

2013



INTERNATIONAL FIGURES ON  
DONATION AND TRANSPLANTATION - 2012

---

# NEWSLETTER TRANSPLANT



GOBIERNO  
DE ESPAÑA

MINISTERIO  
DE SANIDAD, SERVICIOS SOCIALES  
E IGUALDAD



# 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 2012

Editor: Rafael Matesanz

## NATIONAL DATA PROVIDED BY:

### AUSTRIA

Dave Green (ET)

### BELGIUM

Dave Green (ET)

### BULGARIA

Maryana Doitchinova-Simeonova

### CROATIA

Dave Green (ET)

### CYPRUS

Vassilis Hadjianastassiou  
Chrystalla Despoti  
Maurizio Di Fresco (MTN)

### CZECH REPUBLIC

Lucie Baudysova

### DENMARK

Ilse D. Weinreich (SKT)  
Frank Pedersen (SKT)

### ESTONIA

Peeter Dmitriev

### FINLAND

Kaija Salmela

Ilse D. Weinreich (SKT)

Frank Pedersen (SKT)

### FRANCE

Karim Laouabdia-Sellami

### GERMANY

Dave Green (ET)

### GREECE

Georgia Menoudakou

Maurizio Di Fresco (MTN)

### HUNGARY

Sz cs Anikó

### IRELAND

Maeve Raeside

### ITALY

Andrea Ricci

Paola Di Ciaccio

### LATVIA

Sergey Trushkov

### LITHUANIA

Vita Petronyt

### LUXEMBURG

Dave Green (ET)

### MALTA

Joseph Zarb Adami

### NETHERLANDS

Dave Green (ET)

### POLAND

Piotr Malanowski

### PORTUGAL

Catarina Bolotinha

### ROMANIA

Dan Adrian Luscalov

### SLOVAKIA

Ludovit Laca

### SLOVENIA

Dave Green (ET)

### SPAIN

Elisabeth Coll

Carmen Martín

David Uruñuela

Silvia Martín

### SWEDEN

Ilse D. Weinreich (SKT)

Frank Pedersen (SKT)

### UNITED KINGDOM

Mark Jones

### (ET) EUROTRANSPLANT

*Austria, Belgium, Croatia, Germany, Luxemburg, Netherlands and Slovenia*

### (SKT) SCANDIATRANSPLANT

*Denmark, Finland, Norway, Sweden and Iceland*

### ALGERIA

Maurizio Di Fresco (MTN)

### ARMENIA

Ashot Sarkissian

### AUSTRALIA

Byron Arcia

### AZERBAIJAN

Shahlar Nasirov

### CANADA

Andrew Henderson

Liz Anne Gillham-Eisen

### GEORGIA

Gia Tomadze

### ICELAND

Ilse D. Weinreich (SKT)

Frank Pedersen (SKT)

### ISRAEL

Tamar Ashkenazi

Maurizio Di Fresco (MTN)

### LEBANON

Antoine Estephan

Maurizio Di Fresco (MTN)

### MACEDONIA

Goce Spasovski

### MOLDOVA

Igor Codreanu

### NEW ZEALAND

Kylie Hurst

### NORWAY

Ilse D. Weinreich (SKT)

Frank Pedersen (SKT)

### RUSSIA

Gabbasova Laylay

### SWITZERLAND

Franziska Beyeler

### SYRIA

Bassam Saeed

Maurizio Di Fresco (MTN)

### TUNISIA

Hafed Mestiri

Maurizio Di Fresco (MTN)

### TURKEY

Mehmet Ali Aydin

Maurizio Di Fresco (MTN)

### USA

John Rosendale

### UKRAINA

Vitaliy Sobokar

### (MTN) MEDITERRANEAN

**TRANSPLANT NETWORK**  
*Algeria, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Lybia, Malta, Morocco, Palestine, Spain, Syria, Tunisia and Turkey*

### ARGENTINA

Carlos Soratti

Martin Alejandro Torres

Ricardo Rubén Ibar

www.grupopuntacana.org

### BRAZIL

Heder Murari Borba

www.grupopuntacana.org

### CHILI

Jose Luis Rojas

www.grupopuntacana.org

### COLOMBIA

Juan Gonzalo López Casas

Diana Carolina Plazas Sierra

www.grupopuntacana.org

### COSTA RICA

César A. Gamboa Peñaranda

www.grupopuntacana.org

### CUBA

Angela Olga Hidalgo Sánchez

www.grupopuntacana.org

### DOMINICANA

Fernando Morales Billini

www.grupopuntacana.org

### ECUADOR

Diana Almeida

www.grupopuntacana.org

### GUATEMALA

Rudolf García-Gallont

www.grupopuntacana.org

### MEXICO

Enrique Martínez Gutiérrez

Omar Sánchez Ramírez

www.grupopuntacana.org

### NICARAGUA

Tulio René Mendieta Alonso

www.grupopuntacana.org

### PANAMA

Cesar Cuero Zambrano

www.grupopuntacana.org

### PARAGUAY

Hugo A. Espinoza C.

www.grupopuntacana.org

### PERU

Juan A. Almeyda Alcántara

www.grupopuntacana.org

### URUGUAY

Inés Alvarez

Raul José Mizraji

www.grupopuntacana.org

### VENEZUELA

Zoraida Pacheco Graterol

www.grupopuntacana.org

### GRUPO PUNTA CANA

*Argentina, Bolivia, Brazil, Chili, Colombia, Costa Rica, Cuba, Dominicana, Ecuador, El Salvador, España, Guatemala, Honduras, México, Nicaragua, Panamá, Paraguay, Perú, Portugal, Puerto Rico, Uruguay y Venezuela*

www.grupopuntacana.org

### Organización Nacional de Trasplantes (ONT) – Spain

Rafael Matesanz

Beatriz Mahillo

Marina Alvarez

Mar Carmona

# NEWSLETTER TRANSPLANT 2013



## CONTENTS

• <b>International Figures On Organ Donation And Transplantation Activity. Year 2012</b> .....	<b>3</b>
• <b>International Data On Organ Donation And Transplantation Activity, Waiting Lists and Family Refusals. Year 2012</b> .....	<b>33</b>
• <b>International Data On Tissue And Hematopoietic Stem Cell Donation And Transplantation Activity. Year 2012</b> .....	<b>49</b>
• <b>Council Of Europe Convention, Resolutions, Recommendations And Reports</b> .....	<b>63</b>
• <b>Survey On The Implementation Of Council Of Europe Recommendation Rec (2004) 8 Of The Committee Of Ministers To Member States On Autologous Cord Blood Banks</b> .....	<b>67</b>

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

### Actual deceased organ donor

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

### Donor after brain death

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

### Donor after circulatory death

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

### Multiorgan donor

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

### Total TX. (all combinations included)

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

### Double-kidney TX.

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

### TX. from living donors

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

A/ Related:

A1/ Genetically Related:

1st Degree Genetic Relative: Parent, Sibling, Offspring

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

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

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

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

### Heart-lung TX.

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

### Double-lung TX.

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

### Total number of patients transplanted

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

### Absolute number

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

### Paediatric

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

### Waiting List

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

Patients included on the WL for the first time in the course of 2011	100
Total number of patients ever active on the WL during 2011	300
Patients awaiting for a transplant (only active candidates) on 31/12/2011	50
Patients who died while on the WL during 2011	25

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



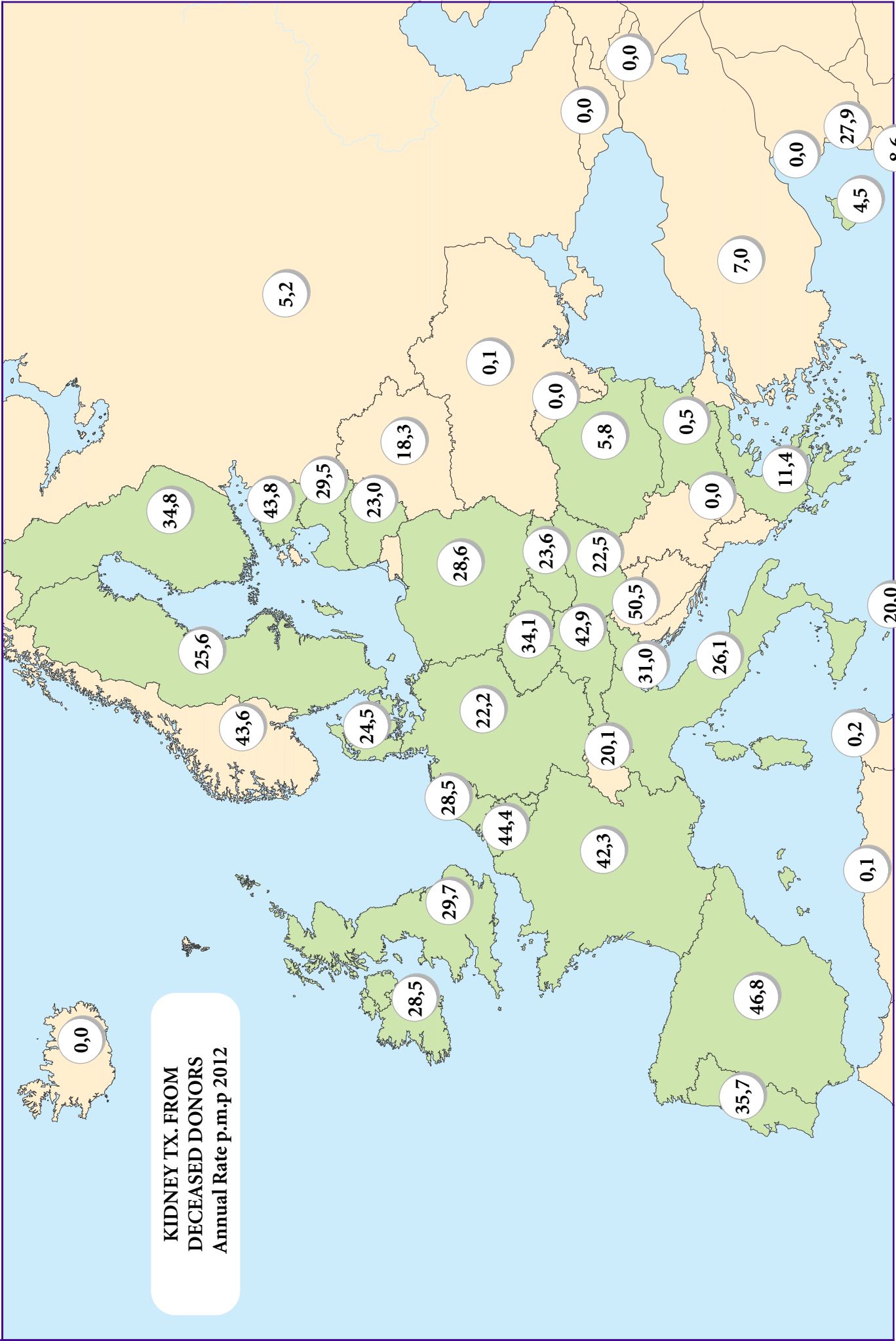
# International Figures On Organ Donation And Transplantation Activity. Year 2012

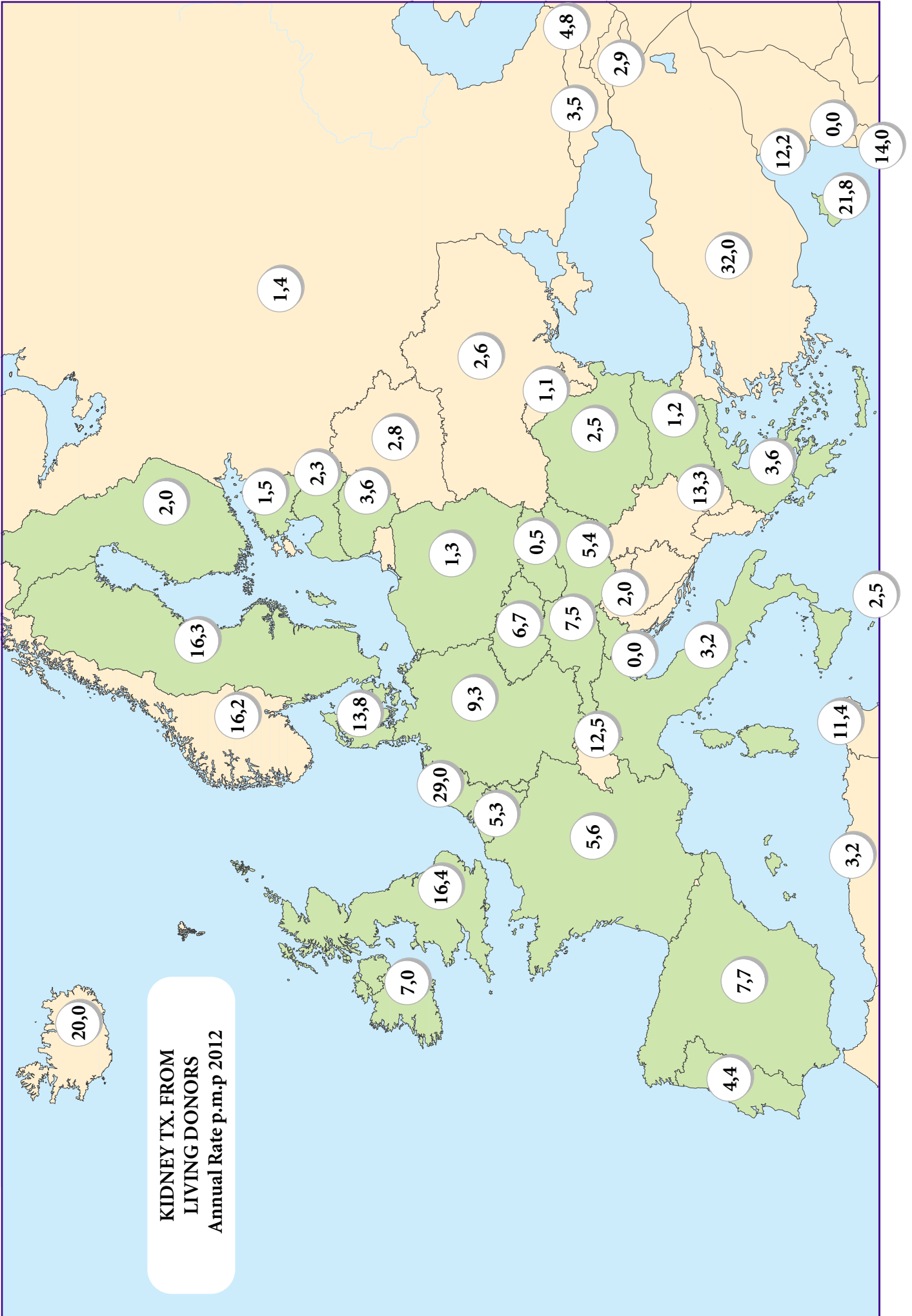


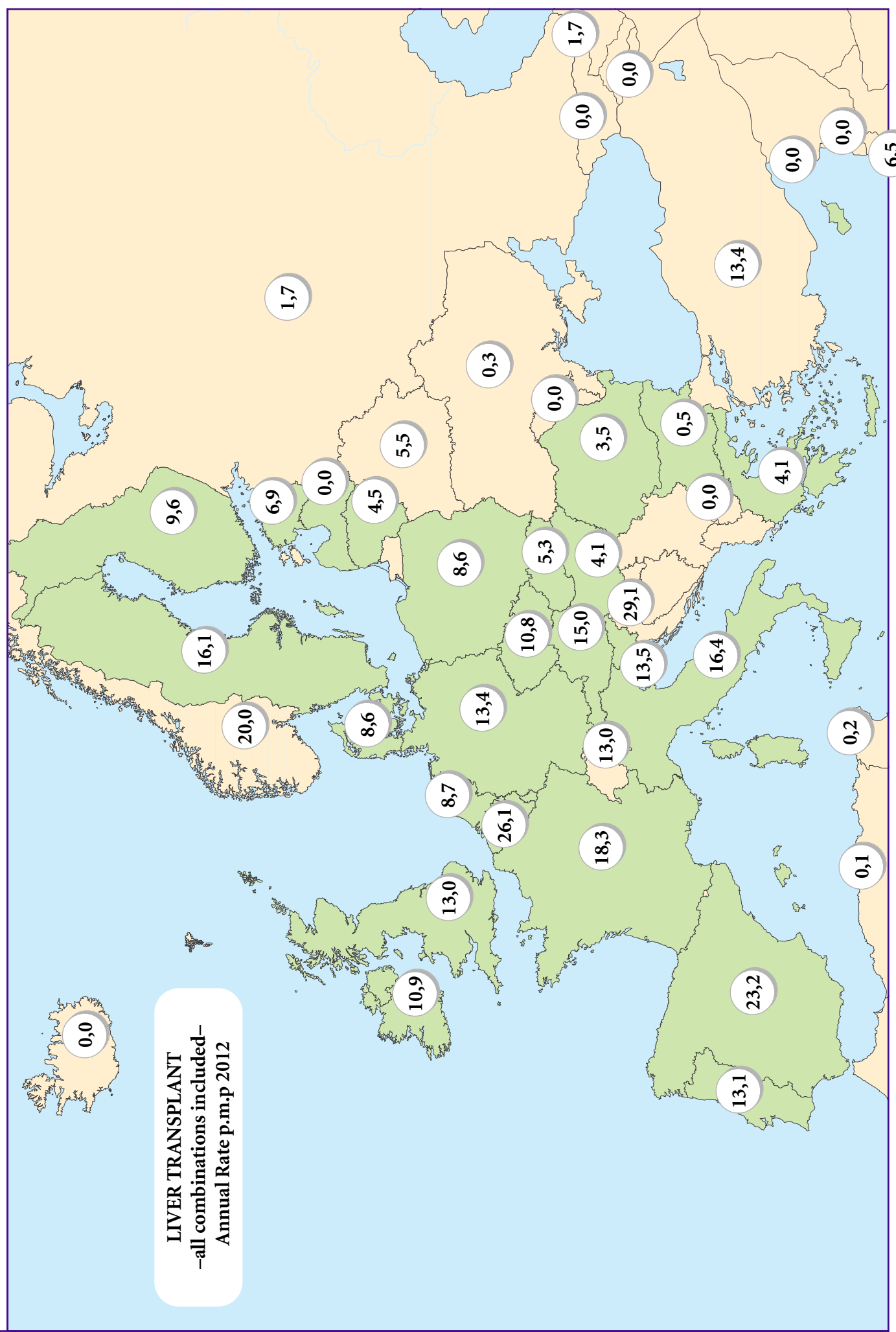




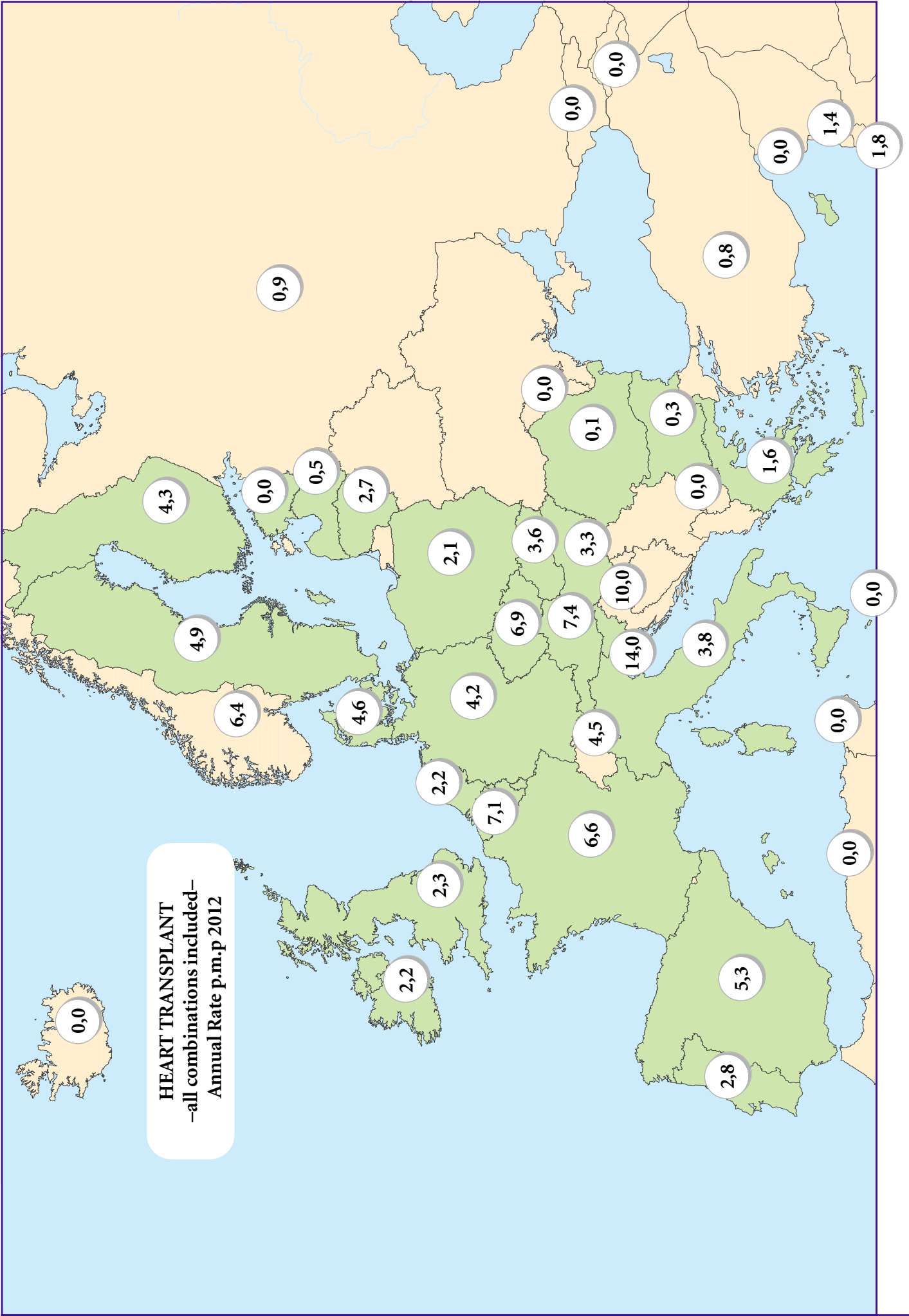
**KIDNEY TX. FROM  
DECEASED DONORS  
Annual Rate p.m.p 2012**





