# NEWSLETTER TRANSPLANT

## International figures on donation and transplantation 2014

**EDQM**
Volume 20
2015

GOBIERNO DE ESPAÑA
MINISTERIO DE SANIDAD, SERVICIOS SOCIALES E IGUALDAD

ONT
ORGANIZACIÓN NACIONAL DE TRASPLANTES

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COUNCIL OF EUROPE
CONSEIL DE L'EUROPE

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

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# NEWSLETTER TRANSPLANT 2015

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

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

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

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

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

**Total TX. (all combinations included)**
Includes the transplantation of the corresponding organ with or without the simultaneous transplant of a different type of organ (s).

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

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

- A/ Related:
  - A1/ Genetically Related:
    - 1st Degree Genetic Relative: Parent, Sibling, Offspring
    - 2nd Degree genetic relative, e.g. grandparent, grandchild, aunt, uncle, niece, nephew,
    - Other than 1st or 2nd degree genetically related, for example cousin
  - A2/ Emotionally Related: Spouse (if not genetically related); in-laws; Adopted; Friend
- B/ Unrelated = Non Related: Not Genetically or Emotionally Related

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

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

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

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

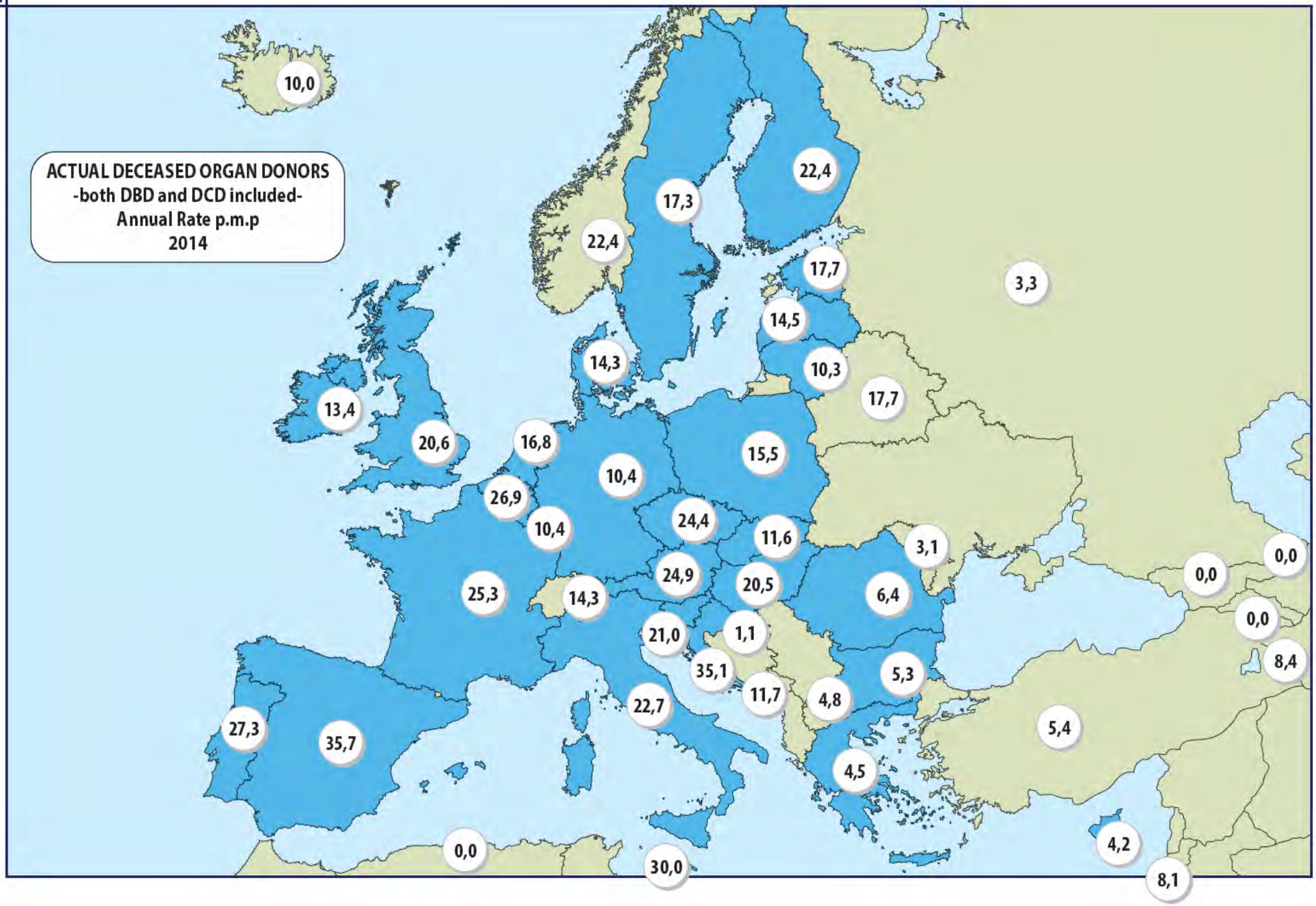
**Paediatric**
Includes only paediatric activity (patients aged < 15 years).

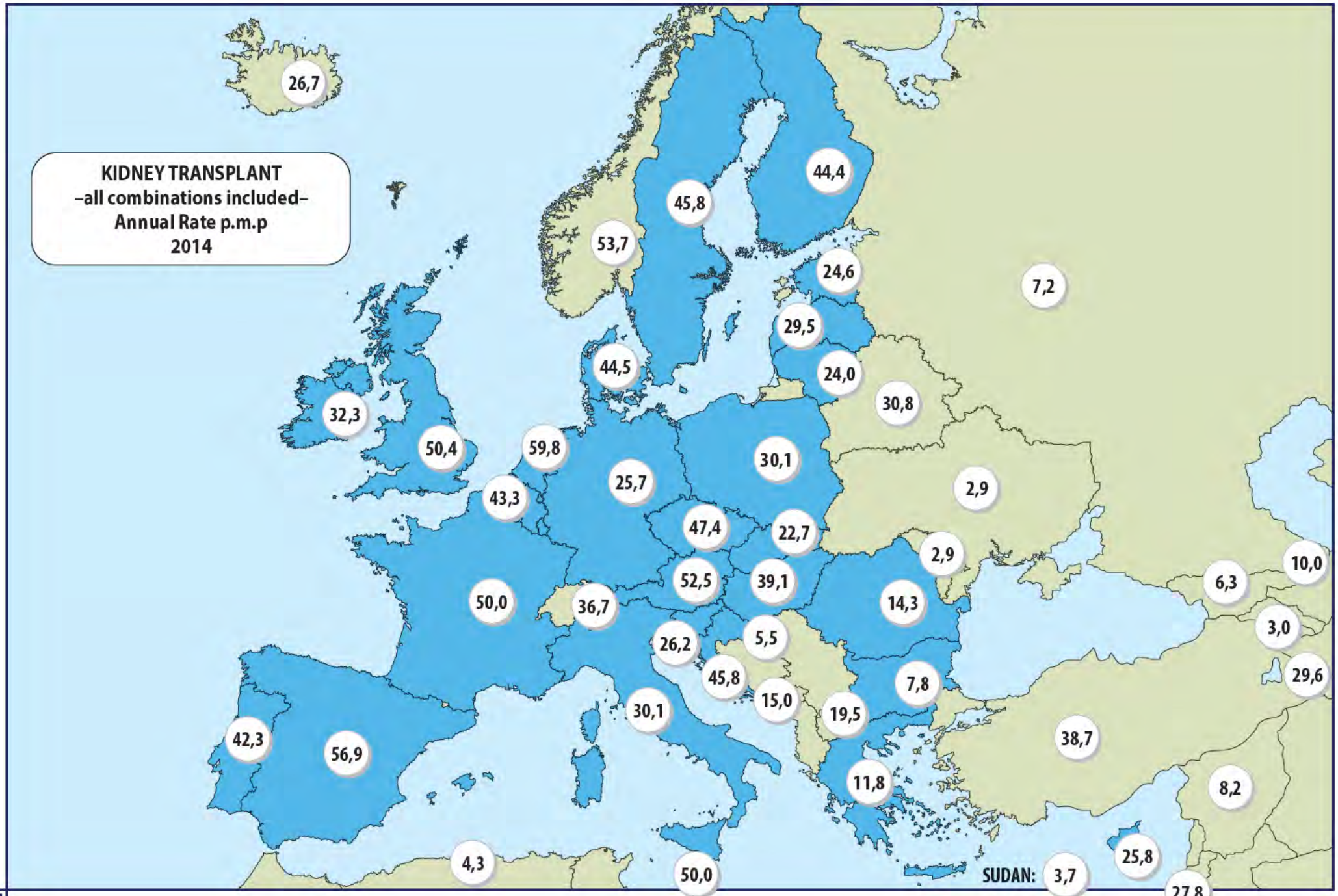
**Waiting List**
**Example:** At 1/1/2011 there were 200 patients active on the WL. Along the year, 100 patients are newly included on the WL (first row). In total, 300 patients have been ever active on the WL during the year (second row). Along the year, 200 patients were transplanted (number recorded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

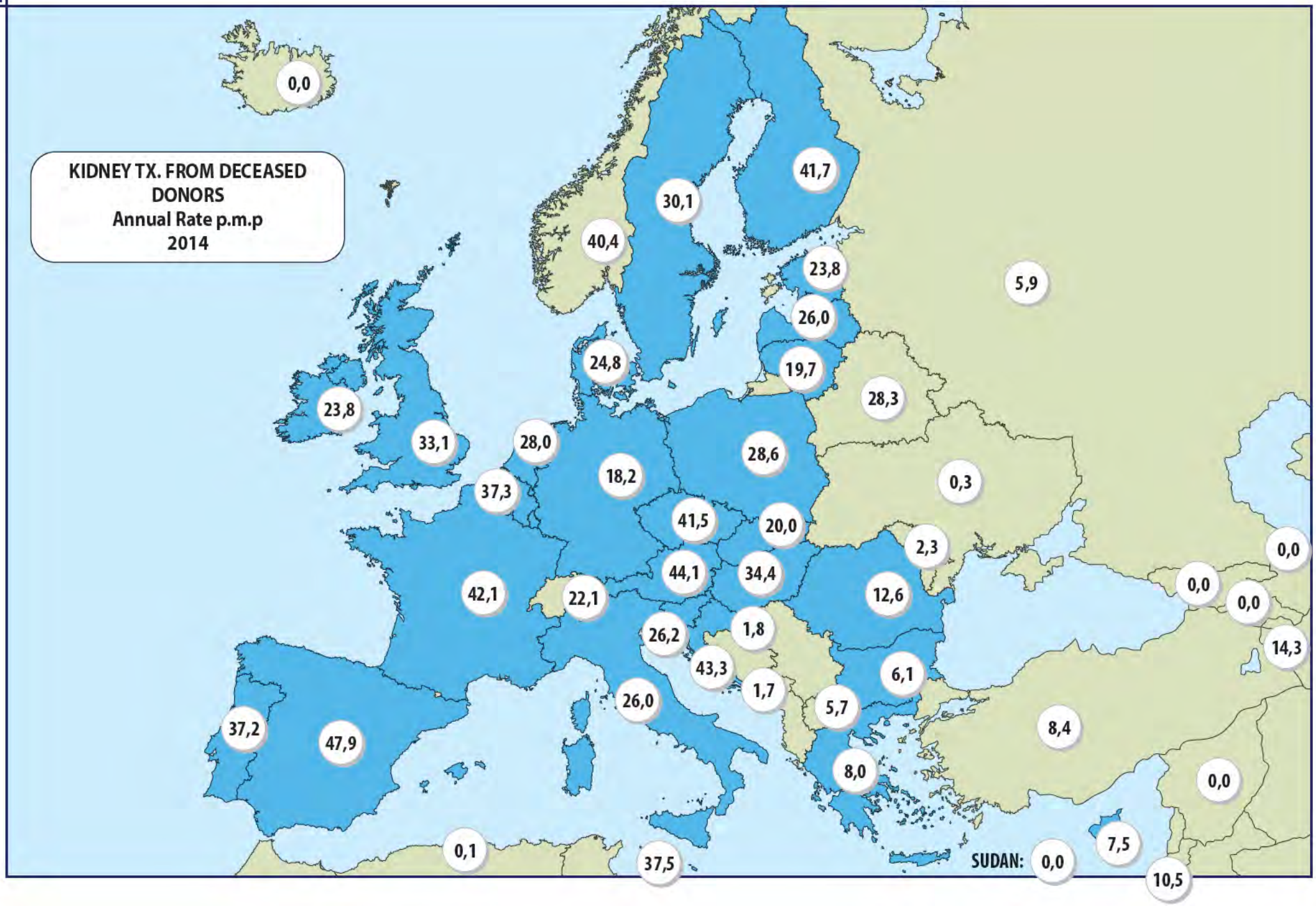
| | |
|---|---|
| Patients included on the WL for the first time in the course of 2014 | 100 |
| Total number of patients ever active on the WL during 2014 | 300 |
| Patients awaiting for a transplant (only active candidates) on 31/12/2014 | 50 |
| Patients who died while on the WL during 2014 | 25 |

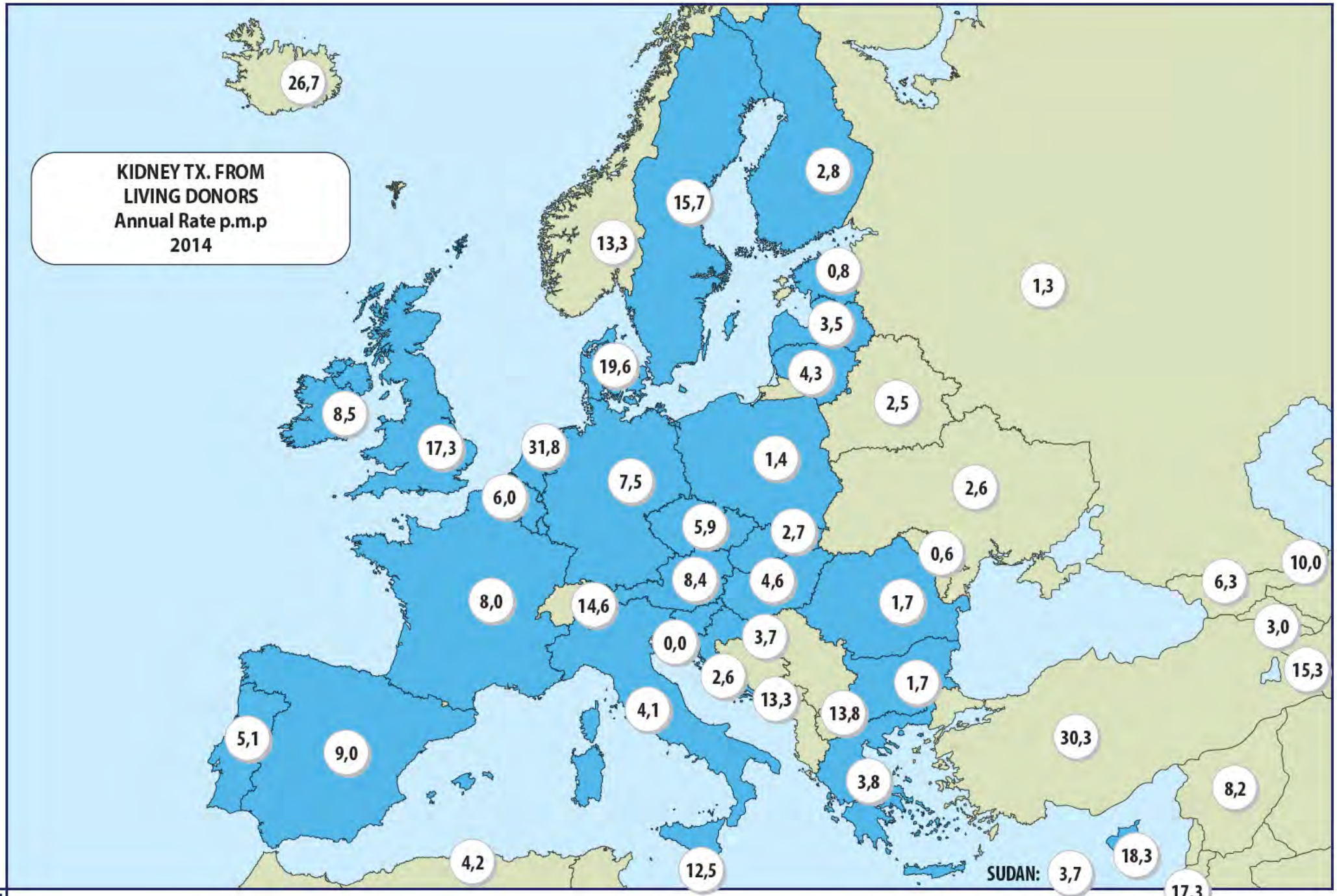
*(*The United Nations Fund report (UNFPA: http://www.unfpa.org/public/) is used as the data source for estimates of population size)*

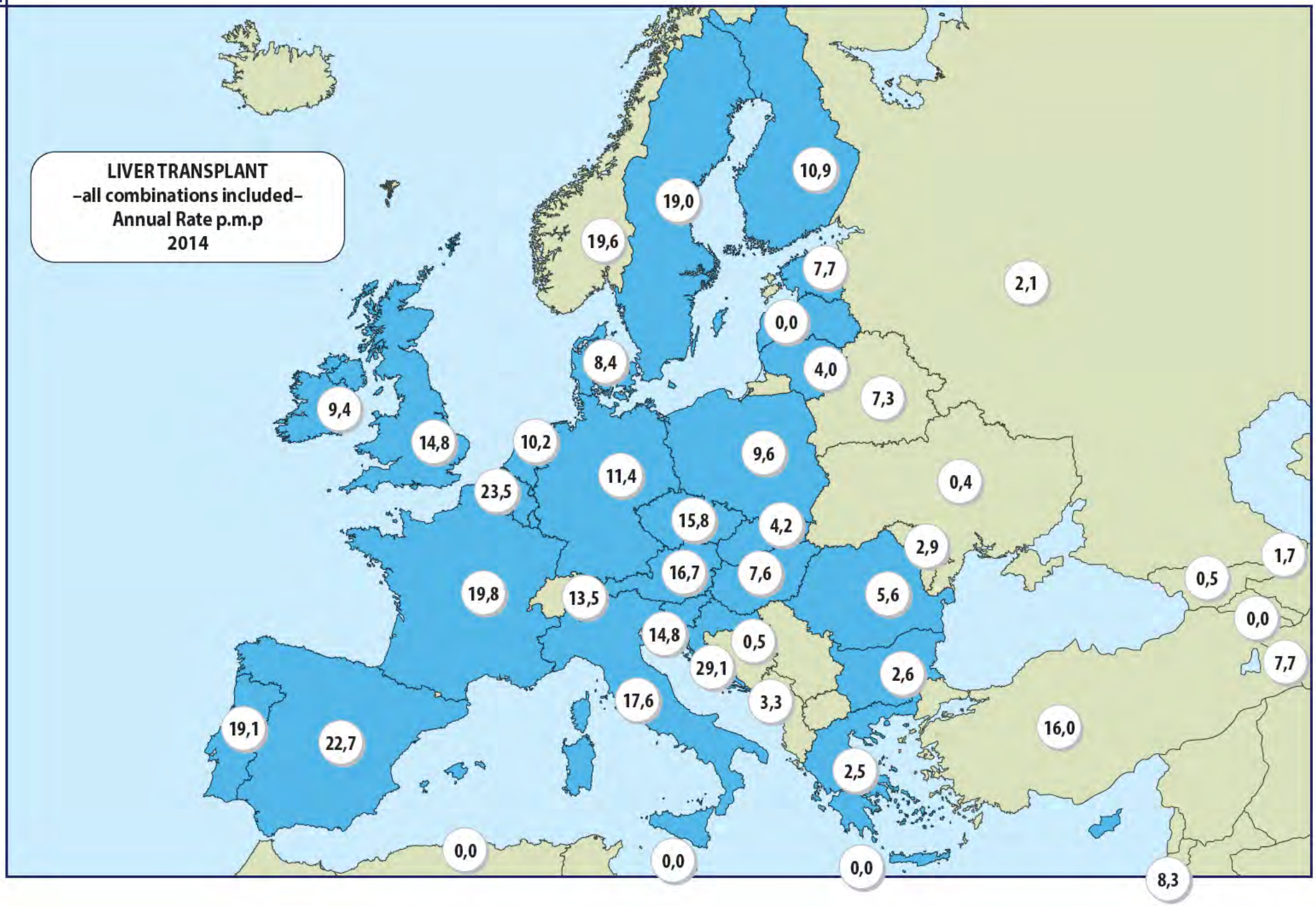
# International Figures On Organ Donation And Transplantation Activity. Year 2014.

