

NEWSLETTER TRANSPLANT

International figures
on donation and
transplantation
2023



EDQM
Volume 29
2024



INTERNATIONAL FIGURES ON ORGAN, TISSUE & HAEMATOPOIETIC PROGENITOR CELL DONATION & TRANSPLANTATION ACTIVITIES. PRODUCED BY THE EUROPEAN COMMITTEE (PARTIAL AGREEMENT) ON ORGAN TRANSPLANTATION (CD-P-TO) OF THE COUNCIL OF EUROPE. YEAR 2023.

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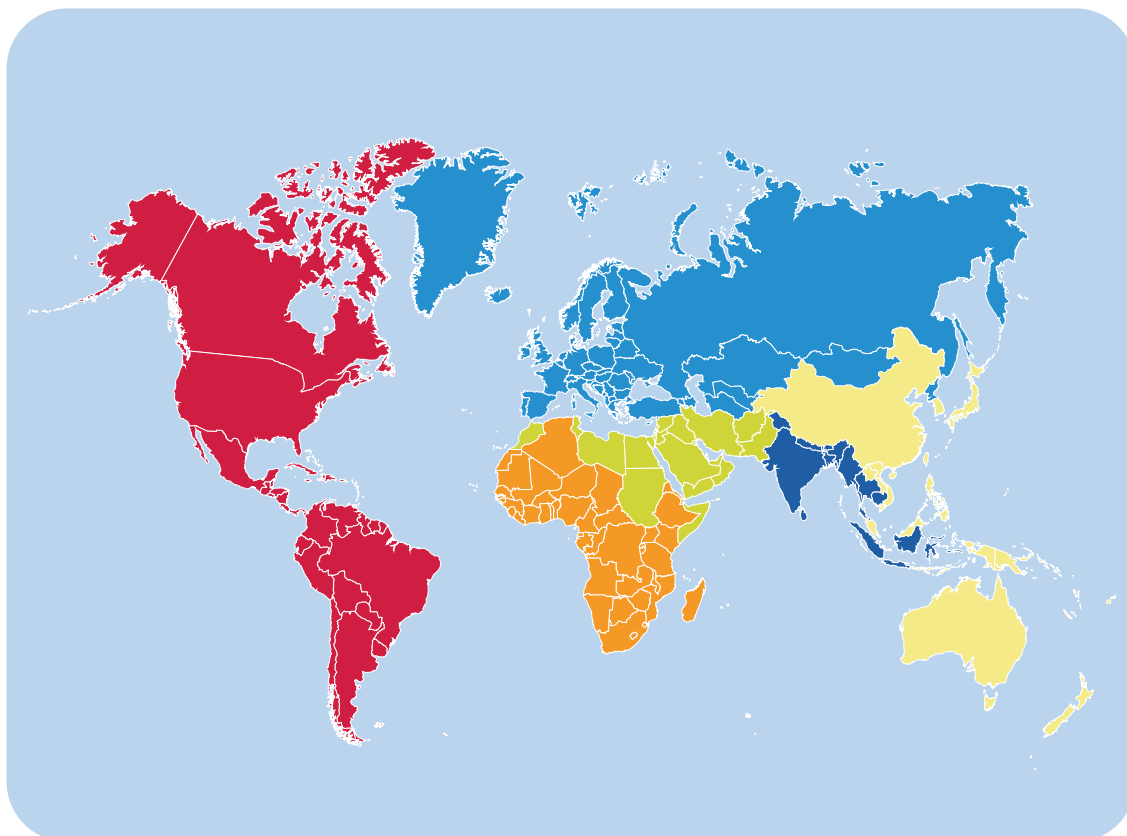
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NEWSLETTER TRANSPLANT 2024



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

ACTUAL DECEASED ORGAN DONOR

A deceased person from whom at least one organ was recovered for the purpose of transplantation.

DONOR AFTER THE NEUROLOGICAL DETERMINATION OF DEATH

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

DONOR AFTER THE CIRCULATORY DETERMINATION OF DEATH

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

Modified Maastricht Categories (Paris 2012) of DCD:

II/ Witnessed cardiac arrest (uncontrolled): Sudden unexpected irreversible cardiac arrest, with unsuccessful attempt at resuscitation by a medical team.

III/ Withdrawal of life-sustaining therapy (controlled DCD): Planned withdrawal of life-sustaining therapy with an expected cardiac arrest.

IV/ Cardiac arrest while brain dead (uncontrolled or controlled): Sudden or planned cardiac arrest after brain death diagnosis, but before organ recovery.

V/ Medical assistance in dying: Medically assisted cardiac arrest

UTILISED DECEASED ORGAN DONOR

An actual donor from whom at least one organ was transplanted.

ORGAN TRANSPLANTS

The transfer (engraftment) of human organs from a donor to a recipient with the aim of restoring function(s) in the body.

TOTAL TRANSPLANTS (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: The donor is genetically and/or emotionally related to the recipient.

A1/ genetically related: A genetic relation exists between donor and recipient (e.g. brother/sister, parent/offspring). Therefore a certain immunological compatibility exists too.

A2/ emotionally related: The donor is a genetically unrelated family member (e.g. spouse) of the recipient or a friend (to be considered as a family member).

B – Unrelated: The donor has no genetic or emotional relationship with the recipient. The relation between donor and recipient must be outlined further by a sub-specification. Immunological compatibility exists only by chance.

B1/ paired exchange or cross-over: By a controlled programme, unrelated donor and recipient pairs exchange grafts beyond any emotional or genetic relation, with the aim of overcoming immunological restrictions.

B2/ non-directed altruistic or anonymous: By a controlled programme, the donor can provide a graft to society which allocates this to a previously unknown recipient by defined rules.

B3/ directed altruistic: By a controlled programme, the donor provides a graft to a recipient of the donor's choice.

DOMINO DONOR

Patient who undergoes organ transplantation from a deceased donor and whose organ is suitable for transplant to another transplant candidate.

DOMINO TRANSPLANT

A procedure in which an organ is removed from one transplant candidate and immediately transplanted into a second patient, with the first patient receiving a new organ from a deceased donor.

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.

PAEDIATRIC

Includes only paediatric activity (patients aged < 18 years).

WAITING LIST

Example: At 1/1/2023 there were 200 patients active on the waiting list (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 received an organ transplant (number recorded in a different questionnaire), 50 patients remained 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 2023	100
Total number of patients ever active on the WL during 2023	300
Patients awaiting for a transplant (only active candidates) on 31/12/2023	50
Patients who died while on the WL during 2023	25

FAMILY REFUSALS

Numbers of interviews to pose the option of organ donation: number of interviews to present families with the option of donating the organs of the deceased person (brain death or circulatory death).

Number of family refusals: number of negative responses to donate after holding interviews with the families.

Letter from the Editor



Letter from the Editor

Beatriz Domínguez-Gil, MD, PhD
Director Organización Nacional de Trasplantes, Spain
Editor of Newsletter Transplant

Dear friends,

It is with great pleasure that I introduce a new issue of the *Newsletter Transplant*, one of the most valuable activities of the European Committee on Organ Transplantation of the Council of Europe (CD-P-TO), produced in conjunction with the Spanish Organización Nacional de Trasplantes (ONT). Since 1996, this publication has allowed the CD-P-TO to share information on donation and transplantation activities, not only in member states of the Council of Europe, but also in a progressively increasing number of countries throughout the world. The *Newsletter Transplant* is also a tool that allows the CD-P-TO to inform on its activities.

Without doubt, monitoring of practices in the donation and transplantation of substances of human origin (SoHO) across countries is essential for the sake of transparency and international benchmarking. This is the main aim of the *Newsletter Transplant* and the reason it has become an international reference. In this new issue, the *Newsletter Transplant* provides data from 89 countries worldwide for the year 2023. An important conclusion from the data collected is that organ transplantation activities increased globally by 9% over 2022, an increase driven by an expansion of both deceased and living organ donation. Donation after the circulatory determination of death gained an extraordinary importance in the past year, since one out of four deceased donors in the world had been declared dead by circulatory criteria. However, organ transplant activities remained highly variable across countries, meaning that access to organ transplantation remains neither universal, nor equitable. Although waiting list data do not accurately represent the need for organs for clinical use, the number of patients waiting for a transplant and the number of deaths on the waiting list are a constant reminder of the importance of pursuing our work to expand transplant therapies. All this information, and more, is presented in this issue of the *Newsletter Transplant*. Let me take this opportunity to remind you that the

underlying data collection is also hosted by the *Global Observatory on Organ Donation and Transplantation* (<https://www.transplant-observatory.org>), developed and maintained by the ONT as collaborating center of the World Health Organization (WHO). The Observatory allows users to download the data, display figures and perform different types of analyses online.

As in previous editions, the *Newsletter Transplant* is not limited to presenting data in the organ field, but also includes data collected via the Eurocet platform by the Centro Nazionale Trapianti (CNT) in Italy on the donation, procurement, processing, distribution and clinical use of tissues and cells from a significant number of countries. This type of data collection should be gaining more prominence, something that I underscore following the official adoption of the Regulation on Substances of Human Origin (SoHO) by the European Union (EU) Parliament and the Council and its publication in May 2024 (<https://data.consilium.europa.eu/doc/document/PE-8-2024-INIT/en/pdf>). This Regulation will determine the future of activities in the SoHO field not only in EU Member States, but also in neighbouring countries. It is important to highlight that the Regulation recognises the Council of Europe guides on the quality and safety of blood, and tissues and cells, as technical references, hence acknowledging the value of this work performed under the auspices of the CD-P-TO.

Through a number of initiatives, programmes and legal instruments, the CD-P-TO has indeed contributed to the development and implementation of quality and safety standards in the field of donation and transplantation. It has also facilitated the exchange of knowledge between countries and institutions, secured fundamental rights and ensured respect for the human body. In addition, over the years, the CD-P-TO has identified topics of interest and elaborated a set of resolutions and recommendations that have been subsequently adopted by the Committee of Ministers of the Council of Europe. These documents have profoundly impacted national legislations, ethical

frameworks, strategic plans on organisational aspects of donation and transplantation, and professional practices, supporting countries in addressing the many challenges posed by transplantation in a uniform manner. This is an ideal opportunity to remind you all that the fruit of this intense work is available on the website of the European Directorate for the Quality of Medicines & Healthcare (EDQM) of the Council of Europe: <https://www.edqm.eu/en/organs-tissues-and-cells>.