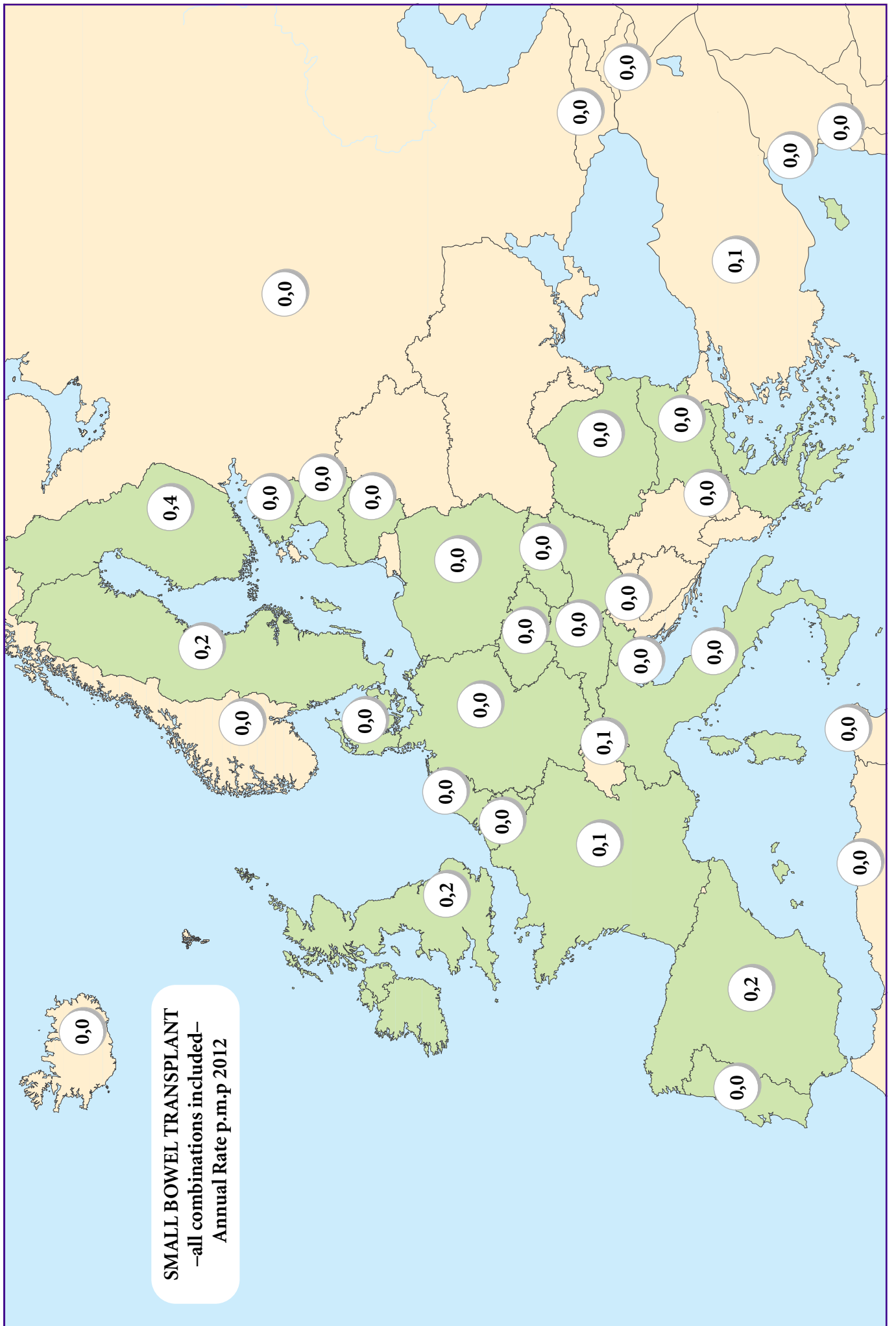


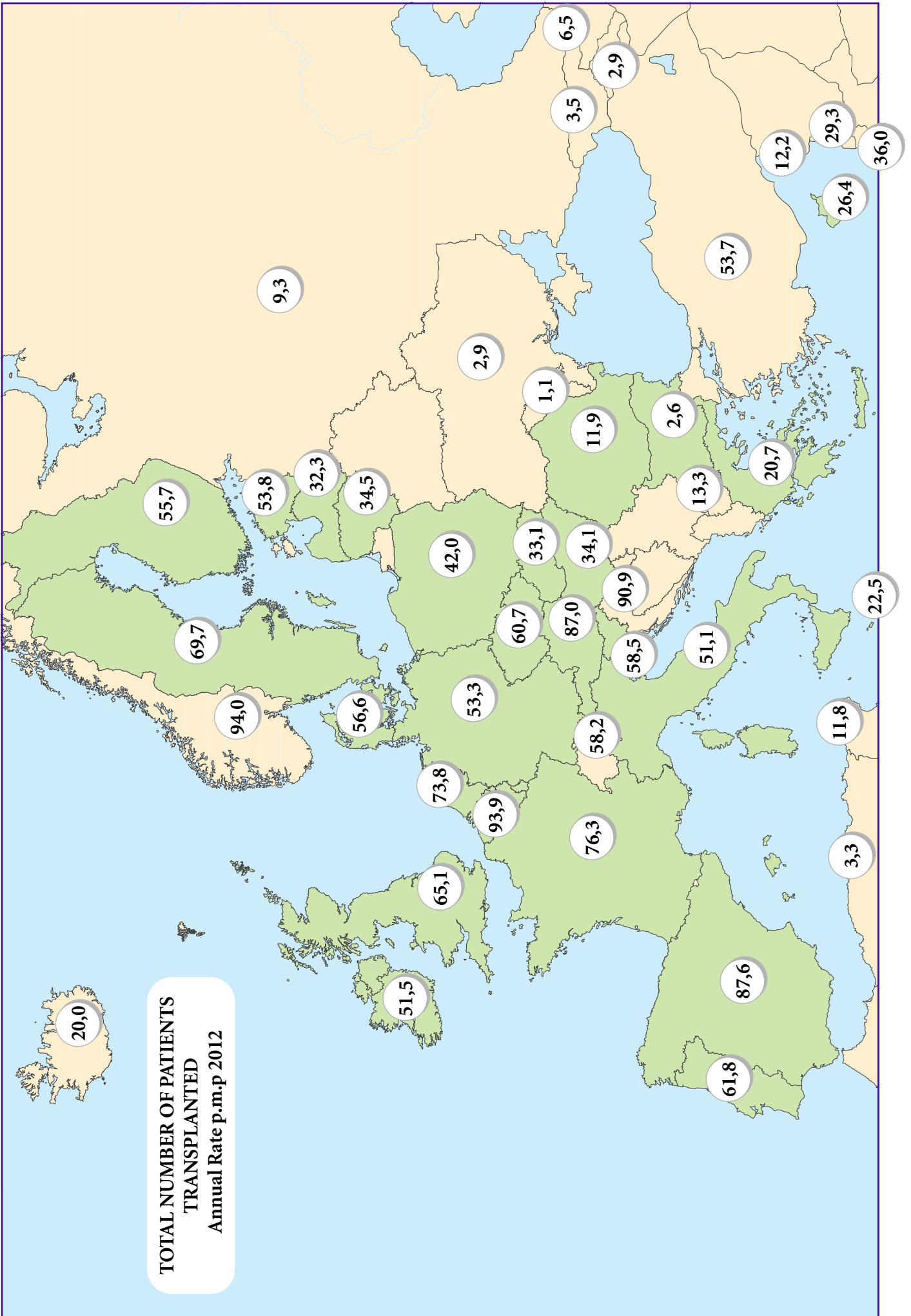


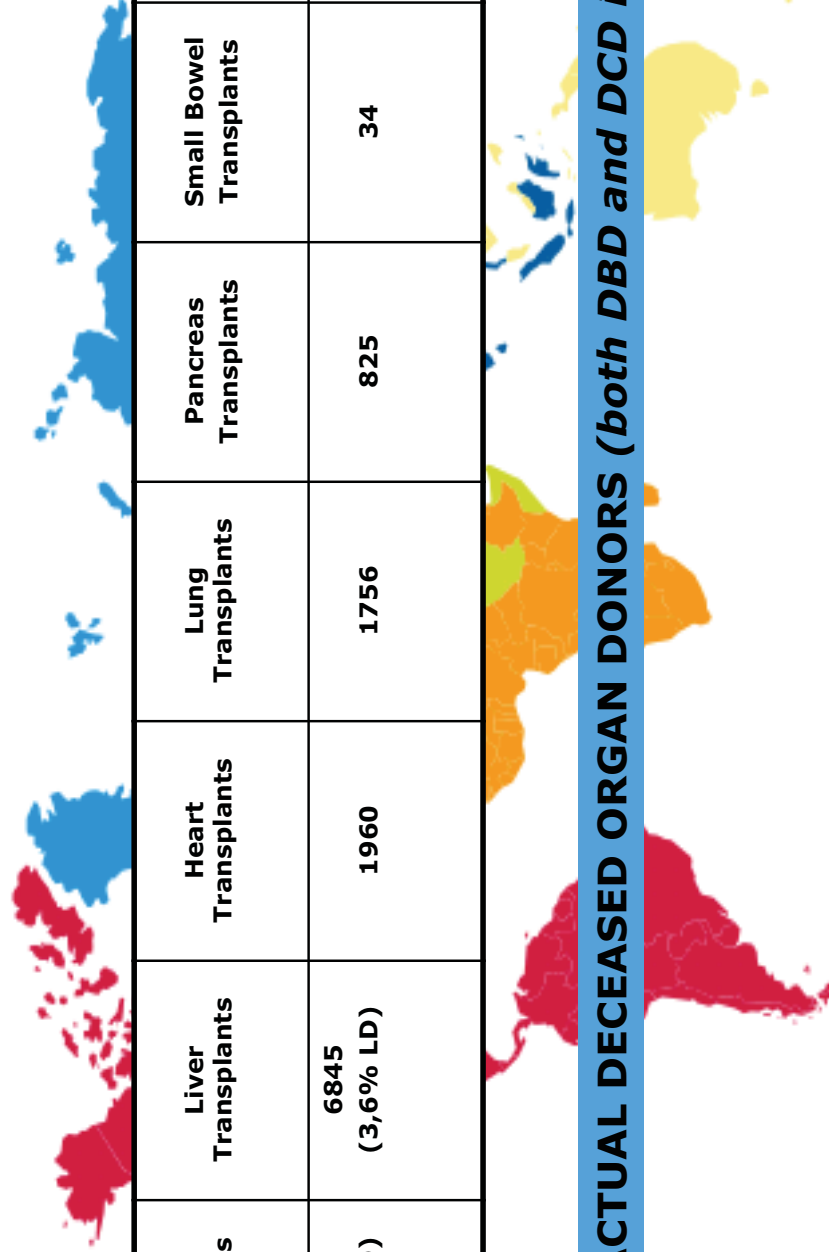










**EOOT**Global Observatory on  
Donation & TransplantationIn collaboration with  
World Health  
OrganizationMINISTERIO  
DE SANIDAD, POLÍTICAS SOCIALES  
Y CONSUMIDORES**ONT****EUROPEAN UNION DATA**

Kidney Transplants	Liver Transplants	Heart Transplants	Lung Transplants	Pancreas Transplants	Small Bowel Transplants	Patients Transplanted
18854 (21,0% LD)	6845 (3,6% LD)	1960	1756	825	34	30274

**9637 ACTUAL DECEASED ORGAN DONORS (both DBD and DCD included)****\* 2012 data****N= 27 COUNTRIES (503,1 million inhabitants)**



**Population (million inhabitants): UNFPA**

Actual deceased organ donors - both DBD and DCD included- KIDNEY TX. from deceased donors TX. from living donors	Number	PMP
LIVER Total TX. -all combinations included-	542	15,6
HEART Total TX. -all combinations included-	850	24,5
HEART-LUNG Total TX.	471	13,6
LUNG Total TX. -all combinations included-	488	14,1
PANCREAS Total TX. -all combinations included-	172	5,0
SMALL BOWEL Total TX. -all combinations included-	3	0,1
RECIPIENTS Total number of patients transplanted	194	5,6
	72	2,1
	0	0,0
	2264	65,2

**Population (million inhabitants): UNFPA**

Actual deceased organ donors - both DBD and DCD included- KIDNEY TX. from deceased donors TX. from living donors	Number	PMP
LIVER Total TX. -all combinations included-	354	15,5
HEART Total TX. -all combinations included-	606	26,5
HEART-LUNG Total TX.	237	10,3
LUNG Total TX. -all combinations included-	231	10,1
PANCREAS Total TX. -all combinations included-	76	3,3
SMALL BOWEL Total TX. -all combinations included-	4	0,2
RECIPIENTS Total number of patients transplanted	148	6,5
	38	1,7
	1	0,0
	1293	56,5

**Population (million inhabitants): UNFPA**

Actual deceased organ donors - both DBD and DCD included- KIDNEY TX. from deceased donors TX. from living donors	Number	PMP
LIVER Total TX. -all combinations included-	354	15,5
HEART Total TX. -all combinations included-	606	26,5
HEART-LUNG Total TX.	237	10,3
LUNG Total TX. -all combinations included-	231	10,1
PANCREAS Total TX. -all combinations included-	76	3,3
SMALL BOWEL Total TX. -all combinations included-	4	0,2
RECIPIENTS Total number of patients transplanted	148	6,5
	38	1,7
	1	0,0
	1293	56,5

**Population (million inhabitants): UNFPA**

Actual deceased organ donors - both DBD and DCD included- KIDNEY TX. from deceased donors TX. from living donors	Number	PMP
LIVER Total TX. -all combinations included-	8143	25,8
HEART Total TX. -all combinations included-	11669	37,0
HEART-LUNG Total TX.	5617	17,8
LUNG Total TX. -all combinations included-	6256	19,8
PANCREAS Total TX. -all combinations included-	2407	7,6
SMALL BOWEL Total TX. -all combinations included-	29	0,1
RECIPIENTS Total number of patients transplanted	1783	5,6
	1043	3,3
	106	0,3
	27211	86,2

**Population (million inhabitants): UNFPA**

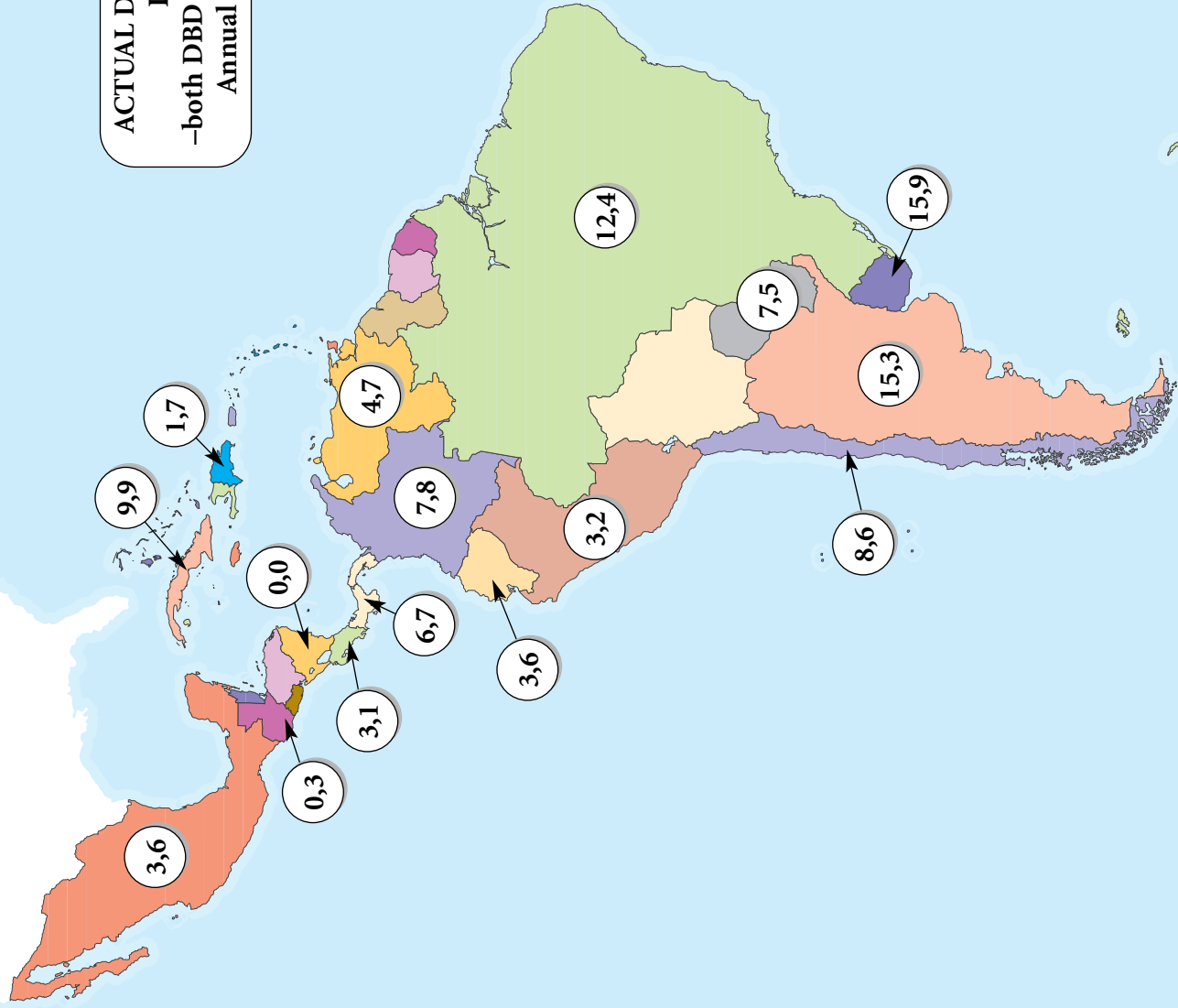
Actual deceased organ donors - both DBD and DCD included- KIDNEY TX. from deceased donors TX. from living donors	Number	PMP
LIVER Total TX. -all combinations included-	38	8,4
HEART Total TX. -all combinations included-	54	12,0
HEART-LUNG Total TX.	54	12,0
LUNG Total TX. -all combinations included-	35	7,8
PANCREAS Total TX. -all combinations included-	12	2,7
SMALL BOWEL Total TX. -all combinations included-	0	0,0
RECIPIENTS Total number of patients transplanted	12	2,7
	3	0,7
	0	0,0
	170	37,8

**Population (million inhabitants): UNFPA**

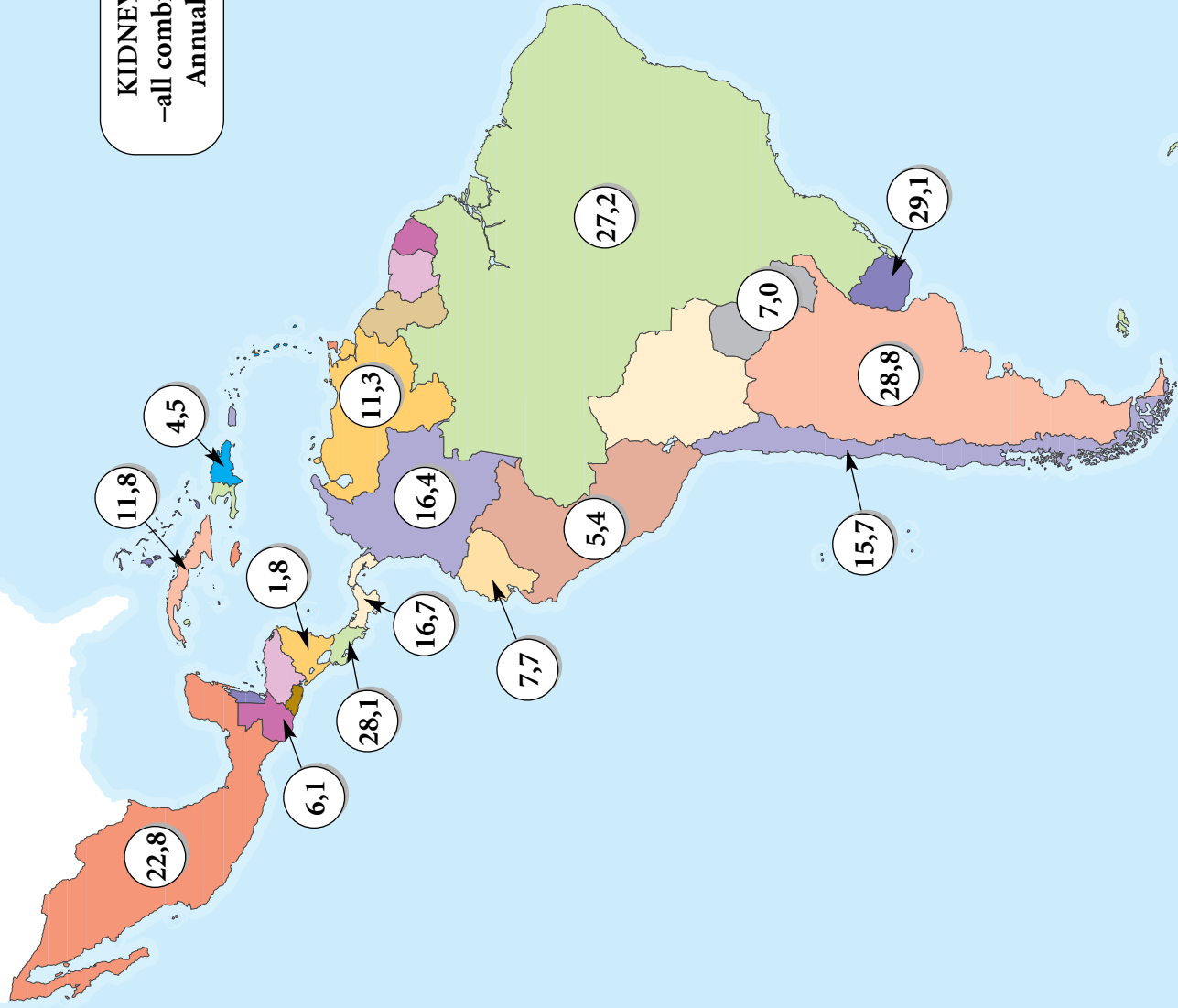
Actual deceased organ donors - both DBD and DCD included- KIDNEY TX. from deceased donors TX. from living donors	Number	PMP
LIVER Total TX. -all combinations included-	38	8,4
HEART Total TX. -all combinations included-	54	12,0
HEART-LUNG Total TX.	54	12,0
LUNG Total TX. -all combinations included-	35	7,8
PANCREAS Total TX. -all combinations included-	12	2,7
SMALL BOWEL Total TX. -all combinations included-	0	0,0
RECIPIENTS Total number of patients transplanted	12	2,7
	3	0,7
	0	0,0
	170	37,8



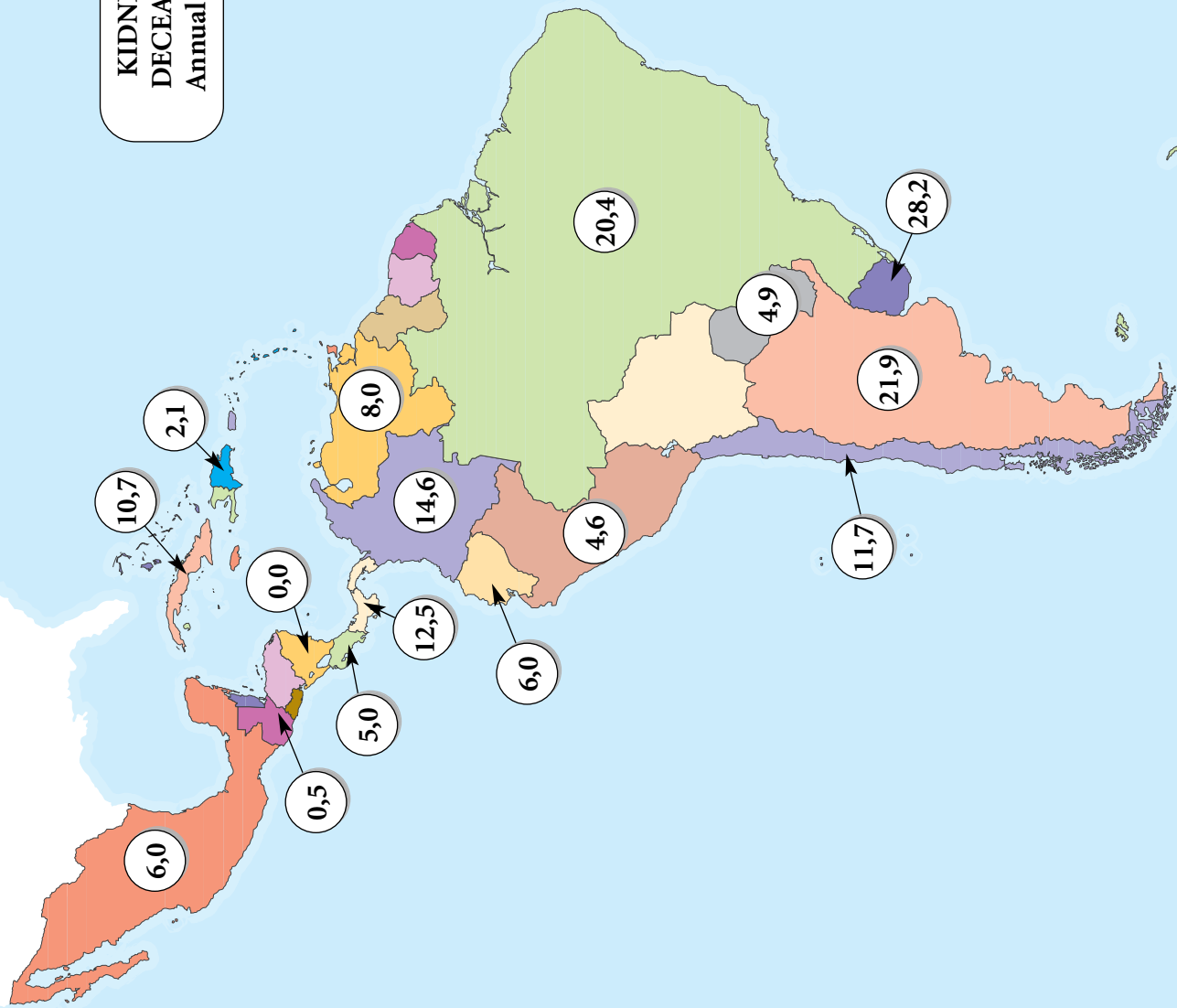
**ACTUAL DECEASED ORGAN DONORS**  
 -both DBD and DCD included-  
 Annual Rate p.m.p 2012