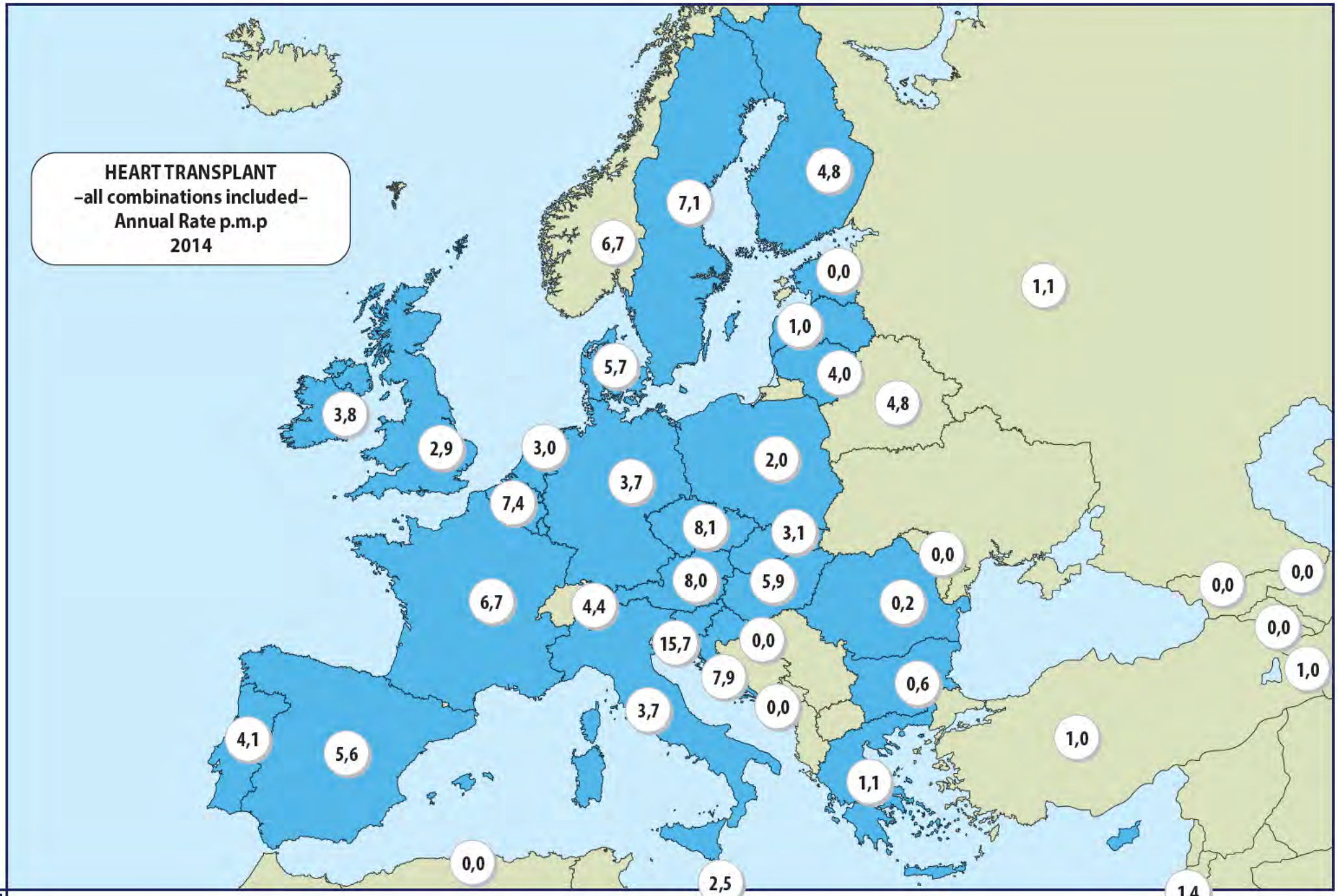

ACTUAL DECEASED ORGAN DONORS
-both DBD and DCD included-
Annual Rate p.m.p
2014
10,0
22,4
17,3
22,4
17,7
3,3
14,5
14,3
10,3
17,7
13,4
20,6
16,8
15,5
10,4
26,9
10,4
24,4
11,6
3,1
0,0
0,0
24,9
20,5
6,4
25,3
14,3
0,0
21,0
1,1
8,4
35,1
5,3
11,7
4,8
22,7
27,3
35,7
5,4
4,5
4,2
0,0
30,0
8,1

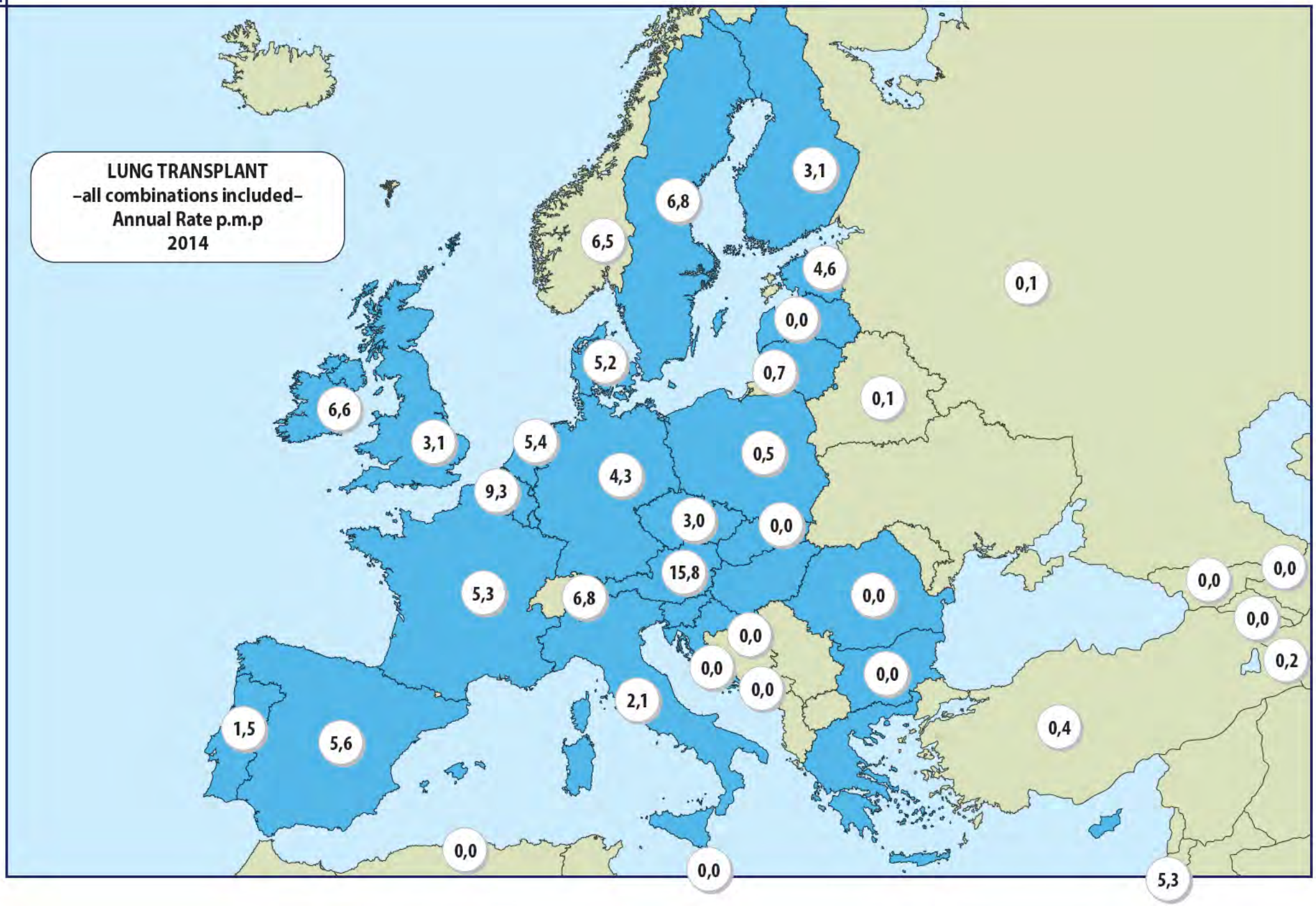

KIDNEY TRANSPLANT
–all combinations included–
Annual Rate p.m.p
2014
26,7
44,4
45,8
53,7
24,6
7,2
29,5
44,5
24,0
30,8
32,3
50,4
59,8
30,1
25,7
2,9
43,3
47,4
22,7
2,9
10,0
52,5
39,1
6,3
50,0
36,7
14,3
3,0
26,2
5,5
29,6
45,8
7,8
15,0
30,1
19,5
42,3
56,9
38,7
11,8
8,2
25,8
4,3
50,0
SUDAN: 3,7
27,8

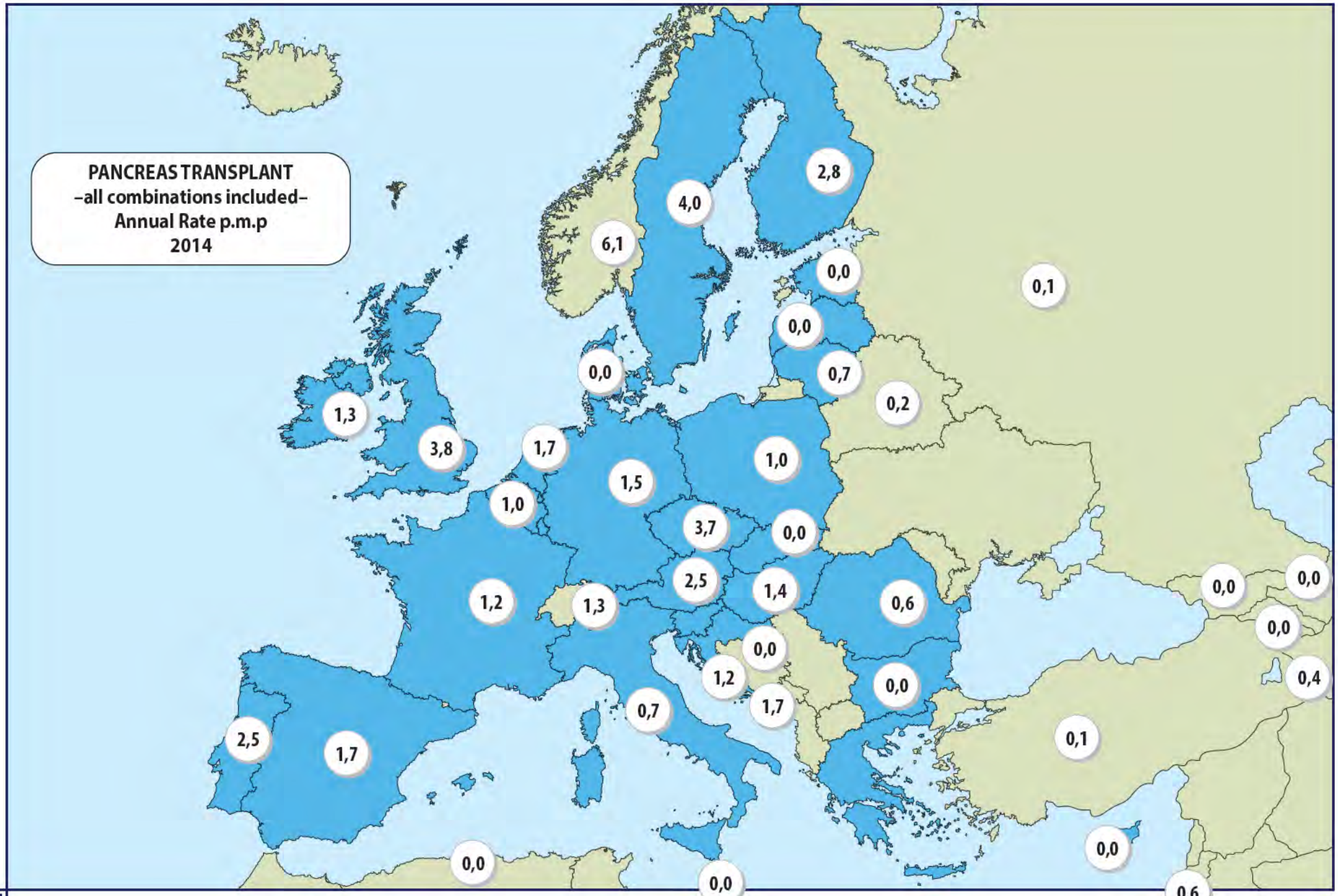

KIDNEY TX. FROM DECEASED DONORS
Annual Rate p.m.p
2014
0,0
41,7
30,1
40,4
23,8
5,9
26,0
24,8
19,7
28,3
23,8
33,1
28,0
28,6
18,2
0,3
37,3
41,5
20,0
2,3
0,0
44,1
34,4
12,6
0,0
42,1
22,1
0,0
1,8
26,2
14,3
43,3
6,1
1,7
26,0
5,7
37,2
47,9
8,4
8,0
0,0
7,5
0,1
37,5
SUDAN:
0,0
10,5

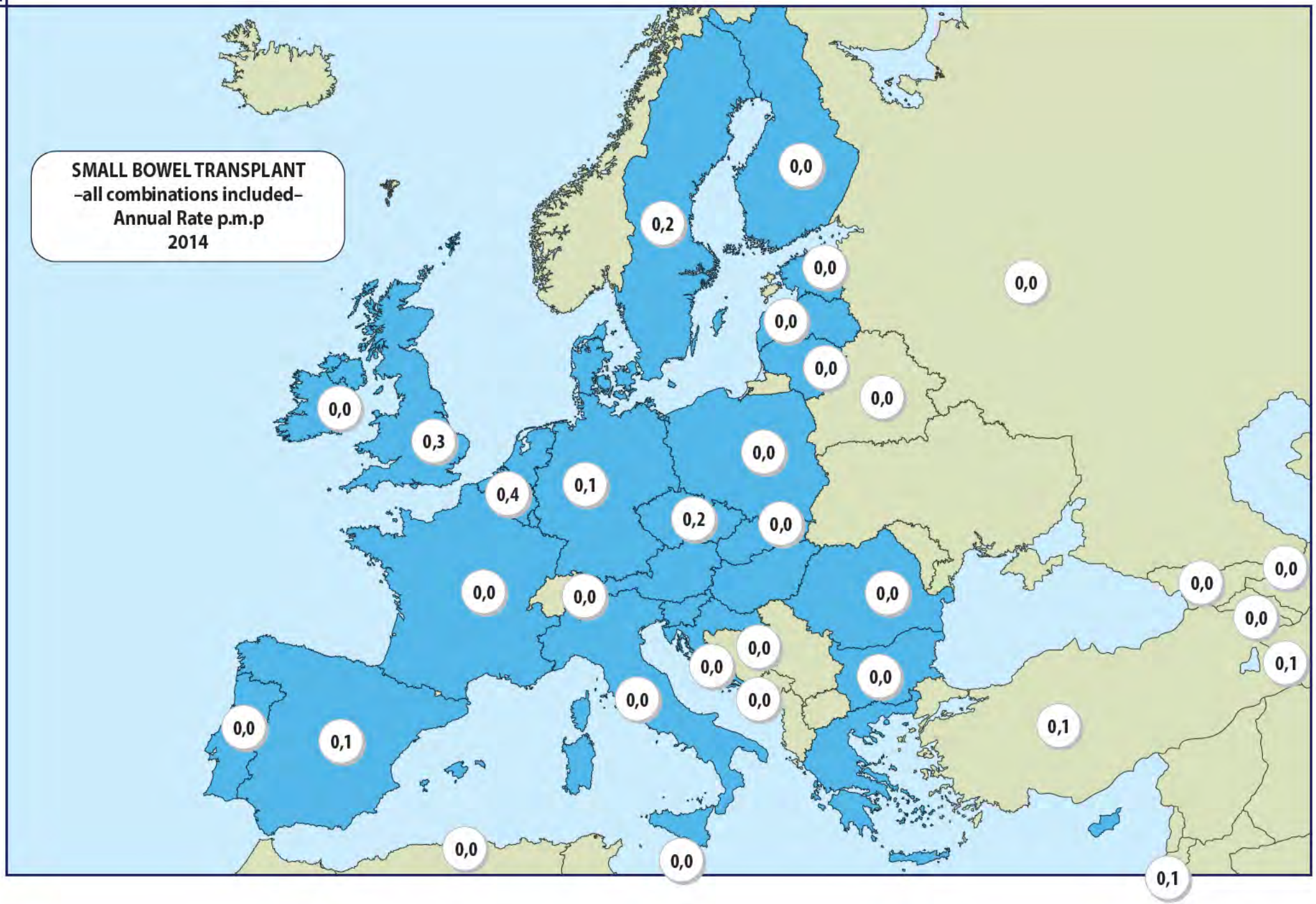

KIDNEY TX. FROM
LIVING DONORS
Annual Rate p.m.p
2014
26,7
2,8
15,7
13,3
0,8
1,3
3,5
19,6
4,3
2,5
8,5
17,3
31,8
1,4
7,5
2,6
6,0
5,9
2,7
0,6
10,0
8,4
4,6
6,3
8,0
14,6
1,7
3,0
0,0
3,7
15,3
2,6
1,7
13,3
13,8
4,1
5,1
9,0
30,3
3,8
8,2
18,3
4,2
12,5
SUDAN:
3,7
17,3


LIVER TRANSPLANT
–all combinations included–
Annual Rate p.m.p
2014
10,9
19,0
19,6
7,7
2,1
0,0
8,4
4,0
7,3
9,4
14,8
10,2
9,6
11,4
0,4
23,5
15,8
4,2
2,9
1,7
16,7
7,6
0,5
19,8
13,5
5,6
0,0
14,8
0,5
7,7
29,1
2,6
17,6
3,3
16,0
19,1
22,7
2,5
0,0
0,0
0,0
8,3


HEART TRANSPLANT
–all combinations included–
Annual Rate p.m.p
2014
4,8
7,1
6,7
0,0
1,1
1,0
5,7
4,0
4,8
3,8
2,9
3,0
2,0
3,7
7,4
8,1
3,1
0,0
8,0
5,9
0,0
0,0
6,7
4,4
0,2
15,7
0,0
0,0
7,9
0,6
1,0
3,7
0,0
4,1
5,6
1,0
1,1
0,0
2,5
1,4


LUNG TRANSPLANT
–all combinations included–
Annual Rate p.m.p
2014
3,1
6,8
6,5
4,6
0,1
0,0
5,2
0,7
0,1
6,6
3,1
5,4
0,5
4,3
9,3
3,0
0,0
15,8
0,0
0,0
5,3
6,8
0,0
0,0
0,0
0,2
0,0
0,0
0,0
2,1
1,5
5,6
0,4
0,0
0,0
5,3


PANCREAS TRANSPLANT
–all combinations included–
Annual Rate p.m.p
2014
2,8
4,0
6,1
0,0
0,1
0,0
0,7
0,0
0,2
1,3
3,8
1,7
1,0
1,5
1,0
3,7
0,0
2,5
1,4
0,6
1,2
1,3
0,0
0,0
0,0
0,0
1,2
0,0
0,4
1,7
0,7
2,5
1,7
0,1
0,0
0,0
0,6


SMALL BOWEL TRANSPLANT
–all combinations included–
Annual Rate p.m.p
2014
0,0
0,2
0,0
0,0
0,0
0,0
0,0
0,0
0,3
0,0
0,4
0,1
0,2
0,0
0,0
0,0
0,0
0,0
0,0
0,0
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0,0
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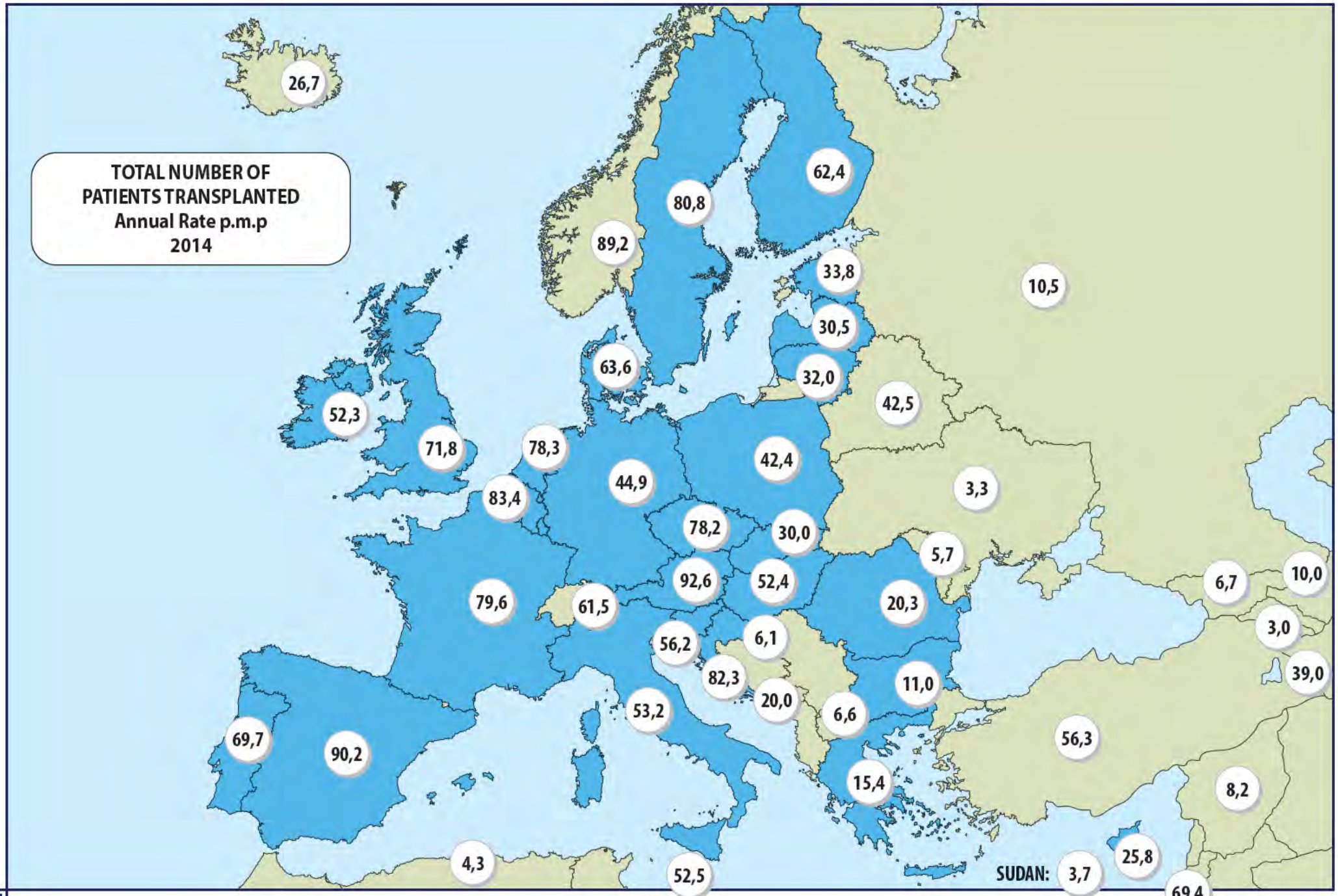
0,1


TOTAL NUMBER OF
PATIENTS TRANSPLANTED
Annual Rate p.m.p
2014
26,7
62,4
80,8
89,2
33,8
10,5
30,5
63,6
32,0
42,5
52,3
71,8
78,3
42,4
44,9
3,3
83,4
78,2
30,0
5,7
92,6
52,4
6,7
10,0
79,6
61,5
20,3
3,0
56,2
6,1
39,0
82,3
11,0
20,0
53,2
6,6
69,7
90,2
56,3
15,4
8,2
4,3
52,5
SUDAN:
3,7
25,8
69,4