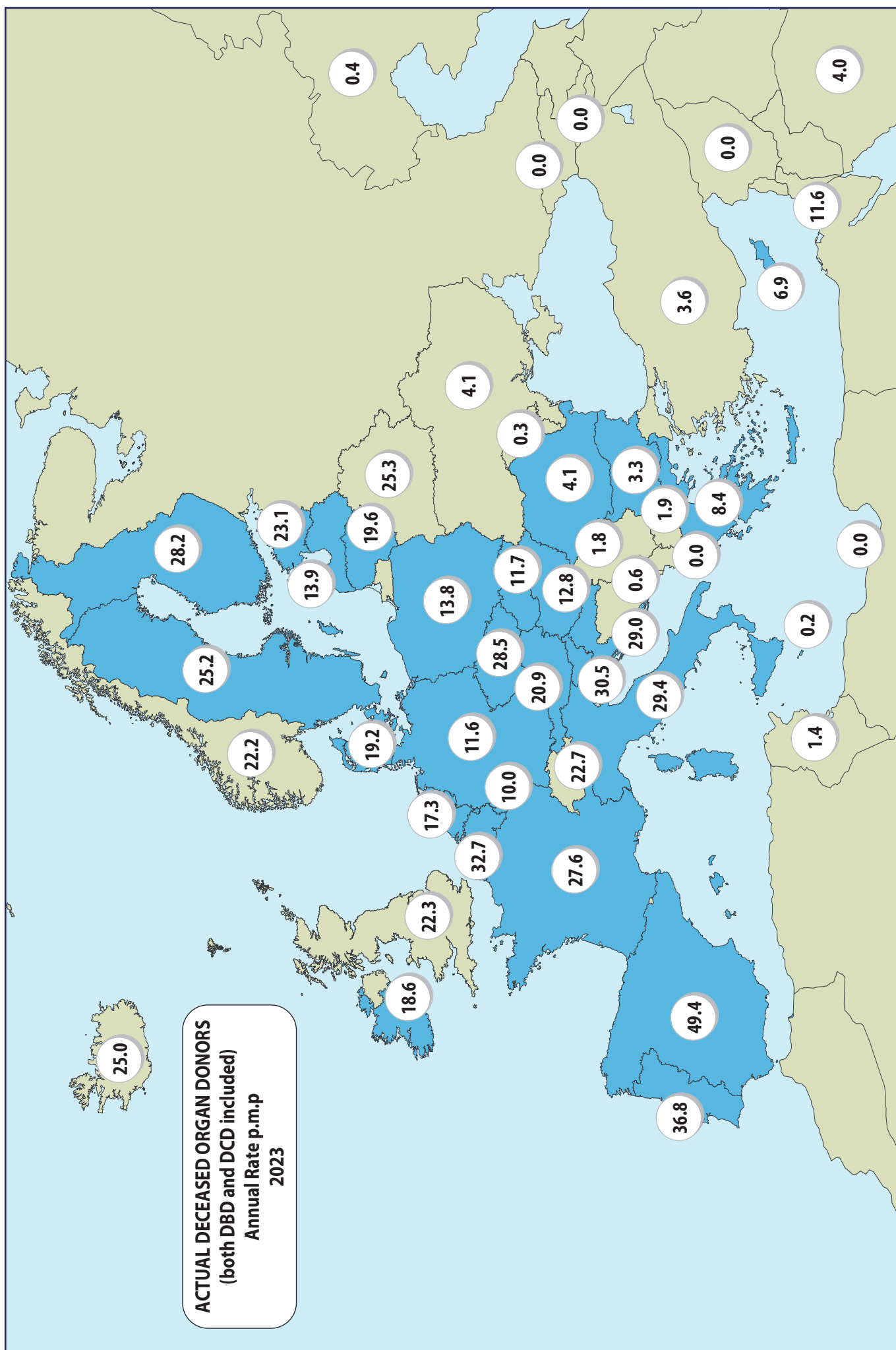
This edition of the *Newsletter Transplant* presents two important documents that emerge from the need to address current challenges in the field on a global scale and that lay out a roadmap for transplantation for the near future. Firstly, we present the Santander Statement, the main result of the Global Summit entitled *Towards Global Convergence in Transplantation: Sufficiency, Transparency and Oversight* that was convened by the ONT under the 2023 Spanish Presidency of the Council of the EU and that took place in the beautiful city of Santander in the north of Spain in November 2023. The event was co-organised by the EDQM, the European Society for Organ Transplantation (ESOT), and The Transplantation Society (TTS), was co-sponsored by WHO and was supported by the International Society of Nephrology (ISN). The Santander Statement, endorsed by the CD-P-TO, provides high-level recommendations aimed at improving patient care, making progress towards sufficiency in transplantation, ensuring transparency

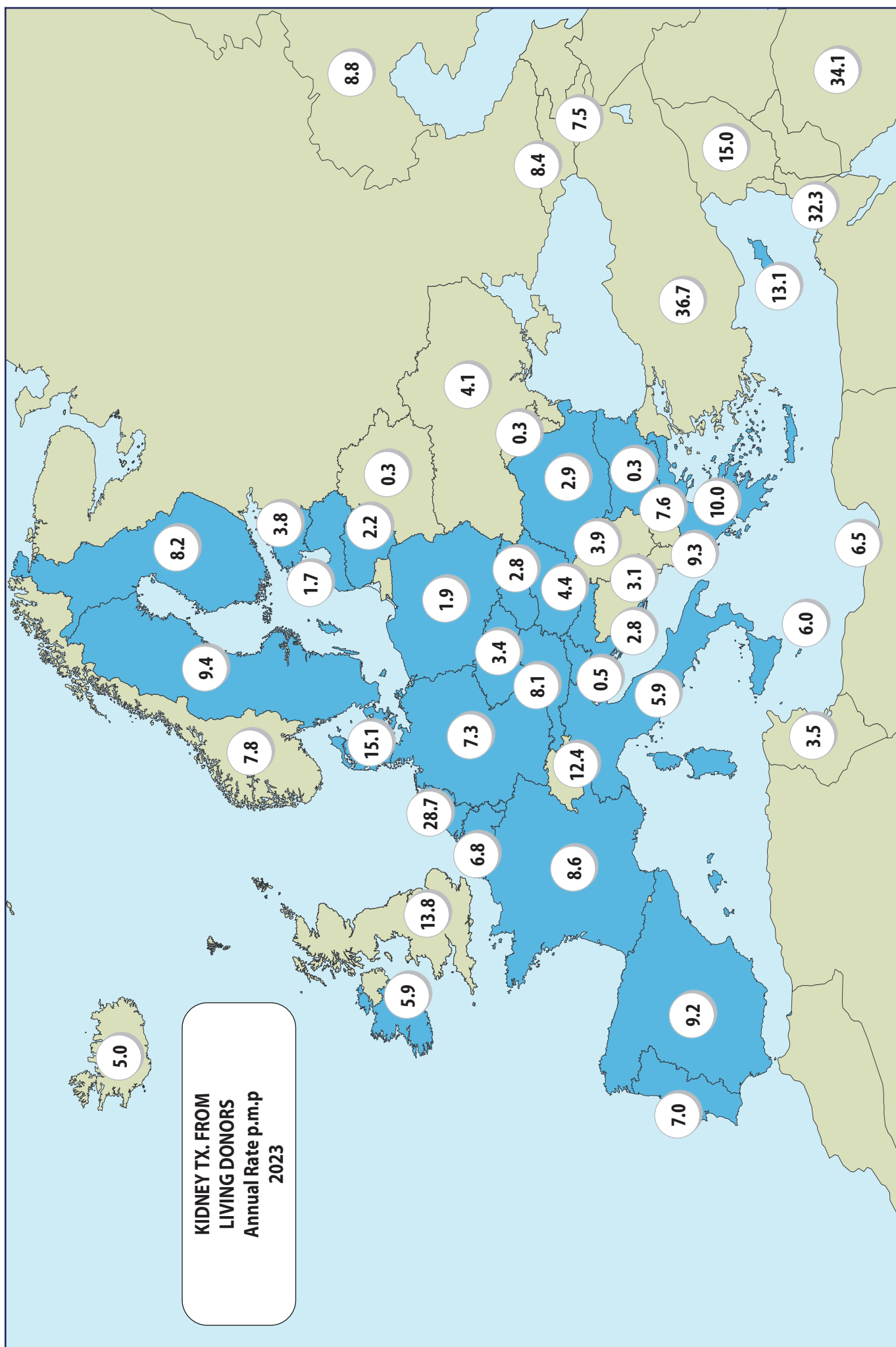
and oversight of practices, strengthening the prevention of human trafficking for the removal of SoHO and trafficking in SoHO, and fostering responsible innovation in the clinical use of SoHO. Secondly, we present World Health Assembly (WHA) Resolution 77.4 on increasing availability, ethical access, and oversight of transplantation of human cells, tissues, and organs, approved on 29 May 2024. The drafting of the resolution was led by Spain, who used the background provided by the Global Summit and the Santander Statement. The draft resolution was later subject to consultation with Member States and formally adopted during the 77th WHA. Resolution 77.4 urges Member States to take actions to face pressing challenges in the field and requests, among others, the WHO Secretariat to support countries through the development of a Global Strategy in Transplantation, expected to be presented at the 79th WHA in May 2026.

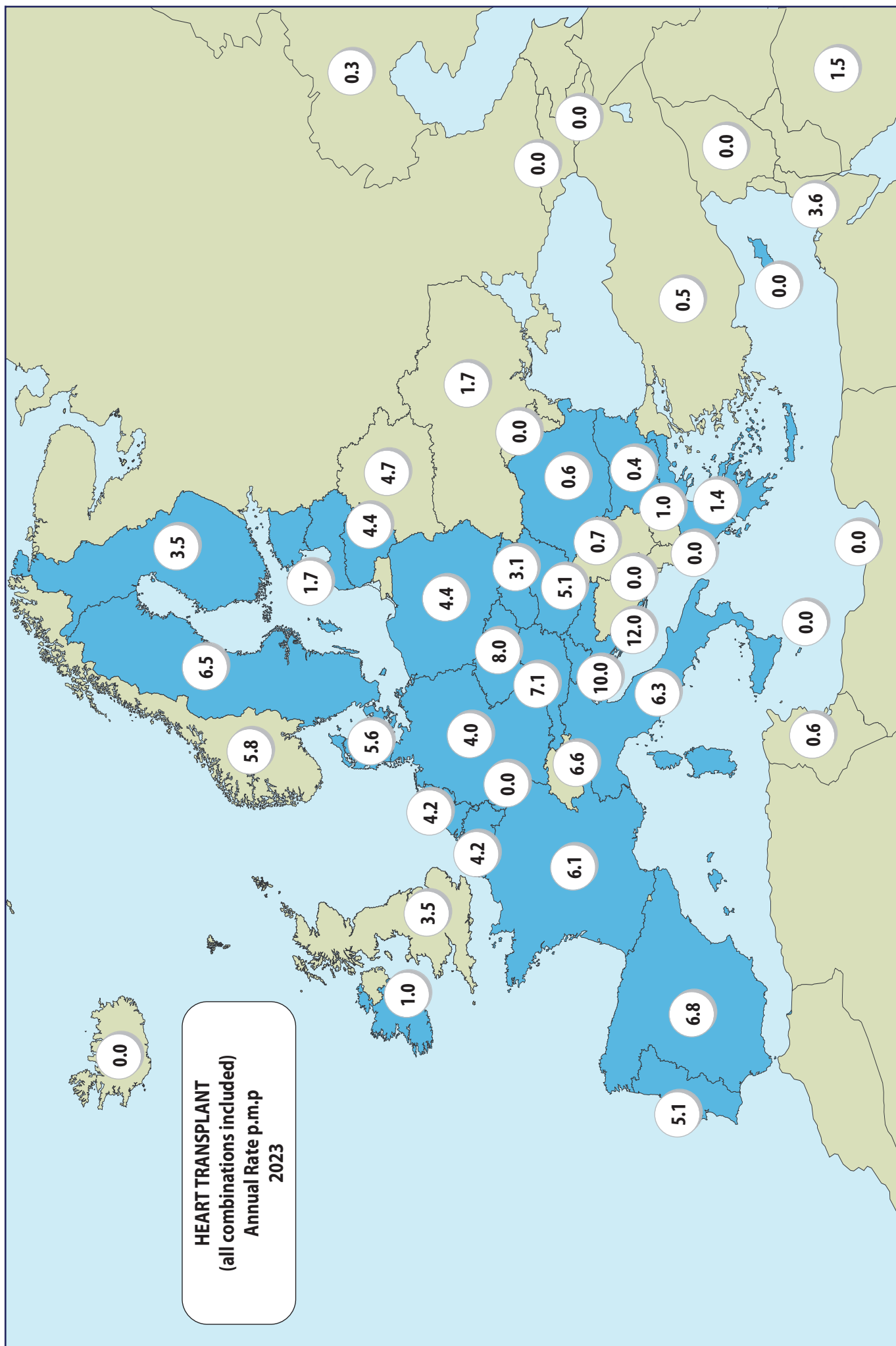
I would like to close this letter by thanking all those who make the *Newsletter Transplant* possible: the members of the CD-P-TO, the national focal points providing official data on a regular basis and the EDQM Secretariat. Let me also thank the members of the ONT devoted to this work, whose continuous commitment and enthusiasm are essential for an exercise that every year showcases the outcomes of the efforts undertaken in the fascinating field of transplantation.