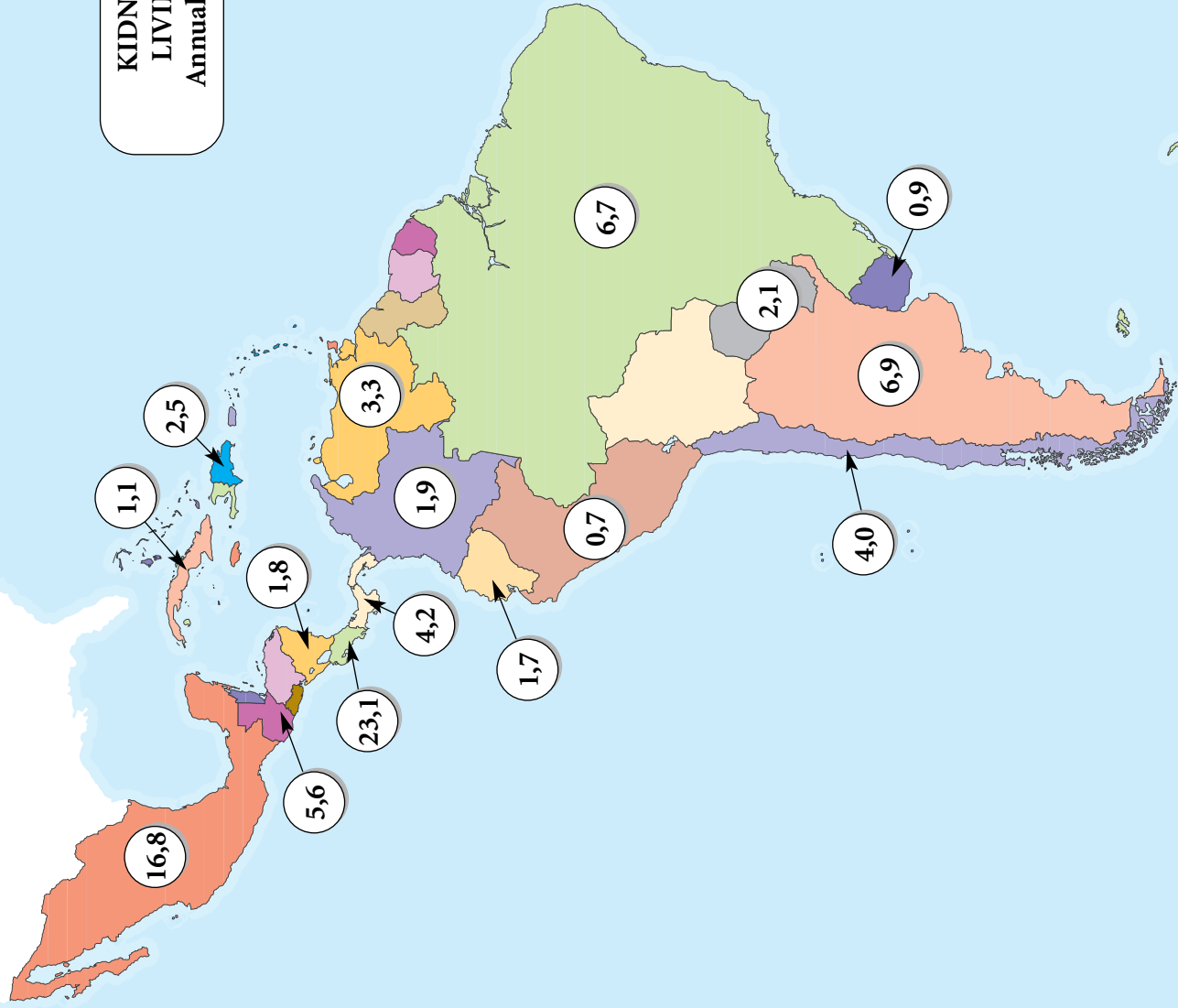
**KIDNEY TRANSPLANT**  
 -all combinations included-  
 Annual Rate p.m.p 2012



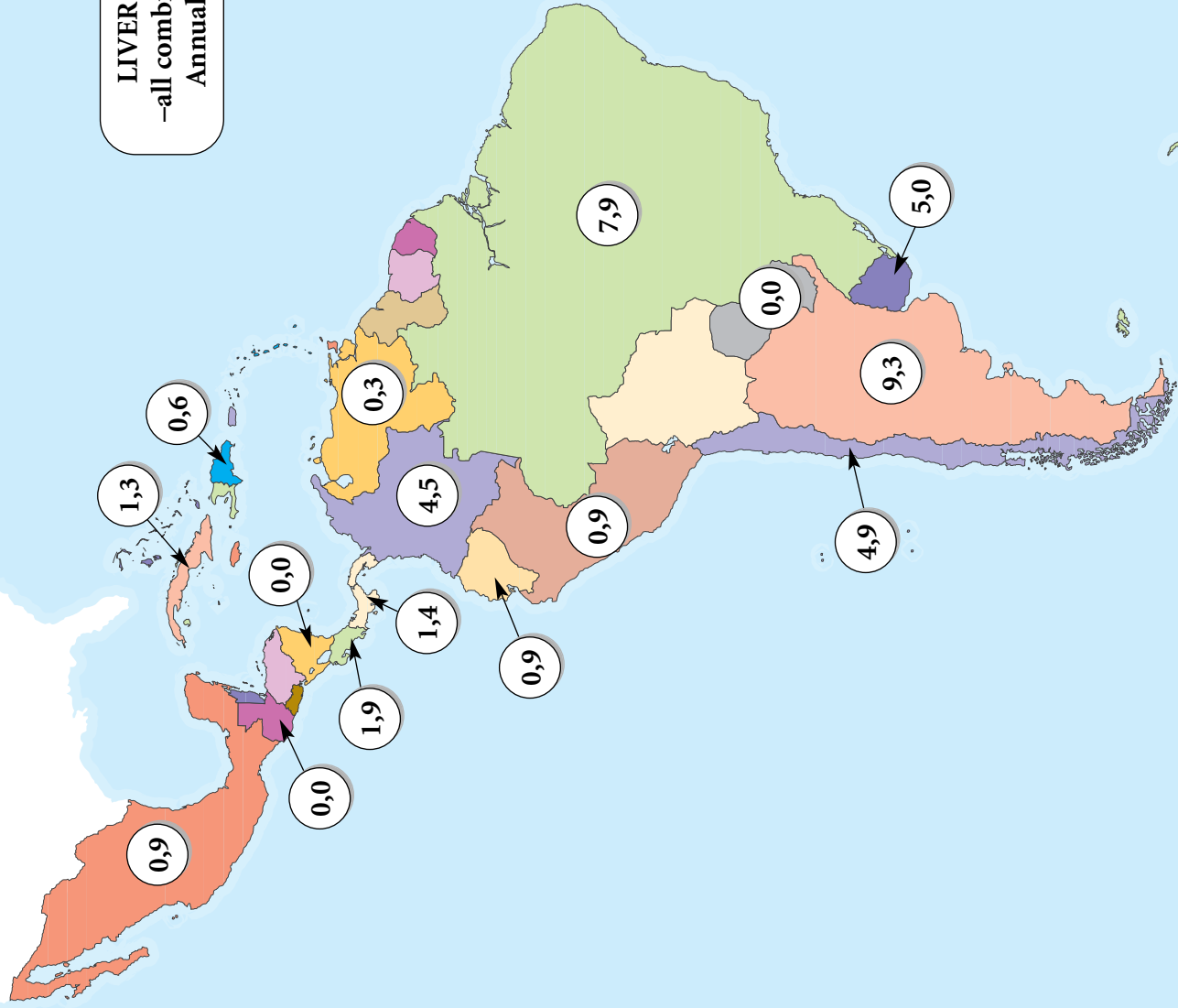
**KIDNEY TX. FROM  
DECEASED DONORS  
Annual Rate p.m.p 2012**



**KIDNEY TX. FROM LIVING DONORS**  
Annual Rate p.m.p 2012

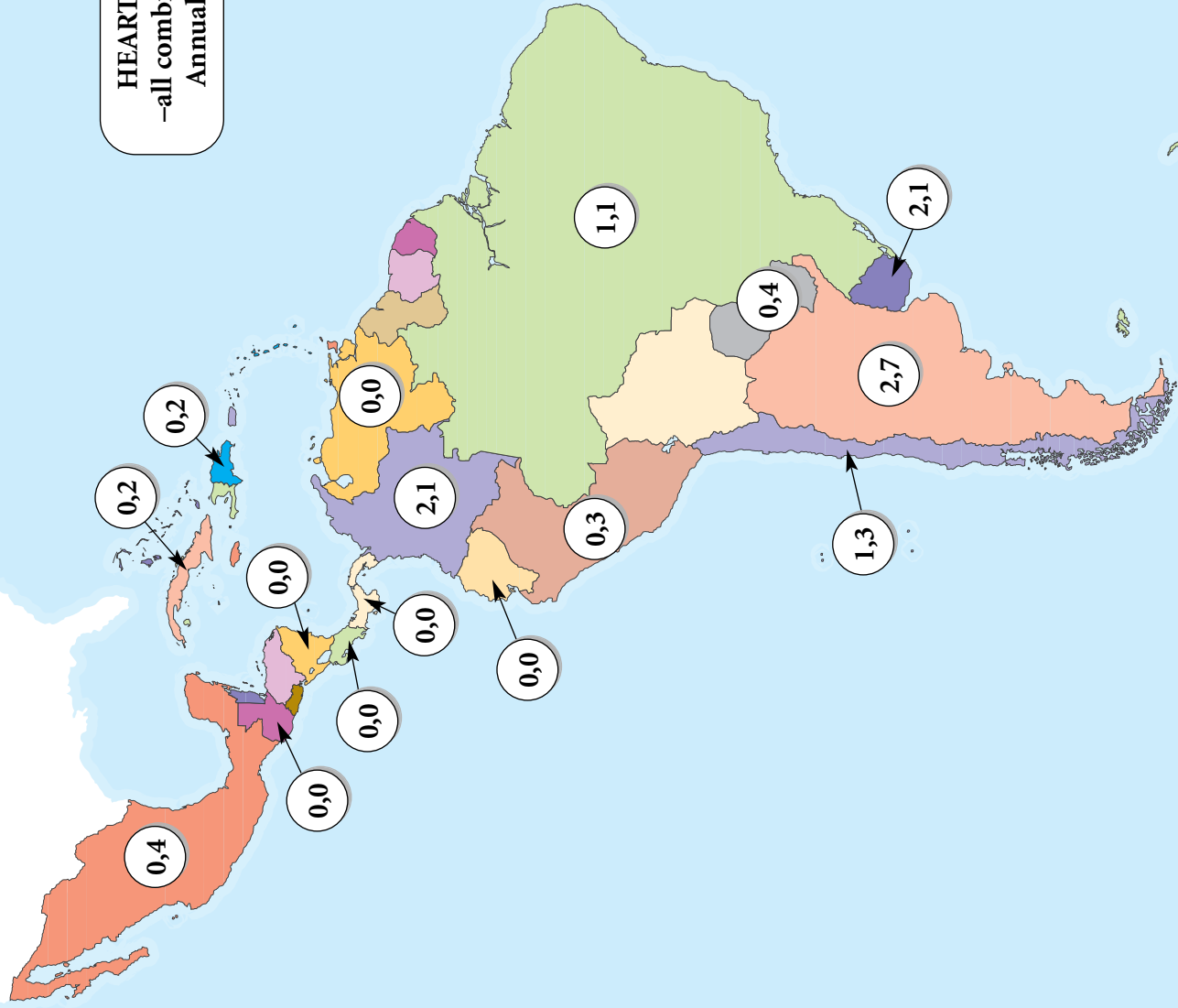


**LIVER TRANSPLANT**  
-all combinations included-  
Annual Rate p.m.p 2012

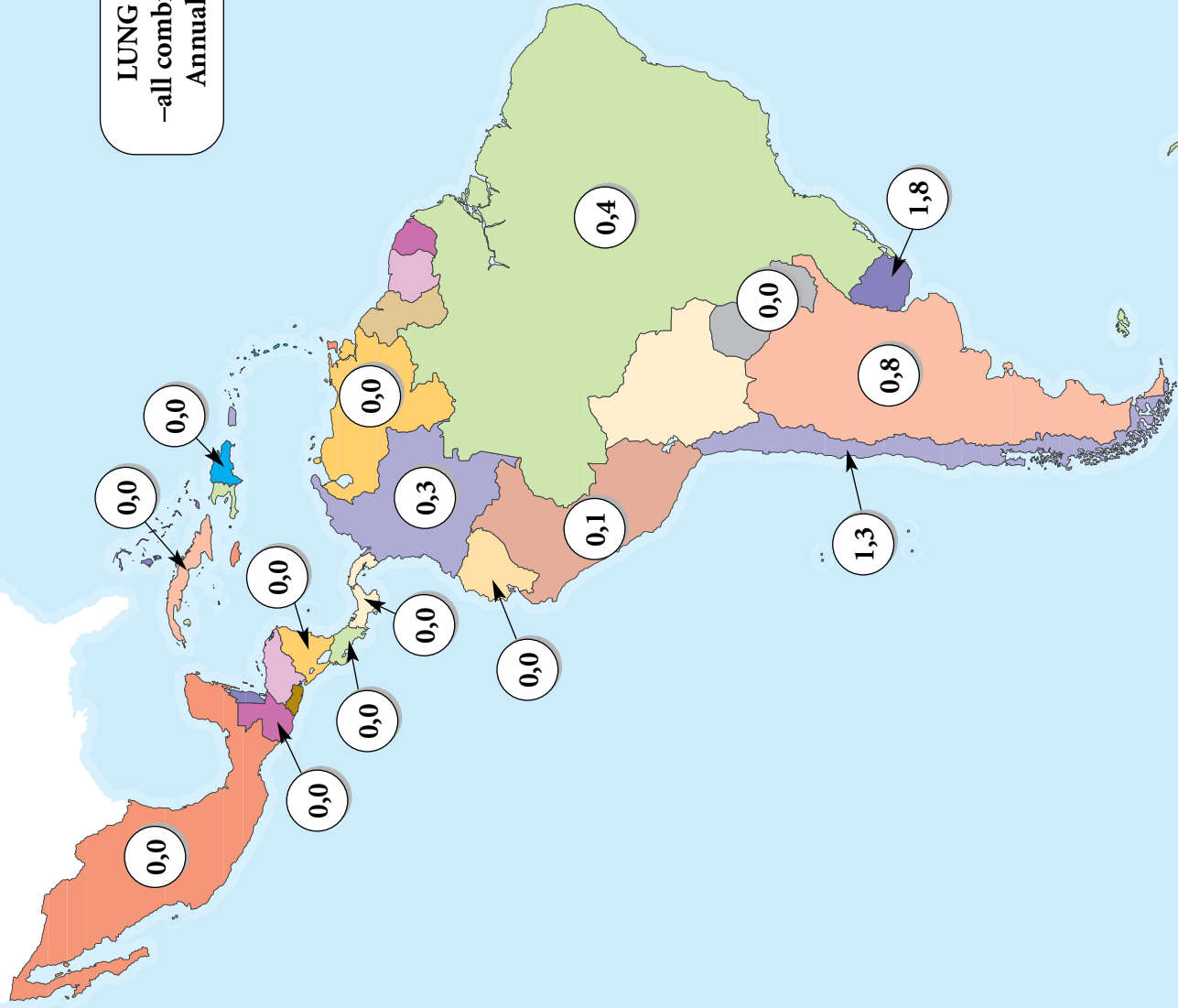




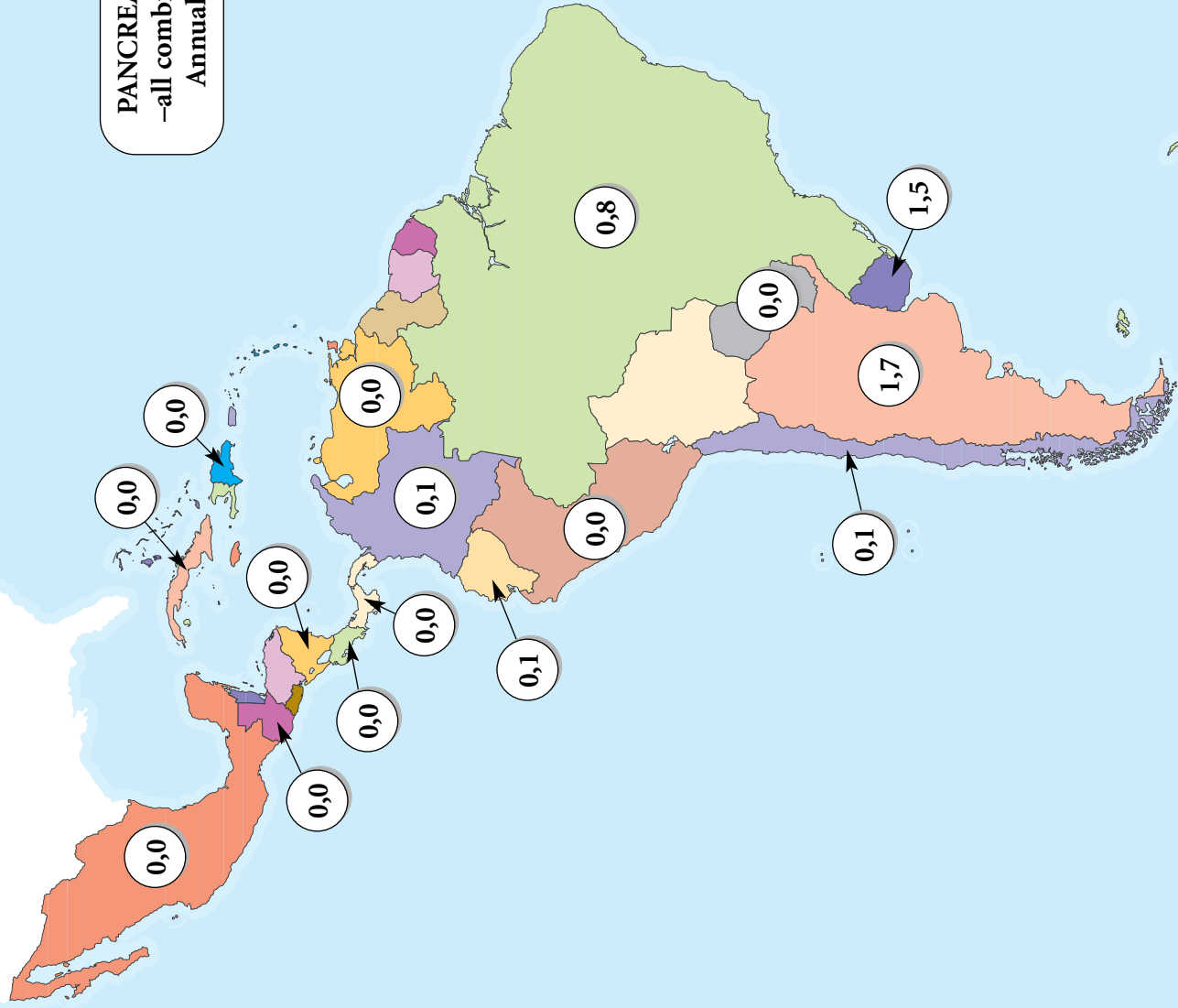
**HEART TRANSPLANT**  
 -all combinations included-  
 Annual Rate p.m.p 2012



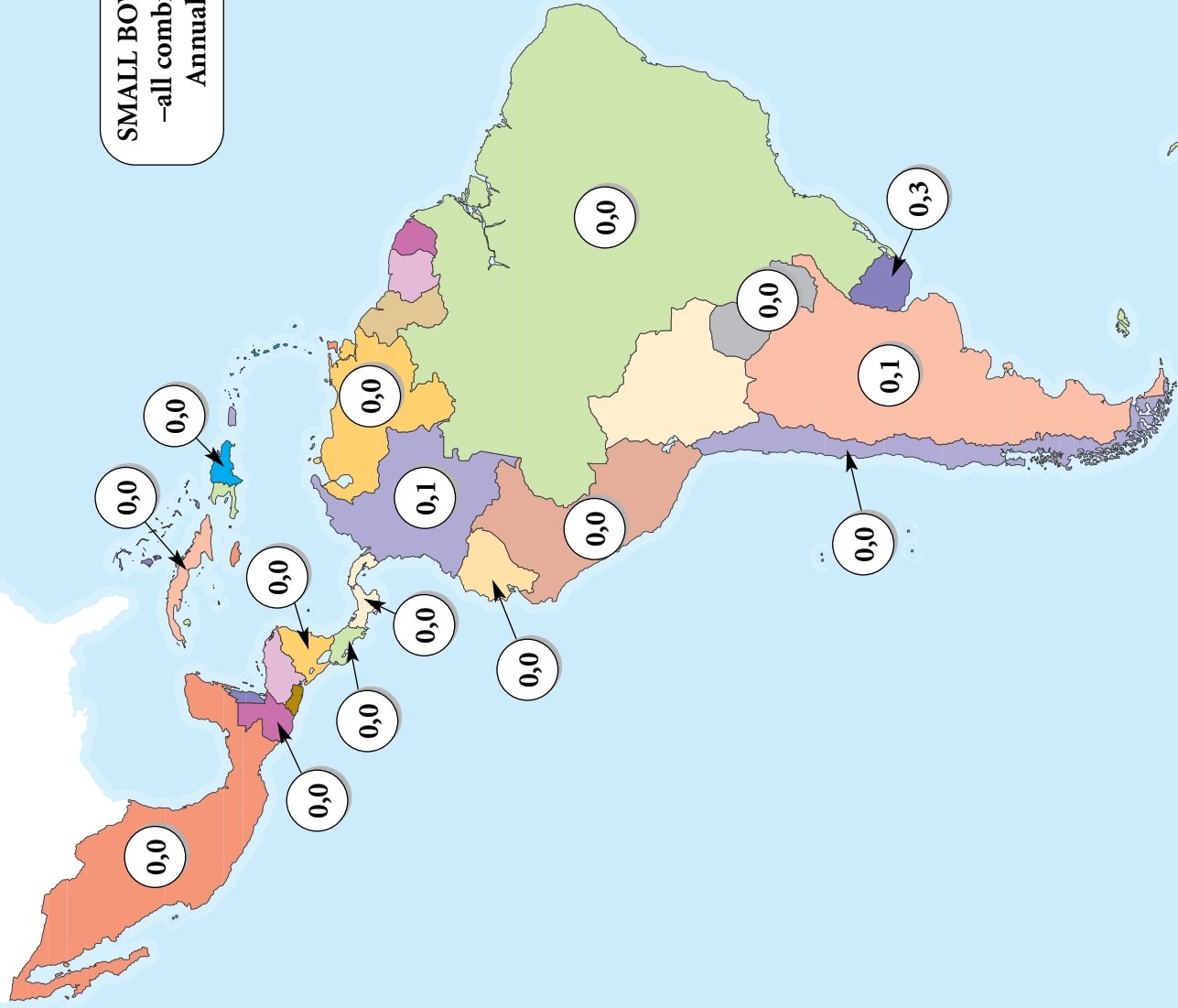
**LUNG TRANSPLANT**  
-all combinations included-  
Annual Rate p.m.p 2012