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ONT

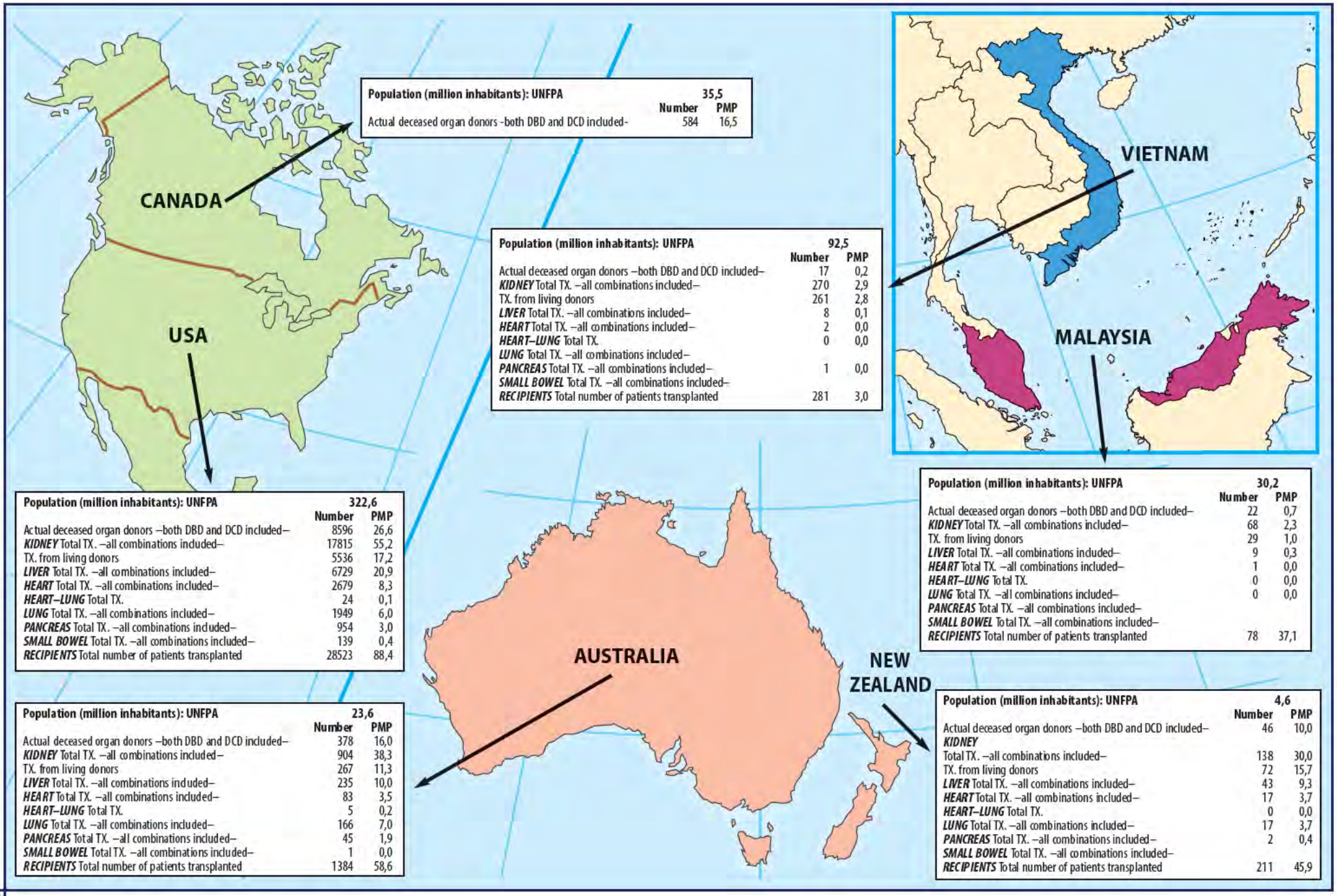
# EUROPEAN UNION DATA

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

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

***2014 data**

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




**CANADA**

| Population (million inhabitants): UNFPA | 35,5 | |
|---|---|---|
| | Number | PMP |
| Actual deceased organ donors -both DBD and DCD included- | 584 | 16,5 |

**VIETNAM**

| Population (million inhabitants): UNFPA | 92,5 | |
|---|---|---|
| | Number | PMP |
| Actual deceased organ donors –both DBD and DCD included– | 17 | 0,2 |
| ***KIDNEY*** Total TX. –all combinations included– | 270 | 2,9 |
| TX. from living donors | 261 | 2,8 |
| ***LIVER*** Total TX. –all combinations included– | 8 | 0,1 |
| ***HEART*** Total TX. –all combinations included– | 2 | 0,0 |
| ***HEART–LUNG*** Total TX. | 0 | 0,0 |
| ***LUNG*** Total TX. –all combinations included– | | |
| ***PANCREAS*** Total TX. –all combinations included– | 1 | 0,0 |
| ***SMALL BOWEL*** Total TX. –all combinations included– | | |
| ***RECIPIENTS*** Total number of patients transplanted | 281 | 3,0 |

**USA**

| Population (million inhabitants): UNFPA | 322,6 | |
|---|---|---|
| | Number | PMP |
| Actual deceased organ donors –both DBD and DCD included– | 8596 | 26,6 |
| ***KIDNEY*** Total TX. –all combinations included– | 17815 | 55,2 |
| TX. from living donors | 5536 | 17,2 |
| ***LIVER*** Total TX. –all combinations included– | 6729 | 20,9 |
| ***HEART*** Total TX. –all combinations included– | 2679 | 8,3 |
| ***HEART–LUNG*** Total TX. | 24 | 0,1 |
| ***LUNG*** Total TX. –all combinations included– | 1949 | 6,0 |
| ***PANCREAS*** Total TX. –all combinations included– | 954 | 3,0 |
| ***SMALL BOWEL*** Total TX. –all combinations included– | 139 | 0,4 |
| ***RECIPIENTS*** Total number of patients transplanted | 28523 | 88,4 |

**MALAYSIA**

| Population (million inhabitants): UNFPA | 30,2 | |
|---|---|---|
| | Number | PMP |
| Actual deceased organ donors –both DBD and DCD included– | 22 | 0,7 |
| ***KIDNEY*** Total TX. –all combinations included– | 68 | 2,3 |
| TX. from living donors | 29 | 1,0 |
| ***LIVER*** Total TX. –all combinations included– | 9 | 0,3 |
| ***HEART*** Total TX. –all combinations included– | 1 | 0,0 |
| ***HEART–LUNG*** Total TX. | 0 | 0,0 |
| ***LUNG*** Total TX. –all combinations included– | 0 | 0,0 |
| ***PANCREAS*** Total TX. –all combinations included– | | |
| ***SMALL BOWEL*** Total TX. –all combinations included– | | |
| ***RECIPIENTS*** Total number of patients transplanted | 78 | 37,1 |

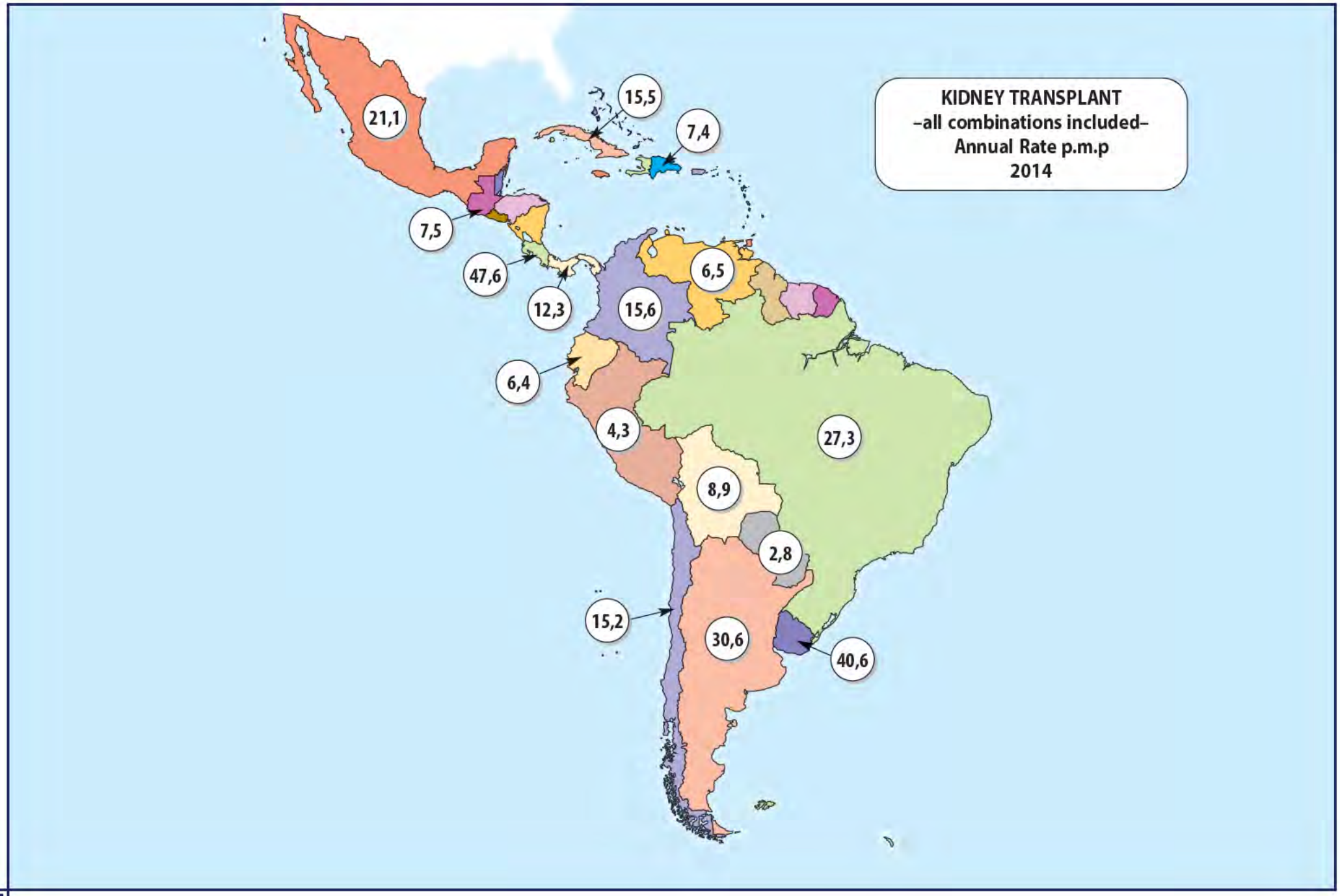
**AUSTRALIA**

| Population (million inhabitants): UNFPA | 23,6 | |
|---|---|---|
| | Number | PMP |
| Actual deceased organ donors –both DBD and DCD included– | 378 | 16,0 |
| ***KIDNEY*** Total TX. –all combinations included– | 904 | 38,3 |
| TX. from living donors | 267 | 11,3 |
| ***LIVER*** Total TX. –all combinations included– | 235 | 10,0 |
| ***HEART*** Total TX. –all combinations included– | 83 | 3,5 |
| ***HEART–LUNG*** Total TX. | 5 | 0,2 |
| ***LUNG*** Total TX. –all combinations included– | 166 | 7,0 |
| ***PANCREAS*** Total TX. –all combinations included– | 45 | 1,9 |
| ***SMALL BOWEL*** Total TX. –all combinations included– | 1 | 0,0 |
| ***RECIPIENTS*** Total number of patients transplanted | 1384 | 58,6 |

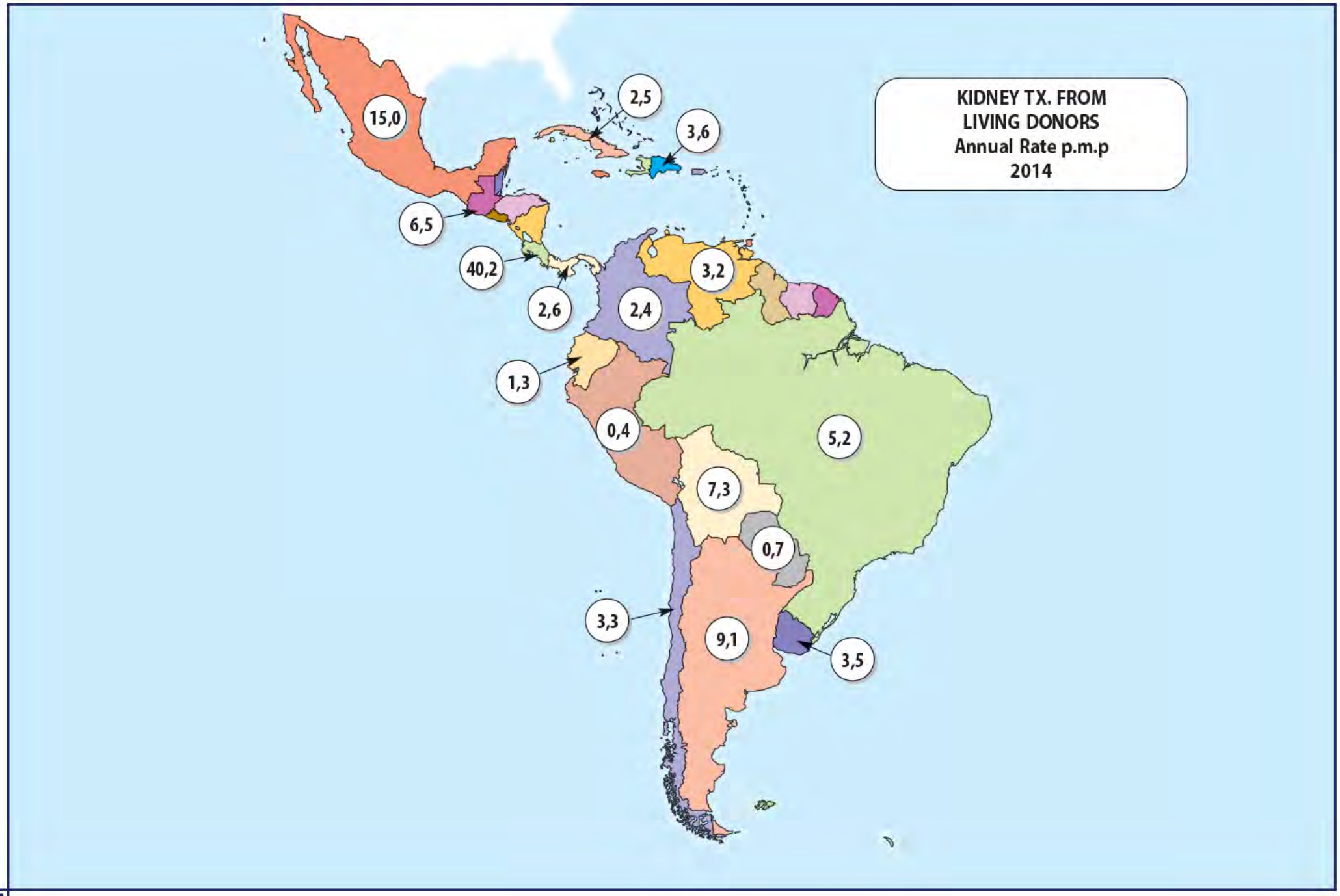
**NEW ZEALAND**

| Population (million inhabitants): UNFPA | 4,6 | |
|---|---|---|
| | Number | PMP |
| Actual deceased organ donors –both DBD and DCD included– | 46 | 10,0 |
| ***KIDNEY*** | | |
| Total TX. –all combinations included– | 138 | 30,0 |
| TX. from living donors | 72 | 15,7 |
| ***LIVER*** Total TX. –all combinations included– | 43 | 9,3 |
| ***HEART*** Total TX. –all combinations included– | 17 | 3,7 |
| ***HEART–LUNG*** Total TX. | 0 | 0,0 |
| ***LUNG*** Total TX. –all combinations included– | 17 | 3,7 |
| ***PANCREAS*** Total TX. –all combinations included– | 2 | 0,4 |
| ***SMALL BOWEL*** Total TX. –all combinations included– | | |
| ***RECIPIENTS*** Total number of patients transplanted | 211 | 45,9 |

ACTUAL DECEASED
ORGAN DONORS
-both DBD and DCD included-
Annual Rate p.m.p
2014
3,4
11,0
2,8
0,5
3,7
7,2
7,1
1,7
3,1
2,4
13,4
0,8
1,3
6,9
13,3
20,0


KIDNEY TRANSPLANT
–all combinations included–
Annual Rate p.m.p
2014
21,1
15,5
7,4
7,5
47,6
12,3
15,6
6,5
6,4
4,3
27,3
8,9
2,8
15,2
30,6
40,6

KIDNEY TX. FROM DECEASED DONORS
Annual Rate p.m.p
2014
6,0
13,0
3,8
1,0
7,3
9,7
13,1
3,4
5,1
3,9
22,0
1,6
2,0
11,9
21,5
37,1


KIDNEY TX. FROM
LIVING DONORS
Annual Rate p.m.p
2014
15,0
2,5
3,6
6,5
40,2
2,6
2,4
3,2
1,3
0,4
5,2
7,3
0,7
3,3
9,1
3,5

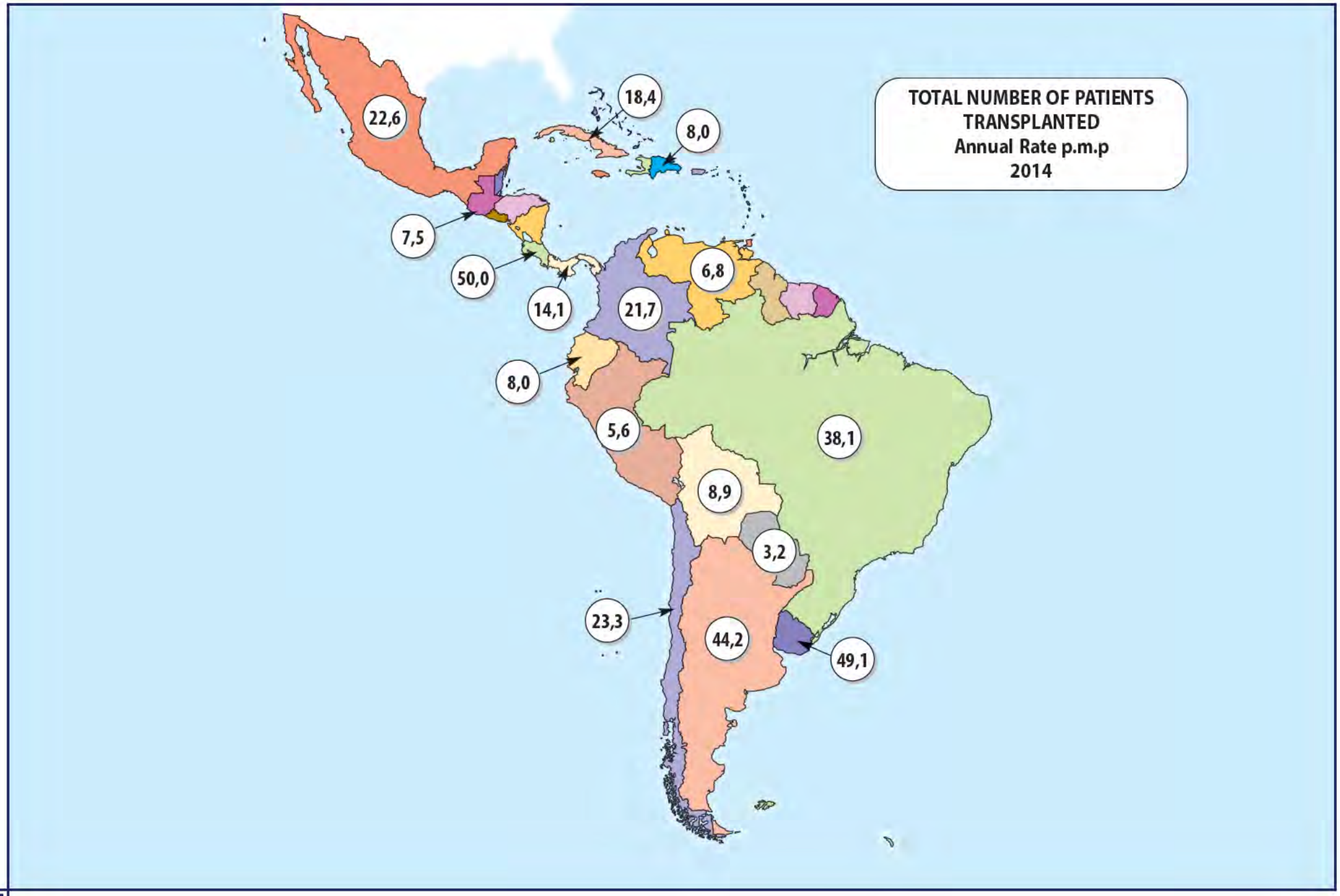
LIVER TRANSPLANT
–all combinations included–
Annual Rate p.m.p
2014
1,1
2,8
0,6
1,8
1,8
4,5
0,3
1,6
0,8
8,8
0,0
4,8
8,6
7,6

HEART TRANSPLANT
–all combinations included–
Annual Rate p.m.p
2014
0,4
0,1
0,0
0,2
0,0
1,7
0,0
0,0
0,5
1,5
0,4
1,3
2,4
2,1

LUNG TRANSPLANT
–all combinations included–
Annual Rate p.m.p
2014
0,0
0,0
0,0
0,2
0,0
0,2
0,0
0,0
0,0
0,3
0,0
1,9
1,0

PANCREAS TRANSPLANT
–all combinations included–
Annual Rate p.m.p
2014
0,0
0,0
0,0
0,0
0,0
0,1
0,0
0,0
0,0
0,7
0,0
0,4
1,7
0,6

SMALL BOWEL TRANSPLANT
–all combinations included–
Annual Rate p.m.p
2014
0,0
0,0
0,0
0,2
0,0
0,1
0,0
0,0
0,0
0,0
0,0
0,0
0,0
0,0


TOTAL NUMBER OF PATIENTS TRANSPLANTED
Annual Rate p.m.p
2014
22,6
18,4
8,0
7,5
50,0
14,1
21,7
6,8
8,0
5,6
38,1
8,9
3,2
23,3
44,2
49,1

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In collaboration with World Health Organization

ONT

# LATINAMERICAN COUNTRIES

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

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

***2014 data**

***N= 16 COUNTRIES (579,6 million inhabitants)***

## GLOBAL ACTIVITY IN ORGAN TRANSPLANTATION 2013 ESTIMATES

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

**118127 SOLID ORGANS REPORTED TO BE TRANSPLANTED**

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

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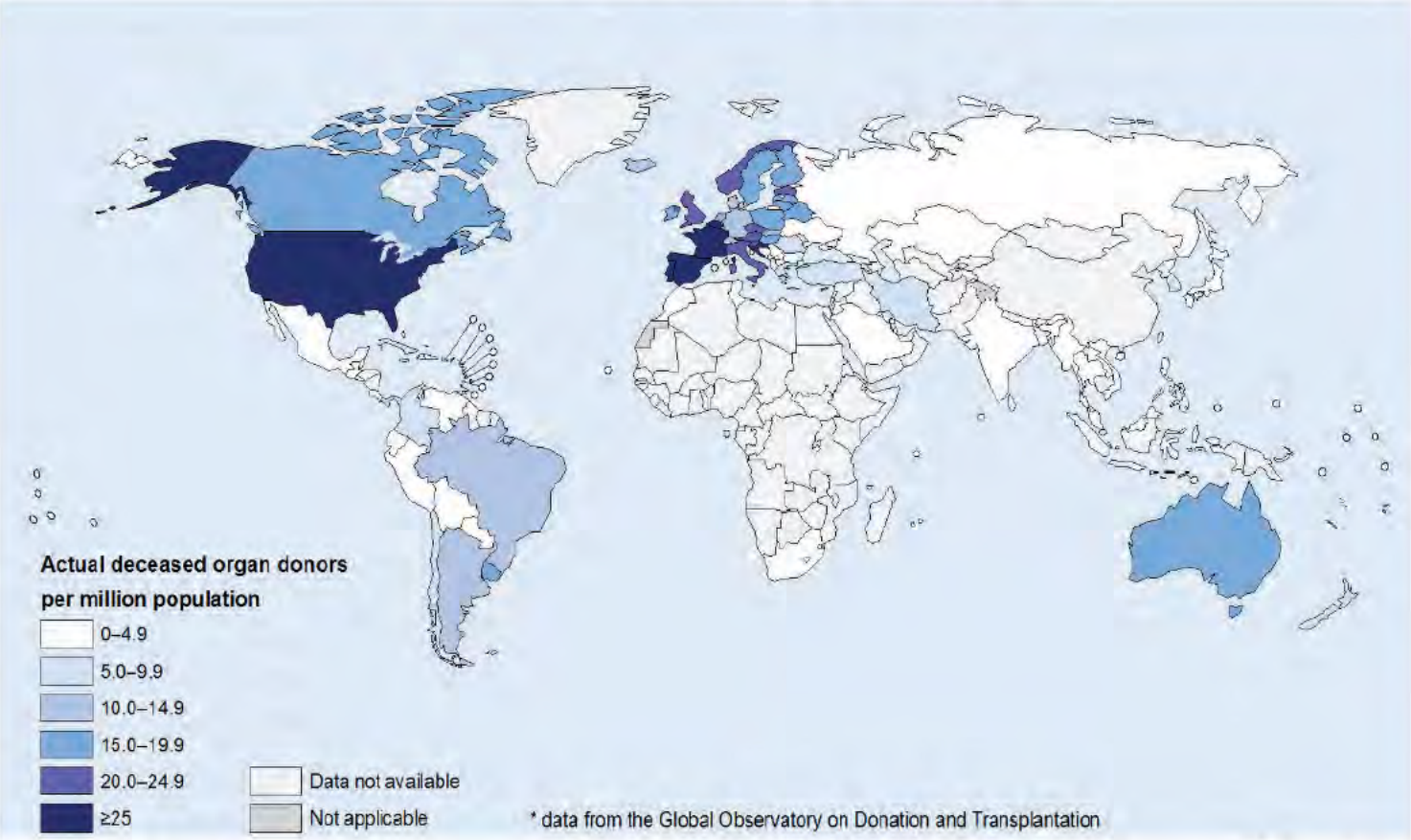
## Actual donors from deceased persons, 2013*