International Figures on Organ Donation and Transplantation Activity. Year 2023

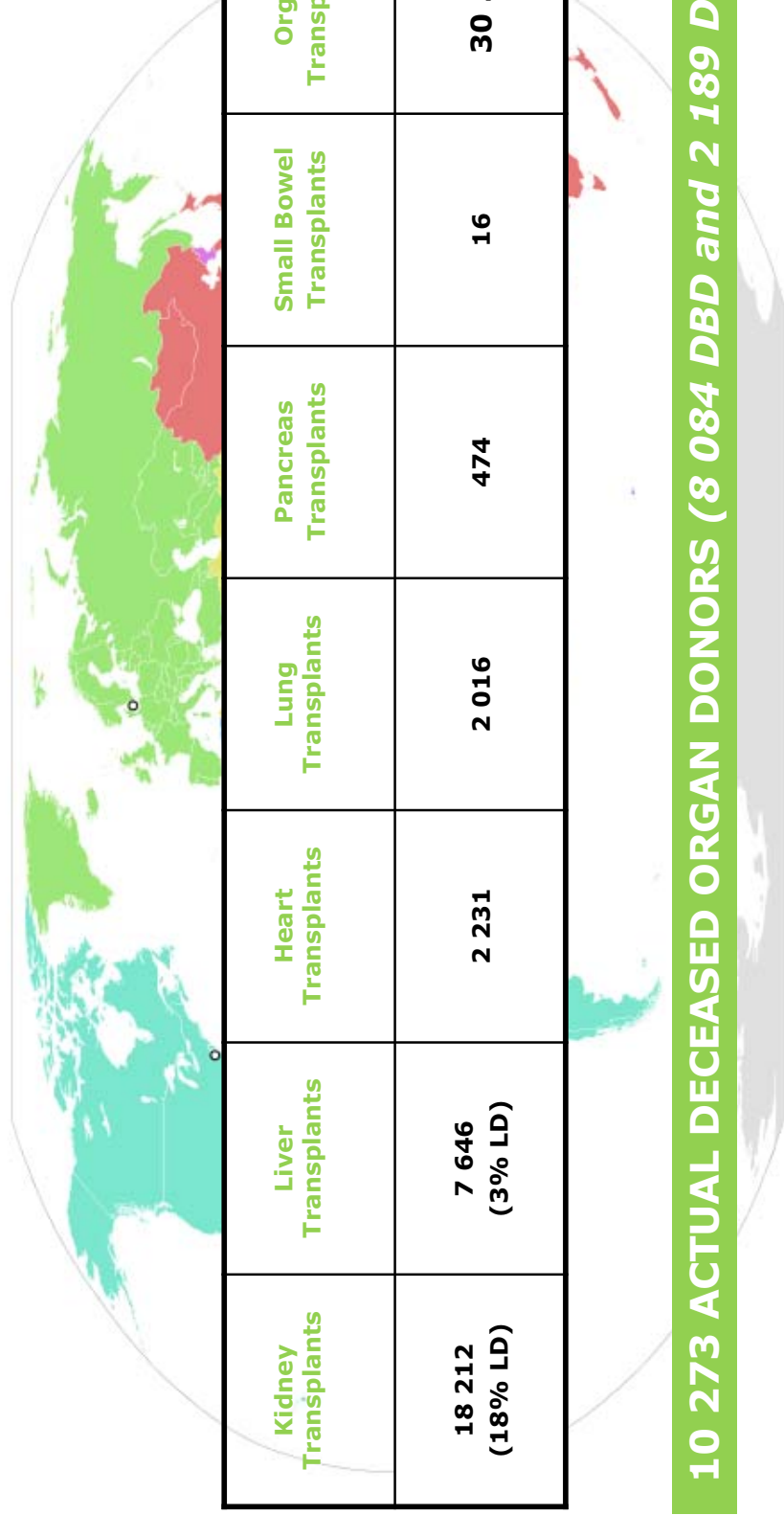








EUROPEAN UNION DATA



10 273 ACTUAL DECEASED ORGAN DONORS (8 084 DBD and 2 189 DCD)

2023 data

N= 27 COUNTRIES (448.9 million inhabitants)

Population (million inhabitants): UNFPA		
	Number	PMP
Actual deceased organ donors (both DBD and DCD included)	—	—
Actual donors after circulatory death (DCD)	—	—
Total Tx (all combinations included)	2078	53.6
Tx from living donors	511	13.2
Total Tx (all combinations included)	669	17.2
Total Tx (all combinations included)	184	4.7
Total Tx (all combinations included)	450	11.6
Total Tx (all combinations included)	66	1.7
Total Tx (all combinations included)	7	0.2
Total number of patients transplanted	3426	88.3
KIDNEY		
LIVER		
HEART		
LUNG		
PANCREAS		
SMALL BOWEL		
RECIPIENTS		

Population (million inhabitants): UNFPA		
	Number	PMP
Actual deceased organ donors (both DBD and DCD included)	33	7.7
Actual donors after circulatory death (DCD)	0	0.0
Total Tx (all combinations included)	140	32.6
Tx from living donors	80	18.6
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	1	0.2
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	2	0.5
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	142	33.0
KIDNEY		
LIVER		
HEART		
LUNG		
PANCREAS		
SMALL BOWEL		
RECIPIENTS		

Population (million inhabitants): UNFPA		
	Number	PMP
Actual deceased organ donors (both DBD and DCD included)	0	0.0
Actual donors after circulatory death (DCD)	0	0.0
Total Tx (all combinations included)	8	0.1
Tx from living donors	8	0.1
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	8	0.1
KIDNEY		
LIVER		
HEART		
LUNG		
PANCREAS		
SMALL BOWEL		
RECIPIENTS		

Population (million inhabitants): UNFPA		
	Number	PMP
Actual deceased organ donors (both DBD and DCD included)	16336	48.0
Actual donors after circulatory death (DCD)	5895	17.3
Total Tx (all combinations included)	28144	82.8
Tx from living donors	6290	18.5
Total Tx (all combinations included)	314	0.9
Total Tx (all combinations included)	10660	31.4
Total Tx (all combinations included)	4599	13.5
Total Tx (all combinations included)	3080	9.1
Total Tx (all combinations included)	914	2.7
Total Tx (all combinations included)	95	0.3
Total number of patients transplanted	44917	132.1
KIDNEY		
LIVER		
HEART		
LUNG		
PANCREAS		
SMALL BOWEL		
RECIPIENTS		

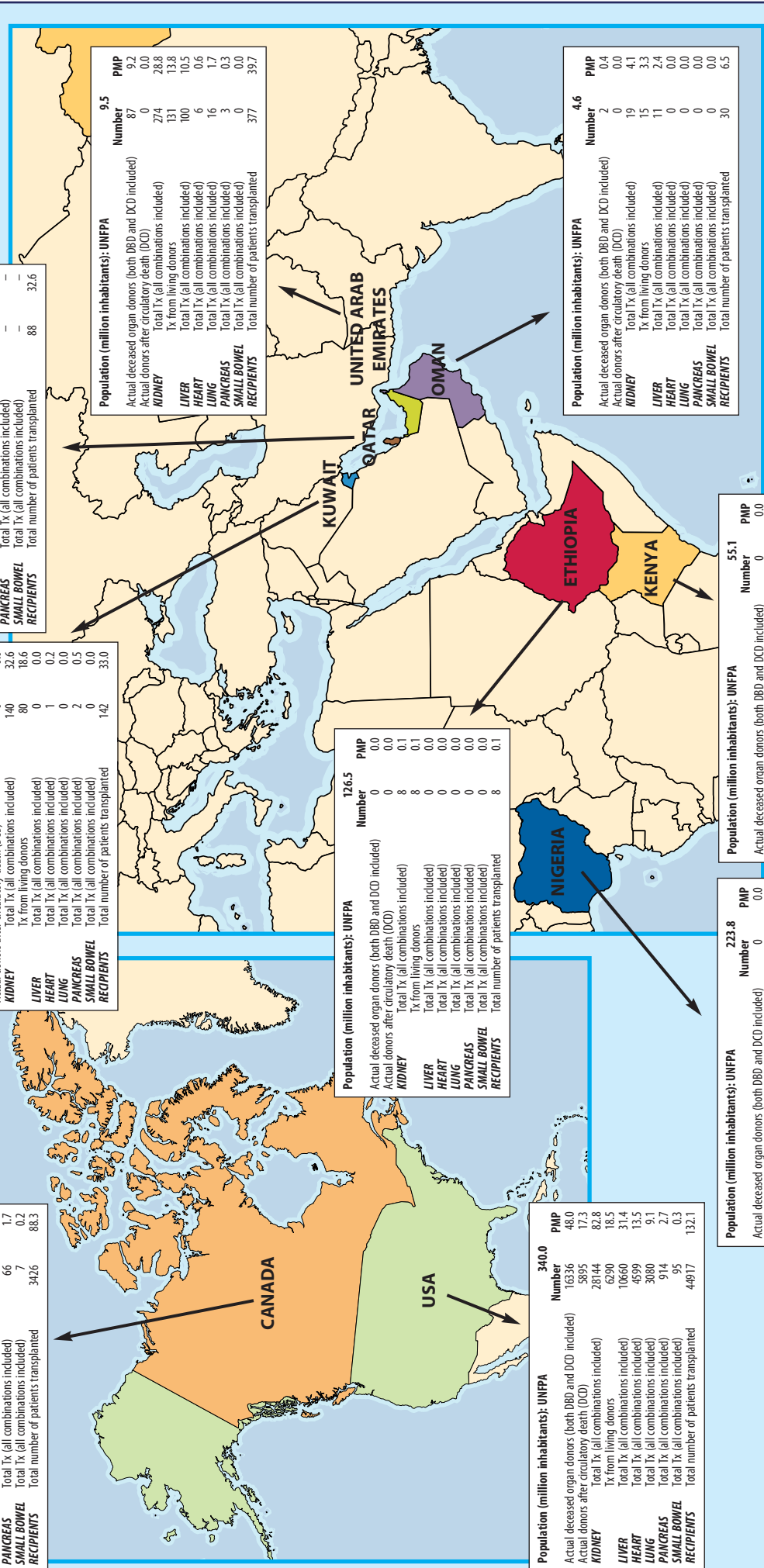
Population (million inhabitants): UNFPA		
	Number	PMP
Actual deceased organ donors (both DBD and DCD included)	0	0.0
Actual donors after circulatory death (DCD)	0	0.0
Total Tx (all combinations included)	253	1.1
Tx from living donors	253	1.1
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	253	1.1
KIDNEY		
LIVER		
HEART		
LUNG		
PANCREAS		
SMALL BOWEL		
RECIPIENTS		