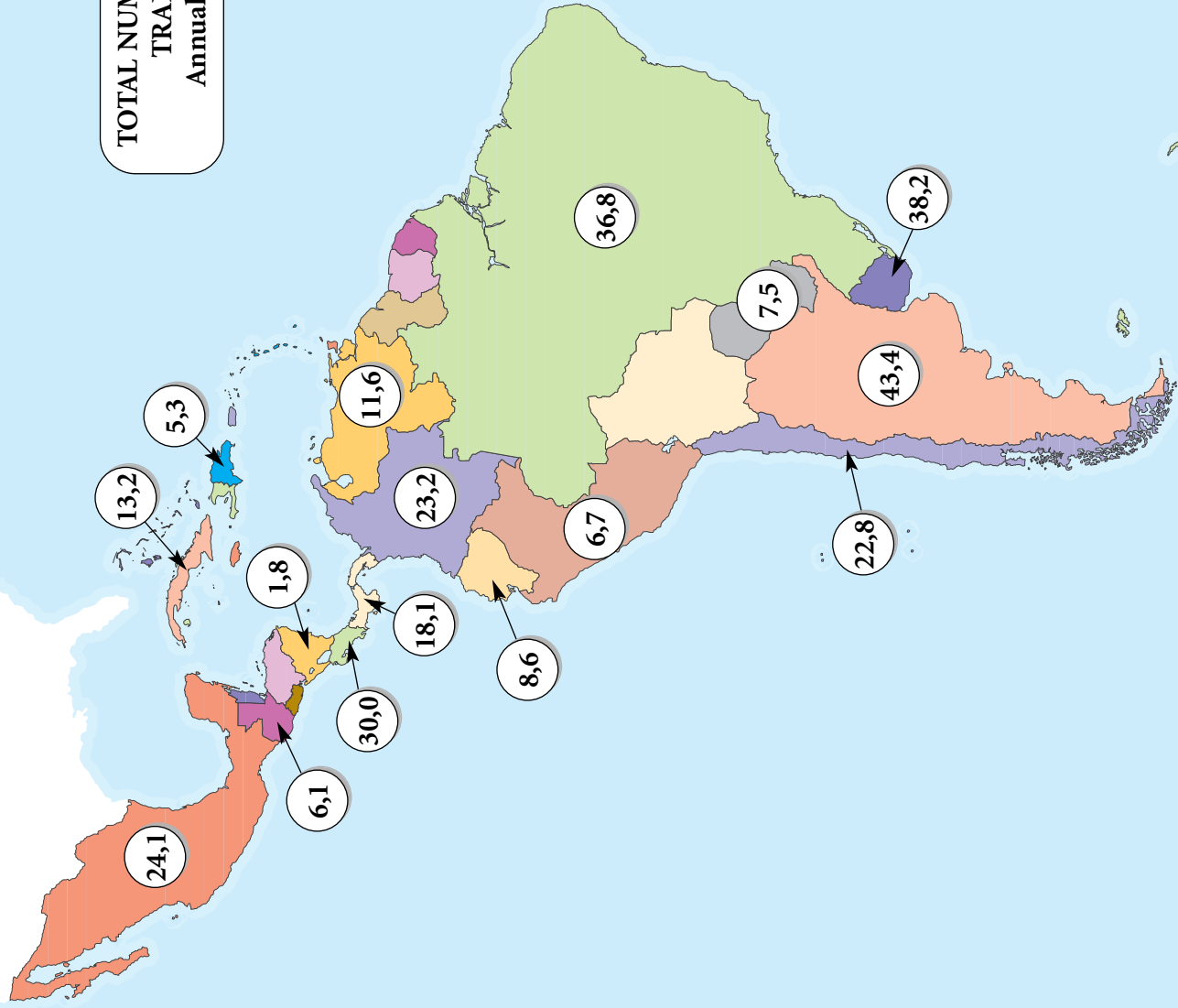
**PANCREAS TRANSPLANT**  
-all combinations included-  
Annual Rate p.m.p 2012



**SMALL BOWEL TRANSPLANT**  
-all combinations included-  
Annual Rate p.m.p 2012



**TOTAL NUMBER OF PATIENTS  
TRANSPLANTED  
Annual Rate p.m.p 2012**





Global Observatory on  
Donation & Transplantation

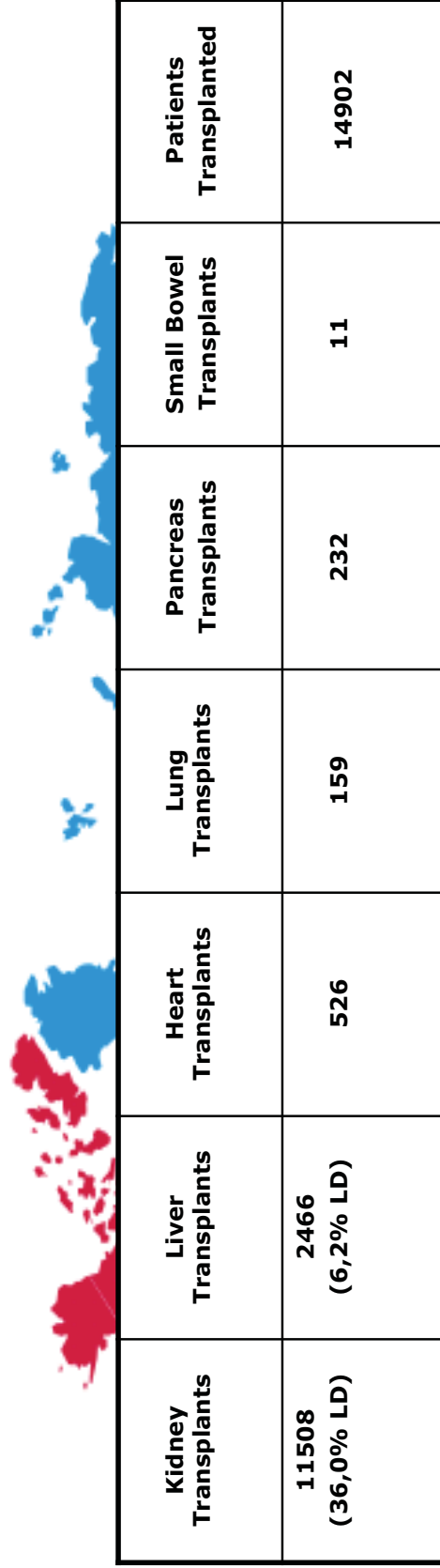
In collaboration with  
World Health  
Organization



MINISTERIO  
DE SANIDAD  
Y CONSUMOS

ONT

## LATINAMERICAN COUNTRIES



Kidney Transplants	Liver Transplants	Heart Transplants	Lung Transplants	Pancreas Transplants	Small Bowel Transplants	Patients Transplanted
11508 (36,0% LD)	2466 (6,2% LD)	526	159	232	11	14902

**4580 ACTUAL DECEASED ORGAN DONORS (both DBD and DCD included)**

**\*2012 data**

**N= 16 COUNTRIES (556,1 million inhabitants)**



**GLOBAL ACTIVITY IN ORGAN TRANSPLANTATION  
2011 ESTIMATES**

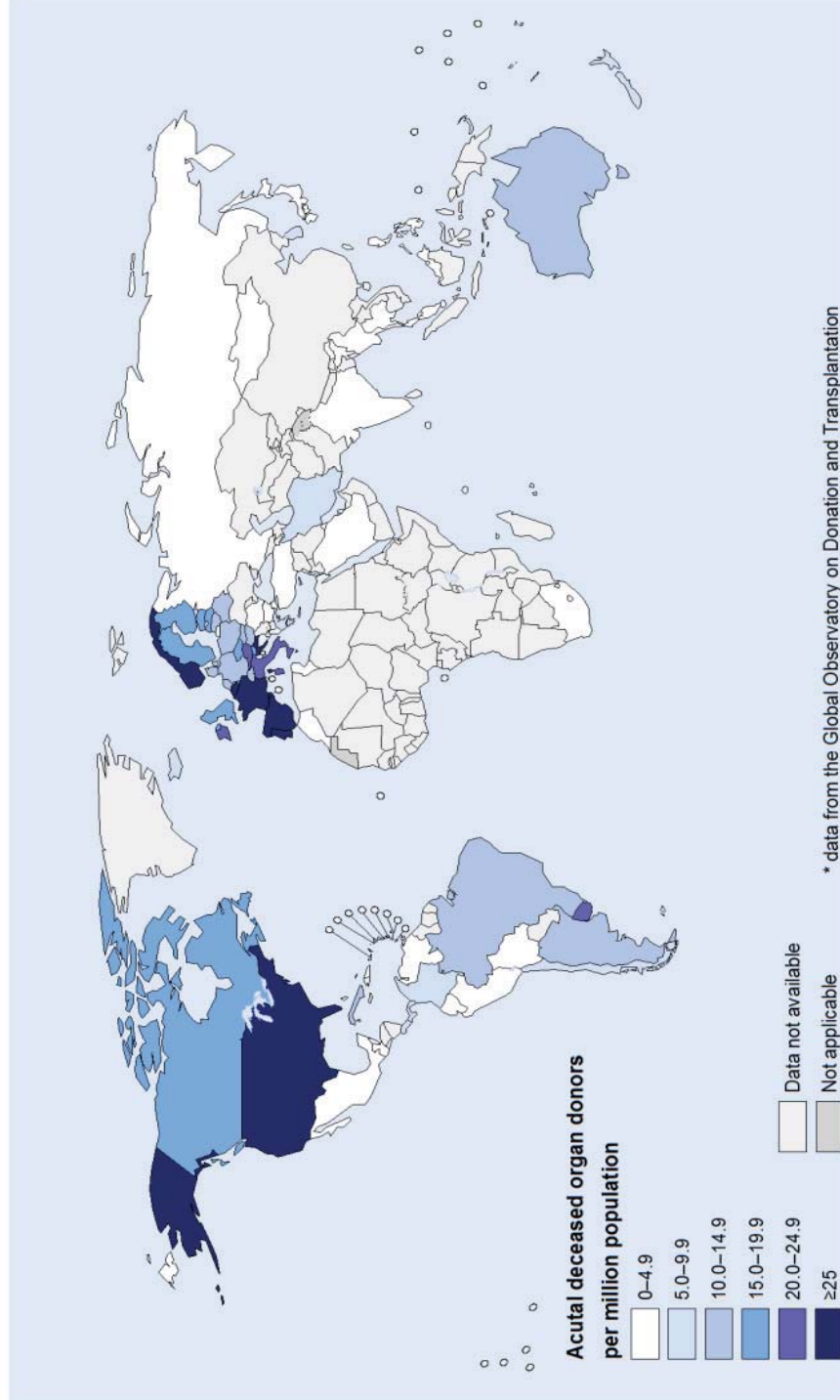


Kidney Transplants	Liver Transplants	Heart Transplants	Lung Transplants	Pancreas Transplants	Small Bowel Transplants
76118	23721	5741	4278	2564	209

**112631 SOLID ORGANS REPORTED TO BE TRANSPLANTED**

*- Information of 103 Member States on organ transplantation activities is included in the GODT: 94 from 2011, 4 from 2010, 2 from 2009 and 3 from 2008.*

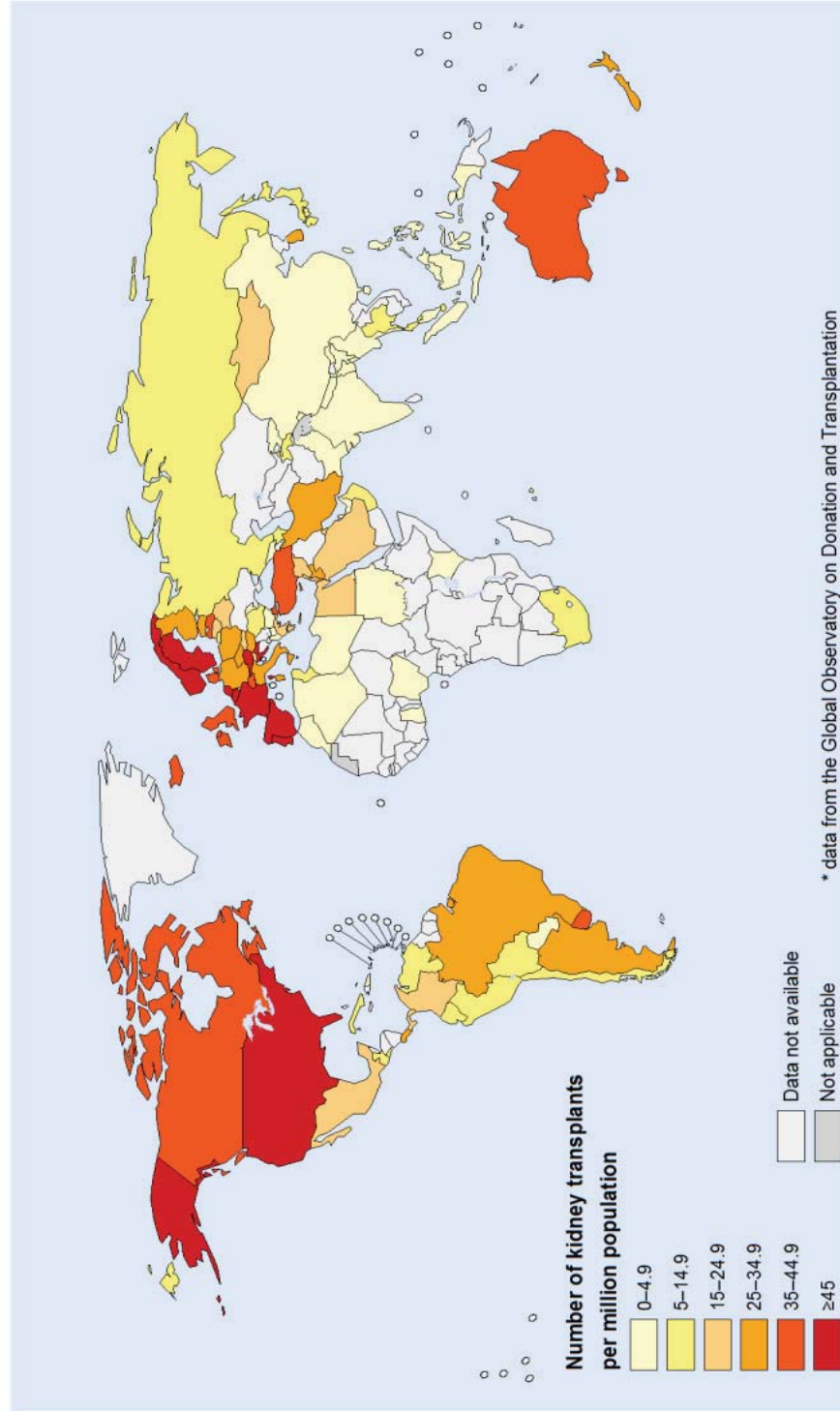
## Actual donors from deceased persons, 2011\*



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

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

## Kidney transplantation activities, 2011\*

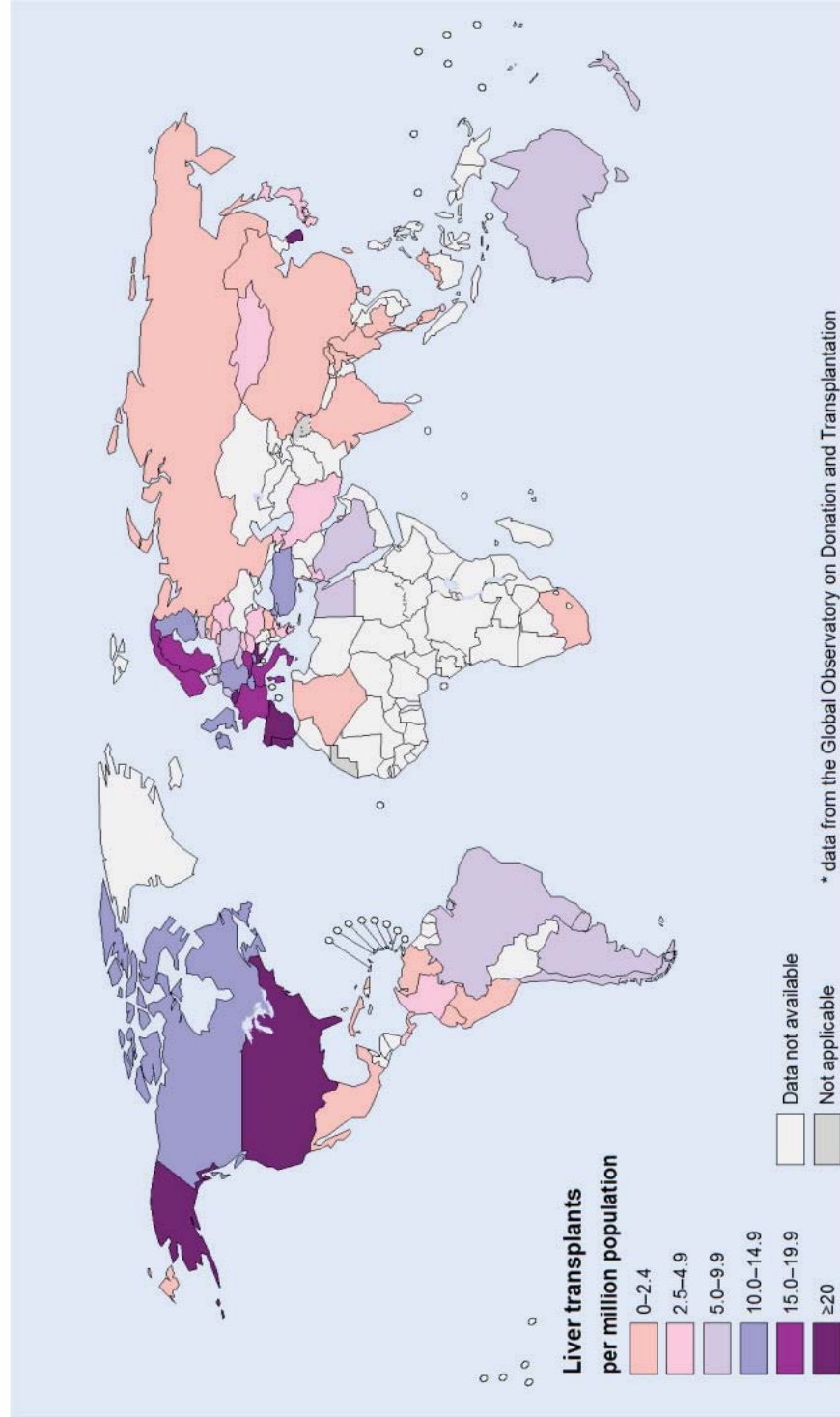


The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers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

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



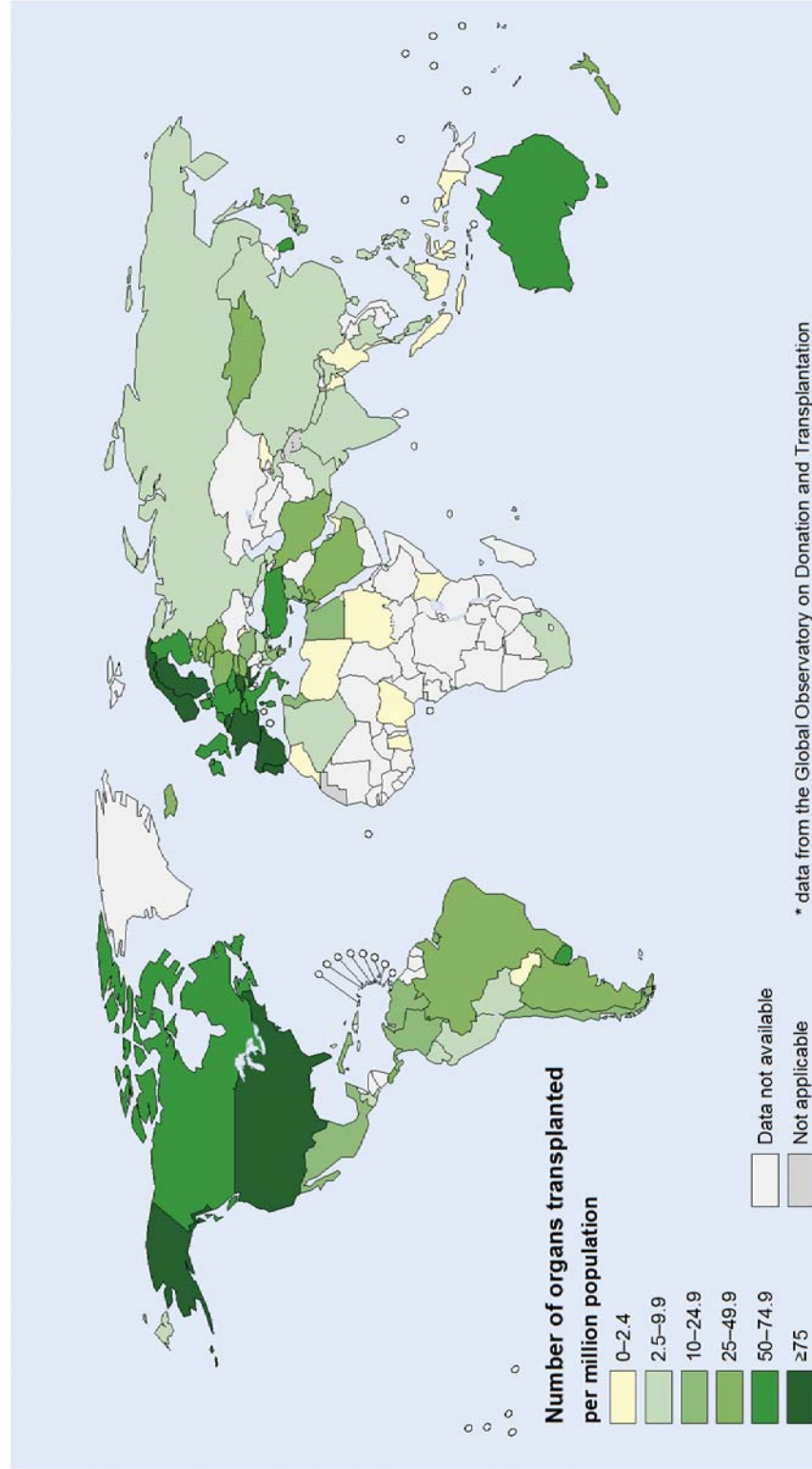
### Liver transplantation activities, 2011\*



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

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

## Global transplantation activities of solid organs, 2011\*



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

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



International Data On Organ Donation And  
Transplantation Activity, Waiting Lists and  
Family Refusals.  
Year 2012.



## DONATION AND TRANSPLANTATION ACTIVITY

## EUROPEAN UNION COUNTRIES

COUNTRIES Population (million inhabitants): UNFPA	AUSTRIA 8,4		BELGIUM 10,8		BULGARIA 7,4		CROATIA 4,4		CYPRUS 1,1		CZECH. R. 10,6		DENMARK 5,6		ESTONIA 1,3		FINLAND 5,4		FRANCE 63,5	
	Number	PMP	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	198 4 149	23,6 0,5 17,7	326 71 252	30,2 6,6 23,3	2 0	0,3 0,0	153 0 142	34,8 0,0 32,3	4 0 4	3,6 0,0 3,6	216 2 123	20,4 0,2 11,6	76 0 58	13,6 0,0 10,4	32 0 18	24,6 0,0 13,8	108 0 70	20,0 0,0 13,0	1642 53 1474	25,9 0,8 23,2
<b>KIDNEY</b> Total TX. - all combinations included- % (TX. from living d./ Total TX.) Paediatric <15 years TX. from deceased donors TX. from DCD Single TX. Double TX. TX. from living donors TX. from Related living donors TX. from Unrelated living donors	423 14,9 6 360 20 353 7 63 63 0	50,4 14,9 0,7 42,9 2,4 42,0 0,8 7,5 7,5 0,0	537 10,6 6 480 92 476 4 57 57 0	49,7 10,6 0,6 44,4 8,5 44,1 0,4 5,3 5,3 0,0	13 69,2 0 4 0 4 0 9 9 0	1,8 0,0 0,5 0,0 0,5 0,0 1,2 1,2 0,0 0,0	231 3,9 2 222 0 221 1 9 9 0	52,5 3,9 0,5 50,5 0,0 50,2 0,2 2,0 2,0 0,0	29 82,8 1 5 0	26,4 0,0 4,5 0,0	432 16,4 10 361 4 352 9 71 63 8	40,8 16,4 0,9 34,1 0,4 33,2 0,8 6,7 5,9 0,8	214 35,9 3 137 0 137 0 77 77 0	38,2 35,9 0,5 24,5 0,0 24,5 0,0 13,8 13,8 0,0	59 3,4 1 57 0 57 0 2 2 0	45,4 3,4 0,8 43,8 0,0 43,8 0,0 1,5 1,5 0,0	199 5,5 6 188 0 188 0 11 11 0	36,9 5,5 1,1 34,8 0,0 34,8 0,0 2,0 2,0 0,0	3044 11,7 47 2687 81 2623 64 357 357 NA	47,9 11,7 0,7 42,3 1,3 41,3 1,0 5,6 5,6 NA
<b>LIVER</b> Total TX. - all combinations included- Paediatric <15 years Split TX. Domino TX. TX. from living donors TX. from DCD	126 4 3 0 0 2	15,0 0,5 0,4 0,0 0,0 0,2	282 29 0 2 30 50	26,1 2,7 0,0 0,2 2,8 4,6	4 0 0 2 0 0	0,5 0,0 0,0 0,3 0,0 0,0	128 4 2 0 4 0	29,1 0,9 0,5 0,0 0,9 0,0	NA NA NA NA NA NA	NA NA NA NA NA NA	114 12 0 0 1 0	10,8 1,1 0,0 0,0 0,1 0,0	48 4 0 0 0 0	8,6 0,7 0,0 0,0 0,0 0,0	9 0 0 0 0 0	6,9 0,0 0,0 0,0 0,0 0,0	52 3 0 0 0 0	9,6 0,6 0,0 0,0 0,0 0,0	1161 76 107 8 9 3	18,3 1,2 1,7 0,1 0,1 0,0
<b>HEART</b> Total TX. - all combinations included- Paediatric <15 years	62 6	7,4 0,7	77 1	7,1 0,1	2 0	0,3 0,0	44 0	10,0 0,0	NA NA	73 1	6,9 0,1	26 2	4,6 0,4	0 0,0	0 0	0,0 0,0	23 0	4,3 0,0	417 21	6,6 0,3
<b>HEART-LUNG</b> Total TX. Paediatric <15 years	3 0	0,4 0,0	2 0	0,2 0,0	0 0	0,0 0,0	0 0	0,0 0,0	NA NA	0 0	0,0 0,0	0 0	0,0 0,0	0 0,0	0 0	0,0 0,0	1 0	0,2 0,0	20 2	0,3 0,0
<b>LUNG</b> Total TX. - all combinations included- Paediatric <15 years Single TX. Double TX. (heart-lung TX. included) TX. from living donors TX. from DCD (double + single)	124 5 3 121 0 2	14,8 0,6 0,4 14,4 0,0 0,2	129 0 9 120 0 18	11,9 0,0 0,8 11,1 0,0 1,7	NA NA NA NA NA NA	NA NA NA NA NA NA	0 0 0 0 0 0	0,0 0,0 0,0 0,0 0,0 0,0	NA NA NA NA NA NA	NA NA NA NA NA NA	20 0 9 11 0 0	1,9 0,0 0,8 1,0 0,0 0,0	30 0 3 27 0 0	5,4 0,0 0,5 4,8 0,0 0,0	2 0 0 2 0 0	1,5 0,0 0,0 1,5 0,0 0,0	27 1 0 27 0 0	5,0 0,2 0,0 5,0 0,0 0,0	342 9 58 284 0 0	5,4 0,1 0,9 4,5 0,0 0,0
<b>PANCREAS</b> Total TX. - all combinations included- Paediatric <15 years Pancreas TX. Alone Kidney – Pancreas TX. TX. from DCD	14 0 2 12 0	1,7 0,0 0,2 1,4 0,0	13 1 1 10 5	1,2 0,1 0,1 0,9 0,5	0 0 0 0 0	0,0 0,0 0,0 0,0 0,0	8 0 0 8 0	1,8 0,0 0,0 1,8 0,0	1 0 0 1 0	0,9 0,0 0,0 0,9 0,0	26 0 3 23 0	2,5 0,0 0,3 2,2 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	8 0 0 8 0	1,5 0,0 0,0 1,5 0,0	72 0 13 58 0	1,1 0,0 0,2 0,9 0,0
<b>SMALL BOWEL</b> Total TX. - all combinations included- Paediatric <15 years Small bowel TX. Alone					0 0 0	0,0 0,0 0,0			NA NA NA	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	2 0 2	0,4 0,0 0,4	7 4 4	0,1 0,1 0,1	
<b>RECIPIENTS</b> Total number of patients transplanted Paediatric <15 years Patients transplanted from living donors	731 21 63	87,0 2,5 7,5	1014 36 87	93,9 3,3 8,1	19 0 11	2,6 0,0 1,5	400 6 13	90,9 1,4 3,0	29 1 24	26,4 0,9 21,8	643 23 72	60,7 2,2 6,8	317 9 77	56,6 1,6	70 1 2	53,8 0,8 1,5	301 10 11	55,7 1,9 2,0	4846 145 366	76,3 2,3 5,8