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

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

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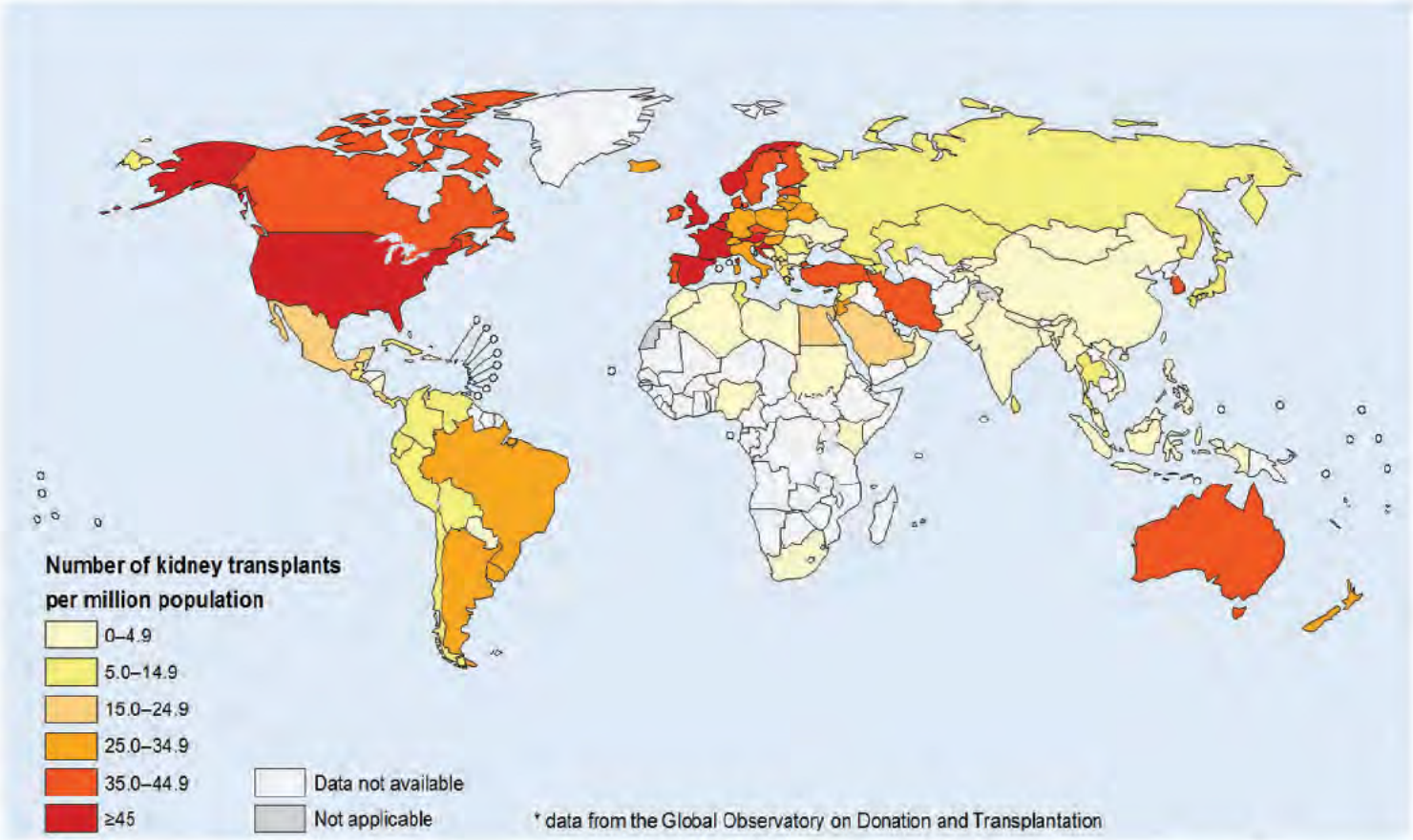
## Kidney transplantation activities, 2013*




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

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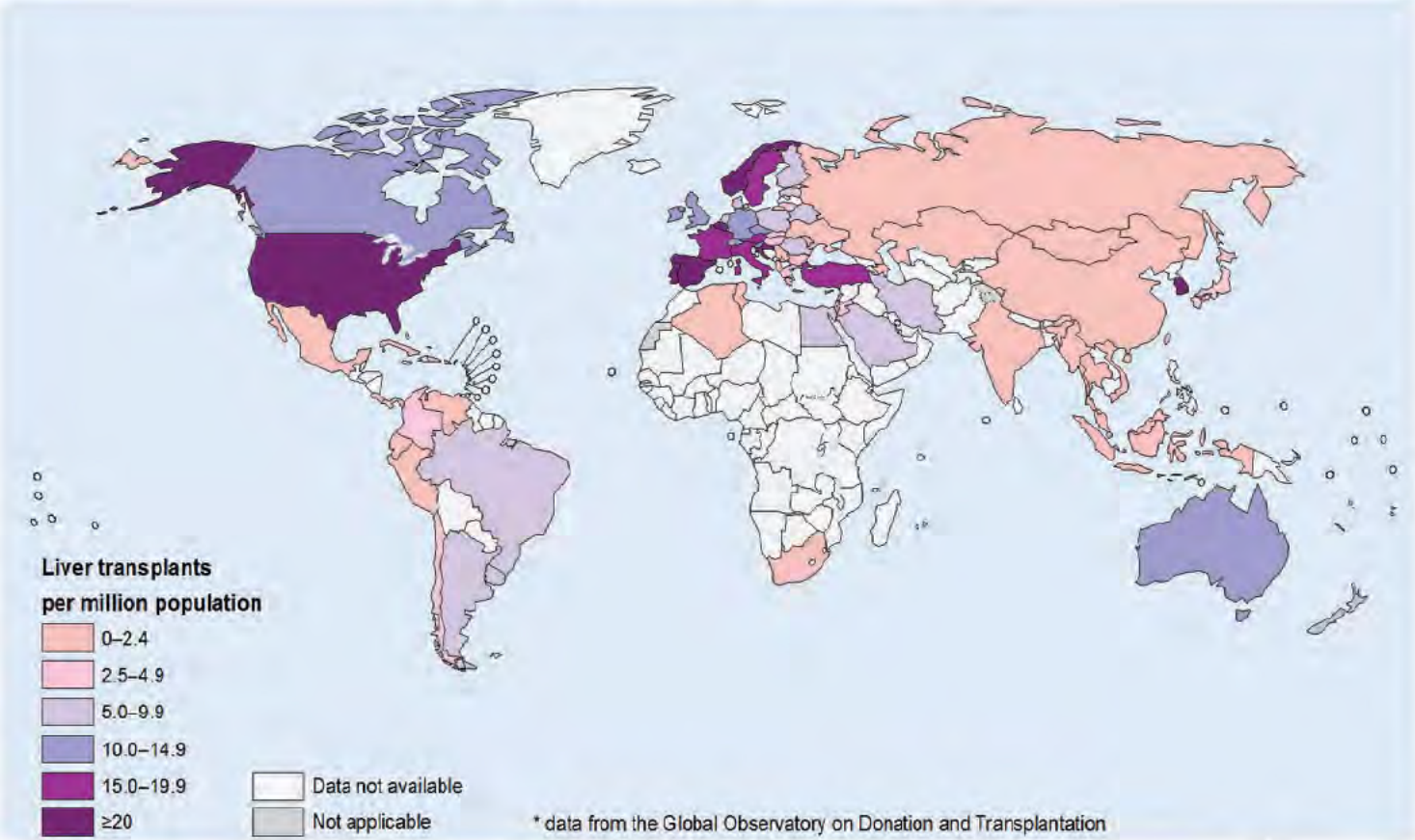
## Liver transplantation activities, 2013*




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

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

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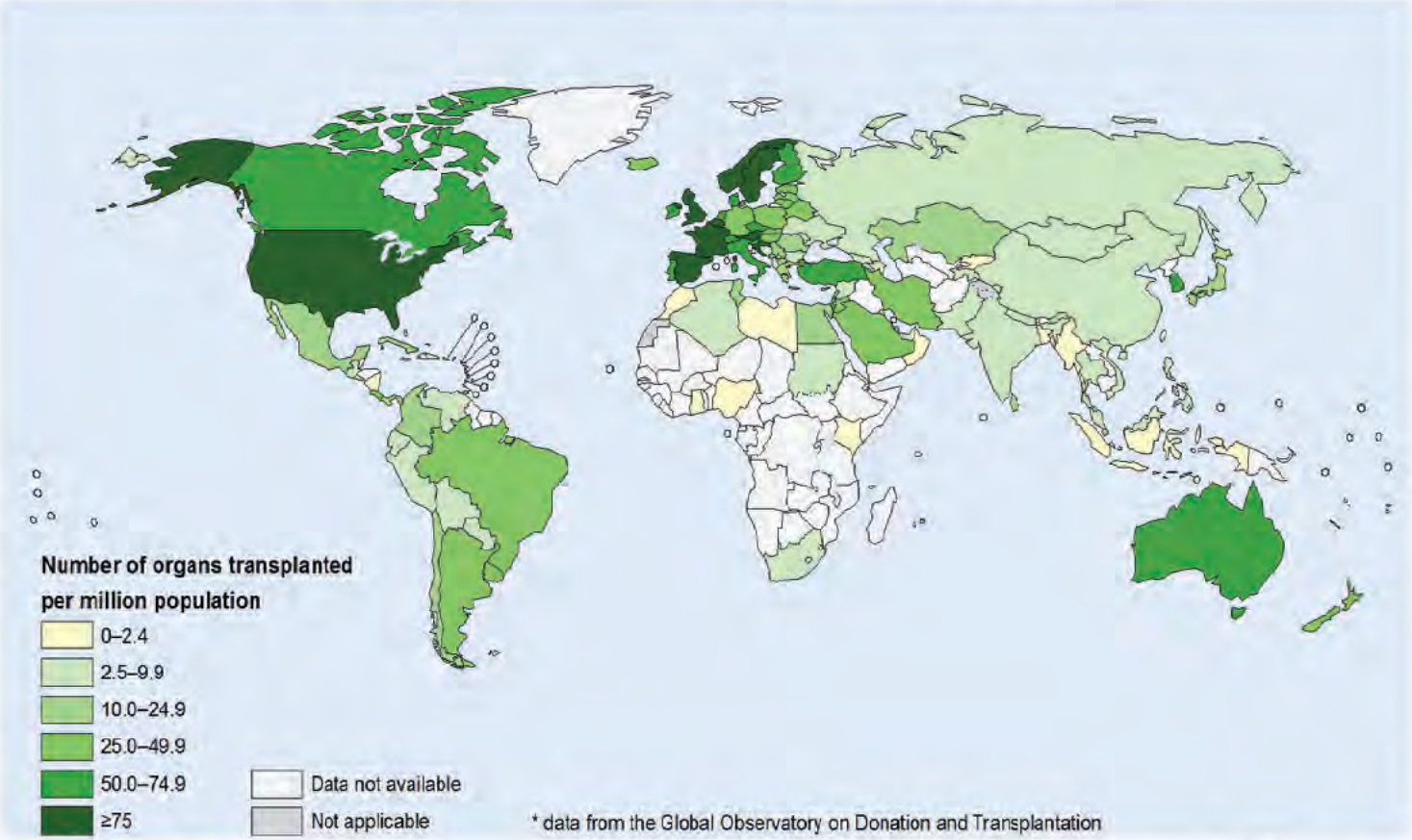
## Global transplantation activities of solid organs, 2013*

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

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

## DONATION AND TRANSPLANTATION ACTIVITY

### EUROPEAN UNION COUNTRIES

| COUNTRIES<br>Population (million inhabitants): UNFPA | AUSTRIA<br>8,5 | | BELGIUM<br>11,1 | | BULGARIA<br>7,2 | | CROATIA<br>4,3 | | CYPRUS<br>1,2 | | CZECH. R.<br>10,7 | | DENMARK<br>5,6 | | ESTONIA<br>1,3 | | FINLAND<br>5,4 | | FRANCE<br>64,6 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DONATION** | | | | | | | | | | | | | | | | | | | | |
| | 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- | 212 | 24,9 | 299 | 26,9 | 38 | 5,3 | 151 | 35,1 | 5 | 4,2 | 261 | 24,4 | 80 | 14,3 | 23 | 17,7 | 121 | 22,4 | 1635 | 25,3 |
| Actual donors after circulatory death –DCD- | 4 | 0,5 | 83 | 7,5 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 4 | 0,4 | 0 | 0,0 | 0 | 0,0 | | | 40 | 0,6 |
| Multiorgan donors | 175 | 20,6 | 230 | 20,7 | 22 | 3,1 | 22 | 5,0 | 0 | 0,0 | 163 | 15,2 | 64 | 11,4 | 17 | 13,1 | 66 | 12,2 | 1573 | 24,3 |
| **TRANSPLANTATION** | | | | | | | | | | | | | | | | | | | | |
| ***KIDNEY*** | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 446 | 52,5 | 481 | 43,3 | 56 | 7,8 | 197 | 45,8 | 31 | 25,8 | 507 | 47,4 | 249 | 44,5 | 32 | 24,6 | 240 | 44,4 | 3232 | 50,0 |
| % (TX. from living d. / Total TX.) | 15,9 | | 13,9 | | 21,4 | | 5,6 | | 71,0 | | | | 44,2 | | 3,1 | | 6,3 | | 15,9 | |
| Paediatric <15 years | 7 | 0,8 | 13 | 1,2 | 0 | 0,0 | 0 | 0,0 | 1 | 0,8 | 3 | 0,3 | 7 | 1,3 | 0 | 0,0 | 12 | 2,2 | 58 | 0,9 |
| TX. from deceased donors | 375 | 44,1 | 414 | 37,3 | 44 | 6,1 | 186 | 43,3 | 9 | 7,5 | 444 | 41,5 | 139 | 24,8 | 31 | 23,8 | 225 | 41,7 | 2718 | 42,1 |
| -TX. from DCD | 26 | 3,1 | 76 | 6,8 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 6 | 0,6 | 0 | 0,0 | 0 | 0,0 | 0,0 | | 54 | 0,8 |
| -Single TX. | 367 | 43,2 | 412 | 37,1 | 44 | 6,1 | 0 | 0,0 | 9 | 7,5 | 442 | 41,3 | 138 | 24,6 | 31 | 23,8 | 225 | 41,7 | 2681 | 41,5 |
| -Double TX. | 8 | 0,9 | 2 | 0,2 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 2 | 0,2 | 1 | 0,2 | 0 | 0,0 | 0 | 0,0 | 37 | 0,6 |
| TX. from living donors | 71 | 8,4 | 67 | 6,0 | 12 | 1,7 | 11 | 2,6 | 22 | 18,3 | 63 | 5,9 | 110 | 19,6 | 1 | 0,8 | 15 | 2,8 | 514 | 8,0 |
| -TX. from Related living donors | 71 | 8,4 | 42 | 3,8 | 12 | 1,7 | 11 | 2,6 | 22 | 18,3 | 40 | 3,7 | 110 | 19,6 | 1 | 0,8 | 15 | 2,8 | 512 | 7,9 |
| -TX. from Unrelated living donors | 0 | 0,0 | 25 | 2,3 | 0 | 0,0 | 0 | 0,0 | 0 | 0 | 23 | 2,1 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 2 | 0,0 |
| ***LIVER*** | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 142 | 16,7 | 261 | 23,5 | 19 | 2,6 | 125 | 29,1 | 0 | 0,0 | 169 | 15,8 | 47 | 8,4 | 10 | 7,7 | 59 | 10,9 | 1280 | 19,8 |
| Paediatric <15 years | 9 | 1,1 | 38 | 3,4 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 7 | 0,7 | 4 | 0,7 | 0 | 0,0 | 4 | 0,7 | 70 | 1,1 |
| Split TX. | 0 | 0,0 | 10 | 0,9 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 7 | 0,7 | 2 | 0,4 | 0 | 0,0 | 0 | 0,0 | 85 | 1,3 |
| Domino TX. | 0 | 0,0 | 2 | 0,2 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 1 | 0,1 | 0 | 0,0 | 0 | 0,0 | 0 | 0 | 5 | 0,1 |
| TX. from living donors | 6 | 0,7 | 40 | 3,6 | 1 | 0,1 | 1 | 0,2 | 0 | 0,0 | 2 | 0,2 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 12 | 0,2 |
| TX. from DCD | 0 | 0,0 | 50 | 4,5 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 4 | 0,1 |
| ***HEART*** | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 68 | 8,0 | 82 | 7,4 | 4 | 0,6 | 34 | 7,9 | 0 | 0,0 | 87 | 8,1 | 32 | 5,7 | 0 | 0,0 | 26 | 4,8 | 436 | 6,7 |
| Paediatric <15 years | 4 | 0,5 | 2 | 0,2 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 2 | 0,2 | 2 | 0,4 | 0 | 0,0 | 2 | 0,4 | 16 | 0,2 |
| ***HEART-LUNG*** | | | | | | | | | | | | | | | | | | | | |
| Total TX. | 0 | 0,0 | 0 | 0,0 | 0,0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 1 | 0,1 | 0 | 0,0 | 0 | 0,0 | 2 | 0,4 | 13 | 0,2 |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 0,0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0,0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 2 | 0,0 |
| ***LUNG*** | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 134 | 15,8 | 103 | 9,3 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 32 | 3,0 | 29 | 5,2 | 6 | 4,6 | 17 | 3,1 | 340 | 5,3 |
| Paediatric <15 years | 7 | 0,8 | 1 | 0,1 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 2 | 0,2 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 8 | 0,1 |
| -Single TX. | 2 | 0,2 | 5 | 0,5 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 1 | 0,1 | 0 | 0,0 | 3 | 2,3 | 0 | 0,0 | 39 | 0,6 |
| -Double TX. (heart-lung TX. included) | 132 | 15,5 | 98 | 8,8 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 31 | 2,9 | 29 | 5,2 | 3 | 2,3 | 17 | 3,1 | 301 | 4,7 |
| TX. from living donors | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 |
| TX. from DCD (double + single) | 3 | 0,4 | 17 | 1,5 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 |
| ***PANCREAS*** | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 21 | 2,5 | 11 | 1,0 | 0 | 0,0 | 5 | 1,2 | 0 | 0,0 | 40 | 3,7 | 0 | 0,0 | 0 | 0,0 | 15 | 2,8 | 79 | 1,2 |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 |
| Pancreas TX. Alone | 2 | 0,2 | 1 | 0,1 | 0 | 0,0 | 1 | 0,2 | 0 | 0,0 | 7 | 0,7 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 8 | 0,1 |
| Kidney – Pancreas TX. | 19 | 2,2 | 7 | 0,6 | 0 | 0,0 | 4 | 0,9 | 0 | 0,0 | 33 | 3,1 | 0 | 0,0 | 0 | 0,0 | 15 | 2,8 | 70 | 1,1 |
| TX. from DCD | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 |
| ***SMALL BOWEL*** | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 0 | 0,0 | 4 | 0,4 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 2 | 0,2 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 3 | 0,0 |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 1 | 0,0 |
| Small bowel TX. Alone | 0 | 0,0 | 4 | 0,4 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 |
| ***RECIPIENTS*** | | | | | | | | | | | | | | | | | | | | |
| Total number of patients transplanted | 787 | 92,6 | 926 | 83,4 | 79 | 11,0 | 354 | 82,3 | 31 | 25,8 | 837 | 78,2 | 356 | 63,6 | 44 | 33,8 | 337 | 62,4 | 5141 | 79,6 |
| Paediatric <15 years | 27 | 3,2 | 54 | 4,9 | 0 | 0,0 | 0 | 0,0 | 1 | 0,8 | 14 | 1,3 | 13 | 2,3 | 0 | 0,0 | 18 | 3,3 | 146 | 2,3 |
| Patients transplanted from living donors | 77 | 9,1 | 107 | 9,6 | 13 | 1,8 | 12 | 2,8 | 22 | 18,3 | 65 | 6,1 | 110 | 19,6 | 1 | 0,8 | 15 | 2,8 | 526 | 8,1 |