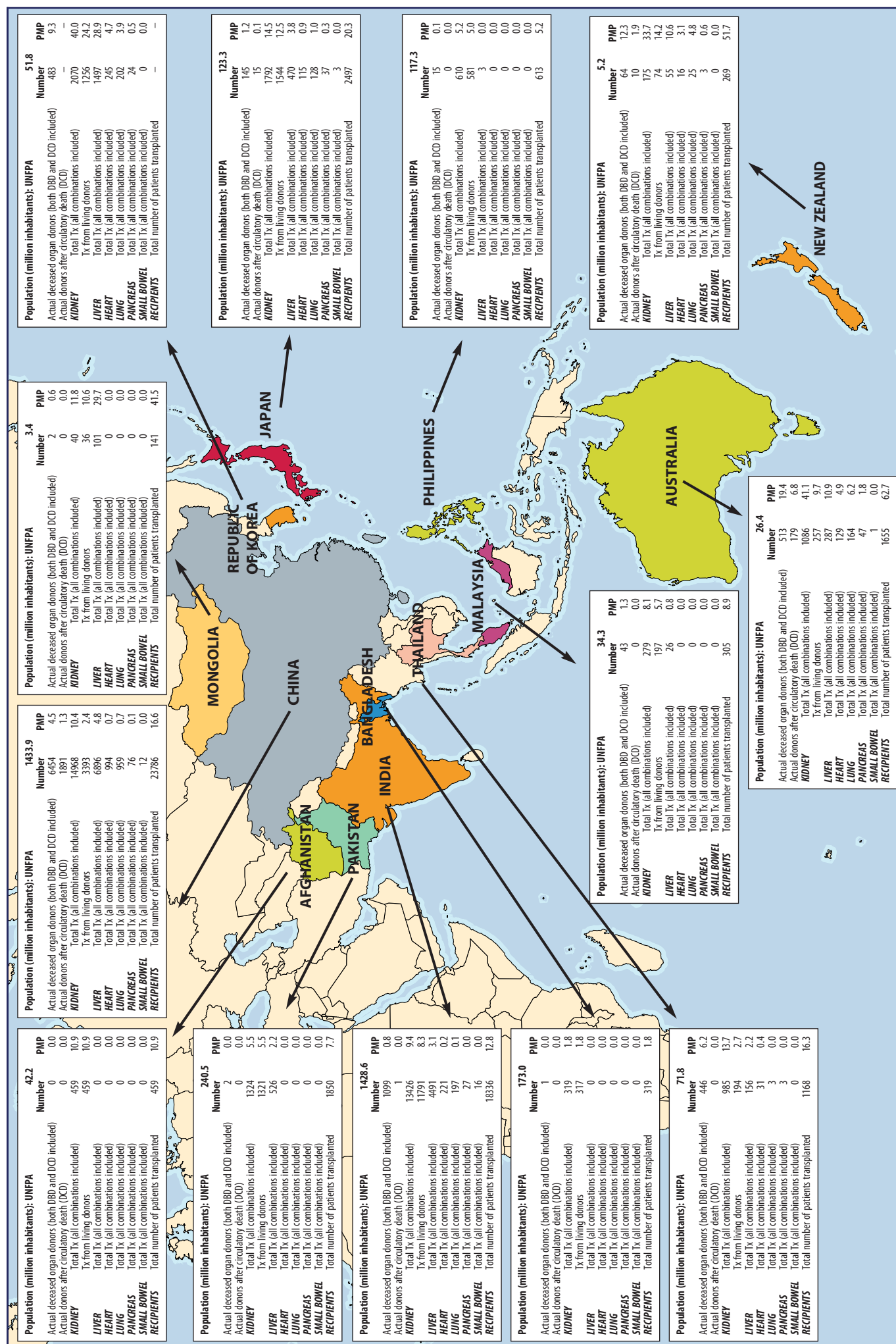
Population (million inhabitants): UNFPA		
	Number	PMP
Actual deceased organ donors (both DBD and DCD included)	0	0.0
Actual donors after circulatory death (DCD)	0	0.0
Total Tx (all combinations included)	53	1.0
Tx from living donors	53	1.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	53	1.0
KIDNEY		
LIVER		
HEART		
LUNG		
PANCREAS		
SMALL BOWEL		
RECIPIENTS		

Population (million inhabitants): UNFPA		
	Number	PMP
Actual deceased organ donors (both DBD and DCD included)	20	7.4
Actual donors after circulatory death (DCD)	0	0.0
Total Tx (all combinations included)	74	27.4
Tx from living donors	48	17.8
Total Tx (all combinations included)	11	4.1
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	3	1.1
Total Tx (all combinations included)	—	—
Total number of patients transplanted	88	32.6
KIDNEY		
LIVER		
HEART		
LUNG		
PANCREAS		
SMALL BOWEL		
RECIPIENTS		

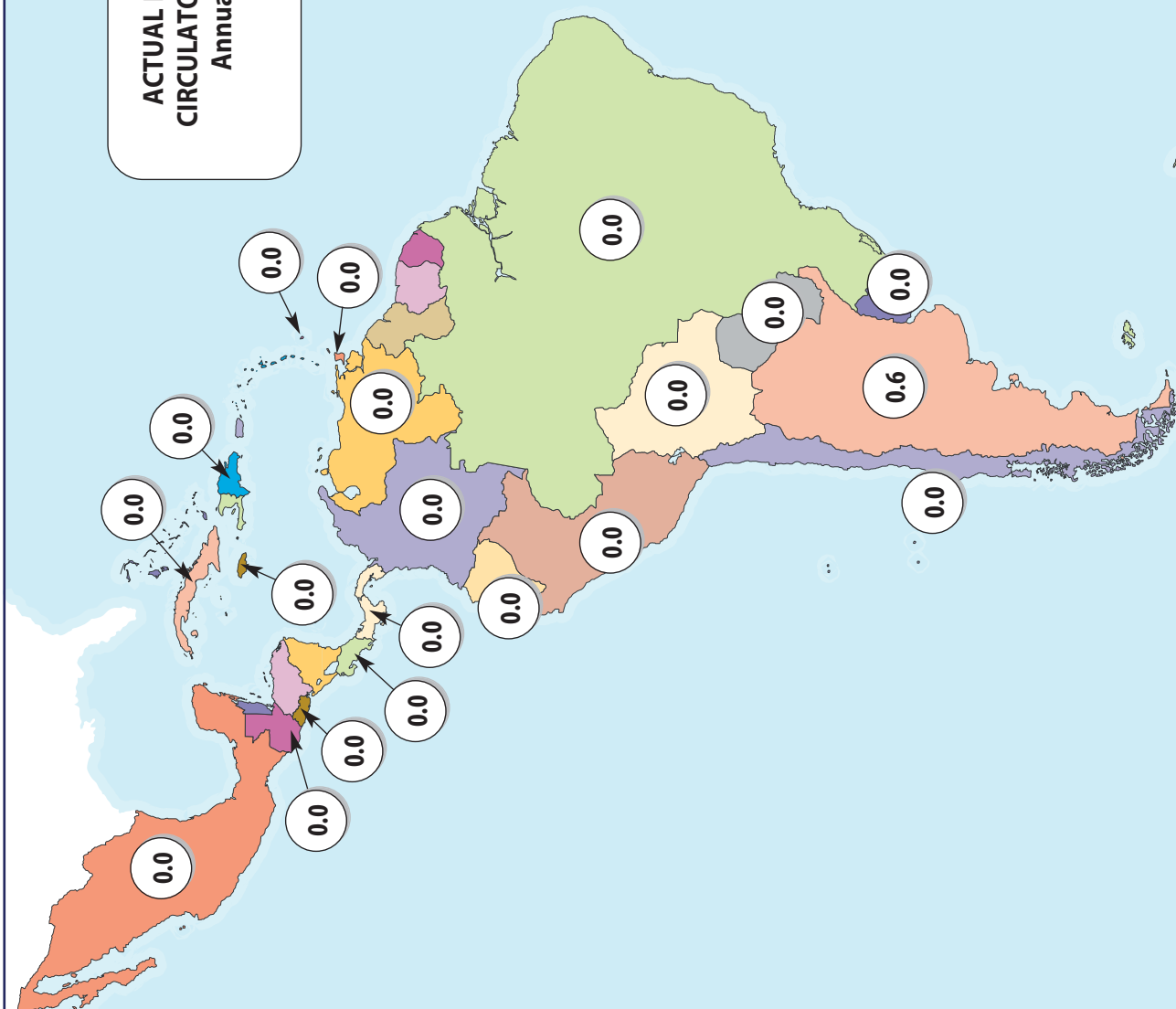
Population (million inhabitants): UNFPA		
	Number	PMP
Actual deceased organ donors (both DBD and DCD included)	87	9.2
Actual donors after circulatory death (DCD)	0	0.0
Total Tx (all combinations included)	274	28.8
Tx from living donors	131	13.8
Total Tx (all combinations included)	100	10.5
Total Tx (all combinations included)	6	0.6
Total Tx (all combinations included)	16	1.7
Total Tx (all combinations included)	3	0.3
Total Tx (all combinations included)	377	39.7
KIDNEY		
LIVER		
HEART		
LUNG		
PANCREAS		
SMALL BOWEL		
RECIPIENTS		

Population (million inhabitants): UNFPA		
	Number	PMP
Actual deceased organ donors (both DBD and DCD included)	2	0.4
Actual donors after circulatory death (DCD)	0	0.0
Total Tx (all combinations included)	19	4.1
Tx from living donors	15	3.3
Total Tx (all combinations included)	11	2.4
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	0	0.0
Total Tx (all combinations included)	30	6.5
KIDNEY		
LIVER		
HEART		
LUNG		
PANCREAS		
SMALL BOWEL		
RECIPIENTS		