## TRANSPLANTATION



**DONATION AND TRANSPLANTATION ACTIVITY**

**EUROPEAN UNION COUNTRIES**

COUNTRIES Population (million inhabitants): UNFPA	GERMANY 82,0		GREECE 11,4		HUNGARY 9,9		IRELAND 4,6		ITALY 61,0		LATVIA 2,2		LITHUANIA 3,3		LUXEMBOURG 0,5		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	1047 0 956	12,8 0,0 11,7	77 0 68	6,8 0,0 6,0	143 0 75	14,4 0,0 7,6	78 3 65	17,0 0,7 14,1	1337 5 762	21,9 0,1 12,5	38 15 1	17,3 6,8 0,5	41 0 22	12,4 0,0 6,7	4 0 3	8,0 0,0 6,0	12 0 12	30,0 0,0 30,0
<b>DONATION</b>																		
<b>TRANSPLANTATION</b>																		
<b>KIDNEY</b>																		
Total TX. -all combinations included-	2586	31,5	171	15,0	276	27,9	163	35,4	1786	29,3	70	31,8	88	26,7	NA	NA	9	22,5
% (TX. from living d./ Total TX.)	29,6																	
Paediatric <15 years	68	0,8	6	0,5	13	1,3	19,6	10,8	56	0,9	2	0,9	2	0,6	NA	NA	0	0,0
TX. from deceased donors	1820	22,2	130	11,4	223	22,5	131	28,5	1593	26,1	65	29,5	76	23,0	NA	NA	8	20,0
TX. from DCD	0	0,0	0	0,0	0	0,0	6	1,3	4	0,1	28	12,7	0	0,0	NA	NA	0	0,0
Single TX.	1798	21,9	130	11,4	221	22,3	125	27,2	1484	24,3	65	29,5	75	22,7	NA	NA	0	0,0
Double TX.	22	0,3	0	0,0	2	0,2	6	1,3	109	1,8	0	0,0	1	0,3	NA	NA	1	0,0
TX. from living donors	766	9,3	41	3,6	53	5,4	32	7,0	193	3,2	5	2,3	12	3,6	NA	NA	1	2,5
TX. from Related living donors	766	9,3	41	3,6	53	5,4	25	5,4	193	3,2	4	1,8	12	3,6	NA	NA	1	2,5
TX. from Unrelated living donors	0	0,0	0	0,0	0	0,0	7	1,5	0	0,0	1	0,5	0	0,0	NA	NA	0	0,0
<b>LIVER</b>																		
Total TX. -all combinations included-	1097	13,4	47	4,1	41	4,1	50	10,9	1001	16,4	0	0,0	15	4,5	NA	NA	NA	NA
Paediatric <15 years	128	1,6	0	0,0	3	0,3	0	0,0	75	1,2	0	0,0	0	0,0	NA	NA	NA	NA
Split TX.	82	1,0	0	0,0	0	0,0	0	0,0	86	1,4	0	0,0	0	0,0	NA	NA	NA	NA
Domino TX.	2	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	NA	NA	NA	NA
TX. from living donors	78	1,0	0	0,0	0	0,0	0	0,0	15	0,2	0	0,0	0	0,0	NA	NA	NA	NA
TX. from DCD	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	NA	NA	NA	NA
<b>HEART</b>																		
Total TX. -all combinations included-	346	4,2	18	1,6	33	3,3	10	2,2	231	3,8	1	0,5	9	2,7	NA	NA	0	0,0
Paediatric <15 years	21	0,3	0	0,0	3	0,3	0	0,0	28	0,5	0	0,0	1	0,3	NA	NA	0	0,0
<b>HEART-LUNG</b>																		
Total TX.	14	0,2	0	0,0	0	0,0	0	0,0	1	0,0	0	0,0	1	0,3	NA	NA	0	0,0
Paediatric <15 years	0	0,0	0	0,0	0	0,0	0	0,0	1	0,0	0	0,0	0	0,0	NA	NA	0	0,0
<b>LUNG</b>																		
Total TX. -all combinations included-	361	4,4	NA	NA	14	3,0	14	3,0	114	1,9	0	0,0	3	0,9	NA	NA	NA	NA
Paediatric <15 years	12	0,1	NA	NA	0	0,0	0	0,0	12	0,2	0	0,0	0	0,0	NA	NA	NA	NA
Single TX.	39	0,5	NA	NA	10	2,2	10	2,2	36	0,6	0	0,0	1	0,3	NA	NA	NA	NA
Double TX. (heart-lung TX. included)	318	3,9	NA	NA	4	0,9	4	0,9	78	1,3	0	0,0	2	0,6	NA	NA	NA	NA
TX. from living donors	4	0,0	NA	NA	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	NA	NA	NA	NA
TX. from DCD (double + single)	0	0,0	NA	NA	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	NA	NA	NA	NA
<b>PANCREAS</b>																		
Total TX. -all combinations included-	161	2,0	NA	NA	6	0,6	1	0,2	67	1,1	0	0,0	0	0,0	NA	NA	NA	NA
Paediatric <15 years	0	0,0	NA	NA	0	0,0	0	0,0	2	0,0	0	0,0	0	0,0	NA	NA	NA	NA
Pancreas TX. Alone	18	0,2	NA	NA	0	0,0	0	0,0	11	0,2	0	0,0	0	0,0	NA	NA	NA	NA
Kidney – Pancreas TX.	141	1,7	NA	NA	6	0,6	1	0,2	53	0,9	0	0,0	0	0,0	NA	NA	NA	NA
TX. from DCD	0	0,0	NA	NA	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	NA	NA	NA	NA
<b>SMALL BOWEL</b>																		
Total TX. -all combinations included-																		
Paediatric <15 years																		
Small bowel TX. Alone																		
<b>RECIPIENTS</b>																		
Total number of patients transplanted	4370	53,3	236	20,7	338	34,1	237	51,5	3118	51,1	71	32,3	114	34,5	NA	NA	9	22,5
Paediatric <15 years	226	2,8	6	0,5	19	1,9	6	1,5	168	2,8	2	0,9	3	0,9	NA	NA	0	0,0
Patients transplanted from living donors	847	10,3	41	3,6	53	5,4	32	7,0	208	3,4	5	2,3	12	3,6	NA	NA	1	2,5







**DONATION AND TRANSPLANTATION ACTIVITY**

**LATINAMERICAN COUNTRIES**

COUNTRIES Population (million inhabitants): UNFPA	ARGENTINA 41,1		BRAZIL 198,4		CHILI 17,4		COLOMBIA 47,6		COSTA RICA 4,8		CUBA 11,2		DOMINICANA 10,2		ECUADOR 14,9		
	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-	630	15,3	2451	12,4	149	8,6	373	7,8	15	3,1	111	9,9	17	1,7	54	3,6	
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	0	0,0	
Multiforgan donors	353	8,6	1103	5,6	83	4,8	98	2,1	5	1,0	20	1,8	10	1,0	54	3,6	
<b>DONATION</b>																	
<b>TRANSPLANTATION</b>																	
<b>KIDNEY</b>																	
Total TX. -all combinations included-	1184	28,8	5387	27,2	274	15,7	782	16,4	135	28,1	132	11,8	46	4,5	114	7,7	
% (TX. from living d./ Total TX.)	23,9		24,8		25,5		11,4		82,2		9,1		54,3		21,9		
Paediatric <15 years	59	1,4	16	0,9	16	0,9	36	0,8	5	1,0	2	0,2	0	0,0	14	0,9	
TX. from deceased donors	901	21,9	4051	20,4	204	11,7	693	14,6	24	5,0	120	10,7	21	2,1	89	6,0	
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	
Single TX.	897	21,8					693	14,6			120	10,7	21	2,1	89	6,0	
Double TX.	4	0,1					0	0,0			0	0,0	0	0,0	0	0,0	
TX. from living donors	283	6,9	1336	6,7	70	4,0	89	1,9	111	23,1	12	1,1	25	2,5	25	1,7	
TX. from Related living donors	283	6,9					80	1,7			12	1,1	21	2,1	25	1,7	
TX. from Unrelated living donors	0	0,0					9	0,2			0	0,0	4	0,4	0	0,0	
<b>LIVER</b>																	
Total TX. -all combinations included-	383	9,3	1576	7,9	85	4,9	216	4,5	9	1,9	14	1,3	6	0,6	13	0,9	
Paediatric <15 years	65	1,6					37	0,8	3	0,6	2	0,2	0	0,0	1	0,1	
Split TX.	30	0,7					4	0,1	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	
TX. from living donors	26	0,6	106	0,5	7	0,4	5	0,1	2	0,4	0	0,0	0	0,0	0	0,0	
TX. from DCD	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	
<b>HEART</b>																	
Total TX. -all combinations included-	111	2,7	227	1,1	22	1,3	101	2,1	0	0,0	2	0,2	2	0,2	0	0,0	
Paediatric <15 years	5	0,1			1	0,1	11	0,2	0	0,0	0	0,0	0	0,0	0	0,0	
<b>HEART-LUNG</b>																	
Total TX.	2	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-	32	0,8	81	0,4	23	1,3	13	0,3	0	0,0	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	
Single TX.	9	0,2			1	0,0	1	0,0	0	0,0	0	0,0	0	0,0	0	0,0	
Double TX. (heart-lung TX. included)	23	0,6			0	0,0	12	0,3	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	
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	0	0,0	
<b>PANCREAS</b>																	
Total TX. -all combinations included-	68	1,7	151	0,8	1	0,1	5	0,1	0	0,0	0	0,0	0	0,0	1	0,1	
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	5	0,1	29	0,1	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	
Kidney – Pancreas TX.	63	1,5	122	0,6	1	0,1	5	0,1	0	0,0	0	0,0	0	0,0	1	0,1	
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-	5	0,1	0	0,0	0	0,0	5	0,1	0	0,0	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	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	0	0,0	
<b>RECIPIENTS</b>																	
Total number of patients transplanted	1783	43,4	7300	36,8	397	22,8	1106	23,2	144	30,0	148	13,2	54	5,3	126	8,5	
Paediatric <15 years	135	3,3	32	1,8	32	1,8	84	1,8	8	1,7	4	0,4	0	0,0	15	1,0	
Patients transplanted from living donors	309	7,5	1442	7,3	77	4,4	94	2,0	113	23,5	12	1,1	25	2,5	25	1,7	

## DONATION AND TRANSPLANTATION ACTIVITY

## LATINAMERICAN COUNTRIES

COUNTRIES Population (million inhabitants): UNFPA	GUATEMALA 15,1		MEXICO 116,1		NICARAGUA 6,0		PANAMA 3,6		PARAGUAY 6,7		PERU 29,7		URUGUAY 3,4		VENEZUELA 29,9	
	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	5 0	0,3 0,0	413 2 130	3,6 0,0 1,1	0 0 0	0,0 0,0 0,0	24 0 5	6,7 0,0 1,4	50 0 3	7,5 0,0 0,4	94 0 24	3,2 0,0 0,8	54 0 18	15,9 0,0 5,3	140 0 1	4,7 0,0 0,0
<b>DONATION</b>																
<b>TRANSPLANTATION</b>																
<b>KIDNEY</b>	92	6,1	2646	22,8	11	1,8	60	16,7	47	7,0	160	5,4	99	29,1	339	11,3
Total TX. - all combinations included- % (TX. from living d./ Total TX.)	77,2		73,6		100,0		25,0		29,8		13,8		3,0		29,2	
Paediatric <15 years	10	0,7	208	1,8	4	0,7	0	0,0	1	0,1	9	0,3	2	0,6	22	0,7
TX. from deceased donors	8	0,5	698	6,0	0	0,0	45	12,5	33	4,9	138	4,6	96	28,2	240	8,0
TX. from DCD	8	0,5	4	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Single TX.	8	0,5	687	5,9	0	0,0	45	12,5	0	0,0	138	4,6	96	28,2	240	8,0
Double TX.	0	0,0	11	0,1	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
TX. from living donors	84	5,6	1948	16,8	11	1,8	15	4,2	14	2,1	22	0,7	3	0,9	99	3,3
TX. from Related living donors	71	4,7	1907	16,4	11	1,8	15	4,2	14	2,1	22	0,7	3	0,9	99	3,3
TX. from Unrelated living donors	13	0,9	41	0,4	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
<b>LIVER</b>	0	0,0	106	0,9	0	0,0	5	1,4	0	0,0	27	0,9	17	5,0	9	0,3
Total TX. - all combinations included- Paediatric <15 years	0	0,0	17	0,1	0	0,0	0	0,0	0	0,0	2	0,1	1	0,3	6	0,2
Split 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
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
TX. from living donors	0	0,0	8	0,1	0	0,0	5	1,4	0	0,0	0	0,0	0	0,0	8	0,3
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
<b>HEART</b>	0	0,0	43	0,4	0	0,0	0	0,0	3	0,4	8	0,3	7	2,1	0	0,0
Total TX. - all combinations included- Paediatric <15 years	0	0,0	3	0,0	0	0,0	0	0,0	1	0,1	0	0,0	1	0,3	0	0,0
<b>HEART-LUNG</b>	0	0,0	0	0,0	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
<b>LUNG</b>	0	0,0	1	0,0	0	0,0	0	0,0	0	0,0	3	0,1	6	1,8	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
Single TX.	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	3	0,1	6	1,8	0	0,0
Double TX. (heart-lung TX. included)	0	0,0	1	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
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	0	0,0
<b>PANCREAS</b>	0	0,0	1	0,0	0	0,0	0	0,0	0	0,0	0	0,0	5	1,5	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
Pancreas 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
Kidney – Pancreas TX.	0	0,0	1	0,0	0	0,0	0	0,0	0	0,0	0	0,0	5	1,5	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
<b>SMALL BOWEL</b>	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	1	0,3	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	1	0,3	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	1	0,3	0	0,0
<b>RECIPIENTS</b>	92	6,1	2796	24,1	11	1,8	65	18,1	50	7,5	198	6,7	130	38,2	348	11,6
Total number of patients transplanted Paediatric <15 years	10	0,7	2228	2,0	4	0,7	0	0,0	2	0,3	11	0,4	5	1,5	28	0,9
Patients transplanted from living donors	84	5,6	1956	16,8	11	1,8	20	5,6	14	2,1	22	0,7	3	0,9	107	3,6

**WAITING LIST**

**EUROPEAN UNION COUNTRIES**

COUNTRIES	AUSTRIA	BELGIUM	BULGARIA	CROATIA	CYPRUS	CZECH. R.	DENMARK	ESTONIA	FINLAND	FRANCE
Population (million inhabitants): UNFPA	8,4	10,8	7,4	4,4	1,1	10,6	5,6	1,3	5,4	63,5

**KIDNEY**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012  
 Patients on dialyses on 31/12/2012

6	8	2	4	4	1	7	3	1	1	43
357	450	120	181	181	29	448	275	45	231	4265
1246	1445	903	405	405	71	1182	597	107	523	13329
745	791	878	130	130	63	767	318	28	291	9835
23	29	12	13	13	0	25	13	0	20	211
	978				410			300		NA

**LIVER**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

4	6	4	4	4	0	2	1	1	1	22
165	315	20	146	146	0	144	48	8	46	1721
287	493	47	235	235	0	220	74	12	57	2662
103	181	43	74	74	0	80	20	1	1	1104
44	52	0	15	15	0	12	3	1	0	182

**HEART**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

4	7	2	2	2	0	2	2	0	1	25
98	115	7	60	60	0	95	36	0	22	530
169	178	39	80	80	0	185	52	0	44	830
76	76	34	21	21	0	91	21	0	17	325
9	16	3	9	9	0	6	4	0	3	63

**LUNG**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

2	4	0	2	2	0	1	1	1	1	13
137	106	1	60	60	0	46	43	1	26	335
218	238	5	80	80	0	90	69	2	34	478
86	81	5	21	21	0	49	32	0	5	124
4	10	0	9	9	0	18	8	0	1	16

**PANCREAS**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

3	7	0	1	1	1	1	0	0	1	11
20	22	0	14	14	2	34	0	0	7	118
44	82	0	15	15	3	136	0	0	10	264
26	54	0	4	4	2	103	0	0	3	165
0			2	2	0	4	0	0	0	5

**SMALL BOWEL**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

0	0	0	0	0	0	1	0	0	1	5
0	0	0	0	0	0	0	0	0	2	8
0	0	0	0	0	0	0	0	0	2	20
0	0	0	0	0	0	0	0	0	0	10
0	0	0	0	0	0	0	0	0	0	2

## WAITING LIST

## EUROPEAN UNION COUNTRIES

COUNTRIES	GERMANY	GREECE	HUNGARY	IRELAND	ITALY	LATVIA	LITHUANIA	LUXEMBOURG	MALTA
Population (million inhabitants): UNFPA	82,0	11,4	9,9	4,6	61,0	2,2	3,3	0,5	0,4
<b>KIDNEY</b>									
<b>N° TX CENTRES</b>	43	5	4	1	41	1	2		1
Patients included on the WL for the first time in the course of 2012	3016	219	387	235	2022	21	103		25
Total number of patients ever active on the WL during 2012	11783	1331	1264	563	8584	131	317		90
Patients awaiting for a transplant (only active candidates) on 31/12/2012	7919	1029	890	502	6731	48	133		87
Patients who died while on the WL during 2012	376	72	33	14	84	2	7		
Patients on dialyses on 31/12/2012			6285	1828	NA	500	1400		250
<b>LIVER</b>									
<b>N° TX CENTRES</b>	25	1	1	1	22	0	2		0
Patients included on the WL for the first time in the course of 2012	1686	86	94	54	1186	0	34		NA
Total number of patients ever active on the WL during 2012	3942	180	221	71	2173	0	75		NA
Patients awaiting for a transplant (only active candidates) on 31/12/2012	1868	92	151	23	943	0	31		NA
Patients who died while on the WL during 2012	514	18	25	4	156	0	9		NA
<b>HEART</b>									
<b>N° TX CENTRES</b>	24	1	2	1	16	1	2		1
Patients included on the WL for the first time in the course of 2012	610	13	48	15	391	1	28		NA
Total number of patients ever active on the WL during 2012	1694	45	69	17	1100	7	50		NA
Patients awaiting for a transplant (only active candidates) on 31/12/2012	1012	19	25	13	697	6	21		NA
Patients who died while on the WL during 2012	170	1	9	1	97	0	14		NA
<b>LUNG</b>									
<b>N° TX CENTRES</b>	16	0	0	1	11	0	1		0
Patients included on the WL for the first time in the course of 2012	435	0	20	36	209	0	5		NA
Total number of patients ever active on the WL during 2012	1081	0	27	41	554	0	7		NA
Patients awaiting for a transplant (only active candidates) on 31/12/2012	483	0	8	40	356	0	3		NA
Patients who died while on the WL during 2012	70	0	0	21	67	0	1		NA
<b>PANCREAS</b>									
<b>N° TX CENTRES</b>	27	0	2	1	17	0	1		0
Patients included on the WL for the first time in the course of 2012	155	0	13	2	96	0	4		NA
Total number of patients ever active on the WL during 2012	484	0	31	2	329	0	12		NA
Patients awaiting for a transplant (only active candidates) on 31/12/2012	254	0	22	2	189	0	8		NA
Patients who died while on the WL during 2012	13	0	3	0	7	0	1		NA
<b>SMALL BOWEL</b>									
<b>N° TX CENTRES</b>		0	0	1	3	1	0		0
Patients included on the WL for the first time in the course of 2012		0	0	0	6	0	0		NA
Total number of patients ever active on the WL during 2012		0	0	0	29	0	0		NA
Patients awaiting for a transplant (only active candidates) on 31/12/2012		0	0	0	26	0	0		NA
Patients who died while on the WL during 2012		0	0	0	2	0	0		NA



WAITING LIST

EUROPEAN UNION COUNTRIES

COUNTRIES	NETHERLANDS	POLAND	PORTUGAL	ROMANIA	SLOVAKIA	SLOVENIA	SPAIN	SWEDEN	U. K.
Population (million inhabitants): UNFPA	16,7	38,3	10,7	21,4	5,5	2,0	46,8	9,5	62,8

**KIDNEY**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012  
 Patients on dialyses on 31/12/2012

9	20	8	5	4	1	4	40	4	27
1156	1196	343	454	155	54	500	2252	500	2252
1644	2683	2316	3371	537	135	4293	9588	926	9588
855	1296	1977		376	67	455	6522	455	6522
94	42	29	22	41		20	288	20	288
	18626	11282	9500	4000		25211			

**LIVER**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

3	6	3	1	2	1	2	25	2	7
221	435	179	128	54	32	1381	324	169	324
375	614	348	475	84	43	2022	1537	212	1537
165	179	89		33	10	639	503	35	503
31	38	19	61	8	7	90	101	9	101

**HEART**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

3	6	4	2	1	1	16	7	2	7
64	238	48	40	30	33	335	137	62	137
136	490	65	123	51	72	433	432	81	432
64	305	42		20	32	112	213	31	213
10	51	1	11	4	8	14	45	4	45

**LUNG**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

3	4	1	1	0	0	8	6	2	6
90	48	19	0	0	0	399	113	61	113
329	78	50	0	0	0	499	466	88	466
194	48	28	0	0	0	204	241	18	241
20	13	2	0	0	0	21	42	8	42

**PANCREAS**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

5	4	2	2	0	1	13	12	3	12
38	32	11	6	0	2	93	179	36	179
72	60	64	71	0	2	222	592	51	592
36	24	35		0	2	125	267	24	267
2	0	0	6	0	0	3	27	1	27

**SMALL BOWEL**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

	1	0	0	0	0	3	4	1	4
	2		0	0	0		20	2	20
	4		0	0	0		36	2	36
	2		0	0	0		17		17
	2		0	0	0		3		3