## DONATION AND TRANSPLANTATION ACTIVITY

### EUROPEAN UNION COUNTRIES

| COUNTRIES<br>Population (million inhabitants): UNFPA | GERMANY<br>82,7 | | GREECE<br>11,1 | | HUNGARY<br>9,9 | | IRELAND<br>4,7 | | ITALY<br>61,1 | | LATVIA<br>2,0 | | LITHUANIA<br>3,0 | | LUXEMBOURG<br>0,5 | | MALTA<br>0,4 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DONATION** | | | | | | | | | | | | | | | | | | |
| | 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- | 864 | 10,4 | 50 | 4,5 | 203 | 20,5 | 63 | 13,4 | 1384 | 22,7 | 29 | 14,5 | 31 | 10,3 | 4 | 10,4 | 12 | 30,0 |
| Actual donors after circulatory death –DCD- | | | 0 | 0,0 | 0 | 0,0 | 4 | 0,9 | 2 | 0,0 | 9 | 4,5 | 0 | 0,0 | | | 0 | 0,0 |
| Multiorgan donors | 779 | 9,4 | 42 | 3,8 | 143 | 14,4 | 52 | 11,1 | 790 | 12,9 | 2 | 1,0 | 19 | 6,3 | 3 | 9,4 | 7 | 17,5 |
| **TRANSPLANTATION** | | | | | | | | | | | | | | | | | | |
| ***KIDNEY*** | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 2128 | 25,7 | 131 | 11,8 | 387 | 39,1 | 152 | 32,3 | 1840 | 30,1 | 59 | 29,5 | 72 | 24,0 | | | 20 | 50,0 |
| % (TX. from living d. / Total TX.) | 29,1 | | 32,3 | | 7,0 | | 26,3 | | 13,6 | | 11,9 | | 18,1 | | | | 25,0 | |
| Paediatric <15 years | 81 | 1,0 | 6 | 0,5 | 7 | 0,7 | 19 | 4,0 | 36 | 0,6 | 1 | 0,5 | 1 | 0,3 | | | 0 | 0,0 |
| TX. from deceased donors | 1508 | 18,2 | 89 | 8,0 | 341 | 34,4 | 112 | 23,8 | 1589 | 26,0 | 52 | 26,0 | 59 | 19,7 | | | 15 | 37,5 |
| -TX. from DCD | | | 0 | 0,0 | | | 8 | 1,7 | 0 | 0,0 | 18 | 9,0 | 0 | 0,0 | | | 0 | 0,0 |
| -Single TX. | 1489 | 18,0 | | | 340 | 34,3 | 111 | 23,6 | 1494 | 24,5 | 51 | 25,5 | 59 | 19,7 | | | 15 | 37,5 |
| -Double TX. | 19 | 0,2 | | | 1 | 0,1 | 1 | 0,2 | 95 | 1,6 | 1 | 0,5 | 0 | 0,0 | | | 0 | 0,0 |
| TX. from living donors | 620 | 7,5 | 42 | 3,8 | 46 | 4,6 | 40 | 8,5 | 251 | 4,1 | 7 | 3,5 | 13 | 4,3 | | | 5 | 12,5 |
| -TX. from Related living donors | 620 | 7,5 | | | 46 | 4,6 | 39 | 8,3 | 145 | 2,4 | 7 | 3,5 | 13 | 4,3 | | | 4 | 10,0 |
| -TX. from Unrelated living donors | 0 | 0,0 | | | | | 1 | 0,2 | 106 | 1,7 | 0 | 0,0 | 0 | 0,0 | | | 1 | 2,5 |
| ***LIVER*** | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 941 | 11,4 | 28 | 2,5 | 75 | 7,6 | 44 | 9,4 | 1075 | 17,6 | 0 | 0,0 | 12 | 4,0 | | | 0 | 0,0 |
| Paediatric <15 years | 122 | 1,5 | | | | | 0 | 0,0 | 50 | 0,8 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 |
| Split TX. | 90 | 1,1 | | | | | 0 | 0,0 | 57 | 0,9 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 |
| Domino TX. | 4 | 0,0 | | | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 |
| TX. from living donors | 58 | 0,7 | | | | | 0 | 0,0 | 16 | 0,3 | 0 | 0,0 | 0 | 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 |
| ***HEART*** | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 304 | 3,7 | 12 | 1,1 | 58 | 5,9 | 18 | 3,8 | 227 | 3,7 | 2 | 1,0 | 12 | 4,0 | | | 1 | 2,5 |
| Paediatric <15 years | 27 | 0,3 | | | 4 | 0,4 | 0 | 0,0 | 21 | 0,3 | 0 | 0,0 | 1 | 0,3 | | | 0 | 0,0 |
| ***HEART-LUNG*** | | | | | | | | | | | | | | | | | | |
| Total TX. | 9 | 0,1 | 0 | 0,0 | | | 0 | 0,0 | 1 | 0,0 | 0 | 0,0 | 1 | 0,3 | | | 0 | 0,0 |
| Paediatric <15 years | | | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 |
| ***LUNG*** | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 352 | 4,3 | | | | | 31 | 6,6 | 126 | 2,1 | 0 | 0,0 | 2 | 0,7 | | | 0 | 0,0 |
| Paediatric <15 years | 3 | 0,0 | | | | | 0 | 0,0 | 2 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 |
| -Single TX. | 46 | 0,6 | | | | | 5 | 1,1 | 33 | 0,5 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 |
| -Double TX. (heart-lung TX. included) | 297 | 3,6 | | | | | 26 | 5,5 | 93 | 1,5 | 0 | 0,0 | 2 | 0,7 | | | 0 | 0,0 |
| TX. from living donors | | | | | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 |
| TX. from DCD (double + single) | | | | | | | 0 | 0,0 | 1 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 |
| ***PANCREAS*** | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 120 | 1,5 | | | 14 | 1,4 | 6 | 1,3 | 43 | 0,7 | 0 | 0,0 | 2 | 0,7 | | | 0 | 0,0 |
| Paediatric <15 years | | | | | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 |
| Pancreas TX. Alone | 14 | 0,2 | | | | | 1 | 0,2 | 14 | 0,2 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 |
| Kidney – Pancreas TX. | 104 | 1,3 | | | 14 | 1,4 | 5 | 1,1 | 29 | 0,5 | 0 | 0,0 | 2 | 0,7 | | | 0 | 0,0 |
| TX. from DCD | | | | | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 |
| ***SMALL BOWEL*** | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 6 | 0,1 | | | | | 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 |
| Small bowel TX. Alone | | | | | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 |
| ***RECIPIENTS*** | | | | | | | | | | | | | | | | | | |
| Total number of patients transplanted | 3710 | 44,9 | 171 | 15,4 | 519 | 52,4 | 246 | 52,3 | 3252 | 53,2 | 61 | 30,5 | 96 | 32,0 | | | 21 | 52,5 |
| Paediatric <15 years | 230 | 2,8 | 6 | | 11 | 1,1 | 19 | 4,0 | 106 | 1,7 | 1 | 0,5 | 2 | 0,7 | | | 0 | 0,0 |
| Patients transplanted from living donors | 682 | 8,2 | 42 | 3,8 | 46 | 4,6 | 40 | 8,5 | 267 | 4,4 | 7 | 3,5 | 13 | 4,3 | | | 5 | 12,5 |

## DONATION AND TRANSPLANTATION ACTIVITY

### EUROPEAN UNION COUNTRIES

| COUNTRIES<br>Population (million inhabitants): UNFPA | NETHERLANDS<br>16,8 | | POLAND<br>38,2 | | PORTUGAL<br>10,6 | | ROMANIA<br>21,6 | | SLOVAKIA<br>5,5 | | SLOVENIA<br>2,1 | | SPAIN<br>47,1 | | SWEEDEN<br>9,6 | | U. K.<br>63,5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DONATION** | | | | | | | | | | | | | | | | | | |
| | 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- | 282 | 16,8 | 594 | 15,5 | 289 | 27,3 | 138 | 6,4 | 64 | 11,6 | 44 | 21,0 | 1682 | 35,9 | 166 | 17,3 | 1309 | 20,6 |
| Actual donors after circulatory death –DCD- | 132 | 7,9 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 193 | 4,1 | | | 505 | 8,0 |
| Multiorgan donors | 221 | 13,2 | 379 | 9,9 | 194 | 18,3 | 107 | 5,0 | 29 | 5,3 | 37 | 17,0 | 1276 | 27,0 | | | 946 | 14,9 |
| **TRANSPLANTATION** | | | | | | | | | | | | | | | | | | |
| ***KIDNEY*** | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 1004 | 59,8 | 1149 | 30,1 | 448 | 42,3 | 310 | 14,3 | 125 | 22,7 | 55 | 26,2 | 2678 | 57,1 | 440 | 45,8 | 3201 | 50,4 |
| % (TX. from living d. / Total TX.) | 53,2 | | 4,9 | | 12,1 | | 11,9 | | 8,4 | | 0,0 | | 15,8 | | 34,3 | | 34,3 | |
| Paediatric <15 years | 19 | 1,1 | 30 | 0,8 | 6 | 0,6 | 1 | 0,0 | 2 | 0,4 | | | 58 | 1,2 | 12 | 1,3 | 98 | 1,5 |
| TX. from deceased donors | 470 | 28,0 | 1094 | 28,6 | 394 | 37,2 | 273 | 12,6 | 110 | 20,0 | 55 | 26,2 | 2255 | 47,9 | 289 | 30,1 | 2104 | 33,1 |
| -TX. from DCD | 220 | 13,1 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 251 | 5,3 | | | 760 | 12,0 |
| -Single TX. | 465 | 27,7 | 1090 | 28,5 | 366 | 34,5 | 273 | 12,6 | 105 | 19,1 | 55 | 26,2 | 2246 | 47,7 | 287 | 29,9 | 1845 | 29,1 |
| -Double TX. | 5 | 0,3 | 4 | 0,1 | 28 | 2,6 | 0 | 0,0 | 5 | 0,9 | 0 | 0,0 | 9 | 0,2 | 2 | 0,2 | 73 | 1,1 |
| TX. from living donors | 534 | 31,8 | 55 | 1,4 | 54 | 5,1 | 37 | 1,7 | 15 | 2,7 | 0 | 0,0 | 423 | 9,0 | 151 | 15,7 | 1097 | 17,3 |
| -TX. from Related living donors | 534 | 31,8 | 55 | 1,4 | 54 | 5,1 | 37 | 1,7 | 9 | 1,6 | 0 | 0,0 | 379 | 8,0 | 150 | 15,6 | 908 | 14,3 |
| -TX. from Unrelated living donors | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 6 | 1,1 | 0 | 0,0 | 44 | 0,9 | 1 | 0,1 | 189 | 3,0 |
| ***LIVER*** | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 172 | 10,2 | 366 | 9,6 | 202 | 19,1 | 122 | 5,6 | 23 | 4,2 | 31 | 14,8 | 1068 | 22,7 | 182 | 19,0 | 937 | 14,8 |
| Paediatric <15 years | 22 | 1,3 | 45 | 1,2 | 20 | 1,9 | 7 | 0,3 | 0 | 0,0 | | | 51 | 1,1 | 15 | 1,6 | 85 | 1,3 |
| Split TX. | 9 | 0,5 | 0 | 0,0 | 0 | 0,0 | 4 | 0,2 | 0 | 0,0 | 0 | 0,0 | 12 | 0,3 | 6 | 0,6 | 112 | 1,8 |
| Domino TX. | 0 | 0,0 | 0 | 0,0 | 8 | 0,8 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 6 | 0,1 | 5 | 0,5 | 3 | 0,0 |
| TX. from living donors | 3 | 0,2 | 30 | 0,8 | 5 | 0,5 | 14 | 0,6 | 0 | 0,0 | 0 | 0,0 | 21 | 0,4 | 6 | 0,6 | 32 | 0,5 |
| TX. from DCD | 47 | 2,8 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 32 | 0,7 | | | 172 | 2,7 |
| ***HEART*** | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 51 | 3,0 | 76 | 2,0 | 43 | 4,1 | 4 | 0,2 | 17 | 3,1 | 33 | 15,7 | 265 | 5,6 | 68 | 7,1 | 186 | 2,9 |
| Paediatric <15 years | 2 | 0,1 | 7 | 0,2 | 2 | 0,2 | 0 | 0,0 | 0 | 0,0 | | | 11 | 0,2 | 4 | 0,4 | 29 | 0,5 |
| ***HEART-LUNG*** | | | | | | | | | | | | | | | | | | |
| Total TX. | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 3 | 0,1 | 1 | 0,1 | 4 | 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 | 0 | 0,0 |
| ***LUNG*** | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 91 | 5,4 | 19 | 0,5 | 19 | 1,8 | 0 | 0,0 | 0 | 0,0 | | | 262 | 5,6 | 65 | 6,8 | 194 | 3,1 |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 1 | 0,0 | 1 | 0,1 | 6 | 0,1 |
| -Single TX. | 13 | 0,8 | 8 | 0,2 | 14 | 1,3 | 0 | 0,0 | 0 | 0,0 | | | 101 | 2,1 | 8 | 0,8 | 32 | 0,5 |
| -Double TX. (heart-lung TX. included) | 78 | 4,6 | 11 | 0,3 | 5 | 0,5 | 0 | 0,0 | 0 | 0,0 | | | 161 | 3,4 | 57 | 5,9 | 162 | 2,6 |
| 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) | 20 | 1,2 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 7 | 0,1 | | | 35 | 0,6 |
| ***PANCREAS*** | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 28 | 1,7 | 37 | 1,0 | 27 | 2,5 | 12 | 0,6 | 0 | 0,0 | | | 81 | 1,7 | 38 | 4,0 | 239 | 3,8 |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 6 | 0,1 | 1 | 0,1 | 6 | 0,1 |
| Pancreas TX. Alone | 1 | 0,1 | 9 | 0,2 | 3 | 0,3 | 2 | 0,1 | 0 | 0,0 | | | 9 | 0,2 | 3 | 0,3 | 27 | 0,4 |
| Kidney – Pancreas TX. | 27 | 1,6 | 28 | 0,7 | 24 | 2,3 | 10 | 0,5 | 0 | 0,0 | | | 66 | 1,4 | 33 | 3,4 | 171 | 2,7 |
| TX. from DCD | 4 | 0,2 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | 53 | 0,8 |
| ***SMALL BOWEL*** | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 6 | 0,1 | 2 | 0,2 | 21 | 0,3 |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 2 | 0,0 | 1 | 0,1 | 6 | 0,1 |
| Small bowel TX. Alone | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 | 3 | 0,0 |
| ***RECIPIENTS*** | | | | | | | | | | | | | | | | | | |
| Total number of patients transplanted | 1315 | 78,3 | 1619 | 42,4 | 739 | 69,7 | 438 | 20,3 | 165 | 30,0 | 118 | 56,2 | 4247 | 90,2 | 776 | 80,8 | 4561 | 71,8 |
| Paediatric <15 years | 43 | 2,6 | 82 | 2,1 | 28 | 2,6 | 8 | 0,4 | 2 | 0,4 | | | 118 | 2,5 | 32 | 3,3 | 219 | 3,4 |
| Patients transplanted from living donors | 537 | 32,0 | 85 | 2,2 | 59 | 5,6 | 52 | 2,4 | 15 | 2,7 | 0 | 0,0 | 444 | 9,4 | 162 | 16,9 | 1129 | 17,8 |

## DONATION AND TRANSPLANTATION ACTIVITY

### OTHER COUNTRIES

| COUNTRIES | ALGERIA | | ARMENIA | | AUSTRALIA | | AZERBAIJAN | | BELARUS | | BOSNIA AND HERZEGOVINA | | CANADA | | GEORGIA | | ICELAND | | IRAN | | ISRAEL | | MACEDONIA | | MALAYSIA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Population (million inhabitants): UNFPA | 39,9 | | 3,0 | | 23,6 | | 9,5 | | 9,3 | | 3,8 | | 35,5 | | 4,3 | | 0,3 | | 78,5 | | 7,8 | | 2,1 | | 30,2 | |
| **DONATION** | Number | PMP | Number | PMP | Number | PMP | 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- | 1 | 0,0 | 0 | 0,0 | 378 | 16,0 | 0 | 0,0 | 165 | 17,7 | 4 | 1,1 | 584 | 16,5 | 0 | 0,0 | 3 | 10,0 | 659 | 8,4 | 63 | 8,1 | 10 | 4,8 | 22 | 0,7 |
| Actual donors after circulatory death –DCD- | 0 | 0,0 | 0 | 0,0 | 107 | 4,5 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | 0 | 0,0 | 3 | 0,4 | | | 1 | 0,0 |
| Multiorgan donors | 0 | 0,0 | 0 | 0,0 | 284 | 12,0 | 0 | 0,0 | 126 | 13,5 | 4 | 1,1 | | | 0 | 0,0 | | | | | 45 | 5,8 | | | 8 | 0,3 |
| **TRANSPLANTATION** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ***KIDNEY*** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 170 | 4,3 | 9 | 3,0 | 904 | 38,3 | 95 | 10,0 | 286 | 30,8 | 21 | 5,5 | | | 27 | 6,3 | 8 | 26,7 | 2325 | 29,6 | 217 | 27,8 | 41 | 19,5 | 68 | 2,3 |
| % (TX. from living d. / Total TX.) | 98,8 | | 100,0 | | 29,5 | | 100,0 | | 8,0 | | 66,7 | | | | 100,0 | | 100,0 | | 51,7 | | 62,2 | | 70,7 | | 42,6 | |
| Paediatric <15 years | 12 | 0,3 | 0 | 0,0 | 31 | 1,3 | 0 | 0,0 | 14 | 1,5 | 0 | 0,0 | | | 2 | 0,5 | 0 | 0,0 | | | 17 | 2,2 | 1 | 0,5 | 4 | 0,1 |
| TX. from deceased donors | 2 | 0,1 | 0 | 0,0 | 637 | 27,0 | 0 | 0,0 | 263 | 28,3 | 7 | 1,8 | | | 0 | 0,0 | | | 0 | 0,0 | 82 | 10,5 | 12 | 5,7 | 39 | 1,3 |
| -TX. from DCD | 0 | 0,0 | 0 | 0,0 | 172 | 7,3 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 | 1122 | 14,3 | 4 | 0,5 | 4 | 1,9 | 2 | 0,1 |
| -Single TX. | 2 | 0,1 | 0 | 0,0 | 615 | 26,1 | 0 | 0,0 | 263 | 28,3 | 7 | 1,8 | | | 0 | 0,0 | 0 | 0,0 | | | 77 | 9,9 | 12 | 5,7 | 38 | 1,3 |
| -Double TX. | 0 | 0,0 | 0 | 0,0 | 22 | 0,9 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 | | | 5 | 0,6 | 0 | 0,0 | 1 | 0,0 |
| TX. from living donors | 168 | 4,2 | 9 | 3,0 | 267 | 11,3 | 95 | 10,0 | 23 | 2,5 | 14 | 3,7 | | | 27 | 6,3 | 8 | 26,7 | 1203 | 15,3 | 135 | 17,3 | 29 | 13,8 | 29 | 1,0 |
| -TX. from Related living donors | 168 | 4,2 | 9 | 3,0 | 219 | 9,3 | 95 | 10,0 | 22 | 2,4 | 14 | 3,7 | | | 27 | 6,3 | 8 | 26,7 | | | 105 | 13,5 | 25 | 11,9 | 29 | 1,0 |
| -TX. from Unrelated living donors | 0 | 0,0 | 0 | 0,0 | 48 | 2,0 | 0 | 0,0 | 1 | 0,1 | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 | | | 30 | 3,8 | 4 | 1,9 | 0 | 0,0 |
| ***LIVER*** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 1 | 0,0 | 0 | 0,0 | 235 | 10,0 | 16 | 1,7 | 68 | 7,3 | 2 | 0,5 | | | 2 | 0,5 | | | 605 | 7,7 | 65 | 8,3 | | | 9 | 0,3 |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 28 | 1,2 | 0 | 0,0 | 7 | 0,8 | 0 | 0,0 | | | 0 | 0,0 | | | | | 18 | 2,3 | | | 1 | 0,0 |
| Split TX. | 0 | 0,0 | 0 | 0,0 | 33 | 1,4 | 0 | 0,0 | 2 | 0,2 | 0 | 0,0 | | | 0 | 0,0 | | | 12 | 0,2 | 5 | 0,6 | | | 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 | 1 | 0,0 | 0 | 0,0 | 1 | 0,0 | 16 | 1,7 | 5 | 0,5 | 0 | 0,0 | | | 2 | 0,5 | | | 35 | 0,4 | 14 | 1,8 | | | 0 | 0,0 |
| TX. from DCD | 0 | 0,0 | 0 | 0,0 | 14 | 0,6 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | 0 | 0,0 | | | | | 0 | 0,0 |
| ***HEART*** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 0 | 0,0 | 0 | 0,0 | 83 | 3,5 | 0 | 0,0 | 45 | 4,8 | 0 | 0,0 | | | 0 | 0,0 | | | 82 | 1,0 | 11 | 1,4 | | | 1 | 0,0 |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 8 | 0,3 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | | | 3 | 0,4 | | | 0 | 0,0 |
| ***HEART-LUNG*** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total TX. | 0 | 0,0 | 0 | 0,0 | 5 | 0,2 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | 0 | 0,0 | 1 | 0,1 | | | 0 | 0,0 |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | | | 1 | 0,1 | | | 0 | 0,0 |
| ***LUNG*** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 0 | 0,0 | 0 | 0,0 | 166 | 7,0 | 0 | 0,0 | 1 | 0,1 | 0 | 0,0 | | | 0 | 0,0 | | | 14 | 0,2 | 41 | 5,3 | | | 0 | 0,0 |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 2 | 0,1 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | | | 1 | 0,1 | | | 0 | 0,0 |
| -Single TX. | 0 | 0,0 | 0 | 0,0 | 7 | 0,3 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | 8 | 0,1 | 25 | 3,2 | | | 0 | 0,0 |
| -Double TX. (heart-lung TX. included) | 0 | 0,0 | 0 | 0,0 | 159 | 6,7 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | 6 | 0,1 | 16 | 2,1 | | | 0 | 0,0 |
| TX. from living donors | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | 0 | 0,0 | | | | | 0 | 0,0 |
| TX. from DCD (double + single) | 0 | 0,0 | 0 | 0,0 | 41 | 1,7 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | 0 | 0,0 | | | | | 0 | 0,0 |
| ***PANCREAS*** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 0 | 0,0 | 0 | 0,0 | 44 | 1,9 | 0 | 0,0 | 2 | 0,2 | 0 | 0,0 | | | 0 | 0,0 | | | 31 | 0,4 | 5 | 0,6 | | | | |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 1 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | | | | | | | | |
| Pancreas TX. Alone | 0 | 0,0 | 0 | 0,0 | 1 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | 8 | 0,1 | | | | | | |
| Kidney – Pancreas TX. | 0 | 0,0 | 0 | 0,0 | 43 | 1,8 | 0 | 0,0 | 2 | 0,2 | 0 | 0,0 | | | 0 | 0,0 | | | 23 | 0,3 | 5 | 0,6 | | | | |
| TX. from DCD | 0 | 0,0 | 0 | 0,0 | 1 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | 0 | 0,0 | | | | | | |
| ***SMALL BOWEL*** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 0 | 0,0 | 0 | 0,0 | 1 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | 7 | 0,1 | 1 | 0,1 | | | | |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 1 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | | | | | | | | |
| Small bowel TX. Alone | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | 7 | 0,1 | 1 | 0,1 | | | | |
| ***RECIPIENTS*** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total number of patients transplanted | 171 | 4,3 | 9 | 3,0 | 1384 | 58,6 | 95 | 10,0 | 395 | 42,5 | 23 | 6,1 | | | 29 | 6,7 | 8 | 26,7 | 3064 | 39,0 | 333 | 69,4 | 41 | 6,6 | 78 | 37,1 |
| Paediatric <15 years | 12 | 0,3 | 0 | 0,0 | 68 | 2,9 | 0 | 0,0 | 21 | 2,3 | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 | | | 38 | 7,9 | 1 | 0,2 | 5 | 2,4 |
| Patients transplanted from living donors | 169 | 4,2 | 9 | 3,0 | 268 | 11,4 | 95 | 10,0 | 28 | 3,0 | 14 | 3,7 | | | 29 | 6,7 | 8 | 26,7 | 1238 | 15,8 | 149 | 31,0 | 29 | 4,7 | 29 | 13,8 |