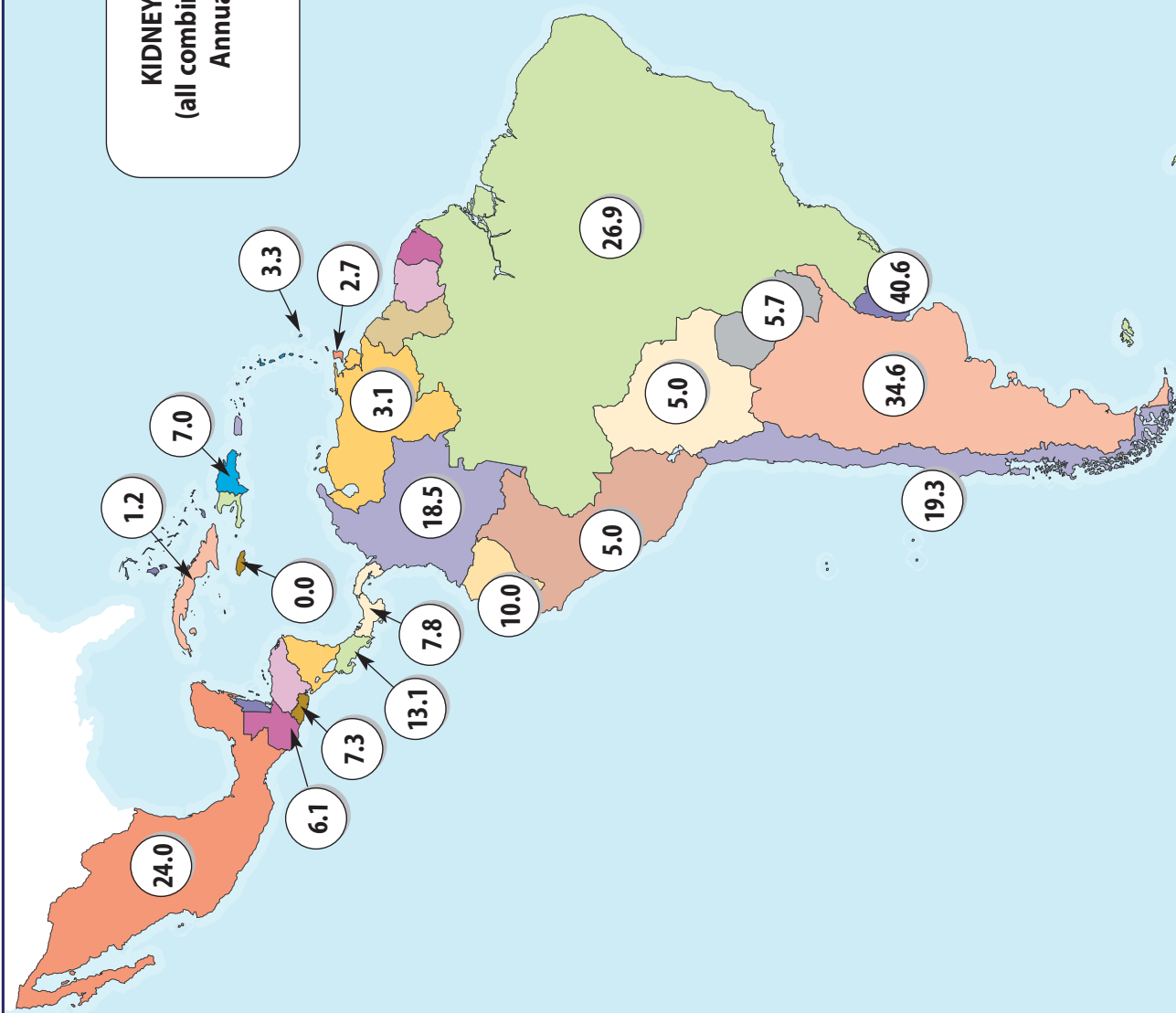




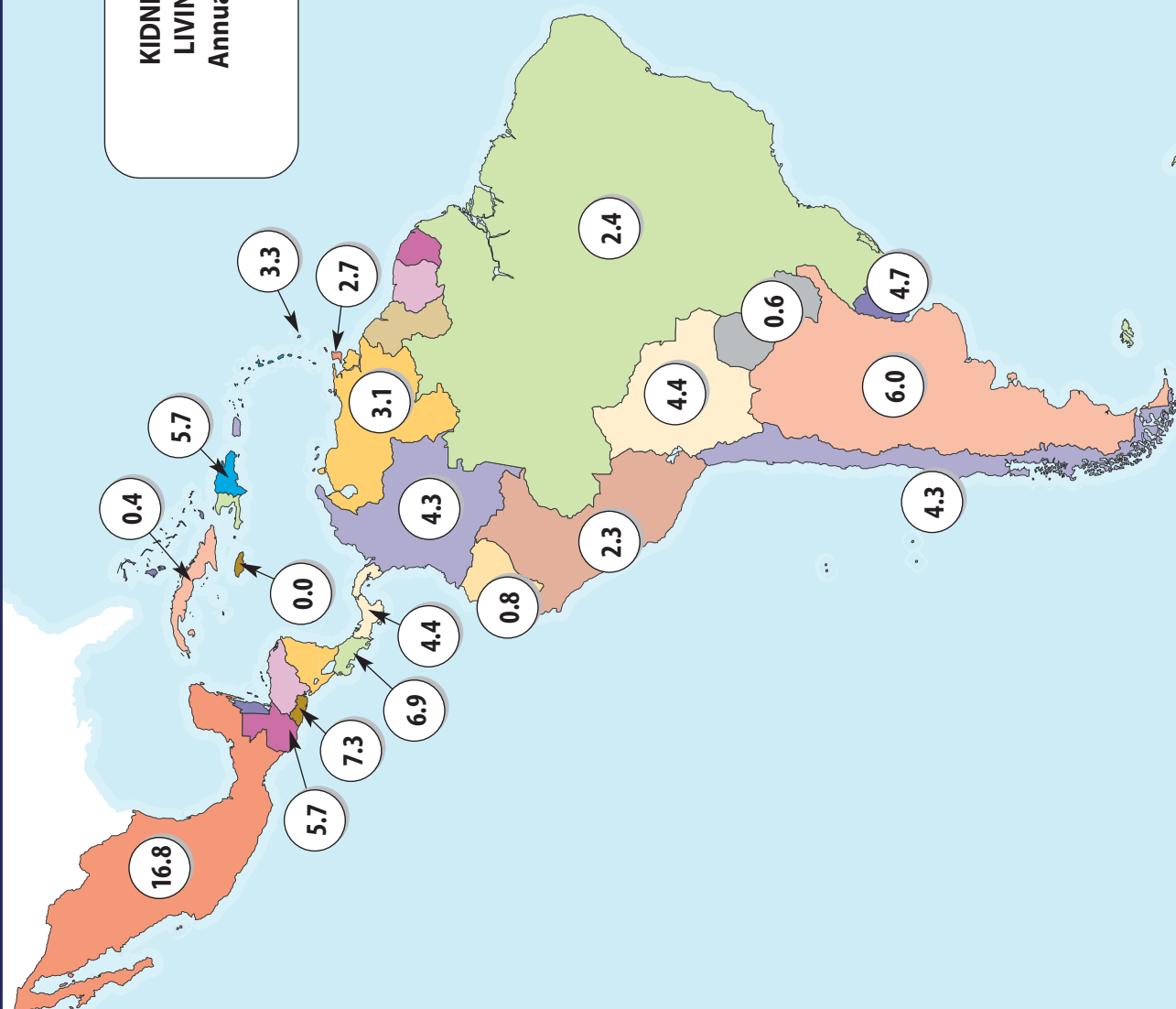
ACTUAL DONORS AFTER
CIRCULATORY DEATH (DCD)
Annual Rate p.m.p
2023



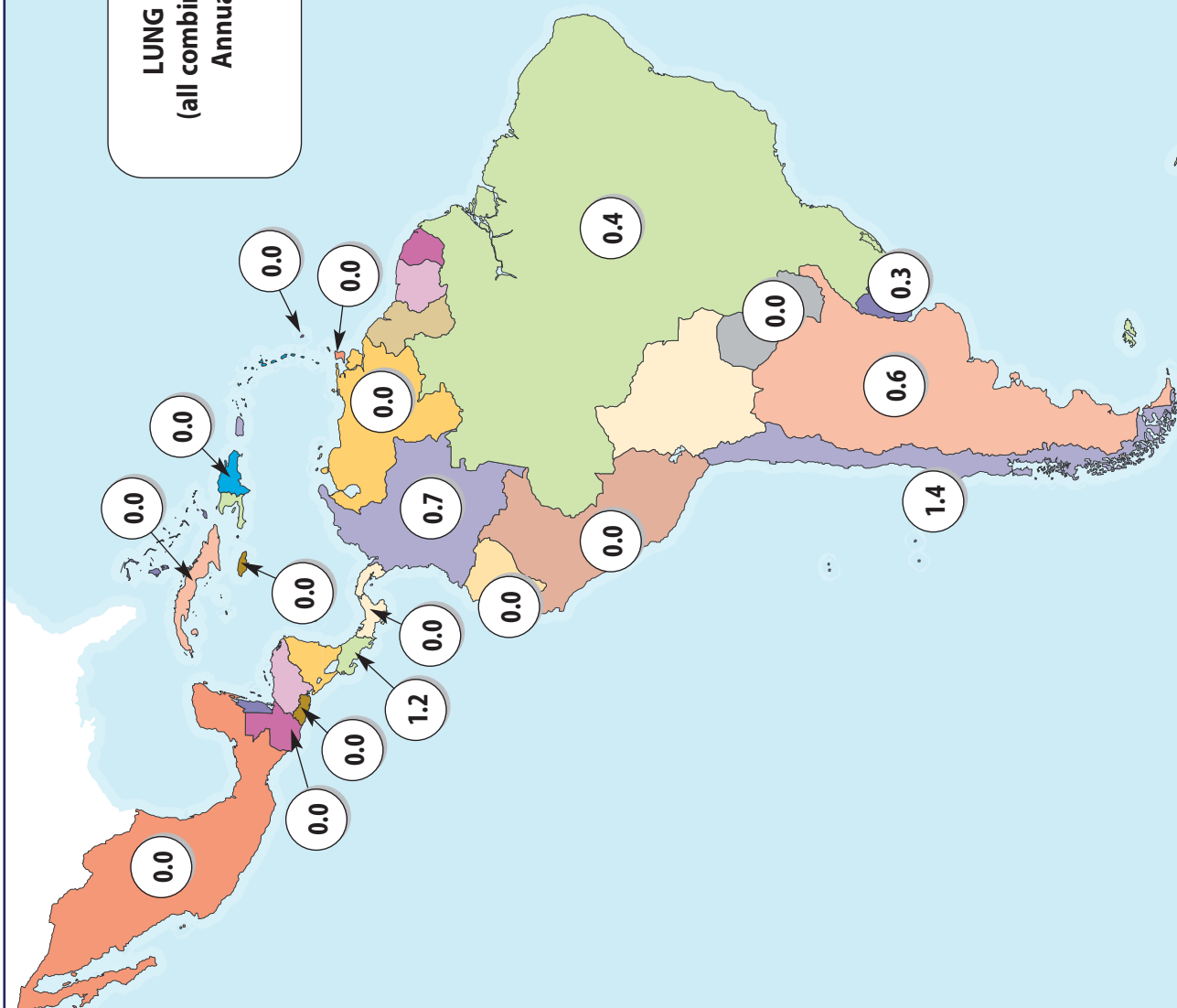
KIDNEY TRANSPLANT
(all combinations included)
Annual Rate p.m.p
2023



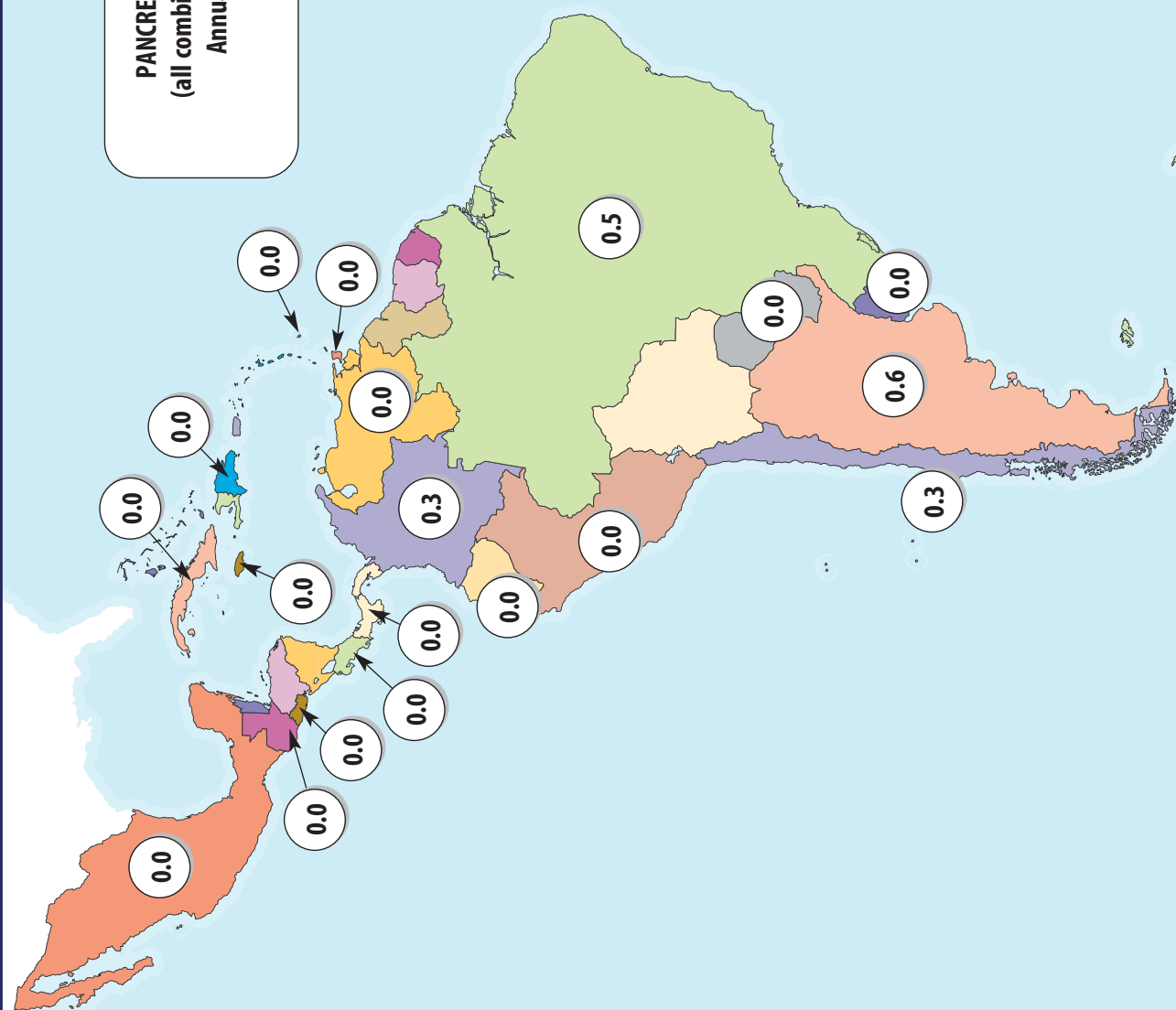
**KIDNEY TX. FROM
LIVING DONORS
Annual Rate p.m.p
2023**