## WAITING LIST

## OTHER COUNTRIES

COUNTRIES	ALGERIA	ARMENIA	AUSTRALIA	AZERBAIJAN	BELARUS	CANADA	GEORGIA	ICELAND	ISRAEL	LEBANON	MACEDONIA
Population (million inhabitants): UNFPA	36,5	3,1	22,9	9,4	9,5	34,7	4,3	0,3	7,7	4,3	2,1
<b>KIDNEY</b>											
<b>N° TX CENTRES</b>	10	1	20	4	5	32	3	1	6	9	2
Patients included on the WL for the first time in the course of 2012		0	510		344		0	6	236	59	2
Total number of patients ever active on the WL during 2012		0	2052		659		0	6			NA
Patients awaiting for a transplant (only active candidates) on 31/12/2012		0	1116		648	2531	0	0	755	129	NA
Patients who died while on the WL during 2012		0	9		11		0	0	32	1	NA
Patients on dialyses on 31/12/2012	16500		11327		1737		0	0	5795	2500	NA
<b>LIVER</b>											
<b>N° TX CENTRES</b>	1	0	8	1	1	12	0	0	4	1	0
Patients included on the WL for the first time in the course of 2012		NA	303		82		0	0	77	0	NA
Total number of patients ever active on the WL during 2012		NA	467		110		0	0		4	NA
Patients awaiting for a transplant (only active candidates) on 31/12/2012		NA	161		35	430	0	0	164	4	NA
Patients who died while on the WL during 2012		NA	48		18		0	0	25	0	NA
<b>HEART</b>											
<b>N° TX CENTRES</b>	0	0	5		1	11	0	0	4	4	0
Patients included on the WL for the first time in the course of 2012		NA	89		45		0	0	29	15	NA
Total number of patients ever active on the WL during 2012		NA	154		93		0	0		15	NA
Patients awaiting for a transplant (only active candidates) on 31/12/2012		NA	64		64	161	0	0	93	20	NA
Patients who died while on the WL during 2012		NA	7		9		0	0	16	3	NA
<b>LUNG</b>											
<b>N° TX CENTRES</b>	0	0	5		1	7	0	0	3	0	0
Patients included on the WL for the first time in the course of 2012		NA	171		2		0	0	48	0	NA
Total number of patients ever active on the WL during 2012		NA	270		18		0	0		0	NA
Patients awaiting for a transplant (only active candidates) on 31/12/2012		NA	99		12	282	0	0	90	0	NA
Patients who died while on the WL during 2012		NA	11		6		0	0	18	0	NA
<b>PANCREAS</b>											
<b>N° TX CENTRES</b>	0	0	2		1	8	0	0	6	0	0
Patients included on the WL for the first time in the course of 2012		NA	85		7		0	0	5	0	NA
Total number of patients ever active on the WL during 2012		NA	128		39		0	0		0	NA
Patients awaiting for a transplant (only active candidates) on 31/12/2012		NA	85		37	115	0	0	12	0	NA
Patients who died while on the WL during 2012		NA	2		2		0	0		0	NA
<b>SMALL BOWEL</b>											
<b>N° TX CENTRES</b>	0	0	1		1	2	0	0	1	0	0
Patients included on the WL for the first time in the course of 2012		NA	2		1		0	0	1	0	NA
Total number of patients ever active on the WL during 2012		NA	5		4		0	0		0	NA
Patients awaiting for a transplant (only active candidates) on 31/12/2012		NA	4		3	1	0	0	2	0	NA
Patients who died while on the WL during 2012		NA	0		1		0	0		0	NA

WAITING LIST

OTHER COUNTRIES

COUNTRIES	MOLDOVA	NEW ZEALAND	NORWAY	RUSSIA	SWITZERLAND	SYRIA	TUNISIA	TURKEY	UKRAINE	USA
Population (million inhabitants): UNFPA	3,5	4,5	5,0	142,7	7,7	21,1	10,7	74,5	44,9	315,8
<b>KIDNEY</b>										
<b>N° TX CENTRES</b>	2	4	1	31	6	4	6	61	7	237
Patients included on the WL for the first time in the course of 2012	8	NA	318	1152	369	NA	116	3775	NA	34834
Total number of patients ever active on the WL during 2012	10	NA	507	3276	1207	NA	1153	18682	NA	88867
Patients awaiting for a transplant (only active candidates) on 31/12/2012	6	NA	197	2550	905	NA	7	1157	NA	58390
Patients who died while on the WL during 2012	0	NA	14	83	17	NA	9000	54892	5000	4537
Patients on dialyses on 31/12/2012	430	NA		671		5000				NA
<b>LIVER</b>										
<b>N° TX CENTRES</b>	2	1	1	13	3	0	2	35	2	139
Patients included on the WL for the first time in the course of 2012	0	NA	113	165	157	NA	8	623	NA	11092
Total number of patients ever active on the WL during 2012	0	NA	126	488	282	NA	12	1646	NA	24088
Patients awaiting for a transplant (only active candidates) on 31/12/2012		NA	17	386	122	NA	7	474	NA	12757
Patients who died while on the WL during 2012		NA	3	58	22	NA	3		NA	1505
<b>HEART</b>										
<b>N° TX CENTRES</b>	1	1	1	9	3	0	3	9	2	130
Patients included on the WL for the first time in the course of 2012	0	NA	39	193	66	NA	3	146	NA	3617
Total number of patients ever active on the WL during 2012	0	NA	55	339	102	NA	3	278	NA	5957
Patients awaiting for a transplant (only active candidates) on 31/12/2012		NA	13	168	57	NA	1	128	NA	2455
Patients who died while on the WL during 2012		NA	1	26	8	NA	2		NA	326
<b>LUNG</b>										
<b>N° TX CENTRES</b>	0	1	1	3	2	0	1	6		66
Patients included on the WL for the first time in the course of 2012		NA	35	26	73	NA	2	7		2322
Total number of patients ever active on the WL during 2012		NA	75	42	122	NA	6			3665
Patients awaiting for a transplant (only active candidates) on 31/12/2012		NA	44	24	61	NA	2	9		1298
Patients who died while on the WL during 2012		NA	0	13	6	NA		10		230
<b>PANCREAS</b>										
<b>N° TX CENTRES</b>	0	0	1	4	3	0	0	4		138
Patients included on the WL for the first time in the course of 2012		NA	37	42	33	NA	NA	35		1807
Total number of patients ever active on the WL during 2012		NA	45	110	84	NA	NA			3975
Patients awaiting for a transplant (only active candidates) on 31/12/2012		NA	16	77	51	NA	NA	218		1376
Patients who died while on the WL during 2012		NA	0	7	2	NA	NA	9		166
<b>SMALL BOWEL</b>										
<b>N° TX CENTRES</b>	0	0	0	0	2	0	0	4		42
Patients included on the WL for the first time in the course of 2012		NA	0		1	NA	NA	0		155
Total number of patients ever active on the WL during 2012		NA	0		3	NA	NA			347
Patients awaiting for a transplant (only active candidates) on 31/12/2012		NA	0		0	NA	NA	0		176
Patients who died while on the WL during 2012		NA	0		0	NA	NA	0		13

LATINAMERICAN COUNTRIES

COUNTRIES	ARGENTINA	BRAZIL	CHILI	COLOMBIA	COSTA RICA	CUBA	DOMINICANA	ECUADOR
Population (million inhabitants): UNFPA	41,1	198,4	17,4	47,6	4,8	11,2	10,2	14,9

**KIDNEY**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012  
 Patients on dialyses on 31/12/2012

55	117	22	23	5	9	7	11
2021	6451	419	47,6	82	46	171	
8112	26589	1916	1120	532	118	212	
5957	19926	1518	51	412	71	117	
370	250	21	20624	2840	21	0	
27674	97000	18008			2100		

**LIVER**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

22	56	8	6	3	3	1	2
683	1714	160	16	16	3	17	
1522	2120	324	28	28	9	23	
839	1256	145	72	12	9	8	
139	150	37	16	2	1	1	

**HEART**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

25	49	7	8	1	1	2	1
171	237	63	6	5	6	3	
272	285	70	24	8	21	8	
102	205	10	5	4	24	4	
48	37	3	4	1	3	4	

**LUNG**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

12	7	4	1	1	1	0	0
92	68	68	0	0	0	0	
240	175	99	6	0	0	0	
148	162	47	0	0	0	0	
33	21	0	0	0	0	0	

**PANCREAS**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

13	18	2	4	1	1	0	1
184	122	1	0	0	0	0	
215	725	5	8	0	0	1	
131	484	3	0	0	0	1	
16	10	0	0	0	0	0	

**SMALL BOWEL**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

4	0	0	2	0	0	0	0
7	0	0	0	0	0	0	
14	0	0	0	0	0	0	
7	0	0	3	0	0	0	
0	0	0	0	0	0	0	

WAITING LIST

LATINAMERICAN COUNTRIES

COUNTRIES	MEXICO	NICARAGUA	PANAMA	PARAGUAY	PERU	URUGUAY	VENEZUELA
Population (million inhabitants): UNFPA	116,1	6,0	3,6	6,7	29,7	3,4	29,9

**KIDNEY**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012  
 Patients on dialyses on 31/12/2012

**LIVER**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

**HEART**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

**LUNG**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

**PANCREAS**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

**SMALL BOWEL**

**N° TX CENTRES**

Patients included on the WL for the first time in the course of 2012  
 Total number of patients ever active on the WL during 2012  
 Patients awaiting for a transplant (only active candidates) on 31/12/2012  
 Patients who died while on the WL during 2012

## FAMILY REFUSALS

## EUROPEAN UNION COUNTRIES

COUNTRIES	AUSTRIA	BELGIUM	BULGARIA	CROATIA	CYPRUS	CZECH. R.	DENMARK	ESTONIA	FINLAND	FRANCE
Population (million inhabitants): UNFPA	8,4	10,8	7,4	4,4	1,1	10,6	5,6	1,3	5,4	63,5

Number of interviews, asking for consent to donation  
Number of family refusals (%)

9  
0

6  
1 (16,7)

216  
30 (13,9)

49  
12 (24,5)

NA  
72,7

COUNTRIES	GERMANY	GREECE	HUNGARY	IRELAND	ITALY	LATVIA	LITHUANIA	LUXEMBOURG	MALTA
Population (million inhabitants): UNFPA	82,0	11,4	9,9	4,6	61,0	2,2	3,3	0,5	0,4

Number of interviews, asking for consent to donation  
Number of family refusals (%)

117  
40 (34,2)

195  
12 (6,2)

2271  
592 (26,1)

30  
10 (33,3)

87  
35 (40,2)

COUNTRIES	NETHERLANDS	POLAND	PORTUGAL	ROMANIA	SLOVAKIA	SLOVENIA	SPAIN	SWEDEN	U. K.
Population (million inhabitants): UNFPA	16,7	38,3	10,7	21,4	5,5	2,0	46,8	9,5	62,8

Number of interviews, asking for consent to donation  
Number of family refusals (%)

626  
70 (11,2)

NA  
NA

154  
45 (29,2)

1948  
305 (15,6)

2906  
1236 (42,5)

## OTHER COUNTRIES

COUNTRIES	ALGERIA	ARMENIA	AUSTRALIA	AZERBAIJAN	CANADA	GEORGIA	ICELAND	ISRAEL	LEBANON	MACEDONIA
Population (million inhabitants): UNFPA	36,5	3,1	22,9	9,4	34,7	4,3	0,3	7,7	4,3	2,1

Number of interviews, asking for consent to donation  
Number of family refusals (%)

0  
0

517  
216 (41,8)

NA  
NA

121  
64 (52,9)

NA  
NA

COUNTRIES	MOLDOVA	NEW ZEALAND	NORWAY	RUSSIA	SWITZERLAND	SYRIA	TUNISIA	UKRAINE	USA
Population (million inhabitants): UNFPA	3,5	4,5	5,0	142,7	7,7	21,1	10,7	44,9	315,8

Number of interviews, asking for consent to donation  
Number of family refusals (%)

3  
3 (100,0)

NA  
NA

117  
21 (17,9)

0  
0

NA  
NA

25  
24 (96,0)

1477  
1132 (76,6)

10  
5 (50,0)

## LATINAMERICAN COUNTRIES

COUNTRIES	ARGENTINA	BRAZIL	CHILI	COLOMBIA	COSTA RICA	CUBA	DOMINICANA	ECUADOR
Population (million inhabitants): UNFPA	41,1	198,4	17,4	47,6	4,8	11,2	10,2	14,9

Number of interviews, asking for consent to donation  
Number of family refusals (%)

4575  
1703 (37,2)

287  
138 (48,1)

630  
159 (25,2)

121  
10 (8,3)

71  
17 (23,9)

97  
16 (16,5)

COUNTRIES	GUATEMALA	MEXICO	NICARAGUA	PANAMA	PARAGUAY	PERU	URUGUAY	VENEZUELA
Population (million inhabitants): UNFPA	15,1	116,1	6,0	3,6	6,7	29,7	3,4	29,9

Number of interviews, asking for consent to donation  
Number of family refusals (%)

0  
0

34  
10 (29,4)

91  
26 (28,6)

245  
151 (61,3)

25  
7 (28,0)

282  
83 (29,4)

International Data On Tissue And  
Hematopoietic Stem Cell Donation And  
Transplantation Activity.  
Year 2012



**DATA PROVIDED BY NATIONAL COMPETENT AUTHORITIES:**

**AUSTRIA**

**BELGIUM**

Muylle Ludo

**BULGARIA**

Yordan Peev

**CROATIA**

Ferenac Kiš Marina

**CYPRUS**

Carolina Stylianou

**CZECH REPUBLIC**

Eva Křemenová

**DENMARK**

**ESTONIA**

Siim Suutre

**FINLAND**

Peltoniemi Pasi

**FRANCE**

Arnaud De Guerra

**GERMANY**

Ralf Toenjes

**GREECE**

**HUNGARY**

Lilla Tokár

**IRELAND**

**ITALY**

Fiorenza Bariani  
Letizia Lombardini  
Eliana Porta

**LATVIA**

Anita Daugavvanaga

**LITHUANIA**

Dainora Medeisiene

**LUXEMBURG**

Gérard Scharll

**MALTA**

**NETHERLANDS**

Frank Van Linden

**POLAND**

Klaudia Nestorowicz  
Izabela Tyszkiewicz

**PORTUGAL**

Rita Piteira

**ROMANIA**

Andrei Nica

**SLOVAKIA**

Valéria Cucorová

**SLOVENIA**

**SPAIN**

Bibiana Ramos  
Marina Alvarez  
Rosario Marazuela

**SWEDEN**

Mona Hansson

**UNITED KINGDOM**

Amy Gelsthorpe Hill  
Emer O' Toole

**ALGERIA**

**ICELAND**

**ISRAEL**

**MACEDONIA**

**MOLDOVA**

Tatiana Timbalari

**NORWAY**

Zaheer Rana

**SWITZERLAND**

**TUNISIA**

**TURKEY**

Yavuz Elba

**ARGENTINA**

Carlos Soratti  
Martín Alejandro Torres  
Ricardo Rubén Ibar

**BRAZIL**

Heder Murari Borba

**CHILI**

**COLOMBIA**

Juan Gonzalo López Casas  
Diana Carolina Plazas Sierra

**COSTA RICA**

César A. Gamboa Peñaranda

**CUBA**

Angela Olga Hidalgo Sánchez

**DOMINICANA**

**ECUADOR**

Diana Almeida

**GUATEMALA**

**MEXICO**

Enrique Martínez Gutiérrez  
Omar Sánchez Ramírez

**NICARAGUA**

Tulio René Mendieta Alonso

**PANAMA**

Cesar Cuero Zambrano

**PARAGUAY**

**PERU**

**URUGUAY**

Inés Alvarez  
Raul José Mizraji

**VENEZUELA**

Zoraida Pacheco Graterol  
Evelyn Alonzo



PRELIMINARY DATA ON TISSUES - YEAR 2012

EUROPEAN UNION COUNTRIES

Country Population (Font: eurostat/ UNFPA)	AUSTRIA 8.443.018	BELGIUM 11.094.850	BULGARIA 7.327.224	CROATIA 4.398.150	CZECH REP. 10.505.445	DENMARK 5.573.894	ESTONIA 1.294.486	FINLAND 5.401.267	FRANCE 65.327.724
TYPE OF TISSUE	NO DATA								
TYPE OF TISSUE	NO DATA								
CORNEA	N. of tissue donations	413	73	178	502		40	134	4.947
	Tissue donation PMP	372	10,0	40,5	478		30,9	24,8	75,7
	N. of tissue retrieved	973	145	374	998		48	273	9.918
	N. of tissue processed (units)	740	NFR	193	676		46	NR	9.918
	N. of tissue distributed (units)	906	NFR	133	676		0	4	4.372
	N. of tissue imported (units)	45	0	54	0		0	0	0
	N. of tissue exported (units)	0	1,0	0,02	127		0	0	14,5
N. of tissues transplanted	0	0	0	0		49	NR	3.572	
N. of transplants	0	110	208	676		0	NR	3.204	
SKIN	N. of tissue donations	106	166	8	44		0	32	185
	Tissue donation PMP	96	42,7	8,8	42		0,0	5,9	2,8
	N. of tissue retrieved	192.946	427.766	UK	0		0	NR	161.036
	N. of tissue processed (units)	0	NFR	UK	0		0	NR	UK
	N. of tissue distributed (units)	0	0	0	0		0	0	17.410
	N. of tissue imported (units)	0	0	0	1.019		0	0	0
	N. of tissue exported (units)	0	61	17	0		0	0	295.905
N. of patients transplanted	0	32	1	926		15	101	101	
N. of transplants	0	81	0	926		0	0	0	
CARDIAC TISSUE	N. of tissue donations	274	0	19	53		0	NR	163
	Tissue donation PMP	247	0,0	4,3	5,0		0,0	0,0	2,5
	N. of tissue retrieved	549	0	9	90		0	231	368
	N. of tissue processed (units)	549	0	31	72		0	NR	272
	N. of tissue distributed (units)	321	0	3	0		0	0	207
	N. of tissue imported (units)	188	0	1	0		0	0	16
	N. of tissue exported (units)	0	0	0	0		0	0	0
N. of patients transplanted	0	0	0	72		0	NR	207	
N. of transplants	0	0	0	72		0	NR	206	
BLOOD VESSEL	N. of tissue donations	207	0	0	10		19	NR	283
	Tissue donation PMP	18,7	0,0	0,0	1,0		14,7	0,0	4,3
	N. of tissue retrieved	456	0	22	19		43	1,4	4.477
	N. of tissue processed (units)	319	0	0	12		28	NR	4.477
	N. of tissue distributed (units)	319	0	0	12		0	NR	1.341
	N. of tissue imported (units)	140	0	0	0		0	0	59
	N. of tissue exported (units)	0	0	0	0		0	0	10,41
N. of patients transplanted	0	0	0	12		8	NR	10,41	
N. of transplants	0	0	0	12		49	NR	51,5	
MUSCULOSKELETAL	N. of tissue donations	5.787	137	240	232		30	NR	60
	Tissue donation PMP	16,197	2,534	2,16	27,13		2,2	0,643	9,102
	N. of tissue retrieved	2.972	NR	251	3.717		106	NR	22.246
	N. of tissue processed (units)	14.653	NFR	156	3.344		98	NR	31.540
	N. of tissue distributed (units)	135	0	0	0		4	93	3.796
	N. of tissue imported (units)	275	0	0	0		0	NR	1.180
	N. of tissue exported (units)	0	95	47	0		94	NR	31.540
N. of patients transplanted	0	NFR	47	2.136		86	NR	24.152	
N. of transplants	0	95	47	2.136		94	NR	0	
PLACENTA/AMNIOTIC MEMBRANE	N. of tissue donations	21	14	1	0		32	12	0
	Tissue donation PMP	1,9	1,9	0,2	0,0		24,7	2,2	0,0
	N. of tissue retrieved	21	14	59	16		32	12	0,0
	N. of tissue processed (units)	106	NFR	50	41		75	NR	81,5
	N. of tissue distributed (units)	0	0	0	0		0	0	2.398
	N. of tissue imported (units)	0	0	0	3		0	29	0
	N. of tissue exported (units)	0	107	7	0		31	214	2.398
N. of patients transplanted	0	NFR	7	36		75	NR	2.084	
N. of transplants	0	107	7	36		75	NR	0	
OTHERS	N. of tissue donations	213	34	0	0		0	NR	0
	Tissue donation PMP	19,2	4,6	0,0	0,0		0,0	NR	0,0
	N. of tissue retrieved	1.213	34	0	0		0	NR	1
	N. of tissue processed (units)	389	NFR	0	65		0	NR	0
	N. of tissue distributed (units)	1.305	0	0	65		0	NR	0
	N. of tissue imported (units)	0	0	0	3		0	NR	0
	N. of tissue exported (units)	1	0	0	0		0	NR	0
N. of patients transplanted	0	0	0	848		0	NR	0	
N. of transplants	0	0	0	848		0	NR	0	
OVARIAN & TESTICULAR TISSUES	N. of tissue donations	0	0	0	0		0	0	0
	Tissue donation PMP	0	0	0	0		0	0	0
	N. of tissue retrieved	0	0	2	6		0	0	0
	N. of tissue processed (units)	0	0	0	6		0	0	0
	N. of tissue distributed (units)	0	0	0	0		0	0	0
	N. of tissue imported (units)	0	0	0	0		0	0	0
	N. of tissue exported (units)	0	0	0	0		0	0	0
N. of patients transplanted	0	0	0	6		0	0	0	
N. of transplants	0	0	0	6		0	0	0	

## PRELIMINARY DATA ON TISSUES - YEAR 2012

## EUROPEAN UNION COUNTRIES

Country Population (Font: eurostat/ UNFPA)	GERMANY 81.843.743	GREECE 11.290.067	HUNGARY 9.932.000	IRELAND 4.582.769	ITALY 59.394.207	LATVIA 2.041.763	LITHUANIA 3.003.641	LUXEMBOURG 524.853	MALTA 417.520
TYPE OF TISSUE	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
<b>CORNEA</b>									
N. of tissue donations			263		7.529	0,0	29	2	
Tissue donation PMP			26,5		126,8	0,0	9,7	3,8	
N. of tissue retrieved			288		15.071	26	58	0	
N. of tissue processed (units)			586		12.377	0	53	0	
N. of tissue distributed (units)			10		6.575	0	0	0	
N. of tissue imported (units)					12	0	0	0	
N. of tissue exported (units)					460	0	53	0	
N. of patients transplanted			177		4.007	26	49	0	
N. of transplants			177		0	26	53	0	
<b>SKIN</b>									
N. of tissue donations			4		339	0,0	NE	0,0	
Tissue donation PMP			0,4		1.020.489	0,0	NE	0,0	
N. of tissue retrieved			0		0	0	NE	0	
N. of tissue processed (units)			0		4.490	0	NE	0	
N. of tissue distributed (units)			0		330	0	NE	0	
N. of tissue imported (units)			4		0	0	NE	0	
N. of tissue exported (units)			4		1.647	0	NE	0	
N. of patients transplanted			4		0	0	NE	0	
N. of transplants			4		0	0	NE	0	
<b>CARDIAC TISSUE</b>									
N. of tissue donations			0		231	0	NE	0,0	
Tissue donation PMP			0,0		39	0,0	NE	0,0	
N. of tissue retrieved			20		366	0	NE	0	
N. of tissue processed (units)			14		164	0	NE	0	
N. of tissue distributed (units)			0		160	0	NE	0	
N. of tissue imported (units)			0		0	0	NE	0	
N. of tissue exported (units)			3		190	0	NE	0	
N. of patients transplanted			3		0	0	NE	0	
N. of transplants			3		0	0	NE	0	
<b>BLOOD VESSEL</b>									
N. of tissue donations			0,0		848	0,0	NE	0,0	
Tissue donation PMP			0,0		14,3	0,0	NE	0,0	
N. of tissue retrieved			0		1.152	0	NE	0	
N. of tissue processed (units)			0		473	0	NE	0	
N. of tissue distributed (units)			0		0	0	NE	0	
N. of tissue imported (units)			0		0	0	NE	0	
N. of tissue exported (units)			0		262	0	NE	0	
N. of patients transplanted			0		0	0	NE	0	
N. of transplants			0		0	0	NE	0	
<b>MUSCULOSKELETAL</b>									
N. of tissue donations			449		3.844	18	86	1	
Tissue donation PMP			44,6		8.149	88	28,6	1,9	
N. of tissue retrieved			1.122		0	292	151	0	
N. of tissue processed (units)			623		16.824	0	67	0	
N. of tissue distributed (units)			0		0	0	0	0	
N. of tissue imported (units)			213		7.297	232	67	0	
N. of tissue exported (units)			199		0	232	67	0	
N. of patients transplanted			142		0	0	0	0	
N. of transplants			142		0	0	0	0	
<b>PLACENTA/AMNIOTIC MEMBRANE</b>									
N. of tissue donations			1		178	0	14	0	
Tissue donation PMP			0,1		3,0	0,0	4,7	0,0	
N. of tissue retrieved			60		0	0	1,26	0	
N. of tissue processed (units)			20		1.364	0	75	0	
N. of tissue distributed (units)			0		50	0	0	0	
N. of tissue imported (units)			20		981	0	75	0	
N. of tissue exported (units)			20		0	0	75	0	
N. of patients transplanted			20		0	0	0	0	
N. of transplants			20		0	0	0	0	
<b>OTHERS</b>									
N. of tissue donations			9		0	0,0	NE	0,0	
Tissue donation PMP			0,9		0	0,0	NE	0,0	
N. of tissue retrieved			9		0	0	NE	0	
N. of tissue processed (units)			2.045		0	0	NE	0	
N. of tissue distributed (units)			280		0	0	NE	0	
N. of tissue imported (units)			0		0	0	NE	0	
N. of tissue exported (units)			20		0	0	NE	0	
N. of patients transplanted			18		0	0	NE	0	
N. of transplants			18		0	0	NE	0	
<b>OVARIAN &amp; TESTICULAR TISSUES</b>									
N. of tissue donations			0		0	0	0	0	
Tissue donation PMP			0		0	0	0	0	
N. of tissue retrieved			4		0	0	0	0	
N. of tissue processed (units)			0		0	0	0	0	
N. of tissue distributed (units)			0		0	0	0	0	
N. of tissue imported (units)			0		0	0	0	0	
N. of tissue exported (units)			0		0	0	0	0	
N. of patients transplanted			0		0	0	0	0	
N. of transplants			0		0	0	0	0	