## DONATION AND TRANSPLANTATION ACTIVITY

### OTHER COUNTRIES

| COUNTRIES<br>Population (million inhabitants): UNFPA | MOLDOVA<br>3,5 | | MONTENEGRO<br>0,6 | | NEW ZEALAND<br>4,6 | | NORWAY<br>5,1 | | RUSSIAN F.<br>142,5 | | SUDAN<br>38,8 | | SWITZERLAND<br>8,2 | | SYRIA<br>22 | | TURKEY<br>75,8 | | UKRAINE<br>44,9 | | USA<br>322,6 | | VIETNAM<br>92,5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DONATION** | | | | | | | | | | | | | | | | | | | | | | | | |
| | Number | PMP | Number | PMP | 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- | 11 | 3,1 | 7 | 11,7 | 46 | 10,0 | 114 | 22,4 | 465 | 3,3 | 0 | 0,0 | 117 | 14,3 | 0 | 0,0 | 407 | 5,4 | | | 8596 | 26,6 | 17 | 0,2 |
| Actual donors after circulatory death –DCD- | 0 | 0,0 | 0 | 0,0 | 6 | 1,3 | 2 | 0,4 | 106 | 0,7 | 0 | 0,0 | 18 | 2,2 | 0 | 0,0 | | | | | 1291 | 4,0 | 0 | 0,0 |
| Multiorgan donors | 3 | 0,9 | 1 | 1,7 | | 0,0 | | | 235 | 1,6 | 0 | 0,0 | 117 | 14,3 | 0 | 0,0 | | | | | 7894 | 24,5 | 0 | 0,0 |
| **TRANSPLANTATION** | | | | | | | | | | | | | | | | | | | | | | | | |
| ***KIDNEY*** | | | | | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 10 | 2,9 | 9 | 15,0 | 138 | 30,0 | 274 | 53,7 | 1026 | 7,2 | 143 | 3,7 | 301 | 36,7 | 180 | 8,2 | 2932 | 38,7 | 131 | 2,9 | 17815 | 55,2 | 270 | 2,9 |
| % (TX. from living d. / Total TX.) | 20,0 | | 88,9 | | 52,2 | | 24,8 | | 18,5 | | 100,0 | | 39,9 | | 100,0 | | 78,6 | | 89,3 | | 31,1 | | 96,7 | |
| Paediatric <15 years | 0 | 0,0 | 1 | 1,7 | 3 | 0,7 | 8 | 1,6 | 73 | 0,5 | 8 | 0,2 | 8 | 1,0 | 15 | 0,7 | 150 | 2,0 | | | 466 | 1,4 | 17 | 0,2 |
| TX. from deceased donors | 8 | 2,3 | 1 | 1,7 | 66 | 14,3 | 206 | 40,4 | 836 | 5,9 | 0 | 0,0 | 181 | 22,1 | 0 | 0,0 | 634 | 8,4 | 14 | 0,3 | 12279 | 38,1 | 9 | 0,1 |
| -TX. from DCD | 0 | 0,0 | 0 | 0,0 | 8 | 1,7 | 4 | 0,8 | | | 0 | 0,0 | 24 | 2,9 | 0 | 0,0 | | | | | 2033 | 6,3 | 0 | 0,0 |
| -Single TX. | 8 | 2,3 | | | 65 | 14,1 | 204 | 40,0 | 836 | 5,9 | 0 | 0,0 | 176 | 21,5 | 0 | 0,0 | | | 14 | 0,3 | 11988 | 37,2 | 9 | 0,1 |
| -Double TX. | 0 | 0,0 | | | 1 | 0,2 | 2 | 0,4 | 0 | 0,0 | 0 | 0,0 | 5 | 0,6 | 0 | 0,0 | | | 0 | 0,0 | 291 | 0,9 | 0 | 0,0 |
| TX. from living donors | 2 | 0,6 | 8 | 13,3 | 72 | 15,7 | 68 | 13,3 | 190 | 1,3 | 143 | 3,7 | 120 | 14,6 | 180 | 8,2 | 2298 | 30,3 | 117 | 2,6 | 5536 | 17,2 | 261 | 2,8 |
| -TX. from Related living donors | 2 | 0,6 | 8 | 13,3 | 67 | 14,6 | 68 | 13,3 | 190 | 1,3 | 141 | 3,6 | 120 | 14,6 | 76 | 3,5 | 2094 | 27,6 | 117 | 2,6 | 4683 | 14,5 | 7 | 0,1 |
| -TX. from Unrelated living donors | 0 | 0,0 | 0 | 0,0 | 5 | 1,1 | 0 | 0,0 | 0 | 0,0 | 2 | 0,1 | 0 | 0,0 | 104 | 4,7 | 204 | 2,7 | 0 | 0,0 | 853 | 2,6 | 254 | 2,7 |
| ***LIVER*** | | | | | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 10 | 2,9 | 2 | 3,3 | 43 | 9,3 | 100 | 19,6 | 302 | 2,1 | | | 111 | 13,5 | | | 1212 | 16,0 | 17 | 0,4 | 6729 | 20,9 | 8 | 0,1 |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 12 | 2,6 | 2 | 0,4 | 76 | 0,5 | | | 6 | 0,7 | | | 185 | 2,4 | | | 466 | 1,4 | 0 | 0,0 |
| Split TX. | 0 | 0,0 | 0 | 0,0 | 3 | 0,7 | 6 | 1,2 | | | | | 2 | 0,2 | | | 20 | 0,3 | | | 135 | 0,4 | | |
| Domino TX. | | | 0 | 0,0 | 0 | 0,0 | | | | | | | 1 | 0,1 | | | | | | | 12 | 0,0 | 0 | 0,0 |
| TX. from living donors | 4 | 1,1 | 0 | 0,0 | 5 | 1,1 | 0 | 0,0 | 126 | 0,9 | | | 3 | 0,4 | | | 892 | 11,8 | 17 | 0,4 | 268 | 0,8 | 3 | 0,0 |
| TX. from DCD | 0 | 0,0 | 0 | 0,0 | 1 | 0,2 | 0 | 0,0 | | | | | 12 | 1,5 | | | | | | | 360 | 1,1 | 0 | 0,0 |
| ***HEART*** | | | | | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 0 | 0,0 | 0 | 0,0 | 17 | 3,7 | 34 | 6,7 | 162 | 1,1 | | | 36 | 4,4 | | | 78 | 1,0 | | | 2679 | 8,3 | 2 | 0,0 |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 1 | 0,2 | 4 | 0,8 | 3 | 0,0 | | | 3 | 0,4 | | | 7 | 0,1 | | | 342 | 1,1 | 0 | 0,0 |
| ***HEART-LUNG*** | | | | | | | | | | | | | | | | | | | | | | | | |
| Total TX. | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 1 | 0,1 | | | | | | | 24 | 0,1 | 0 | 0,0 |
| Paediatric <15 years | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | | | | | 5 | 0,0 | 0 | 0,0 |
| ***LUNG*** | | | | | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | | | 0 | 0,0 | 17 | 3,7 | 33 | 6,5 | 12 | 0,1 | | | 56 | 6,8 | | | 33 | 0,4 | | | 1949 | 6,0 | | |
| Paediatric <15 years | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | | | 1 | 0,1 | | | 0 | 0,0 | | | 33 | 0,1 | | |
| -Single TX. | | | 0 | 0,0 | 1 | 0,2 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | 33 | 0,4 | | | 613 | 1,9 | | |
| -Double TX. (heart-lung TX. included) | | | 0 | 0,0 | 16 | 3,5 | 33 | 6,5 | 12 | 0,1 | | | 56 | 6,8 | | | 0 | 0,0 | | | 1336 | 4,1 | | |
| TX. from living donors | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | | | 0 | 0,0 | | | 0 | 0,0 | | |
| TX. from DCD (double + single) | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | | | 5 | 0,6 | | | | | | | 44 | 0,1 | | |
| ***PANCREAS*** | | | | | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | | | 1 | 1,7 | 2 | 0,4 | 31 | 6,1 | 19 | 0,1 | | | 11 | 1,3 | | | 10 | 0,1 | | | 954 | 3,0 | 1 | 0,0 |
| Paediatric <15 years | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | | | 0 | 0,0 | | | 0 | 0,0 | | | 35 | 0,1 | | |
| Pancreas TX. Alone | | | 0 | 0,0 | 0 | 0,0 | 14 | 2,7 | 0 | 0,0 | | | 3 | 0,4 | | | 8 | 0,1 | | | 168 | 0,5 | | |
| Kidney – Pancreas TX. | | | 0 | 0,0 | 2 | 0,4 | 17 | 3,3 | 19 | 0,1 | | | 8 | 1,0 | | | 2 | 0,0 | | | 709 | 2,2 | | |
| TX. from DCD | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | | | 0 | 0,0 | | | | | | | 26 | 0,1 | 0 | 0,0 |
| ***SMALL BOWEL*** | | | | | | | | | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | | | 0 | 0,0 | | | | | 1 | 0,0 | | | 0 | 0,0 | | | 5 | 0,1 | | | 139 | 0,4 | | |
| Paediatric <15 years | | | 0 | 0,0 | | | | | | | | | 0 | 0,0 | | | 0 | 0,0 | | | 52 | 0,2 | | |
| Small bowel TX. Alone | | | 0 | 0,0 | | | | | 1 | 0,0 | | | 0 | 0,0 | | | 5 | 0,1 | | | 57 | 0,2 | | |
| ***RECIPIENTS*** | | | | | | | | | | | | | | | | | | | | | | | | |
| Total number of patients transplanted | 20 | 5,7 | 12 | 20,0 | 211 | 45,9 | 455 | 89,2 | 1503 | 10,5 | 143 | 3,7 | 504 | 61,5 | 180 | 8,2 | 4264 | 56,3 | 148 | 3,3 | 28523 | 88,4 | 281 | 3,0 |
| Paediatric <15 years | 0 | 0,0 | 1 | 1,7 | 16 | 3,5 | 14 | 2,7 | | 0,0 | 8 | 0,2 | 17 | 2,1 | 15 | 0,7 | 342 | 4,5 | | | 1288 | 4,0 | 17 | 0,2 |
| Patients transplanted from living donors | 6 | 1,7 | 10 | 16,7 | 77 | 16,7 | 68 | 13,3 | 317 | 2,2 | 143 | 3,7 | 123 | 15,0 | 180 | 8,2 | 3190 | 42,1 | 117 | 2,6 | 5805 | 18,0 | 264 | 2,9 |

## DONATION AND TRANSPLANTATION ACTIVITY

### LATINAMERICAN COUNTRIES

| COUNTRIES<br>Population (million inhabitants): UNFPA | ARGENTINA<br>41,8 | | BOLIVIA<br>10,8 | | BRAZIL<br>202,0 | | CHILE<br>17,8 | | COLOMBIA<br>48,9 | | COSTA RICA<br>4,9 | | CUBA<br>11,3 | | DOMINICANA<br>10,5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DONATION** | | | | | | | | | | | | | | | | |
| | **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- | 555 | 13,3 | 9 | 0,8 | 2710 | 13,4 | 123 | 6,9 | 346 | 7,1 | 18 | 3,7 | 124 | 11,0 | 29 | 2,8 |
| Actual donors after circulatory death –DCD- | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 |
| Multiorgan donors | 319 | 7,6 | 0 | 0,0 | 1797 | 8,9 | 80 | 4,5 | 280 | 5,7 | | | 38 | 3,4 | 8 | 0,8 |
| **TRANSPLANTATION** | | | | | | | | | | | | | | | | |
| ***KIDNEY*** | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 1277 | 30,6 | 96 | 8,9 | 5507 | 27,3 | 271 | 15,2 | 761 | 15,6 | 233 | 47,6 | 175 | 15,5 | 78 | 7,4 |
| % (TX. from living d. / Total TX.) | 29,8 | | 82,3 | | 19,1 | | 21,8 | | 15,5 | | 84,5 | | 16,0 | | 48,7 | |
| Paediatric <15 years | 69 | 1,7 | | | | | 21 | 1,2 | | 0,0 | 3 | 0,6 | 5 | 0,4 | 0 | 0,0 |
| TX. from deceased donors | 897 | 21,5 | 17 | 1,6 | 4453 | 22,0 | 212 | 11,9 | 643 | 13,1 | 36 | 7,3 | 147 | 13,0 | 40 | 3,8 |
| -TX. from DCD | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 | | | | | 0 | 0,0 | 0 | 0,0 |
| -Single TX. | 892 | 21,3 | | | 4427 | 21,9 | 200 | 11,2 | 627 | 12,8 | | | 147 | 13,0 | | |
| -Double TX. | 5 | 0,1 | | | 26 | 0,1 | 12 | 0,7 | 16 | 0,3 | | | 0 | 0,0 | | |
| TX. from living donors | 380 | 9,1 | 79 | 7,3 | 1054 | 5,2 | 59 | 3,3 | 118 | 2,4 | 197 | 40,2 | 28 | 2,5 | 38 | 3,6 |
| -TX. from Related living donors | 371 | 8,9 | 67 | 6,2 | | | 59 | 3,3 | | | | | 28 | 2,5 | 29 | 2,8 |
| -TX. from Unrelated living donors | 9 | 0,2 | 12 | 1,1 | | | 0 | 0,0 | | | | | 0 | 0,0 | 9 | 0,9 |
| ***LIVER*** | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 361 | 8,6 | | | 1769 | 8,8 | 86 | 4,8 | 222 | 4,5 | 9 | 1,8 | 32 | 2,8 | 6 | 0,6 |
| Paediatric <15 years | 73 | 1,7 | | | | | 17 | 1,0 | 46 | 0,9 | 0 | 0,0 | 8 | 0,7 | 0 | 0,0 |
| Split TX. | 12 | 0,3 | | | | | 0 | 0,0 | 2 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 |
| Domino TX. | 0 | 0,0 | | | | | 0 | 0,0 | | | | | | | 0 | 0,0 |
| TX. from living donors | 34 | 0,8 | | | 154 | 0,8 | 9 | 0,5 | 21 | 0,4 | 0 | 0,0 | 2 | 0,2 | 0 | 0,0 |
| TX. from DCD | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 | | | | | 0 | 0,0 | 0 | 0,0 |
| ***HEART*** | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 101 | 2,4 | | | 309 | 1,5 | 24 | 1,3 | 82 | 1,7 | 1 | 0,2 | 1 | 0,1 | 0 | 0,0 |
| Paediatric <15 years | 4 | 0,1 | | | | | 3 | 0,2 | 6 | 0,1 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 |
| ***HEART-LUNG*** | | | | | | | | | | | | | | | | |
| Total TX. | 1 | 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 |
| ***LUNG*** | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 42 | 1,0 | | | 67 | 0,3 | 33 | 1,9 | 10 | 0,2 | 1 | 0,2 | 0 | 0,0 | 0 | 0,0 |
| Paediatric <15 years | 1 | 0,0 | | | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 |
| -Single TX. | 17 | 0,4 | | | 19 | 0,1 | 33 | 1,9 | 3 | 0,1 | 1 | 0,2 | 0 | 0,0 | 0 | 0,0 |
| -Double TX. (heart-lung TX. included) | 25 | 0,6 | | | 47 | 0,2 | 0 | 0,0 | 7 | 0,1 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 |
| TX. from living donors | 0 | 0,0 | | | 1 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 |
| TX. from DCD (double + single) | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 | | | | | 0 | 0,0 | 0 | 0,0 |
| ***PANCREAS*** | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 69 | 1,7 | | | 140 | 0,7 | 7 | 0,4 | 3 | 0,1 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 |
| Paediatric <15 years | 0 | 0,0 | | | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 |
| Pancreas TX. Alone | 6 | 0,1 | | | 42 | 0,2 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 |
| Kidney – Pancreas TX. | 63 | 1,5 | | | 98 | 0,5 | 7 | 0,4 | 3 | 0,1 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 |
| TX. from DCD | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | | | 0 | 0,0 | 0 | 0,0 |
| ***SMALL BOWEL*** | | | | | | | | | | | | | | | | |
| Total TX. -all combinations included- | 2 | 0,0 | | | 4 | 0,0 | 0 | 0,0 | 5 | 0,1 | 1 | 0,2 | 0 | 0,0 | 0 | 0,0 |
| Paediatric <15 years | 1 | 0,0 | | | | | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 |
| Small bowel TX. Alone | 1 | 0,0 | | | | | 0 | 0,0 | 5 | 0,1 | 0 | 0,0 | 0 | 0,0 | 0 | 0,0 |
| ***RECIPIENTS*** | | | | | | | | | | | | | | | | |
| Total number of patients transplanted | 1847 | 44,2 | 96 | 8,9 | 7694 | 38,1 | 414 | 23,3 | 1059 | 21,7 | 245 | 50,0 | 208 | 18,4 | 84 | 8,0 |
| Paediatric <15 years | 148 | 3,5 | | | | | 41 | 2,3 | 99 | 2,0 | 3 | 0,6 | 13 | 1,2 | 0 | 0,0 |
| Patients transplanted from living donors | 414 | 9,9 | 79 | 7,3 | 1209 | 6,0 | 68 | 3,8 | 139 | 2,8 | 197 | 40,2 | 30 | 2,7 | 38 | 3,6 |

## DONATION AND TRANSPLANTATION ACTIVITY

### LATINAMERICAN COUNTRIES

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

## WAITING LIST

### EUROPEAN UNION COUNTRIES

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

## WAITING LIST

### EUROPEAN UNION COUNTRIES

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

## WAITING LIST

### EUROPEAN UNION COUNTRIES

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

## WAITING LIST

### OTHER COUNTRIES

| COUNTRIES | ALGERIA | ARMENIA | AUSTRALIA | AZERBAIJAN | BELARUS | BOSNIA AND HERZEGOVINA | CANADA | GEORGIA | ICELAND | IRAN | ISRAEL | MACEDONIA | MALAYSIA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Population (million inhabitants): UNFPA** | **39,9** | **3,0** | **23,6** | **9,5** | **9,3** | **3,8** | **35,5** | **4,3** | **0,3** | **78,5** | **7,8** | **2,1** | **30,2** |
| ***KIDNEY*** | | | | | | | | | | | | | |
| **N° TX CENTRES** | 12 | 1 | 20 | 4 | 5 | 2 | | 3 | | 29 | 6 | 2 | 3 |
| Patients included on the WL for the first time in the course of 2014 | 16 | | 762 | | 351 | 39 | | | | 2235 | 372 | | |
| Total number of patients ever active on the WL during 2014 | 104 | | 1835 | | 1011 | 227 | | | | | | | |
| Patients awaiting for a transplant (only active candidates) on 31/12/2014 | | | 1056 | | 709 | 230 | | | | 1065 | 867 | | 18661 |
| Patients who died while on the WL during 2014 | 0 | | 3 | | 16 | | | | | 11 | 35 | | |
| Patients on dialyses on 31/12/2014 | 21000 | 600 | 11774 | | 1807 | | | | | 24142 | 6287 | | 30000 |
| ***LIVER*** | | | | | | | | | | | | | |
| **N° TX CENTRES** | 2 | 0 | 8 | 1 | 2 | 1 | | 3 | | 7 | 4 | | 1 |
| Patients included on the WL for the first time in the course of 2014 | | 0 | 347 | | 79 | 15 | | | | | 156 | | 20 |
| Total number of patients ever active on the WL during 2014 | | 0 | 492 | | 169 | 15 | | | | | | | 39 |
| Patients awaiting for a transplant (only active candidates) on 31/12/2014 | | 0 | 186 | | 95 | 11 | | | | | 146 | | 7 |
| Patients who died while on the WL during 2014 | | 0 | 16 | | 6 | 2 | | | | | 44 | | 11 |
| ***HEART*** | | | | | | | | | | | | | |
| **N° TX CENTRES** | 0 | 0 | 5 | 0 | 2 | 0 | | 0 | | 8 | 4 | | 1 |
| Patients included on the WL for the first time in the course of 2014 | | 0 | 127 | | 79 | 3 | | | | 138 | 26 | | 2 |
| Total number of patients ever active on the WL during 2014 | | 0 | 175 | | 140 | 3 | | | | | | | 7 |
| Patients awaiting for a transplant (only active candidates) on 31/12/2014 | | 0 | 60 | | 68 | 3 | | | | 254 | 73 | | 6 |
| Patients who died while on the WL during 2014 | | 0 | 5 | | 8 | | | | | 17 | 18 | | 0 |
| ***LUNG*** | | | | | | | | | | | | | |
| **N° TX CENTRES** | 0 | 0 | 5 | 0 | 1 | 0 | | 0 | | 2 | 2 | | 1 |
| Patients included on the WL for the first time in the course of 2014 | | 0 | 223 | | 8 | | | | | | 64 | | 2 |
| Total number of patients ever active on the WL during 2014 | | 0 | 319 | | 21 | | | | | | | | 7 |
| Patients awaiting for a transplant (only active candidates) on 31/12/2014 | | 0 | 110 | | 14 | | | | | | 74 | | 7 |
| Patients who died while on the WL during 2014 | | 0 | 14 | | 2 | | | | | | 28 | | 0 |
| ***PANCREAS*** | | | | | | | | | | | | | |
| **N° TX CENTRES** | 0 | 0 | 2 | 0 | 1 | 0 | | 0 | | 2 | 3 | | |
| Patients included on the WL for the first time in the course of 2014 | | 0 | 38 | | 9 | | | | | | 7 | | |
| Total number of patients ever active on the WL during 2014 | | 0 | 101 | | 45 | | | | | | | | |
| Patients awaiting for a transplant (only active candidates) on 31/12/2014 | | 0 | 39 | | 31 | | | | | | 18 | | |
| Patients who died while on the WL during 2014 | | 0 | 5 | | 1 | | | | | | | | |
| ***SMALL BOWEL*** | | | | | | | | | | | | | |
| **N° TX CENTRES** | 0 | 0 | 1 | 0 | 1 | | | 0 | | 1 | 1 | | |
| Patients included on the WL for the first time in the course of 2014 | | 0 | 0 | | 0 | 0 | | | | | | | |
| Total number of patients ever active on the WL during 2014 | | 0 | 5 | | 2 | | | | | | | | |
| Patients awaiting for a transplant (only active candidates) on 31/12/2014 | | 0 | 4 | | 2 | | | | | | 2 | | |
| Patients who died while on the WL during 2014 | | 0 | 0 | | 0 | | | | | | | | |