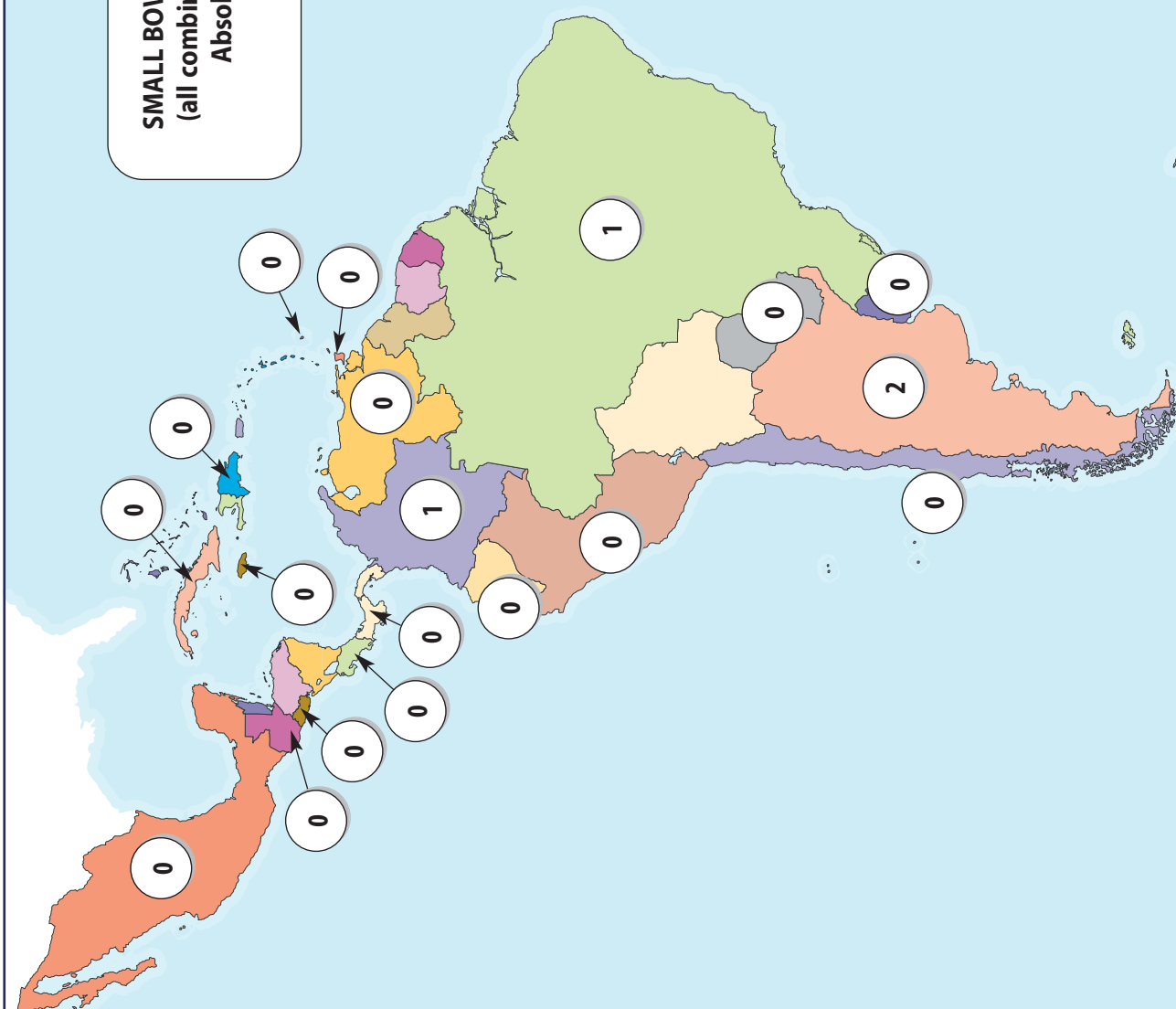
LUNG TRANSPLANT
(all combinations included)
Annual Rate p.m.p
2023



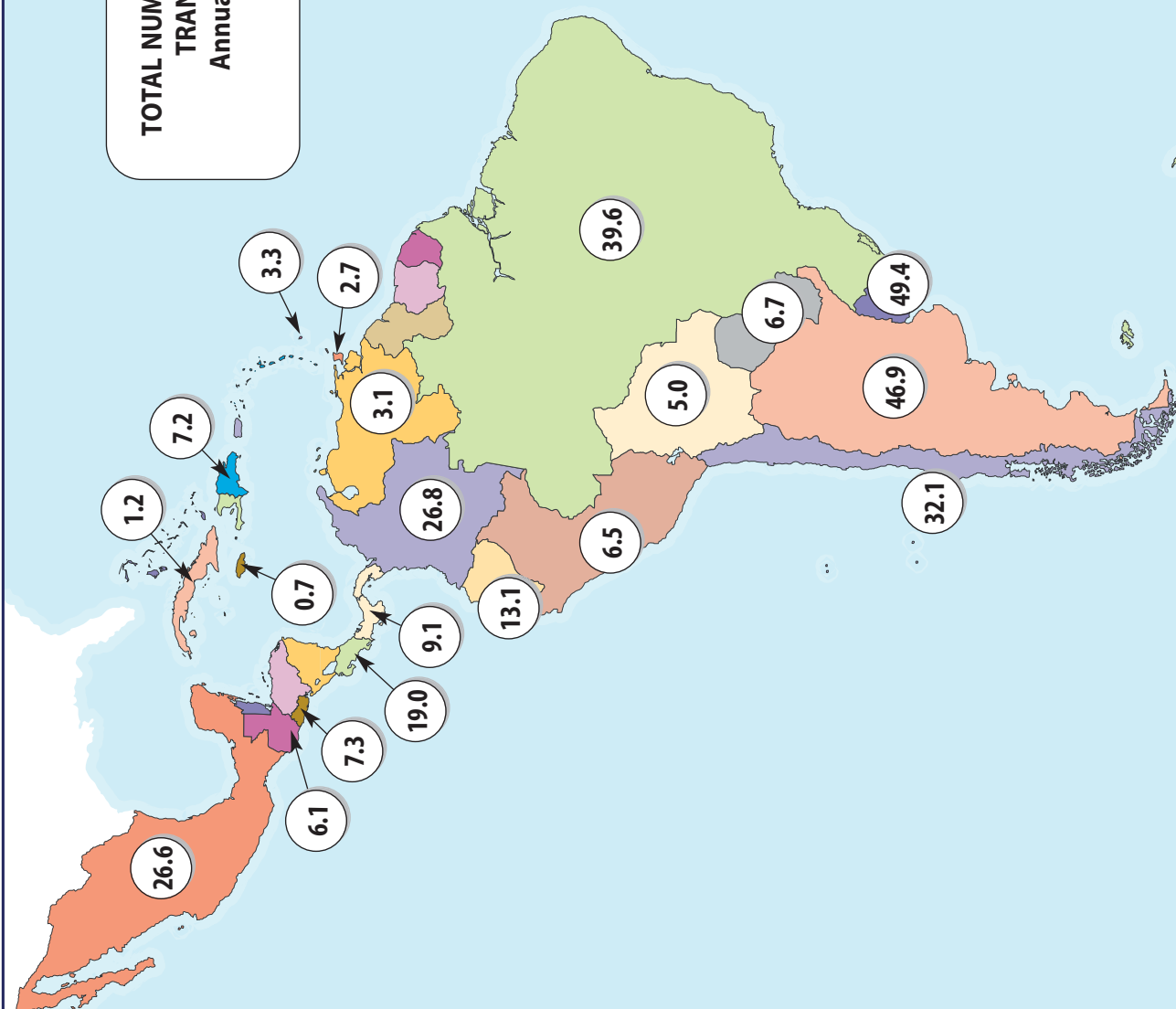
PANCREAS TRANSPLANT
(all combinations included)
Annual Rate p.m.p
2023



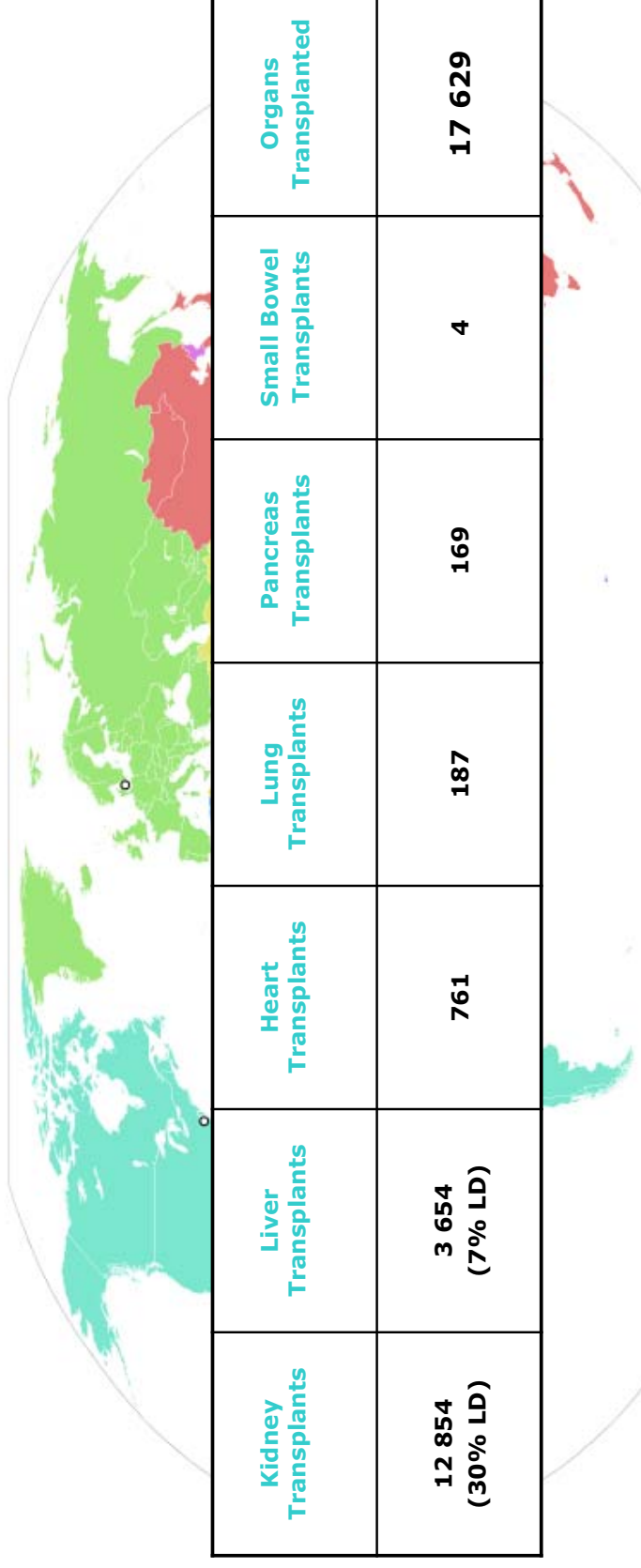
SMALL BOWEL TRANSPLANT
(all combinations included)
Absolute number
2023