PRELIMINARY DATA ON TISSUES - YEAR 2012

EUROPEAN UNION COUNTRIES

Country Population (Font: eurostat/ UNFPA)	NETHERLANDS 16.730.348	POLAND 38.538.447	PORTUGAL 10.542.398	ROMANIA 21.355.849	SLOVAKIA 5.404.322	SLOVENIA 2.055.496	SPAIN 46.196.276	SWEDEN 9.482.855	U. KINGDOM 63.256.141
TYPE OF TISSUE	NO DATA								
<b>CORNEA</b>									
N. of tissue donations	1.635	559	448	48	99		2.735	516	NR
Tissue donation PMP	97,7	14,5	42,5	2,2	18,3		59,2	54,4	0,0
N. of tissue retrieved	3.239	1.056	905	48	186		4.808	859	7.040
N. of tissue processed (units)	3.906	855	NE	0	186		4.808	1.105	3.309
N. of tissue distributed (units)	2.603	0	NE	0	118		2.743	829	3.752
N. of tissue imported (units)	9,34	0	1,36	89	0		1,0	0	61,5
N. of tissues transplanted	3.241	0	NE	137	0		3,264	0	NR
N. of patients transplanted	1.434	0	NE	137	113		3,248	0	NR
N. of transplants	1.434	0	799	137	118		0	0	NR
<b>SKIN</b>									
N. of tissue donations	495	39	1	4	3		94	83	NR
Tissue donation PMP	29,6	1,0	0,1	0,2	0,6		2,0	0,0	0,0
N. of tissue retrieved (cm <sup>2</sup> )	1.930.500	32.571	706	6.200	18.535		217.016	88.600	347
N. of tissue processed (units)	0	690	44	0	0		0	102	322
N. of tissue distributed (units)	0	11.251	74	0	0		0	51	4.180
N. of tissue imported (units)	10.051	0	0	0	0		0	0	1.225
N. of tissues transplanted	157	0	NE	0	0		105.065	6	0
N. of patients transplanted	92	0	NE	3	6		44	14	NR
N. of transplants	92	0	NE	3	6		0	0	NR
<b>CARDIAC TISSUE</b>									
N. of tissue donations	220	179	22	0	11		192	150	NR
Tissue donation PMP	12,1	4,6	2,1	0,0	2,0		1,2	1,9	NR
N. of tissue retrieved	NE	358	2,1	0	15		350	323	985
N. of tissue processed (units)	452	230	10	0	9		350	323	931
N. of tissue distributed (units)	129	160	5	0	0		149	302	566
N. of tissue imported (units)	0	0	0	0	0		0	0	37
N. of tissue exported (units)	47	5	NE	0	0		95	0	37
N. of tissues transplanted	6	0	NE	0	0		77	0	NR
N. of patients transplanted	6	0	NE	0	0		0	0	NR
N. of transplants	6	0	NE	0	0		0	0	NR
<b>BLOOD VESSEL</b>									
N. of tissue donations	27	2	0	0	3		175	50	NR
Tissue donation PMP	1,6	0,1	0,0	0,0	0,6		3,6	0,0	0,0
N. of tissue retrieved	27	3	0	0	3		368	118	238
N. of tissue processed (units)	19	0	0	0	0		266	34	107
N. of tissue distributed (units)	2	0	0	0	0		20	0	0
N. of tissue imported (units)	2	0	0	0	0		191	0	0
N. of tissues transplanted	2	0	0	0	0		167	0	NR
N. of patients transplanted	2	0	0	0	0		0	0	NR
N. of transplants	2	0	0	0	0		0	0	NR
<b>MUSCULOSKELETAL</b>									
N. of tissue donations	128	365	48	137	411		2.123	1.896	NR
Tissue donation PMP	7,7	9,5	4,6	6,4	76,1		46,0	199,9	0,0
N. of tissue retrieved	NE	2.710	229	137	450		1.438	1.893	0,0
N. of tissue processed (units)	36.649	9.657	1.311	1.37	294		14.630	1.201	28.851
N. of tissue distributed (units)	36,7	0	91	13	0		901	58	11.985
N. of tissue imported (units)	26.622	0	0	0	167		432	37	2.452
N. of tissue exported (units)	3.349	0	NE	102	0		10,610	0	NR
N. of tissues transplanted	3.167	0	NE	73	274		9,010	1,103	NR
N. of patients transplanted	7.640	0	NE	73	294		0	0	NR
N. of transplants	7.640	0	NE	73	294		0	0	NR
<b>PLACENTA/AMNIOTIC MEMBRANE</b>									
N. of tissue donations	0	65	35	0	24		68	6	NR
Tissue donation PMP	0,0	1,7	3,3	0,0	4,4		1,536	0,6	0,0
N. of tissue retrieved	0	849	37	0	284		1.936	305	0
N. of tissue processed (units)	91	842	148	0	168		1.761	346	0
N. of tissue distributed (units)	21	0	0	0	0		0	0	778
N. of tissue imported (units)	31	0	145	0	0		0	0	NR
N. of tissues transplanted	31	0	NE	NE	132		1.575	0	NR
N. of patients transplanted	31	0	NE	NE	168		1.428	0	NR
N. of transplants	31	0	NE	NE	168		0	0	NR
<b>OTHERS</b>									
N. of tissue donations	0	0	0	0	0		0	0	NR
Tissue donation PMP	0,0	0,0	0,0	3,577	0,0		0,0	0,0	0,0
N. of tissue retrieved	456	0	0	3.577	0		0	0	3.173
N. of tissue processed (units)	90	0	0	0	0		0	0	43.907
N. of tissue distributed (units)	63	0	0	0	0		0	0	2.558
N. of tissue imported (units)	62	0	0	NE	0		0	0	NR
N. of tissues transplanted	62	0	0	NE	0		0	0	NR
N. of patients transplanted	62	0	0	NE	0		0	0	NR
N. of transplants	62	0	0	NE	0		0	0	NR
<b>OVARIAN &amp; TESTICULAR TISSUES</b>									
N. of tissue donations	0	0	0	0	0		0	0	NR
Tissue donation PMP	0,0	0,0	0,0	0,0	0,0		0,0	0,0	0,0
N. of tissue retrieved	91	0	0	0	0		0	226	0
N. of tissue processed (units)	0	0	0	0	0		0	29	0
N. of tissue distributed (units)	0	0	0	0	0		0	0	0
N. of tissue imported (units)	0	0	0	0	0		0	0	0
N. of tissues transplanted	0	0	0	0	0		0	0	NR
N. of patients transplanted	0	0	0	0	0		0	0	NR
N. of transplants	0	0	0	0	0		0	0	NR

\* only extra EU

## PRELIMINARY DATA ON TISSUES - YEAR 2012

## OTHER COUNTRIES

Country Population (Font: eurostat/ UNFPA)	ALGERIA 36,5	ICELAND 319,575	ISRAEL 7,7	MACEDONIA 2,059,794	MOLDOVA 3,500,000	NORWAY 4,985,870	SWITZERLAND 7,954,662	TUNISIA 10,7	TURKEY 74,724,269
TYPE OF TISSUE	NO DATA				NO DATA				
<b>CORNEA</b>									
N. of tissue donations	0		818		NE	63		430	1,913
Tissue donation PMP	0		106,2		0,0	126		402	25,6
N. of tissue retrieved	0		0		0,0	126		371	2,074
N. of tissue processed (units)	0		0		0	86		0	0
N. of tissue distributed (units)	0		0		0	119		0	0
N. of tissue imported (units)	0		0		0	0		0	0
N. of tissue exported (units)	320		0		0	196		946	0
N. of tissues transplanted	250		0		0	196		946	0
N. of patients transplanted	0		0		0	196		946	0
N. of transplants	0		0		0	196		946	0
<b>SKIN</b>									
N. of tissue donations	0		57		2	0		0	0
Tissue donation PMP	0		7,4		6	0		0	0
N. of tissue retrieved	0		0		1,700	0		0	0
N. of tissue processed (units)	0		0		NE	0		0	0
N. of tissue distributed (units)	0		0		NE	0		0	0
N. of tissue imported (units)	0		0		0	0		0	0
N. of tissue exported (units)	0		0		0	0		0	0
N. of tissues transplanted	0		0		0	0		0	0
N. of patients transplanted	0		0		0	0		0	0
N. of transplants	0		0		0	0		0	0
<b>CARDIAC TISSUE</b>									
N. of tissue donations	0		19		0	0		0	5
Tissue donation PMP	0		2,50		0	0		0,00	0,1
N. of tissue retrieved	0		0		0	0		0	0
N. of tissue processed (units)	0		0		0	0		0	0
N. of tissue distributed (units)	0		0		0	0		0	0
N. of tissue imported (units)	0		0		0	0		0	0
N. of tissue exported (units)	0		0		0	0		0	0
N. of tissues transplanted	0		0		0	0		0	0
N. of patients transplanted	0		0		0	0		0	0
N. of transplants	0		0		0	0		0	0
<b>BLOOD VESSEL</b>									
N. of tissue donations	0		0		0	0		0	0
Tissue donation PMP	0		0		0	0		0	0
N. of tissue retrieved	0		0		0	0		0	0
N. of tissue processed (units)	0		0		0	0		0	0
N. of tissue distributed (units)	0		0		0	0		0	0
N. of tissue imported (units)	0		0		0	0		0	0
N. of tissue exported (units)	0		0		0	0		0	0
N. of tissues transplanted	0		0		0	0		0	0
N. of patients transplanted	0		0		0	0		0	0
N. of transplants	0		0		0	0		0	0
<b>MUSCULOSKELETAL</b>									
N. of tissue donations	0		12		13	176		58	0
Tissue donation PMP	0		1,6		37	37,7		34	0
N. of tissue retrieved	0		0		5,1	37,4		36	0
N. of tissue processed (units)	0		0		184	199		0	0
N. of tissue distributed (units)	0		0		181	115		0	0
N. of tissue imported (units)	0		0		0	40		0	0
N. of tissue exported (units)	0		0		0	0		0	0
N. of tissues transplanted	0		0		145	257		11	0
N. of patients transplanted	0		0		120	239		11	0
N. of transplants	0		0		121	277		11	0
<b>PLACENTA/AMNIOTIC MEMBRANE</b>									
N. of tissue donations	0		0		NE	1		0	0
Tissue donation PMP	0		0		0	0,2		0	0
N. of tissue retrieved	0		0		NE	0		0	0
N. of tissue processed (units)	0		0		NE	40		0	0
N. of tissue distributed (units)	0		0		NE	60		0	0
N. of tissue imported (units)	0		0		NE	30		0	0
N. of tissue exported (units)	0		0		NE	0		0	0
N. of tissues transplanted	0		0		NE	68		0	0
N. of patients transplanted	0		0		NE	48		0	0
N. of transplants	0		0		NE	48		0	0
<b>OTHERS</b>									
N. of tissue donations	0		0		0	0		0	0
Tissue donation PMP	0		0		0	0		0	0
N. of tissue retrieved	0		0		0	64		0	0
N. of tissue processed (units)	0		0		0	0		0	0
N. of tissue distributed (units)	0		0		0	0		0	0
N. of tissue imported (units)	0		0		0	0		0	0
N. of tissue exported (units)	0		0		0	0		0	0
N. of tissues transplanted	0		0		0	0		0	0
N. of patients transplanted	0		0		0	0		0	0
N. of transplants	0		0		0	0		0	0
<b>OVARIAN &amp; TESTICULAR TISSUES</b>									
N. of tissue donations	0		0		0	0		0	0
Tissue donation PMP	0		0		0	0		0	0
N. of tissue retrieved	0		0		0	0		0	0
N. of tissue processed (units)	0		0		0	0		0	0
N. of tissue distributed (units)	0		0		0	0		0	0
N. of tissue imported (units)	0		0		0	0		0	0
N. of tissue exported (units)	0		0		0	0		0	0
N. of tissues transplanted	0		0		0	0		0	0
N. of patients transplanted	0		0		0	0		0	0
N. of transplants	0		0		0	0		0	0

PRELIMINARY DATA ON TISSUES - YEAR 2012

LATINAMERICAN COUNTRIES

Country	ARGENTINA	BRAZIL	CHILI	COLOMBIA	COSTA RICA	CUBA	DOMINICANA	ECUADOR
Population (Font: eurostat/ UNFPA)	41,1	198,4	17,4	47,6	4,8	11,2	10,2	14,9
TYPE OF TISSUE	NO DATA							
TYPE OF DATA	NO DATA							
<b>CORNEA</b>								
N. of tissue donations	0	27.595		1.710	265	1.175		115
Tissue donation PMP	0,0	139,1		35,9	55,2	104,9		7,7
N° of tissue retrieved	0	24.675		1.710	0	585		228
N° of tissues transplanted	1.071	15.141		1.856	0	0		170
N° of patients transplanted	1.062	0		1.856	0	585		170
N° of transplants	1.071	0		1.856	263	585		170
<b>SKIN</b>								
N. of tissue donations	0	131		85	9	0		0
Tissue donation PMP	0,0	0,7		1,8	1,9	0,0		0,0
N° of tissue retrieved (cm²)	0	57.629		85	13.652	0		0
N° of tissues transplanted	24.487	42.170		70	0	0		0
N° of patients transplanted	61	0		70	0	0		0
N° of transplants	61	0		70	44	0		0
<b>CARDIAC TISSUE</b>								
N. of tissue donations	17	272		72	8	0		0
Tissue donation PMP	0,40	1,40		1,50	1,70	0,00		0,0
N° of tissue retrieved	0	544		72	8	0		0
N° of tissues transplanted	229	275		77	0	0		0
N° of patients transplanted	225	0		77	0	0		0
N° of transplants	229	0		77	5	0		0
<b>BLOOD VESSEL</b>								
N. of tissue donations	0	0		0	6	0		0
Tissue donation PMP	0,0	0,0		0,0	1,3	0,0		0,0
N° of tissue retrieved	0	0		0	10	0		0
N° of tissues transplanted	0	0		0	0	0		0
N° of patients transplanted	0	0		0	0	0		0
N° of transplants	0	0		0	5	0		0
<b>MUSCULOSKELETAL</b>								
N. of tissue donations	1.537	1.681		1.053	0	381		0
Tissue donation PMP	37,4	8,5		22,1	0,0	34,0		0,0
N° of tissue retrieved	0	23.637		1.053	0	381		0
N° of tissues transplanted	10.987	24.028		16.198	0	0		0
N° of patients transplanted	6.068	0		16.198	0	160		0
N° of transplants	10.987	0		16.198	0	161		0
<b>PLACENTA/AMNIOTIC MEMBRANE</b>								
N. of tissue donations	137	0		7	6	0		0
Tissue donation PMP	3,3	0,0		0,1	1,3	0,0		0,0
N° of tissue retrieved	0	0		7	6	0		0
N° of tissues transplanted	4.876	0		464	0	0		0
N° of patients transplanted	379	0		464	0	115		0
N° of transplants	379	0		464	1	128		0
<b>OTHERS</b>								
N. of tissue donations	0	0		0	0	52		0
Tissue donation PMP	0,0	0,0		0,0	0,0	4,6		0,0
N° of tissue retrieved	0	0		0	0	42		0
N° of tissues transplanted	0	0		0	0	0		0
N° of patients transplanted	0	0		0	0	0		0
N° of transplants	0	0		0	0	0		0

PRELIMINARY DATA ON TISSUES - YEAR 2012

LATINAMERICAN COUNTRIES

Country	GUATEMALA	MEXICO	NICARAGUA	PANAMA	PARAGUAY	PERU	URUGUAY	VENEZUELA
Population (Font: eurostat/ UNFPA)	15,1	116,1	6,0	3,6	6,7	29,7	3,4	29,9

TYPE OF TISSUE	TYPE OF DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
CORNEA	N. of tissue donations	2.638					209	116
	Tissue donation PMP	22,7					61,5	3,9
	N° of tissue retrieved	2.638					209	111
	N° of tissues transplanted	2.907					186	208
	N° of patients transplanted	2.907					179	208
SKIN	N. of tissue donations	10					14	0
	Tissue donation PMP	0,1					4,1	0,0
	N° of tissue retrieved (cm²)	0					20.900	0
	N° of tissues transplanted	0					19.700	0
	N° of patients transplanted	0					18	0
CARDIAC TISSUE	N. of tissue donations	7					1	26
	Tissue donation PMP	0,10					0,30	0,90
	N° of tissue retrieved	0					2	15
	N° of tissues transplanted	2					2	7
	N° of patients transplanted	2					2	7
BLOOD VESSEL	N. of tissue donations	0					21	0
	Tissue donation PMP	0,0					6,2	0,0
	N° of tissue retrieved	0					22	0
	N° of tissues transplanted	0					18	0
	N° of patients transplanted	0					18	0
MUSCULOSKELETAL	N. of tissue donations	196					31	0
	Tissue donation PMP	1,7					9,1	0,0
	N° of tissue retrieved	0					31	0
	N° of tissues transplanted	0					3.442	0
	N° of patients transplanted	0					132	0
PLACENTA/AMNIOTIC MEMBRANE	N. of tissue donations	0					97	0
	Tissue donation PMP	0,0					28,5	0,0
	N° of tissue retrieved	0					88	0
	N° of tissues transplanted	0					20.950	0
	N° of patients transplanted	0					50	0
OTHERS	N. of tissue donations	6					11	0
	Tissue donation PMP	0,1					3,2	0,0
	N° of tissue retrieved	0					1.297	0
	N° of tissues transplanted	0					7	0
	N° of patients transplanted	0					7	0

PRELIMINARY DATA ON HPC CELLS - YEAR 2012

EUROPEAN UNION COUNTRIES

Country Population (Font: eurostat/ UNFPA)	AUSTRIA 8.443.018	BELGIUM 11.094.850	BULGARIA 7.327.224	CROATIA 4.398.150	CYPRUS 862.011	CZECH REP. 10.505.445	DENMARK 5.573.894	ESTONIA 1.294.486	FINLAND 5.401.267	FRANCE 65.327.724
---	----------------------	-----------------------	-----------------------	----------------------	-------------------	--------------------------	----------------------	----------------------	----------------------	----------------------

CATEGORY OF DATA TYPE OF DATA

POTENTIAL DONATION AND SEARCHING IN THE NATIONAL REGISTRIES

N° of potential donors at 31.12	0	0	0	31.758	117.528	61.889	0	0	21.560	206.471
N° of coord blood unit at 31.12	0	0	0	2.026	2.182	0	0	0	3.369	23.539
N° of searches requested	0	0	0	318	5.301	19.493	0	0	NR	20.718
N° of unrelated donation	0	0	0	11	31	94	0	0	NR	1.320

DONATION

N° of donation - Autologous	0	607	108	792	39	0	0	43	NR	3.154
N° of donation - Allogenic	0	0	12	2.103	1.713	49	0	2	448	1.172
N° of donation - Allogenic, related	0	0	12	43	0	0	0	2	NR	713
N° of donation - Allogenic, unrelated	0	0	0	2.060	1.713	49	0	0	448	459

BANKING of CORD BLOOD

N° of unrelated coord blood units collected	0	4.744	0	2.048	1.685	0	0	0	NR	7.642
N° of unrelated coord blood units distributed	0	53	0	0	2	11	0	0	NR	206
N° of unrelated coord blood units at 31.12	0	21.148	0	2.338	2.184	11	0	0	NR	23.539
N° of related coord blood units collected	0	15	0	15	1.771	0	0	0	NR	0
N° of related coord blood units distributed	0	7	0	0	0	0	0	0	NR	0
N° of related coord blood units at 31.12	0	325	0	155	17.062	0	0	0	NR	0

TRANSPLANT

N° of transplants - Autologous	0	0	96	118	22	0	0	40	NR	2.766
N° of patients transplanted - Autologous	0	0	92	109	22	0	0	2	NR	2.630
N° of transplants - Allogenic	0	0	20	58	0	0	0	13	NR	1.721
N° of patients transplanted - Allogenic	0	0	18	57	0	0	0	1	NR	1.686
N° of transplants - Allogenic, related	0	0	12	27	0	0	0	2	NR	710
N° of patients transplanted - Allogenic, related	0	0	11	27	0	0	0	0	NR	NR
N° of transplants - Allogenic, unrelated	0	0	8	31	0	0	0	11	NR	1.011

PRELIMINARY DATA ON HPC CELLS - YEAR 2012

EUROPEAN UNION COUNTRIES

Country	GERMANY	GREECE	HUNGARY	IRELAND	ITALY	LATVIA	LITHUANIA	LUXEMBOURG	MALTA
Population (Font: eurostat/ UNFPA)	81.843.743	11.290.067	9.932.000	4.582.769	59.394.207	2.041.763	3.003.641	524.853	417.520

CATEGORY OF DATA	TYPE OF 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	0	0	0	0	339.472	0	7.808	0	0
N° of cord blood unit at 31.12	0	0	0	0	28.688	0	863	0	0
N° of searches requested	0	0	0	0	3.809	0	189	0	0
N° of unrelated donation	0	0	0	0	734	0	4	0	0

DONATION

N° of donation - Autologous	9.569	347	4.699	287	34	0	0	0	0
N° of donation - Allogenic	12.090	52	23.619	67	0	0	0	0	0
N° of donation - Allogenic, related	962	50	2.700	16	0	0	0	0	0
N° of donation - Allogenic, unrelated	11.128	2	20.919	51	0	0	0	0	0

BANKING OF CORD BLOOD

N° of unrelated cord blood units collected	4.893	0	20.761	NE	0	0	0	0	0
N° of unrelated cord blood units distributed	14	0	86	NE	0	0	0	0	0
N° of unrelated cord blood units at 31.12	14.684	0	36.299	NE	0	0	0	0	0
N° of related cord blood units collected	29	9.532	350	169	0	0	0	0	0
N° of related cord blood units distributed	2	2	0	0	0	0	0	0	0
N° of related cord blood units at 31.12	126	46.174	3.215	863	0	0	0	0	0

TRANSPLANT

N° of transplants - Autologous	3.813	195	3.134	123	22	0	0	0	0
N° of patients transplanted - Autologous	3.096	209	0	97	21	0	0	0	0
N° of transplants - Allogenic	2.999	87	1.736	69	0	0	0	0	0
N° of patients transplanted - Allogenic	2.797	85	0	62	0	0	0	0	0
N° of transplants - Allogenic, related	905	36	980	16	0	0	0	0	0
N° of patients transplanted - Allogenic, related	817	35	0	14	0	0	0	0	0
N° of transplants - Allogenic, unrelated	2.094	51	756	53	0	0	0	0	0
N° of patients transplanted - Allogenic, unrelated	1.980	50	0	48	0	0	0	0	0



PRELIMINARY DATA ON HPC CELLS - YEAR 2012

EUROPEAN UNION COUNTRIES

Country Population (Font: eurostat/ UNFPA)	NETHERLANDS 16.730.348	POLAND 38.538.447	PORTUGAL 10.542.398	ROMANIA 21.355.849	SLOVAKIA 5.404.322	SLOVENIA 2.055.496	SPAIN 46.196.276	SWEDEN 9.482.855	U. KINGDOM 63.256.141
---	---------------------------	----------------------	------------------------	-----------------------	-----------------------	-----------------------	---------------------	---------------------	--------------------------