## WAITING LIST

### OTHER COUNTRIES

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

## WAITING LIST

### LATINAMERICAN COUNTRIES

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

## WAITING LIST

### LATINAMERICAN COUNTRIES

| COUNTRIES<br>Population (million inhabitants): UNFPA | ECUADOR<br>16,0 | GUATEMALA<br>15,9 | MEXICO<br>123,8 | PANAMA<br>3,9 | PARAGUAY<br>6,8 | PERU<br>30,8 | URUGUAY<br>3,4 | VENEZUELA<br>30,9 |
|---|---|---|---|---|---|---|---|---|
| ***KIDNEY*** | | | | | | | | |
| **N° TX CENTRES** | 7 | 3 | 237 | 1 | 5 | 9 | 3 | 15 |
| Patients included on the WL for the first time in the course of 2014 | 338 | | 4575 | 56 | 71 | 218 | 135 | 385 |
| Total number of patients ever active on the WL during 2014 | 441 | | 14641 | 210 | 148 | 512 | 610 | 1612 |
| Patients awaiting for a transplant (only active candidates) on 31/12/2014 | 357 | | 11320 | 170 | 129 | 375 | 438 | 1185 |
| Patients who died while on the WL during 2014 | 2 | | 138 | 2 | | 1 | 35 | 79 |
| Patients on dialyses on 31/12/2014 | 321 | | 59754 | 2005 | 1152 | | 2497 | 17723 |
| ***LIVER*** | | | | | | | | |
| **N° TX CENTRES** | 2 | | 68 | 1 | 1 | 5 | 1 | 2 |
| Patients included on the WL for the first time in the course of 2014 | 31 | | 269 | 5 | | 41 | 35 | 7 |
| Total number of patients ever active on the WL during 2014 | 33 | | 674 | 14 | | 49 | 54 | 24 |
| Patients awaiting for a transplant (only active candidates) on 31/12/2014 | 8 | | 396 | 3 | | 9 | 23 | 8 |
| Patients who died while on the WL during 2014 | 2 | | 39 | 4 | | 3 | 4 | 8 |
| ***HEART*** | | | | | | | | |
| **N° TX CENTRES** | 1 | | 45 | 0 | 3 | 4 | 3 | 1 |
| Patients included on the WL for the first time in the course of 2014 | 2 | | 66 | 0 | 12 | 17 | 11 | 0 |
| Total number of patients ever active on the WL during 2014 | 4 | | 116 | 0 | 16 | 22 | 37 | 0 |
| Patients awaiting for a transplant (only active candidates) on 31/12/2014 | 4 | | 43 | 0 | 11 | 4 | 19 | 0 |
| Patients who died while on the WL during 2014 | 0 | | 5 | 0 | 2 | 2 | 3 | 0 |
| ***LUNG*** | | | | | | | | |
| **N° TX CENTRES** | 0 | | 8 | 0 | | 3 | | 0 |
| Patients included on the WL for the first time in the course of 2014 | 0 | | 0 | 0 | | 0 | 8 | 0 |
| Total number of patients ever active on the WL during 2014 | 0 | | 1 | 0 | | 0 | 12 | 0 |
| Patients awaiting for a transplant (only active candidates) on 31/12/2014 | 0 | | 1 | 0 | | 0 | 9 | 0 |
| Patients who died while on the WL during 2014 | 0 | | 0 | 0 | | 0 | 2 | 0 |
| ***PANCREAS*** | | | | | | | | |
| **N° TX CENTRES** | 1 | | 19 | 0 | | 2 | | 0 |
| Patients included on the WL for the first time in the course of 2014 | 0 | | 4 | 0 | | 1 | | 0 |
| Total number of patients ever active on the WL during 2014 | 0 | | 23 | 0 | | 1 | | 0 |
| Patients awaiting for a transplant (only active candidates) on 31/12/2014 | 0 | | 17 | 0 | | 0 | | 0 |
| Patients who died while on the WL during 2014 | 0 | | 2 | 0 | | 0 | | 0 |
| ***SMALL BOWEL*** | | | | | | | | |
| **N° TX CENTRES** | 0 | | 3 | 0 | | 0 | | 0 |
| Patients included on the WL for the first time in the course of 2014 | 0 | | 0 | 0 | | 0 | | 0 |
| Total number of patients ever active on the WL during 2014 | 0 | | 0 | 0 | | 0 | | 0 |
| Patients awaiting for a transplant (only active candidates) on 31/12/2014 | 0 | | 0 | 0 | | 0 | | 0 |
| Patients who died while on the WL during 2014 | 0 | | 0 | 0 | | 0 | | 0 |

# FAMILY REFUSALS

## EUROPEAN UNION COUNTRIES

| COUNTRIES | AUSTRIA | BELGIUM | BULGARIA | CROATIA | CYPRUS | CZECH. R. | DENMARK | ESTONIA | FINLAND | FRANCE |
|---|---|---|---|---|---|---|---|---|---|---|
| **Population (million inhabitants): UNFPA** | **8,5** | **11,1** | **7,2** | **4,3** | **1,2** | **10,7** | **5,6** | **1,3** | **5,4** | **64,6** |
| Number of interviews, asking for consent to donation | | 396 | 38 | 190 | 8 | | | 32 | | |
| Number of family refusals (%) | | 49 (12,4) | 6 (15,8) | 39 (20,5) | 3 (37,5) | | | 6 (18,8) | | 716 |

| COUNTRIES | GERMANY | GREECE | HUNGARY | IRELAND | ITALY | LATVIA | LITHUANIA | LUXEMBOURG | MALTA |
|---|---|---|---|---|---|---|---|---|---|
| **Population (million inhabitants): UNFPA** | **82,7** | **11,1** | **9,9** | **4,7** | **61,1** | **2,0** | **3,0** | **0,5** | **0,4** |
| Number of interviews, asking for consent to donation | | | | | 2349 | 24 | 86 | | 13 |
| Number of family refusals (%) | | | | | 728 (31,0) | 7 (29,2) | 37 (43,0) | | 1 (7,7) |

| COUNTRIES | NETHERLANDS | POLAND | PORTUGAL | ROMANIA | SLOVAKIA | SLOVENIA | SPAIN | SWEDEN | U. K. |
|---|---|---|---|---|---|---|---|---|---|
| **Population (million inhabitants): UNFPA** | **16,8** | **38,2** | **10,6** | **21,6** | **5,5** | **2,1** | **47,1** | **9,6** | **63,5** |
| Number of interviews, asking for consent to donation | | 782 | | 284 | 99 | | 2049 | | 3336 |
| Number of family refusals (%) | | 100 (12,8) | | 83 (29,2) | 12 (12,1) | | 367 (17,9) | | 1401 (42,0) |

## OTHER COUNTRIES

| COUNTRIES | ALGERIA | ARMENIA | AUSTRALIA | AZERBAIJAN | BELARUS | BOSNIA AND HERZEGOVINA | CANADA | GEORGIA | ICELAND | IRAN | ISRAEL | MACEDONIA | MALAYSIA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Population (million inhabitants): UNFPA** | **39,9** | **3,0** | **23,6** | **9,5** | **9,3** | **3,8** | **35,5** | **4,3** | **0,3** | **78,5** | **7,8** | **2,1** | **30,2** |
| Number of interviews, asking for consent to donation | 10 | | 488 | | | 12 | | | | | 125 | 18 | 68 |
| Number of family refusals (%) | 4 (40,0) | | 200 (50,0) | | | 8 (66,7) | | | | | 60 (48,0) | 6 (33,3) | 44 (64,7) |

| COUNTRIES | MOLDOVA | MONTENEGRO | NEW ZEALAND | NORWAY | RUSSIAN F. | SUDAN | SWITZERLAND | SYRIA | TURKEY | UKRAINE | USA | VIETNAM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Population (million inhabitants): UNFPA** | **3,5** | **0,6** | **4,6** | **5,1** | **142,5** | **38,8** | **8,2** | **22,0** | **75,8** | **44,9** | **322,6** | **92,5** |
| Number of interviews, asking for consent to donation | 77 | 7 | | | | | 303 | | 1810 | | 9248 | |
| Number of family refusals (%) | 36 (46,8) | 7 (100,0) | | | | | 175 (57,8) | | 1403 (77,5) | | 2028 (21,9) | |

## LATINAMERICAN COUNTRIES

| COUNTRIES | ARGENTINA | BOLIVIA | BRAZIL | CHILI | COLOMBIA | COSTA RICA | CUBA | DOMINICANA |
|---|---|---|---|---|---|---|---|---|
| **Population (million inhabitants): UNFPA** | **41,8** | **10,8** | **202,0** | **17,8** | **48,9** | **4,9** | **11,3** | **10,5** |
| Number of interviews, asking for consent to donation | 1174 | | 8228 | 259 | 662 | 21 | 149 | 43 |
| Number of family refusals (%) | 571 (48,6) | | 3457 (42,0) | 135 (52,1) | 254 (38,4) | 3 (14,3) | 25 (16,8) | 29 (67,4) |

| COUNTRIES | ECUADOR | GUATEMALA | MEXICO | PANAMA | PARAGUAY | PERU | URUGUAY | VENEZUELA |
|---|---|---|---|---|---|---|---|---|
| **Population (million inhabitants): UNFPA** | **16** | **15,9** | **123,8** | **3,9** | **6,8** | **30,8** | **3,4** | **30,9** |
| Number of interviews, asking for consent to donation | 104 | | | 40 | 119 | 185 | | 147 |
| Number of family refusals (%) | 41 (39,4) | | 235 | 12 (30,0) | 16 (13,4) | 115 (62,2) | | 36 (24,5) |

# International Data On Tissue And Hematopoeitic Stem Cell Donation And Transplantation Activity. Year 2014.

## Data provided by National Competent Authorities:

**EUROPE**

**Austria**

**Belgium**

**Bulgaria**
Yordan Peev

**Cyprus**
Carolina Stylianou

**Czech Republic**
Eva Křemenová
Ivana Koblihová

**Germany**

**Denmark**

**Estonia**
Siim Suutre

**Spain**
Bibiana Ramos
Marina Álvarez

**Finland**
Anne Tammiruusu

**France**
Candide Font-Sala

**Greece**

**Croatia**
Milena Ivanković

**Hungary**
Lilla Tokár

**Ireland**

**Italy**
Fiorenza Bariani
Letizia Lombardini

**Lithuania**
Dainora Medeisiene

**Luxembourg**
Gérard Scharll

**Latvia**
Ieva Bekere

**The Republic of Moldova**
Igor Codreanu
Tatiana Timbalari

**Macedonia**

**Malta**
Patricia Galea

**Netherlands**
Frank Van Linden

**Norway**
Zaheer Rana

**Poland**
Izabela Uhrynowska- Tyszkiewicz
Artur Kaminski

**Portugal**
Paulo Severino

**Romania**
Andrei Nica

**Sweden**
Mona Hansson

**Slovenia**

**Slovakia**
Magdaléna Krátka
Daniel Kuba

**Turkey**
Yavuz Elbaş

**United Kingdom**
Sarah Kelly

**LATINAMERICA**

**Argentina**
Carlos Soratti

**Brasil**
Heder Murari Borba

**Chile**
Jose Luis Rojas

**Colombia**
Mª Angélica Salinas

**Costa Rica**
Roselyn Serrano
Cesar Gamboa

**Cuba**
Antonio Enamorado

**Dominicana**
Fernando R. Morales

**Ecuador**
Diana Almeida

**Mexico**
J. Salvador Aburto

**Panama**
César J. Cuero

**Paraguay**
Hugo A. Espinoza C.

**Peru**
Mariela Delgado

**Uruguay**
Mika Bengochea

**Venezuela**
Xiomara Ramirez

**Data recorded & prepared by: EUROCET - European Network of Competent Authorities for Tissues and Cells -Team (www.eurocet.org)**

## PRELIMINARY DATA ON TISSUES - YEAR 2014

### EUROPEAN UNION COUNTRIES

| *Country* | | AUSTRIA | BELGIUM | BULGARIA | CROATIA | CYPRUS | CZECH REPUBLIC | DENMARK | ESTONIA | FINLAND | FRANCE | GERMANY | GREECE | HUNGARY | IRELAND | ITALY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Population (Font: eurostat)* | | 8.506.889 | 11.203.992 | 7.245.677 | 4.246.809 | 858.000 | 10.512.419 | 5.627.235 | 1.315.819 | 5.451.270 | 65.835.579 | 80.767.463 | 10.903.704 | 9.877.365 | 4.605.501 | 60.782.668 |
| TYPE OF TISSUE | TYPE OF DATA | NO DATA | NO DATA | | | | | NO DATA | | | | NO DATA | NO DATA | | NO DATA | |
| CORNEA | N. of tissue donations | | | 71 | 143 | 0 | 925 | | 18 | 123 | 5.416 | | | 312 | | 7.499 |
| | Tissue donation PMP | | | 9,8 | 33,7 | 0,0 | 88,0 | | 13,7 | 22,6 | 0,0 | | | 31,6 | | 123,4 |
| | N° of tissue retrieved | | | 136 | 283 | 0 | 1.122 | | 36 | 0 | 10.742 | | | 623 | | 14.435 |
| | N° tissue processed (units) | | | 136 | 288 | 0 | 1.133 | | 37 | 246 | 10.742 | | | 606 | | NA |
| | N° tissue distributed (units) | | | 108 | 186 | 0 | 763 | | 38 | 173 | 4.804 | | | 395 | | 6.453 |
| | N° tissue imported (units) | | | 1 | 48 | 41 | 0 | | 0 | 14 | 0 | | | 0 | | 11 |
| | N° tissue exported (units) | | | 0 | 0 | 0 | 203 | | 0 | 0 | 175 | | | 76 | | 619 |
| | N° of tissues transplanted | | | 109 | 228 | 41 | 566 | | 37 | 0 | 4.804 | | | 276 | | NA |
| | N° of patients transplanted | | | 109 | 228 | 41 | 550 | | 43 | NA | 4.271 | | | 261 | | NA |
| | N° of transplants | | | 109 | 228 | 41 | 566 | | 48 | 173 | UK | | | 276 | | 5.279 |
| BLOOD VESSEL | N. of tissue donations | | | 0 | 9 | 0 | 28 | | 15 | 0 | 5.133 | | | 52 | | 722 |
| | Tissue donation PMP | | | 0,0 | 2,1 | 0,0 | 2,7 | | 11,4 | 0,0 | 78,0 | | | 5,3 | | 11,9 |
| | N° of tissue retrieved | | | 0 | 16 | 0 | 84 | | 19 | 0 | 5.685 | | | 52 | | 1.174 |
| | N° tissue processed (units) | | | 0 | 16 | 0 | 99 | | 42 | 21 | 5.685 | | | 56 | | NA |
| | N° tissue distributed (units) | | | 0 | 0 | 0 | 33 | | 36 | 19 | 1.694 | | | 7 | | 396 |
| | N° tissue imported (units) | | | 0 | 0 | 0 | 0 | | 0 | 0 | 41 | | | 0 | | 0 |
| | N° tissue exported (units) | | | 0 | 0 | 0 | 0 | | 0 | 0 | 19 | | | 0 | | 0 |
| | N° of tissues transplanted | | | 0 | 0 | 0 | 21 | | 9 | 0 | 1.694 | | | 43 | | NA |
| | N° of patients transplanted | | | 0 | 0 | 0 | 21 | | 36 | NA | 1.247 | | | 38 | | NA |
| | N° of transplants | | | 0 | 0 | 0 | 26 | | 36 | 19 | UK | | | 38 | | 254 |
| CARDIAC TISSUE | N. of tissue donations | | | 0 | 10 | 0 | 127 | | 0 | 54 | 238 | | | 65 | | 249 |
| | Tissue donation PMP | | | 0,0 | 2,4 | 0,0 | 12,1 | | 0,0 | 9,9 | 3,6 | | | 6,6 | | 4,1 |
| | N° of tissue retrieved | | | 0 | 15 | 0 | 127 | | 0 | 0 | 454 | | | 65 | | 459 |
| | N° tissue processed (units) | | | 0 | 15 | 0 | 127 | | 0 | 152 | 454 | | | 65 | | NA |
| | N° tissue distributed (units) | | | 0 | 0 | 0 | 78 | | 0 | 111 | 186 | | | 30 | | 185 |
| | N° tissue imported (units) | | | 0 | 0 | 0 | 0 | | 0 | 0 | 57 | | | 0 | | 0 |
| | N° tissue exported (units) | | | 0 | 0 | 0 | 0 | | 0 | 3 | 60 | | | 0 | | 2 |
| | N° of tissues transplanted | | | 0 | 0 | 0 | 78 | | 0 | 0 | 186 | | | 14 | | NA |
| | N° of patients transplanted | | | 0 | 0 | 0 | 71 | | 0 | NA | 146 | | | 14 | | NA |
| | N° of transplants | | | 0 | 0 | 0 | 78 | | 0 | 111 | UK | | | 14 | | 139 |
| MUSCULOSKELETAL | N. of tissue donations | | | 1.811 | 209 | 0 | 905 | | 151 | 1.086 | 23.376 | | | 161 | | 3.102 |
| | Tissue donation PMP | | | 249,9 | 49,2 | 0,0 | 86,1 | | 114,8 | 199,2 | 355,1 | | | 16,3 | | 51,0 |
| | N° of tissue retrieved | | | 1.811 | 367 | 0 | 2.818 | | 207 | 0 | 23.592 | | | 161 | | 7.743 |
| | N° tissue processed (units) | | | 716 | 367 | 0 | 2.427 | | 325 | 1.662 | 23.592 | | | 1.244 | | NA |
| | N° tissue distributed (units) | | | 1.690 | 229 | 0 | 2.344 | | 291 | NA | 33.003 | | | 1.127 | | 12.252 |
| | N° tissue imported (units) | | | 141 | 0 | 0 | 0 | | 0 | 13 | 282 | | | 0 | | 0 |
| | N° tissue exported (units) | | | 2.216 | 0 | 0 | 452 | | 0 | 0 | 4.661 | | | 0 | | 0 |
| | N° of tissues transplanted | | | 137 | 229 | 0 | 760 | | 192 | 0 | 33.003 | | | NA | | NA |
| | N° of patients transplanted | | | 132 | 213 | 0 | 646 | | 254 | NA | 26.034 | | | NA | | NA |
| | N° of transplants | | | 132 | 224 | 0 | 790 | | 290 | 1.291 | UK | | | NA | | 8.346 |
| SKIN | N. of tissue donations | | | 57 | 7 | 0 | 45 | | 2 | 29 | 179 | | | 10 | | 409 |
| | Tissue donation PMP | | | 7,9 | 1,6 | 0,0 | 4,3 | | 1,5 | 5,3 | 2,7 | | | 1,0 | | 6,7 |
| | N° of tissue retrieved | | | 91.039 | 113 | 0 | 45 | | 0 | 0 | 325.930 | | | 10 | | 1.094.329 |
| | N° tissue processed (units) | | | 31 | 246 | 0 | 634 | | 8 | 1.259 | UK | | | 37.140 | | NA |
| | N° tissue distributed (units) | | | 36 | 236 | 0 | 761 | | 0 | 960 | UK | | | 37.080 | | 4.844 |
| | N° tissue imported (units) | | | 13 | 0 | 0 | 0 | | 0 | 0 | 17.160 | | | 0 | | 0 |
| | N° tissue exported (units) | | | 0 | 0 | 0 | 761 | | 0 | 0 | 0 | | | 0 | | 0 |
| | N° of tissues transplanted | | | 0 | 236 | 0 | 0 | | 0 | 960 | 245.779 | | | NA | | NA |
| | N° of patients transplanted | | | 0 | 4 | 0 | 0 | | 0 | 19 | 97 | | | NA | | NA |
| | N° of transplants | | | 0 | 5 | 0 | 0 | | 0 | NA | UK | | | NA | | 2.003 |
| PLACENTA/AMNIOTIC MEMBRANE | N. of tissue donations | | | 12 | 3 | 0 | 6 | | 34 | 8 | UK | | | 0 | | 214 |
| | Tissue donation PMP | | | 1,7 | 0,7 | 0,0 | 0,6 | | 25,8 | 1,5 | 0,0 | | | 0,0 | | 3,5 |
| | N° of tissue retrieved | | | 12 | 3 | 0 | 6 | | 34 | 0 | 109 | | | 0 | | 153 |
| | N° tissue processed (units) | | | 53 | 145 | 0 | 60 | | 104 | 193 | 3.203 | | | 117 | | NA |
| | N° tissue distributed (units) | | | 51 | 85 | 0 | 173 | | 88 | 186 | 2.818 | | | 87 | | 1.239 |
| | N° tissue imported (units) | | | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | | | 0 | | 0 |
| | N° tissue exported (units) | | | 0 | 0 | 0 | 17 | | 0 | 34 | 7 | | | 0 | | 0 |
| | N° of tissues transplanted | | | 76 | 118 | 0 | 14 | | 3 | 0 | 2.818 | | | 81 | | NA |
| | N° of patients transplanted | | | 76 | 118 | 0 | 14 | | 72 | NA | 1.850 | | | 67 | | NA |
| | N° of transplants | | | 76 | 118 | 0 | 14 | | 88 | 186 | UK | | | 73 | | 865 |
| OTHER TISSUES | N. of tissue donations | | | 0 | 0 | NA | 30 | | 0 | 0 | UK | | | 137 | | 111 |
| | Tissue donation PMP | | | 0,0 | 0,0 | NA | 2,9 | | 0,0 | 0,0 | 0,0 | | | 13,9 | | 1,8 |
| | N° of tissue retrieved | | | 0 | 0 | NA | 32 | | 0 | 0 | 13 | | | 137 | | 508 |
| | N° tissue processed (units) | | | 0 | 0 | 1.613 | 0 | | 0 | 0 | UK | | | 151 | | NA |
| | N° tissue distributed (units) | | | 0 | 0 | 0 | 0 | | 0 | 0 | 8 | | | 65 | | 81 |
| | N° tissue imported (units) | | | 0 | 0 | 1.390 | 0 | | 0 | 3 | 0 | | | 0 | | 0 |
| | N° tissue exported (units) | | | 0 | 0 | 0 | 5 | | 0 | 0 | 0 | | | 0 | | 0 |
| | N° of tissues transplanted | | | 0 | 0 | 0 | 0 | | 0 | 0 | 8 | | | NA | | NA |
| | N° of patients transplanted | | | 0 | 0 | 0 | 0 | | 0 | NA | UK | | | NA | | NA |
| | N° of transplants | | | 0 | 0 | 0 | 0 | | 0 | 5 | UK | | | NA | | 60 |

