it involves organ trafficking, human trafficking for the purpose of organ removal or if the resources devoted to providing transplants to patients from outside a country (may they be organs, professionals, and transplant centres) undermine the country’s ability to provide transplant services for its own population;

Taking into account the Declaration of Istanbul Custodian Group guidelines on ethical travel for transplantation;

Taking into account the Resolution of Madrid,<sup>6</sup> calling for all States to strive towards self-sufficiency in organ transplantation;

Taking into account the Statement of the Pontifical Academy of Sciences Summit on Organ Trafficking and Transplant Tourism;<sup>7</sup>

Considering that patients having received an organ transplant abroad, should it have been through proper travel for transplantation or through transplant tourism, typically return to their country of origin shortly after the transplantation procedure to receive post-transplantation care;

Considering that patients having received an organ transplant abroad as a result of transplant tourism are much more likely to suffer serious complications or life-threatening conditions, particularly infections caused by opportunistic pathogens, microorganisms not previously seen in their home country or multidrug resistant organisms which entail a risk not only to themselves but to public health;

Aware that systematic and appropriate registration of patients who undergo organ transplantation within a jurisdiction allows traceability of organs from donors to recipients and *vice versa*, as well as vigilance and surveillance, and enables the evaluation of the long-term outcomes of transplantation, the minimisation of public health risks and the detection of cases that may raise ethical and/or criminal concerns;

Considering that the principles of transparency, traceability and continuity of care are desirable not only for patients having received an organ transplant domestically but also for those having received a transplant abroad;

Considering that the quality of care provided to patients having received an organ transplant abroad would be enhanced upon registration in national transplant registries and by ensuring connection between traceability and biovigilance systems which would allow to have up-to-date epidemiological information and to provide personalised care depending on the country where the patient has received the organ transplant;

3. Available at: [http://ec.europa.eu/justice/data-protection/reform/files/regulation\\_oj\\_en.pdf](http://ec.europa.eu/justice/data-protection/reform/files/regulation_oj_en.pdf)

4. Available at: <http://www.who.int/transplantation/TxGP08-en.pdf>

5. Adopted at the International Summit on Transplant Tourism and Organ Trafficking organised by the Transplantation Society and the International Society of Nephrology, Istanbul, Turkey, 30 April-2 May 2008. Available at: [http://www.edqm.eu/medias/fichiers/The\\_Declaration\\_of\\_Istanbul.pdf](http://www.edqm.eu/medias/fichiers/The_Declaration_of_Istanbul.pdf)

6. The Madrid resolution on organ donation and transplantation, Transplantation, 2011, vol. 91 (pg. S29-31)

7. Available at: [http://www.pas.va/content/accademia/en/events/2017/organ\\_trafficking/statement.html](http://www.pas.va/content/accademia/en/events/2017/organ_trafficking/statement.html)



Considering that currently patients who receive a transplant abroad are not systematically recorded in national registries in most member States and that their care is circumscribed to the attention that may be provided by their treating physician upon return home;

Considering that the international exchange of information about patients who receive a transplant abroad will help to better understand and analyse the phenomenon of travel for transplantation and to identify possible hotspots of transplant tourism that deserve careful investigation by the concerned countries;

Aware that procedures established for the management of patients who receive an organ transplant abroad, similarly to those procedures established for the management of patients who receive an organ transplant domestically, should respect the professional obligations of healthcare professionals towards patients and be in conformity with national and international data protection rules and other applicable national legislation, especially national transplantation law;

Aware that information collected from patients who receive a transplant abroad in circumstances that may be consistent with organ trafficking and/or human trafficking for the purpose of organ removal can provide the basis to initiate and/or co-operate in criminal investigations and help to detain and combat illicit practices;

Recommends to the governments of States Parties to the Convention on the Elaboration of a European Pharmacopoeia:

1. to provide the resources and the means to progress towards self-sufficiency in transplantation at a national level – with regional co-operation as appropriate – by reducing the need for transplants through preventive measures and improving access to national transplant programmes in an ethical and regulated manner;
2. to ensure that patients having received an organ transplant abroad are promptly referred for evaluation at a transplant centre, where the best available expertise and knowledge will be available to guarantee appropriate screening and care of these patients;
3. to ensure that specific guidelines and training for the evaluation and management of patients who have received an organ transplant abroad, particularly addressing infectious diseases, is provided to healthcare professionals at transplant centres;
4. to ensure that patients having received an organ transplant abroad receive the necessary medical

care upon their return to their home country, which should be the same as that provided to any other patient having received an organ transplant domestically;

5. to ensure that the same data routinely collected by healthcare professionals and recorded in national transplant registries on patients having received an organ transplant domestically, including long-term follow-up information, are also routinely collected for patients having received an organ transplant abroad;
6. to support and promote communication and collaboration between transplantation centres, and where relevant, health authorities from the country where the transplantation procedure took place and where the patient returns to receive follow-up care. While respecting the privacy of the patient and professional obligations to patients, in conformity with national and international data protection rules and other applicable legislation, the data to be shared should include at least the date of the procedure, city and hospital where the procedure took place and type of organ transplanted. This exchange would ensure transparency of practices, the establishment of links between the traceability and biovigilance systems of both countries and guarantee the best possible care is provided to the patient and, as relevant, to the living donor or to the recipients of other organs and tissues from the same deceased donor;
7. to increase awareness among healthcare professionals on organ trafficking and/or human trafficking for the purpose of organ removal and support the development of clear protocols to identify patients who may have received an organ transplant abroad in circumstances consistent with organ trafficking and/or human trafficking for the purpose of organ removal;
8. to develop a framework for healthcare and other professionals to communicate information about suspected or confirmed events of organ trafficking and/or human trafficking for the purpose of organ removal to the appropriate national authorities, while respecting their professional obligations to patients. The decision in a member State may range from developing legislation and mechanism that provide for a (voluntary or mandatory) non-anonymised reporting of detected or suspicious events to the appropriate national authorities, to a (voluntary or mandatory) reporting of anonymised data that reveals

information on entities, hospital or professional engaged in illegitimate transplantation but not the identities of the patients concerned;

9. to take the necessary steps to ensure that national healthcare systems and/or insurance providers do not cover the costs of transplant procedures performed abroad involving organ trafficking and/or human trafficking for the purpose of organ removal;

10. to facilitate a comprehensive international collection of information by regularly reporting anonymised activity data on patients having received an organ transplant abroad to the Secretariat of the European Committee on Organ Transplantation (CD-P-TO) of the Council of Europe with a view to analysing and discussing such results within the CD-P-TO and informing member States.

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ISSN 2171-4118 / NIPO: 691-15-002-5

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