CATEGORY OF DATA	TYPE OF DATA	NO DATA	NO DATA					
POTENTIAL DONATION AND SEARCHING IN THE NATIONAL REGISTRIES	N° of potential donors at 31.12	41.667	408.388	311.508	NR	107.003	0	NR
	N° of coord blood unit at 31.12	3.237	871	91.892	3.222	55.509	0	NR
	N° of searches requested	486	1.852	3.071	0	1.723	0	NR
	N° of unrelated donation	441	443	339	0	687	0	NR
DONATION	N° of donation - Autologous	20.059	10.063	353	2.215	1.700	447	NR
	N° of donation - Allogenic	47	5.920	169	1.632	1.017	988	NR
	N° of donation - Allogenic, related	0	5.620	73	1.632	541	63	NR
	N° of donation - Allogenic, unrelated	47	300	96	0	476	925	NR
BANKING of CORD BLOOD	N° of unrelated coord blood units collected	280	538	5.838	0	3.674	837	12.754
	N° of unrelated coord blood units distributed	96	2	0	0	109	17	NR
	N° of unrelated coord blood units at 31.12	184	0	8.445	22	55.509	3.693	NR
	N° of related coord blood units collected	0	0	13.999	17.549	4	0	514
	N° of related coord blood units distributed	0	0	1	0	4	0	NR
	N° of related coord blood units at 31.12	0	0	91.981	67.625	0	43	NR
TRANSPLANT	N° of transplants - Autologous	17	797	334	0	1.700	628	NR
	N° of patients transplanted - Autologous	662	0	312	0	0	458	NR
	N° of transplants - Allogenic	546	448	130	1	999	329	NR
	N° of patients transplanted - Allogenic	463	414	125	1	0	252	NR
	N° of transplants - Allogenic, related	178	186	64	1	541	92	NR
	N° of patients transplanted - Allogenic, related	163	169	62	1	0	64	NR
	N° of transplants - Allogenic, unrelated	368	262	66	0	458	237	NR
N° of patients transplanted - Allogenic, unrelated	300	245	63	0	0	188	NR	

PRELIMINARY DATA ON HPC CELLS - YEAR 2012

OTHER COUNTRIES

Country	ALGERIA	ICELAND	ISRAEL	MACEDONIA	MOLDOVA	NORWAY	SWITZERLAND	TUNISIA	TURKEY
Population (Font: eurostat/ UNFPA)	36,5	319.575	7,7	2.059.794		4.985.870	7.954.662	10,7	74.724.269

CATEGORY OF DATA	TYPE OF 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	NE	29.168	0					0
N° of coord blood unit at 31.12	NE	0						0
N° of searches requested	0	14.510						0
N° of unrelated donation	0	1						0

DONATION

N° of donation - Autologous	0	217						1.408
N° of donation - Allogenic	0	68						699
N° of donation - Allogenic, related	0	41						84
N° of donation - Allogenic, unrelated	0	27						615

BANKING OF CORD BLOOD

N° of unrelated coord blood units collected	0	0						0
N° of unrelated coord blood units distributed	0	0						0
N° of unrelated coord blood units at 31.12	0	0						0
N° of related coord blood units collected	0	81						0
N° of related coord blood units distributed	0	0						0
N° of related coord blood units at 31.12	0	614						0

TRANSPLANT

N° of transplants - Autologous	0	27						0
N° of patients transplanted - Autologous	0	26						0
N° of transplants - Allogenic	0	50						0
N° of patients transplanted - Allogenic	0	50						0
N° of transplants - Allogenic, related	0	0						0
N° of patients transplanted - Allogenic, related	0	0						0
N° of transplants - Allogenic, unrelated	0	50						0
N° of patients transplanted - Allogenic, unrelated	0	50						0

PRELIMINARY DATA ON HPC CELLS - YEAR 2012

LATINAMERICAN COUNTRIES

Country Population (Font: eurostat/ UNFPA)	ARGENTINA 41,1	BRAZIL 198,4	CHILI 17,4	COLOMBIA 47,6	COSTA RICA 4,8	CUBA 11,2	DOMINICANA 10,2	ECUADOR 14,9
---	-------------------	-----------------	---------------	------------------	-------------------	--------------	--------------------	-----------------

CATEGORY OF DATA	TYPE OF 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	933	0						
N° of coord blood unit at 31.12	112	428						
N° of searches requested	541	0						
N° of unrelated donation	0	0						

DONATION

N° of donation - Autologous	0	0						
N° of donation - Allogenic	0	0						
N° of donation - Allogenic, related	0	0						
N° of donation - Allogenic, unrelated	0	0						

BANKING of CORD BLOOD

N° of unrelated coord blood units collected	0	0						
N° of unrelated coord blood units distributed	0	0						
N° of unrelated coord blood units at 31.12	0	0						
N° of related coord blood units collected	0	0						
N° of related coord blood units distributed	0	0						
N° of related coord blood units at 31.12	0	0						

TRANSPLANT

N° of transplants - Autologous	441	261						
N° of patients transplanted - Autologous	422	0						
N° of transplants - Allogenic	204	138						
N° of patients transplanted - Allogenic	195	0						
N° of transplants - Allogenic, related	126	103						
N° of patients transplanted - Allogenic, related	118	0						
N° of transplants - Allogenic, unrelated	78	35						
N° of patients transplanted - Allogenic, unrelated	77	0						

PRELIMINARY DATA ON HPC CELLS - YEAR 2012

LATINAMERICAN COUNTRIES

Country Population (Font: eurostat/ UNFPA)	GUATEMALA	MEXICO	NICARAGUA	PANAMA	PARAGUAY	PERU	URUGUAY	VENEZUELA
		15,1	116,1	6,0	3,6	6,7	29,7	3,4 - 29,9

CATEGORY OF DATA	TYPE OF DATA	NO DATA	NO DATA	NO DATA
------------------	--------------	---------	---------	---------

POTENTIAL DONATION  
AND SEARCHING IN THE  
NATIONAL REGISTRIES

N° of potential donors at 31.12	154	0	0	559	0
N° of coord blood unit at 31.12	15	0	0	0	0
N° of searches requested	0	0	0	20	0
N° of unrelated donation	0	0	0	0	0

DONATION

N° of donation - Autologous	0	0	0	0	0
N° of donation - Allogenic	0	0	0	0	0
N° of donation - Allogenic, related	0	0	0	0	0
N° of donation - Allogenic, unrelated	0	0	0	0	0

BANKING OF CORD BLOOD

N° of unrelated coord blood units collected	0	0	0	0	0
N° of unrelated coord blood units distributed	0	0	0	0	0
N° of unrelated coord blood units at 31.12	0	0	0	0	0
N° of related coord blood units collected	0	0	0	0	0
N° of related coord blood units distributed	0	0	0	0	0
N° of related coord blood units at 31.12	0	0	0	0	0

TRANSPLANT

N° of transplants - Autologous	26	25	119	33
N° of patients transplanted - Autologous	0	25	90	33
N° of transplants - Allogenic	128	9	33	18
N° of patients transplanted - Allogenic	0	9	33	18
N° of transplants - Allogenic, related	128	9	29	18
N° of patients transplanted - Allogenic, related	0	9	29	18
N° of transplants - Allogenic, unrelated	0	0	4	0
N° of patients transplanted - Allogenic, unrelated	0	0	4	0

# Council Of Europe Convention, Resolutions, Recommendations And Reports



## Chairmen of the European Committee (Partial Agreement) on Organ Transplantation (CD-P-TO)

1988- 1995	HORS Jacques (FRANCE)
1995- 2000	MATESANZ Rafael (SPAIN)
2000- 2003	DOYLE Peter (UK)
2003- 2005	MATESANZ Rafael (SPAIN)
2005- 2010	LOTY Bernard (FRANCE)
2010- 2012	PFEFFER Per (NORWAY)
2012-	NANNI COSTA Alessandro (ITALY)

## Council of Europe Convention, Resolutions, Recommendations and Reports

### CONVENTIONS

Convention for the protection of human rights and dignity of the human being with regard to the application of biology and medicine: Convention on human rights and biomedicine.

Explanatory report to the Convention for the protection of human rights and dignity of the human being with regard to the application of biology and medicine: Convention on human rights and biomedicine.

Additional protocol to the Convention on human rights and biomedicine concerning transplantation of organs and tissues of human origin.

Explanatory report to the Additional protocol to the Convention on human rights and biomedicine concerning transplantation of organs and tissues of human origin.

Convention on Action against Trafficking in Human Beings (*including for the purpose of organ removal*).

Explanatory report to the Convention on Action against Trafficking in Human Beings (*including for the purpose of organ removal*).

## RECOMMENDATIONS

Recommendation No. R (94) 1 of the Committee of Ministers to member states on human tissue banks.

Recommendation No. R (97) 15 of the Committee of Ministers to member states on xenotransplantation.

Recommendation No. R (97) 16 of the Committee of Ministers to member states on liver transplantation from living related donors.

Recommendation No. R (98) 2 of the Committee of Ministers to member states on provision of haematopoietic progenitor cells.

Recommendation Rec(2001)5 of the Committee of Ministers to member states on the management of organ transplant waiting lists and waiting times.

Recommendation Rec(2003)10 of the Committee of Ministers to member states on xenotransplantation.

Explanatory memorandum to Recommendation Rec(2003)10 of the Committee of Ministers to member states on xenotransplantation.

Recommendation Rec(2003)12 of the Committee of Ministers to member states on organ donor registers.

Recommendation Rec(2004)7 of the Committee of Ministers to member states on organ trafficking.

Recommendation Rec(2004)8 of the Committee of Ministers to member states on autologous cord blood banks.

Explanatory memorandum to Recommendation Rec(2004)8 of the Committee of Ministers to member states on autologous cord blood Banks.

Recommendation Rec(2004)19 of the Committee of Ministers to member states on criteria for the authorisation of organ transplantation facilities.

Recommendation Rec(2005)11 of the Committee of Ministers to member states on the role and training of professionals responsible for organ donation (transplant “donor co-ordinators”).

Recommendation Rec(2006)15 of the Committee of Ministers to member states on the background, functions and responsibilities of a National Transplant Organisation (NTO).

Recommendation Rec(2006)16 of the Committee of Ministers to member states on quality improvement programmes for organ donation.

## RESOLUTIONS

Resolution (78) 29 on harmonisation of legislations of member states relating to removal, grafting and transplantation of human substances.

Resolution CM/Res(2008)4 on adult-to-adult living donor liver Transplantation.

Resolution CM/Res(2008)6 on transplantation of kidneys from living donors who are not genetically related to the recipient.

## REPORTS

Organ shortage: current status and strategies for improvement of organ donation – A European consensus document.

Joint Council of Europe/United Nations Study on trafficking in organs, tissues and cells and trafficking in human beings for the purpose of the removal of organs.



# Survey On The Implementation Of Council Of Europe Recommendation Rec (2004) 8 Of The Committee Of Ministers To Member States On Autologous Cord Blood Banks



# Survey on the implementation of Council of Europe Recommendation Rec(2004)8 of the Committee of Ministers to member states on autologous cord blood banks

Faucher C. & Laouabdia-Sellami K.

*On behalf of the European Committee (Partial Agreement) on Organ Transplantation<sup>1</sup>*

## INTRODUCTION AND BACKGROUND

Since the first report of the allogeneic transplantation of hematopoietic stem cells from a cord blood unit to a patient who was consequently cured of his Fanconi anaemia in 1988, thousands of allogeneic cord blood transplantations have been performed around the world, mainly for malignant and inherited haematological diseases. Fundamental clinical research in this field is currently very active, with a view to improving the outcome of allogeneic cord blood transplantation.

The Council of Europe has been studying the issue of cord blood donation for a number of years and has always been concerned about the proliferation of private cord blood banks dedicated to the collection and storage of cord blood for autologous purposes. This resulted in the adoption of Recommendation Rec(2004)8 of the Committee of Ministers to member states on autologous cord blood banks<sup>2</sup> and its Explanatory Memorandum on 19 May 2004 at the 88th meeting of the Ministers' Deputies. Rec(2004) 8 recommends that member states only allow the establishment of cord blood banks on the basis of altruistic and voluntary cord blood donations. More generally, it presents the view of the Council of Europe that the promotion of cord blood donation for autologous use and the establishment of cord blood banks for autologous use should not be supported by member states or their health services.

The principal current use of umbilical cord blood is for the collection of haematopoietic progenitor cells that can be transplanted into patients with acquired or congenital diseases of the bone marrow. In addition, it is known that umbilical cord blood could act as a source of stem cells. Nevertheless, cord blood that is stored only for autologous use is very rarely needed. It is currently widely accepted among the medical community that the medical indications for transfusion to a child of stem cells taken from preserved placental blood derived from that child's own umbilical cord are extremely limited. Even if it is the case that, in the future, children do

develop diseases requiring a haematopoietic progenitor cells transplant, there is evidence to suggest that it is preferable to use allogeneic transplantation to achieve the "graft vs. tumour effect" in haematological diseases. In cases of congenital disease and in some leukaemias with intra-uterine cell mutations, autologous hematopoietic progenitor cell transplantation is contraindicated. Therefore, the probability of autologous use before the age of 20, in conditions of increasingly doubtful safety as time passes, is infinitely smaller than the likelihood of an allogeneic indication, so that children whose cord blood had been stored would still be potential users of allogeneic banks in any case. As a result, these children would benefit from others without there being any possibility of reciprocity.

Furthermore, there is no scientific evidence that umbilical cord blood for autologous use can be stored for long enough to be of any use to the vast majority of donors. An international system for locating allogeneically-compatible donors already exists and storage for autologous purposes could seriously endanger and limit altruistic and voluntary donation, thereby limiting the possibility of treating a significant number of patients.

Most autologous cord blood banks are driven by financial objectives rather than altruistic ones, and they seek to achieve these commercial objectives by providing parents with the illusion of therapeutic promise for the future, which so far is devoid of any scientific foundation. As such, advertisements by such banks are usually intentionally ambiguous regarding the absence of indications and the potential future uses of the properties of stem cells (if and when medical research finds such uses). Nevertheless, parents should be informed of the current lack of any scientific or medical justification for systematic collection of cord blood for exclusively autologous purposes and they should be encouraged to participate instead in the necessary development of public allogeneic and anonymous cord blood banks.

Moreover, the quality of donations stored by autologous (private) banks is notoriously variable compared to allogeneic (public) banks, largely because the income of private cord blood banks tends to be related to the number of units banked rather than units issued. In fact, a very high percentage of the units collected in allogeneic banks are discarded as they do not pass the very stringent quality criteria. These

<sup>1</sup> European Committee (Partial Agreement) on Organ Transplantation (CD-P-TO). More information available at <http://www.edqm.eu/en/organ-transplantation-work-programme-72.html>

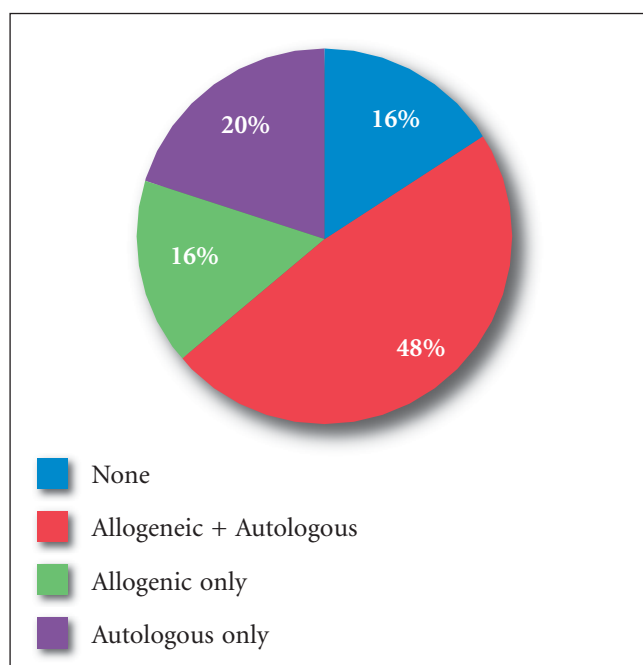
<sup>2</sup> Recommendation Rec(2004)8 of the Committee of Ministers to member states on autologous cord blood banks, available at <https://wcd.coe.int/ViewDoc.jsp?id=744641&Lang=en>

quality issues make it very unlikely that units stored by private banks could be selected for transplantation.

In November 2012, the European Committee (Partial Agreement) on Organ Transplantation of the Council of Europe (CD-P-TO) submitted a survey to its member states in order to collect information on the implementation of Recommendation Rec(2004)8. The following analysis summarises their responses.

## RESULTS

- **53%** (25/47) of Council of Europe member states responded to the survey
- **88%** (22/47, including Croatia) of respondents were European Union member states
- **84%** (21/25) have cord blood banks of any kind established in the country



**Figure 1.** Presence of cord blood banks in Council of Europe member states. Percentages are calculated based on the responses of the 25 respondent member states.

Summary of the answers submitted by the member states:

- **44%** (11/25) used Council of Europe Recommendation Rec(2004)8, at least partially, to set up their own national regulations on cord blood banks.
- **16%** (4/25) have explicitly forbidden autologous cord blood banks (1/25 only after an autologous cord blood bank had already been established).
- **16%** (4/25) declared not having regulations concerning cord blood banking and no allogeneic or autologous cord blood banks had been established. In one member state, legislation is currently being drawn up.
- **68%** (17/25) declared having one or more autologous cord blood banks established in the country and/or pri-

vate banks that collect cord blood units and send them to be stored in another country with more convenient legislation. Among these 17 countries:

- **16 member states** have authorised the establishment of these banks. In one country, autologous cord blood banks are established, but not authorised: the legal framework for cord blood banks does exist, but it is not enforced by the Health Authority;
  - among the member states with autologous cord blood banks and/or private banks that collect cord blood units and send them to be stored in another country, **9 have public information** on altruistic donation of cord blood distributed either by the national Health Authority, the national organisation for transplantation/transfusion (public or private foundations) or both. Where public information exists, autologous cord blood banking is generally not recommended because of the absence of scientific evidence for its therapeutic use;
  - **11 member states** with autologous cord blood banks declared having the same laws for autologous and allogeneic cord blood banks;
  - **only 1 member state**, which has an autologous bank that collects cord blood units and that sends them to another country to be stored, has asked this establishment to annually report its activity (i.e. number of cord blood units transferred for storage purposes);
  - **in 1 member state**, autologous cord blood banks are authorised but, by law, they must make stored cord blood units available for allogeneic purposes if needed. As a result, nearly all cord blood units collected for autologous purposes are sent to another country for storage.
- Among the 21 member states that declared having established cord blood banks:
    - **81%** (17/21) have a legal framework based on the European Union tissues and cell directives (Directives 2004/23/EC, 2006/17/EC, 2006/86/EC) or national regulations;
    - **95%** (20/21) also have a publicly-funded Bone Marrow donor registry;
    - The number of allogeneic cord blood units available in public cord blood banks is much lower than cord blood units stored in autologous cord blood banks, where these figures are known by the Health Authorities.

## CONCLUSIONS

Many Council of Europe member states have autologous cord blood banks established in the country and/or private establishments that collect cord blood units and send them for storage to another country. Few member states have used Council of Europe Recommendation Rec(2004)8 of the Com-

*mittee of Ministers to member states on autologous cord blood banks* to establish their legal framework on cord blood banking. Furthermore, few member states provide independent public information on altruistic cord blood donation.

Many non-European Union Council of Europe member states did not respond to the questionnaire and, thus, the situation relating to cord blood banking in those countries is unknown.

The European Committee on Organ Transplantation (CD-P-TO) of the Council of Europe deems this a very worrisome

situation and will study the possibility of further action, including the elaboration of an information booklet on cord blood donation addressed to parents and to be used by national health authorities. The proposed booklet will include the most recent and accurate scientific and medical data on cord blood transplantation.

Currently, allogeneic transplantation of hematopoietic stem cells from cord blood is the only effective therapy for malignant and inherited haematological diseases for thousands of patients across the world.

# Members of the Council of Europe European Committee (Partial Agreement) on Organ Transplantation (CD-P-TO) (25/06/2013)

## **Chairman**

NANNI COSTA Alessandro

## **Members**

### **AUSTRIA**

MUEHLBACHER Ferdinand

### **BELGIUM**

COLENBIE Luc

MUYLLE Ludo (secondment)

### **BULGARIA**

GICHEVA Maria

DOITCHINOVA-SIMEONOVA

Maryana

### **CROATIA**

BUSIC Mirela

ANUSIC JURICIC Martina

### **CYPRUS**

HADJIANASTASSIOU Vassilis

### **CZECH REPUBLIC**

BREZOVSKY Pavel

### **DENMARK**

CARLSEN Jorn

### **ESTONIA**

DMITRIEV Peeter

### **FINLAND**

SALMELA Kaija

### **FRANCE**

LAOUABDIA-SELLAMI Karim

HUOT Olivier (secondment)

TESKRAT Fewzi (secondment)

### **GERMANY**

HUCK Angelika

SCHLEICHER Christina

TONJES Ralf Reinhard (secondment)

### **GREECE**

KOSTAKIS Alkiviadis

### **HUNGARY**

LANGER Robert

### **ICELAND**

MAGNUSSON Sveinn

### **IRELAND**

EGAN Jim

### **ITALY**

COZZI Emanuele

MORRESI Assunta

CHATZIXIROS Efstratios (secondment)

### **LATVIA**

TRUSHKOV Sergey

### **LUXEMBURG**

JOME Laurent

### **MALTA**

ZARB ADAMI Joseph

### **NETHERLANDS**

HAASE-KROMWIJK Bernadette (vice chair)

### **NORWAY**

OYEN Ole

### **POLAND**

DANIELEWICZ Roman

### **PORTUGAL**

AMIL Margarida

FRANCA Ana

BOLOTINHA Catarina (secondment)

### **ROMANIA**

ZOTA Victor

### **SLOVAK REPUBLIC**

DANNINGER Filip

### **SLOVENIA**

AVSEC Danica

## **SPAIN**

MATESANZ Rafael

DOMINGUEZ-GIL Beatiz

(secondment)

MARAZUELA Rosario (secondment)

## **SWEDEN**

GRANKVIST Erica

ERICZON Bo-Göran (secondment)

## **SWITZERLAND**

MOREL Philippe

## **TURKEY**

KEMALOGLU Bahri

AYDIN Mehmet Ali (secondment)

## **UKRAINE**

NYKONENKO Oleksandr

SOBOKAR Vitaliy

## **UNITED KINGDOM**

NEUBERGER James

## **Observers**

### **ALBANIA**

KOSOVRASTI Denis

### **ARMENIA**

SARKISSIAN Ashot

### **AZERBAIJAN**

KADIROV Aydin Vali

### **BELARUS**

RUMO Aleh

### **CANADA**

AGBANYO Francisca

### **DH-BIO (BIOETHICS COMMITTEE, COUNCIL OF EUROPE)**

ARIAS-DIAZ Javier (secondment)

### **DTI FOUNDATION**

MANYALICH Marti

### **ESOT (EUROPEAN SOCIETY FOR ORGAN TRANSPLANTATION)**

PLOEG Rutger

### **EUROPEAN COMMISSION**

LE-BORGNE Hélène

SISKA Ioana-Raluca

### **EUROTRANSPLANT INTERNATIONAL FOUNDATION**

RAHMEL Axel

OOSTERLEE Arie

### **GEORGIA**

TOMADZE Gia

### **HOLY SEE**

Mgr RALLO Vito

### **ISRAEL**

ASHKENAZI Tamar

### **MOLDOVA**

CODREANU Igor

### **SCANDIATRANSPLANT**

HOCKERSTEDT Krister

### **TTS (THE TRANSPLANTATION SOCIETY)**

DELMONICO Francis

KUYPERS Dirk

### **RUSSIAN FEDERATION**

GABBASOVA Lyalya

NIKOLAEV German

### **UNOS (UNITED NETWORK FOR ORGAN SHARING)**

PRUETT Timothy

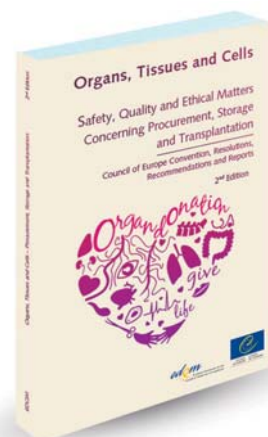
### **USA**

WITTEN Celia

### **WHO (WORLD HEALTH ORGANISATION)**

NOEL Luc

# 3 Publications from EDQM on transplantation



Information:  
[www.edqm.eu](http://www.edqm.eu)