## PRELIMINARY DATA ON TISSUES - YEAR 2014

| | | EUROPEAN UNION COUNTRIES | | | | | | | | | | | | | OTHER COUNTRIES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Country* | | LATVIA | LITHUANIA | LUXEMBOURG | MALTA | NETHERLANDS | POLAND | PORTUGAL | ROMANIA | SLOVAKIA | SLOVENIA | SPAIN | SWEDEN | UNITED KINGDOM | TURKEY | NORWAY |
| *Population (Font: eurostat)* | | 2.001.468 | 2.943.472 | 549.680 | 425.384 | 16.829.289 | 38.017.856 | 10.427.301 | 19.947.311 | 5.415.949 | 2.061.085 | 46.512.199 | 9.644.864 | 64.308.261 | 76.667.864 | 5.107.970 |
| TYPE OF TISSUE | TYPE OF DATA | | | | | | | | | | | | | | | |
| CORNEA | N. of tissue donations | 5 | 18 | 19 | 12 | 0 | 614 | 489 | 57 | 102 | 60 | 2.799 | 558 | NA | 1.632 | 61 |
| | Tissue donation PMP | 2,5 | 6,1 | 34,6 | 28,2 | 0,0 | 16,2 | 46,9 | 2,9 | 18,8 | 29,1 | 60,2 | 57,9 | NA | 21,3 | 11,9 |
| | N° of tissue retrieved | 10 | 36 | NA | 12 | 0 | 1.219 | 937 | 114 | 194 | 120 | 5.575 | 1.134 | 6.076 | 3.264 | 122 |
| | N° tissue processed (units) | 0 | 36 | 0 | 12 | 3.531 | 1.185 | 629 | 0 | 194 | 118 | 4.625 | 1.134 | 5.901 | 3.264 | 122 |
| | N° tissue distributed (units) | 0 | 35 | 0 | 10 | 2.930 | 988 | 677 | 0 | 143 | 89 | 3.191 | 870 | 3.896 | 2.968 | 60 |
| | N° tissue imported (units) | 0 | 0 | 0 | 0 | 102 | 0 | 211 | 72 | 11 | 0 | 1 | 0 | 852 | 624 | 135 |
| | N° tissue exported (units) | 0 | 0 | 0 | 0 | 216 | 0 | 0 | 0 | 0 | 0 | 0 | 82 | 3.896 | 0 | 0 |
| | N° of tissues transplanted | NA | 35 | 0 | 10 | 2.216 | 0 | 883 | 174 | 197 | 89 | 3.539 | 869 | NA | NA | 192 |
| | N° of patients transplanted | NA | 34 | 0 | 10 | 2.205 | 0 | 860 | 174 | 176 | 89 | 3.488 | 777 | NA | NA | 130 |
| | N° of transplants | NA | 35 | 0 | 10 | 2.216 | 0 | 884 | 174 | 179 | 89 | NA | 795 | NA | NA | 196 |
| BLOOD VESSEL | N. of tissue donations | NE | NE | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 130 | 164 | NA | 0 | 0 |
| | Tissue donation PMP | NE | NE | 7,3 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 18,4 | 2,8 | 17,0 | NA | 0,0 | 0,0 |
| | N° of tissue retrieved | NE | NE | 4 | 0 | 71 | 0 | 0 | 0 | 0 | 38 | 313 | 234 | 70 | 0 | 0 |
| | N° tissue processed (units) | NE | NE | 0 | 0 | 71 | 0 | 0 | 0 | 0 | 38 | 313 | 249 | 289 | 0 | 0 |
| | N° tissue distributed (units) | NE | NE | 0 | 0 | 22 | 2 | 0 | 0 | 0 | 9 | 233 | 30 | 108 | 0 | 0 |
| | N° tissue imported (units) | NE | NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| | N° tissue exported (units) | NE | NE | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 |
| | N° of tissues transplanted | NE | NE | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 147 | 20 | NA | 0 | 0 |
| | N° of patients transplanted | NE | NE | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 98 | 13 | NA | 0 | 0 |
| | N° of transplants | NE | NE | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | NA | 13 | NA | 0 | 0 |
| CARDIAC TISSUE | N. of tissue donations | NE | NE | 4 | 0 | 0 | 153 | 22 | 0 | 3 | 0 | 153 | 178 | NA | 0 | 0 |
| | Tissue donation PMP | NE | NE | 7,3 | 0,0 | 0,0 | 4,0 | 2,1 | 0,0 | 0,6 | 0,0 | 3,3 | 18,5 | NA | 0,0 | 0,0 |
| | N° of tissue retrieved | NE | NE | 4 | 0 | 398 | 306 | 22 | 0 | 6 | 0 | 283 | 319 | 564 | 0 | 0 |
| | N° tissue processed (units) | NE | NE | 0 | 0 | 398 | 187 | 20 | 0 | 6 | 0 | 283 | 321 | 736 | 0 | 0 |
| | N° tissue distributed (units) | NE | NE | 0 | 0 | 90 | 147 | 8 | 0 | 11 | 0 | 134 | 181 | 450 | 0 | 0 |
| | N° tissue imported (units) | NE | NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | N° tissue exported (units) | NE | NE | 0 | 0 | 18 | 2 | 0 | 0 | 0 | 0 | 1 | 61 | 0 | 0 | 0 |
| | N° of tissues transplanted | NE | NE | 0 | 0 | 97 | 0 | 9 | 0 | 11 | 0 | 76 | 182 | NA | 0 | 0 |
| | N° of patients transplanted | NE | NE | 0 | 0 | 97 | 0 | 9 | 0 | 11 | 0 | 69 | 103 | NA | 0 | 0 |
| | N° of transplants | NE | NE | 0 | 0 | 97 | 0 | 9 | 0 | 11 | 0 | NA | 163 | NA | 0 | 0 |
| MUSCULOSKELETAL | N. of tissue donations | 4 | NA | 94 | 0 | 0 | 242 | 41 | 284 | 356 | 95 | 2.639 | 1.787 | NA | 0 | 596 |
| | Tissue donation PMP | 2,0 | NA | 171,0 | 0,0 | 0,0 | 6,4 | 3,9 | 14,2 | 65,7 | 46,1 | 56,7 | 185,3 | NA | 0,0 | 116,7 |
| | N° of tissue retrieved | 16 | NA | 94 | 0 | 3.286 | 2.235 | 165 | 284 | 3.555 | 96 | 18.437 | 1.806 | 7.142 | 0 | 481 |
| | N° tissue processed (units) | 44 | NA | 0 | 0 | 8.243 | 9.021 | 230 | 211 | 3.813 | 96 | 18.437 | 1.833 | 1.913 | 0 | 379 |
| | N° tissue distributed (units) | 59 | NA | 0 | 0 | 8.488 | 9.144 | 249 | 140 | 3.340 | 84 | 16.712 | 1.030 | 26.744 | 0 | 163 |
| | N° tissue imported (units) | 0 | NA | 0 | 0 | 306 | 0 | 143 | 55 | 0 | 0 | 0 | 48 | 31.486 | 0 | 57 |
| | N° tissue exported (units) | 0 | NA | 0 | 0 | 37.724 | 0 | 0 | 0 | 2.855 | 0 | 33 | 0 | 33.818 | 0 | 0 |
| | N° of tissues transplanted | NA | NA | 0 | 0 | 8.488 | 0 | 389 | 270 | 485 | 4 | 15.013 | 1.066 | NA | 0 | 269 |
| | N° of patients transplanted | NA | NA | 0 | 0 | 2.488 | 0 | 248 | 225 | 234 | 4 | 11.447 | 1.017 | NA | 0 | 274 |
| | N° of transplants | NA | NA | 0 | 0 | NA | 0 | 345 | 225 | 234 | 4 | NA | 1.031 | NA | 0 | 298 |
| SKIN | N. of tissue donations | NE | NE | 0 | 0 | 0 | 41 | 0 | 18 | 21 | 17 | 201 | 86 | NA | 0 | 0 |
| | Tissue donation PMP | NE | NE | 0,0 | 0,0 | 0,0 | 1,1 | 0,0 | 0,9 | 3,9 | 8,2 | 4,3 | 8,9 | NA | 0,0 | 0,0 |
| | N° of tissue retrieved | NE | NE | 0 | 0 | 1.739.500 | 77.605 | 0 | 24.950 | 101.096 | 3.560 | 345.217 | 69 | 325 | 0 | 0 |
| | N° tissue processed (units) | NE | NE | 0 | 0 | 4.970 | 636 | 0 | 0 | 0 | 89 | NA | 794 | 391 | 0 | 0 |
| | N° tissue distributed (units) | NE | NE | 0 | 0 | 1.265 | 498 | 0 | 0 | 0 | 42 | NA | 24 | 3.664 | 0 | 0 |
| | N° tissue imported (units) | NE | NE | 0 | 0 | 590 | 0 | 79 | 0 | 0 | 0 | 0 | 29 | 3.143 | 0 | 0 |
| | N° tissue exported (units) | NE | NE | 0 | 0 | 16.215 | 0 | 0 | 0 | 0 | 0 | 53 | 0 | 4.145 | 0 | 0 |
| | N° of tissues transplanted | NE | NE | 0 | 0 | 1.265 | 0 | 79 | 21.050 | 52.234 | 23 | 150.481 | 24 | NA | 0 | 0 |
| | N° of patients transplanted | NE | NE | 0 | 0 | NA | 0 | 12 | 18 | 27 | 23 | 37 | 61 | NA | 0 | 0 |
| | N° of transplants | NE | NE | 0 | 0 | NA | 0 | 18 | 18 | 34 | 23 | NA | 125 | NA | 0 | 0 |
| PLACENTA/AMNIOTIC MEMBRANE | N. of tissue donations | 59 | 16 | 0 | 0 | 0 | 128 | 17 | 0 | 20 | 2 | 72 | 6 | NA | 0 | 2 |
| | Tissue donation PMP | 29,5 | 5,4 | 0,0 | 0,0 | 0,0 | 3,4 | 1,6 | 0,0 | 3,7 | 1,0 | 1,5 | 0,6 | NA | 0,0 | 0,4 |
| | N° of tissue retrieved | 59 | 16 | 0 | 0 | 2 | 128 | 17 | 0 | 20 | 2 | 1.679 | 366 | 56 | 0 | 2 |
| | N° tissue processed (units) | NE | 161 | 0 | 0 | 2 | 1.530 | 206 | 0 | 219 | 2 | 1.679 | 374 | 56 | 0 | 85 |
| | N° tissue distributed (units) | NE | 75 | 0 | 0 | 94 | 1.162 | 187 | 0 | 190 | 46 | 1.234 | 364 | 793 | 0 | 29 |
| | N° tissue imported (units) | NE | NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 230 | 0 | 22 |
| | N° tissue exported (units) | NE | NE | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 793 | 0 | 0 |
| | N° of tissues transplanted | NE | 75 | 0 | 0 | 54 | 0 | 169 | 0 | 183 | 32 | 1.302 | 364 | NA | 0 | 9 |
| | N° of patients transplanted | NE | 72 | 0 | 0 | 50 | 0 | 152 | 0 | 171 | 32 | 1.237 | 177 | NA | 0 | 9 |
| | N° of transplants | NE | 75 | 0 | 0 | 50 | 0 | 168 | 0 | 171 | 32 | NA | 210 | NA | 0 | 9 |
| OTHER TISSUES | N. of tissue donations | 154 | 4 | 0 | 0 | 0 | 1.098 | 0 | 0 | 181 | 18 | 0 | 0 | NA | 0 | NA |
| | Tissue donation PMP | 76,9 | 1,4 | 0,0 | 0,0 | 0,0 | 28,9 | 0,0 | 0,0 | 33,4 | 8,7 | 0,0 | 0,0 | NA | 0,0 | NA |
| | N° of tissue retrieved | 154 | 4 | 0 | 0 | 120 | 1.104 | 0 | 0 | 180 | 18 | 0 | 0 | 8.828 | 0 | NA |
| | N° tissue processed (units) | NE | 4 | 0 | 0 | 221 | 1.073 | 0 | 0 | 6 | 18 | 0 | 0 | 6.033 | 0 | 98 |
| | N° tissue distributed (units) | NE | 3 | 0 | 0 | 49 | 95 | 0 | 0 | 6 | 10 | 0 | 0 | 1.791 | 0 | NA |
| | N° tissue imported (units) | NE | NE | 0 | 0 | 7.157 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.186 | 0 | 0 |
| | N° tissue exported (units) | NE | NE | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.057 | 0 | 0 |
| | N° of tissues transplanted | NE | 3 | 0 | 0 | 446 | 0 | 0 | 0 | 68 | 10 | 0 | 0 | NA | 0 | NA |
| | N° of patients transplanted | NE | 3 | 0 | 0 | 393 | 0 | 0 | 0 | 30 | 10 | 0 | 0 | NA | 0 | NA |
| | N° of transplants | NE | 3 | 0 | 0 | 393 | 0 | 0 | 0 | 30 | 10 | 0 | 0 | NA | 0 | NA |

## PRELIMINARY DATA ON TISSUES - YEAR 2014

### LATINAMERICAN COUNTRIES

| *Country* | | ARGENTINA | BRAZIL | CHILI | COLOMBIA | COSTA RICA | CUBA | DOMINICANA | ECUADOR | MEXICO | PANAMA | PARAGUAY | PERU | URUGUAY | VENEZUELA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Population (Font: UNFPA, state of world population, Nov 2014 - Million)* | | 41,8 | 202,0 | 17,8 | 48,9 | 4,9 | 11,3 | 10,5 | 16,0 | 123,8 | 3,9 | 6,9 | 30,8 | 3,4 | 30,9 |
| TYPE OF TISSUE | TYPE OF DATA | | | | | | | | | | | | | | |
| CORNEA | N. of tissue donations | 1.589 | 12.460 | 93 | 981 | 143 | NA | 28 | 0 | 2.978 | 36 | 75 | 341 | 75 | 58 |
| | Tissue donation PMP | 38,0 | 61,7 | 5,2 | 20,1 | 29,2 | NA | 2,7 | 0,0 | 24,1 | 9,2 | 10,9 | 11,1 | 22,1 | 1,9 |
| | N° of tissue retrieved | 1.589 | 24.919 | 179 | 1.436 | 86 | NA | 28 | 0 | 2.978 | NA | 76 | 220 | 197 | 108 |
| | N° of tissues transplanted | 906 | 13.456 | NA | 1.510 | NA | NA | 331 | 0 | 3.204 | 36 | 75 | 341 | 217 | 99 |
| | N° of patients transplanted | 906 | NA | 162 | | 143 | 538 | NA | 0 | 3.204 | 36 | 75 | 341 | NA | 99 |
| | N° of transplants | 906 | 13.456 | 162 | | NA | 538 | 331 | 0 | 3.204 | 36 | 75 | 341 | 205 | 99 |
| BLOOD VESSEL | N. of tissue donations | 0 | 0 | 0 | NA | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 |
| | Tissue donation PMP | 0,0 | 0,0 | 0,0 | NA | 1,6 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 5,3 | 0,0 |
| | N° of tissue retrieved | 0 | 0 | 0 | 54 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 |
| | N° of tissues transplanted | 69 | 0 | 0 | 10 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 |
| | N° of patients transplanted | 69 | 0 | 0 | NA | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NA | 0 |
| | N° of transplants | 69 | 0 | 0 | NA | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 |
| CARDIAC TISSUE | N. of tissue donations | 176 | 167 | 7 | 80 | 6 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| | Tissue donation PMP | 4,2 | 0,8 | 0,4 | 1,6 | 1,2 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,2 |
| | N° of tissue retrieved | NA | 277 | 14 | 97 | 8 | 0 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 20 |
| | N° of tissues transplanted | 230 | 207 | 0 | 113 | NA | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | NA |
| | N° of patients transplanted | 230 | 207 | 0 | NA | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | NA | NA |
| | N° of transplants | 230 | 207 | 0 | NA | NA | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | NA |
| MUSCULOSKELETAL | N. of tissue donations | 116 | 1.432 | 7 | 1.500 | 0 | 0 | 0 | 0 | 261 | 0 | 0 | 0 | 0 | 0 |
| | Tissue donation PMP | 2,8 | 7,1 | 0,4 | 30,7 | 0,0 | 0,0 | 0,0 | 0,0 | 2,1 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| | N° of tissue retrieved | NA | 25.215 | 0 | 2.102 | 0 | 0 | 0 | 0 | 261 | 0 | 0 | 0 | 28 | 0 |
| | N° of tissues transplanted | 7.034 | 21.639 | 0 | 12.484 | 0 | 0 | 0 | 0 | NA | 0 | 0 | 0 | 718 | 0 |
| | N° of patients transplanted | 7.034 | NA | 0 | NA | 0 | 0 | 0 | 0 | NA | 0 | 0 | 0 | NA | 0 |
| | N° of transplants | 7.034 | NA | 0 | NA | 0 | 0 | 0 | 0 | NA | 0 | 0 | 0 | 151 | 0 |
| SKIN | N. of tissue donations | 11 | 191 | 1 | 23 | 14 | NA | 0 | 0 | 38 | 0 | 0 | 0 | 11 | 0 |
| | Tissue donation PMP | 0,3 | 0,9 | 0,1 | 0,5 | 2,9 | NA | 0,0 | 0,0 | 0,3 | 0,0 | 0,0 | 0,0 | 3,2 | 0,0 |
| | N° of tissue retrieved | NA | 74.528 | 0 | 23 | 11.184 | NA | 0 | 0 | NA | 0 | 0 | 0 | 19.200 | 0 |
| | N° of tissues transplanted | 45 | 62.863 | 0 | 311 | NA | NA | 0 | 0 | NA | 0 | 0 | 0 | 13.000 | 0 |
| | N° of patients transplanted | 45 | NA | 0 | NA | 36 | 107 | 0 | 0 | NA | 0 | 0 | 0 | NA | 0 |
| | N° of transplants | 45 | NA | 0 | NA | NA | 107 | 0 | 0 | NA | 0 | 0 | 0 | 6 | 0 |
| PLACENTA/AMNIOTIC MEMBRANE | N. of tissue donations | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94 | 0 |
| | Tissue donation PMP | 0,0 | 0,0 | 0,0 | 0,4 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 27,6 | 0,0 |
| | N° of tissue retrieved | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 0 |
| | N° of tissues transplanted | 531 | 0 | 0 | 218 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16.950 | 0 |
| | N° of patients transplanted | 531 | 0 | 0 | NA | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NA | 0 |
| | N° of transplants | 531 | 0 | 0 | NA | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 0 |
| OTHER TISSUES | N. of tissue donations | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Tissue donation PMP | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| | N° of tissue retrieved | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 |
| | N° of tissues transplanted | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 |
| | N° of patients transplanted | 0 | 0 | 0 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | N° of transplants | 0 | 0 | 0 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 |

## PRELIMINARY DATA ON HPC CELLS - YEAR 2014

### MEMBER STATES OF THE EUROPEAN UNION

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

## PRELIMINARY ON HPC CELLS - YEAR 214

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

## PRELIMINARY DATA ON HPC CELLS - YEAR 2014

### LATINAMERICAN COUNTRIES

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

# Council of Europe Reference Documents 2015

# Position Paper on Transplantation and Physical Activity

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*on behalf of the European Committee on Organ Transplantation (CD-P-TO) , Council of Europe, Strasbourg (France)*

## INTRODUCTION

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

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

The solid organ transplant population is characterised by an increased risk of developing cardiovascular disease after receiving a transplant, and the analysis of available post-transplant data shows a high number of complications including an increased incidence of diabetes, weight gain possibly leading to obesity, and dyslipidaemia. It is now known that the key factors affecting weight gain in transplant recipients are the post-transplant treatment itself, which alters metabolic function, and the hunger induced by the improvement patients experience in their physical condition after the transplant. Quality of life is known to have a major influence on the success of a transplant, and is evaluated by various social indicators including returning to work or resuming studies, becoming a parent, participating in social activities in general, and social reintegration. Physical activity and exercise are meaningful indicators for social reintegration since they help organ transplant patients adjust to the changes in their lives brought about by a transplant, develop their body awareness and enhance their physical and mental condition.

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

## PRESENT SITUATION IN EUROPE

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

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

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

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

## OUR RECOMMENDATIONS

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

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

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

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

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

National Health Systems should recognise the importance of prescribing physical activity as an adjunct to immunosuppressive therapy for transplanted patients and provide appropriate funding.

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

## THE ITALIAN EXPERIENCE

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

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

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

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

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

## CLINICAL TRIAL

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

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

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

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

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

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

## CONCLUSION

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

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

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

The CD-P-TO (European Committee – partial agreement – on organ transplantation) recommends that all Council of Europe countries promote specific physical activity programs as a complementary treatment for transplanted patients and a means of improving quality of life, and encourages Governments to act on this suggestion to improve the general health of their national population.

## TABLE

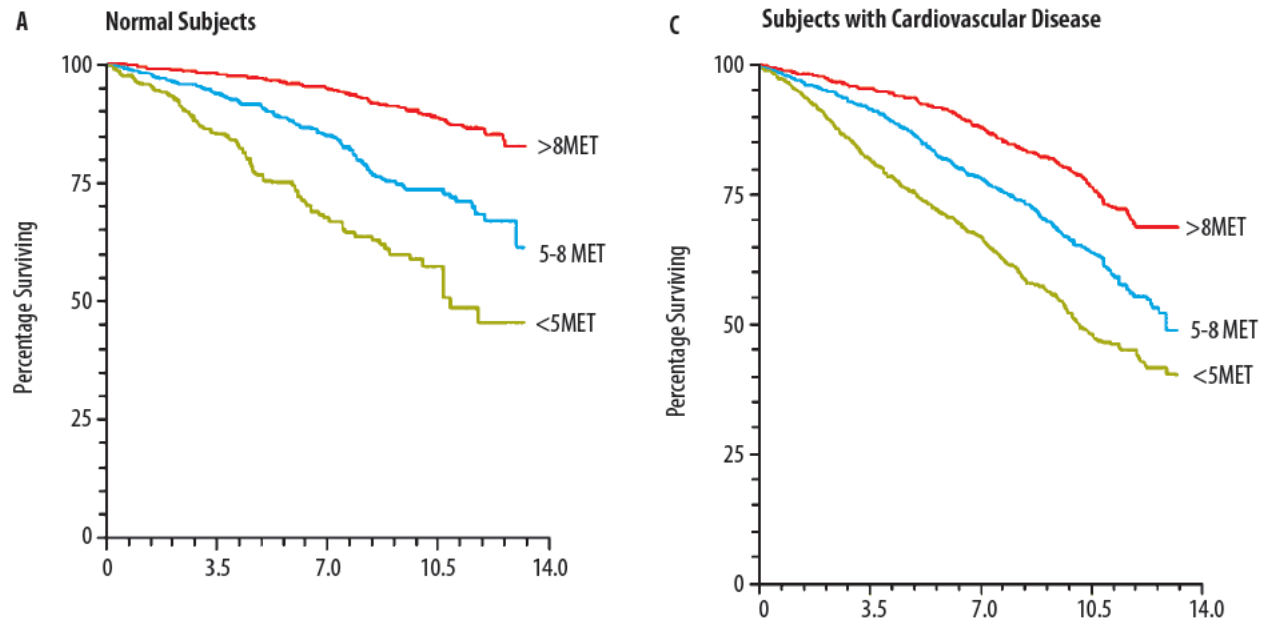


**Table 1:** *Myers et al., NEJM 2002, 346:793-801*

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# Long-term outcome of living kidney donation

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

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

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

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

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

In all cases, the CD-P-TO emphasises that free life-long monitoring should be offered to all living donors following kidney donation. Particular consideration should be given to donors travelling from overseas to donate, especially those from developing countries, as these individuals may have limited resources or access to health care in the longer term. In addition, the establishment of national or even supranational registries to monitor live donation and its consequences should be regarded as highly desirable [5].

To date, the risk of ESRD for living donors has been considered to be lower than, or no different to, that of the general population (180 vs 268 cases/$10^6$ person-years) since living donors are thoroughly screened and reportedly healthier than controls who have had no screening [6].

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

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

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

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

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

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

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

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

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

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

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

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

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