**TOTAL NUMBER OF PATIENTS
TRANSPLANTED
Annual Rate p.m.p
2023**



LATIN AMERICAN COUNTRIES



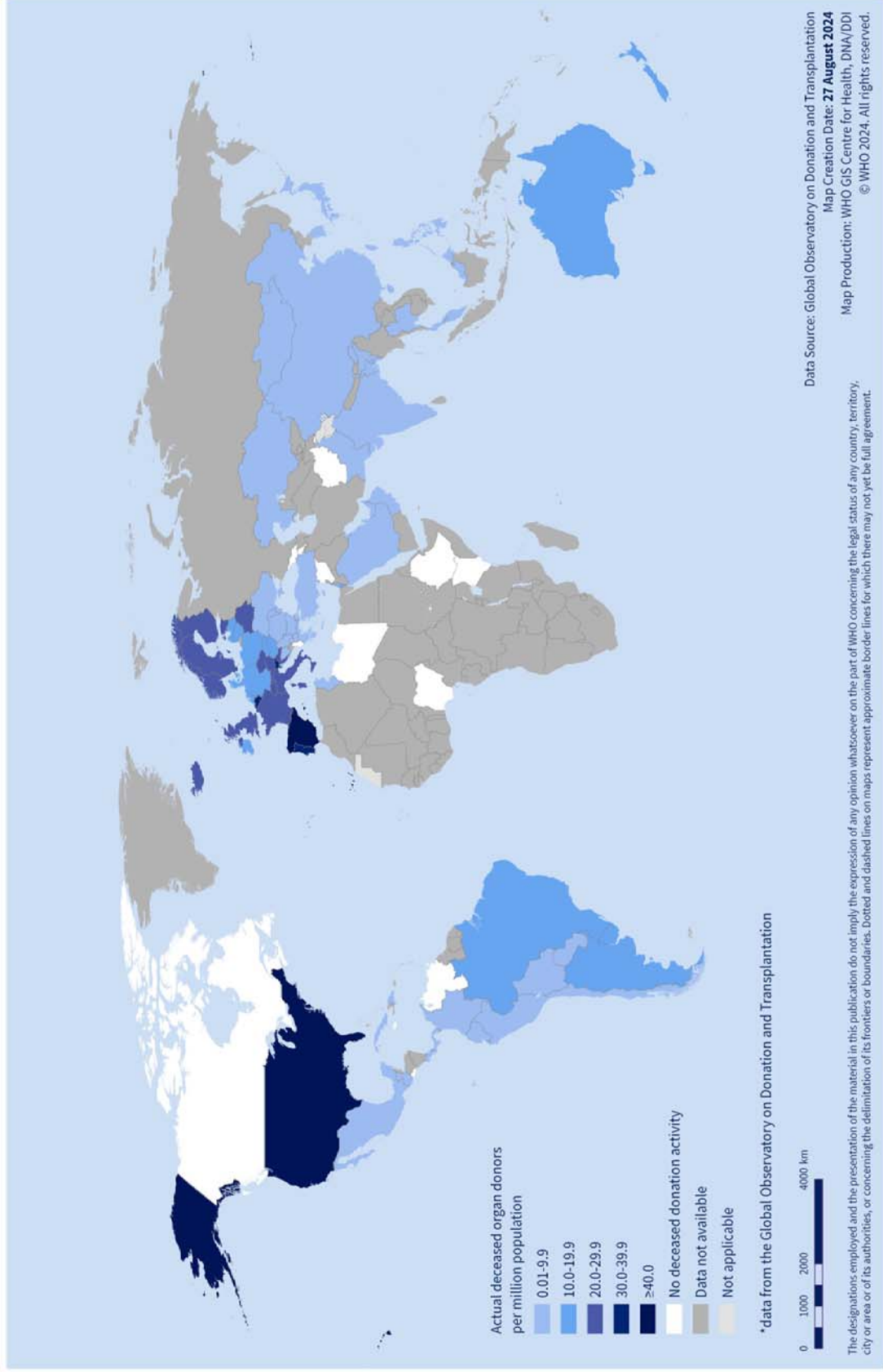
Kidney Transplants	Liver Transplants	Heart Transplants	Lung Transplants	Pancreas Transplants	Small Bowel Transplants	Organs Transplanted
12 854 (30% LD)	3 654 (7% LD)	761	187	169	4	17 629

5 953 ACTUAL DECEASED ORGAN DONORS
(5 927 DBD and 26 DCD included)

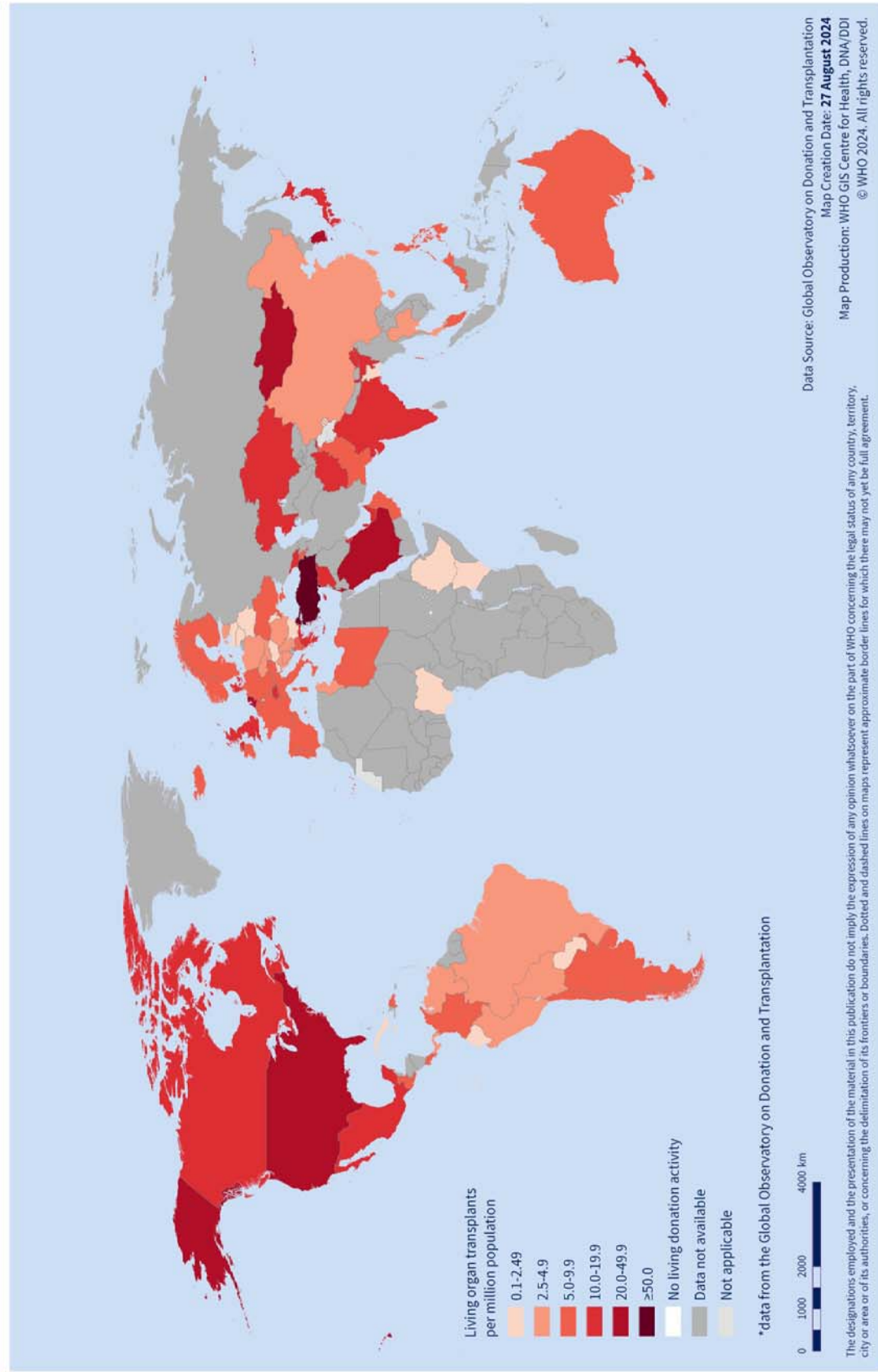
2023 data

N= 17 COUNTRIES (623.2 million inhabitants)

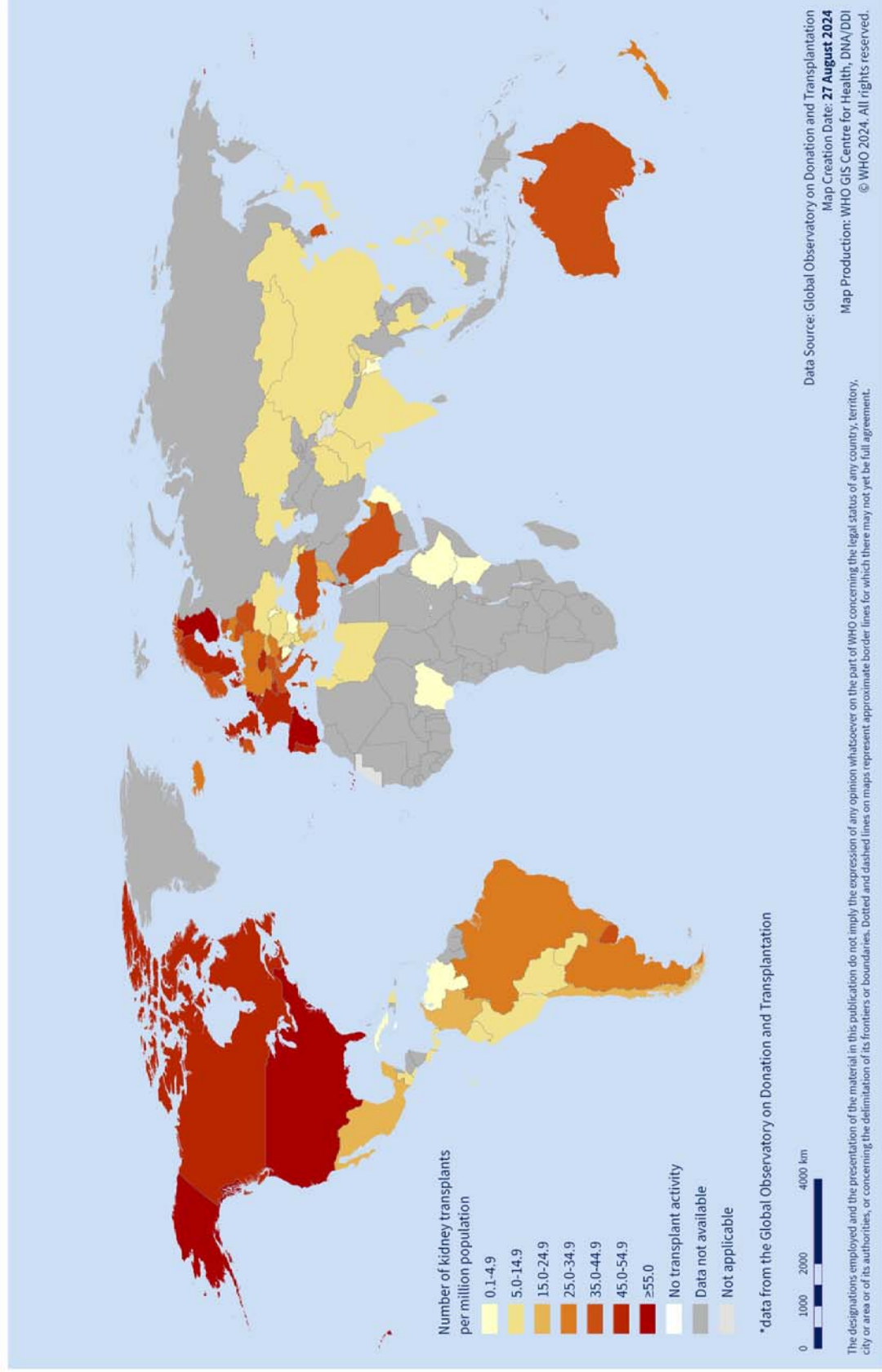
Actual donors from deceased persons, 2023*



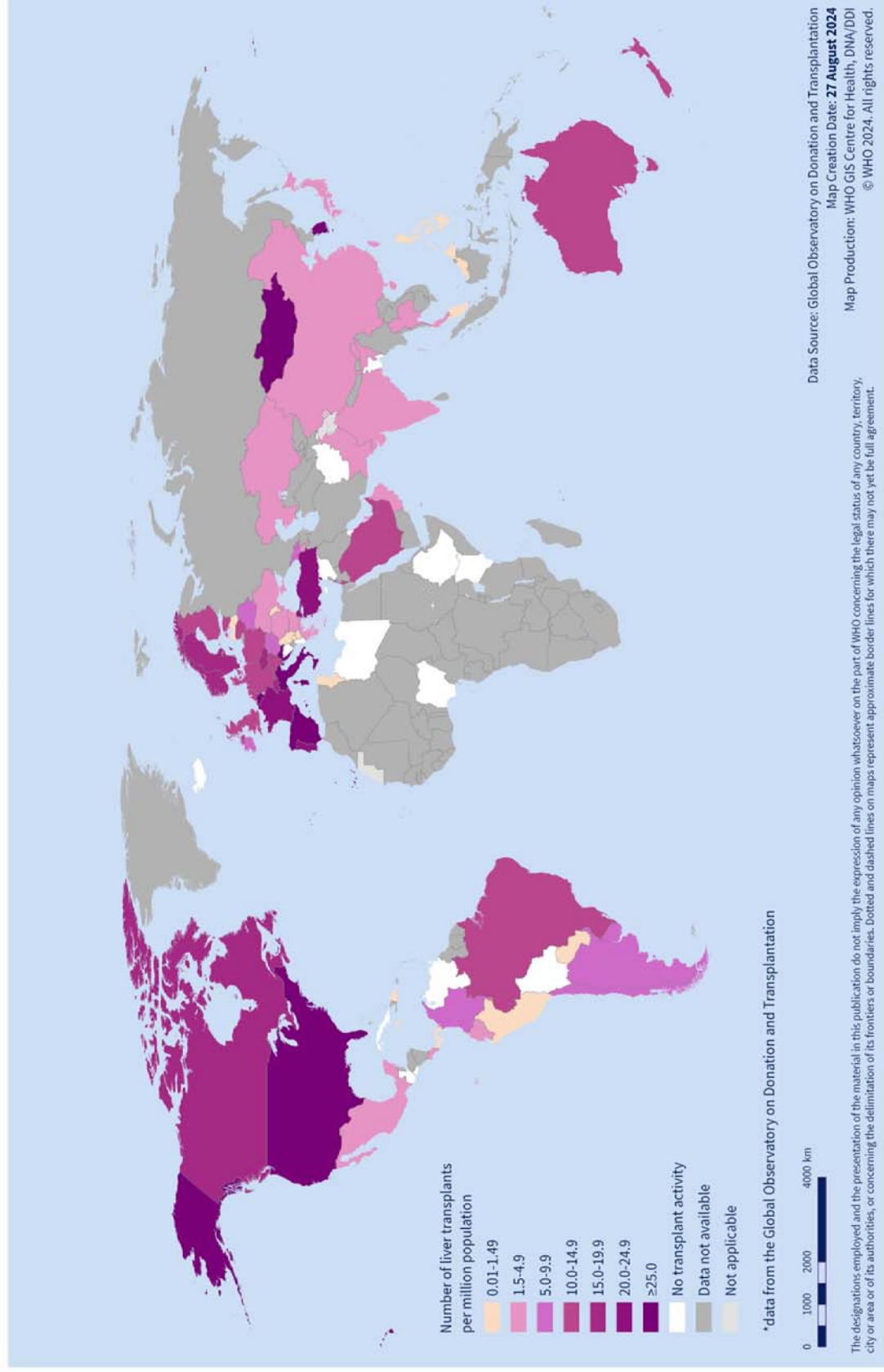
Organ transplantation from living donors, 2023*



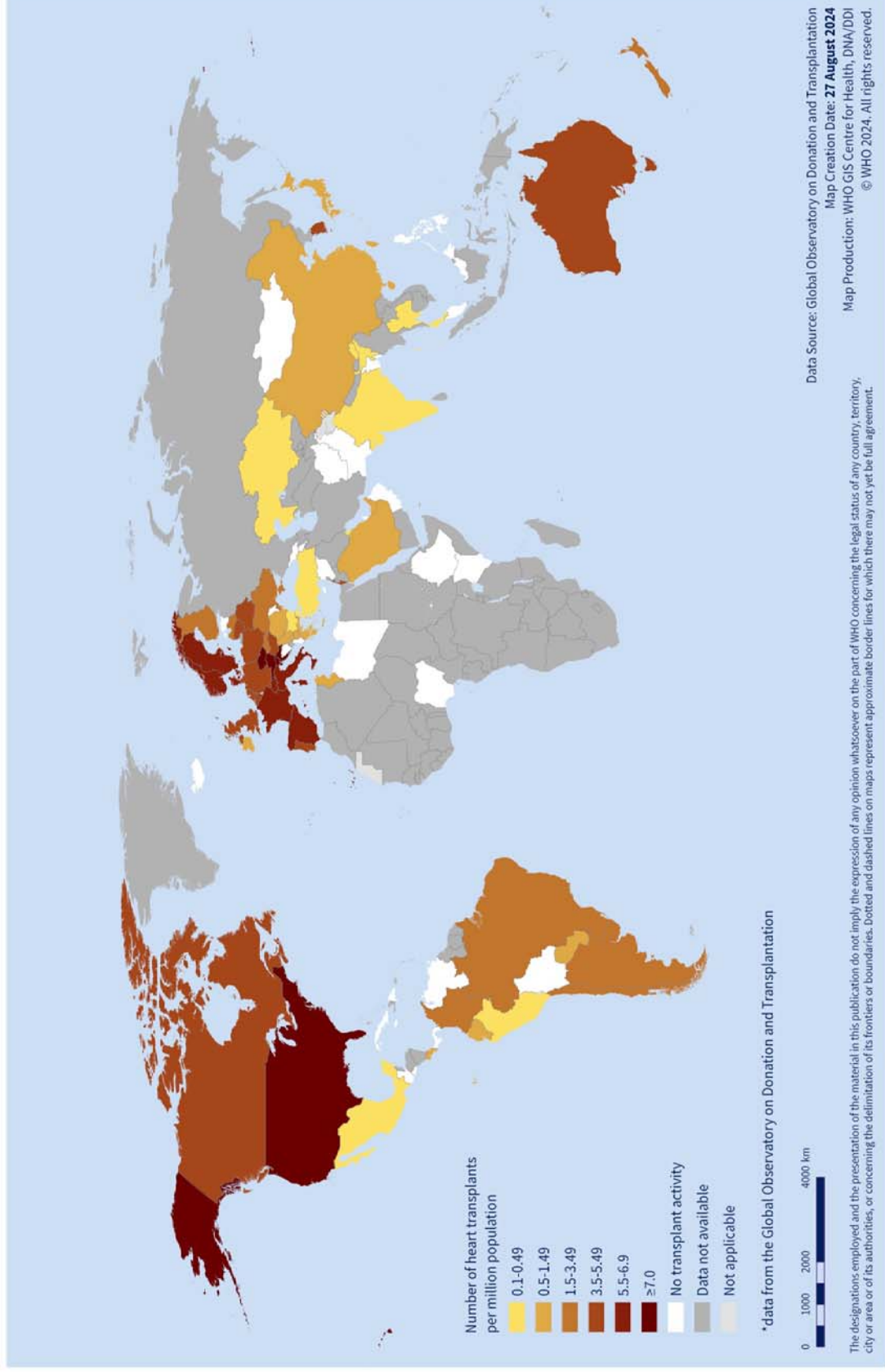
Kidney transplantation activities, 2023*



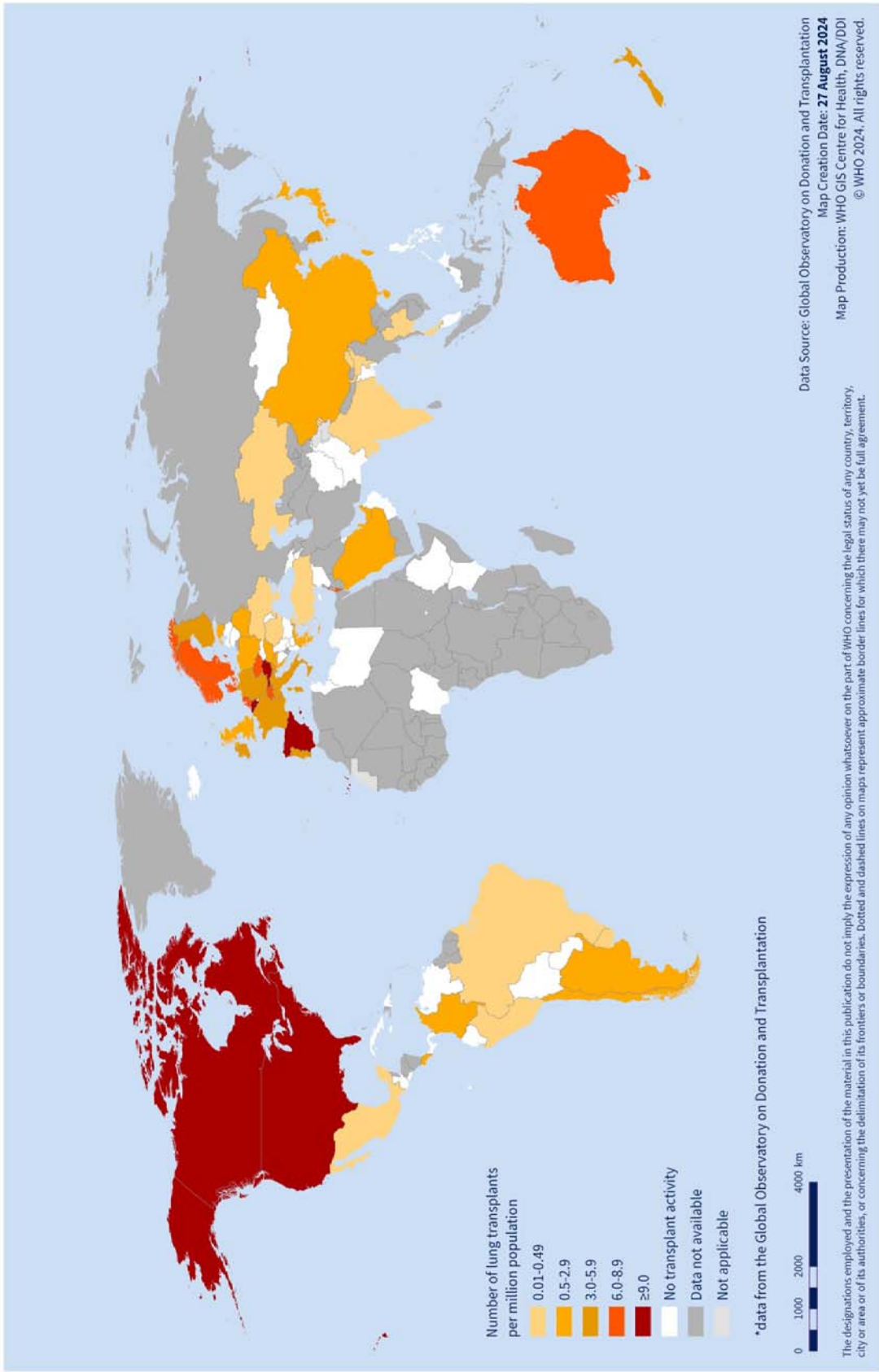
Liver transplantation activities, 2023*



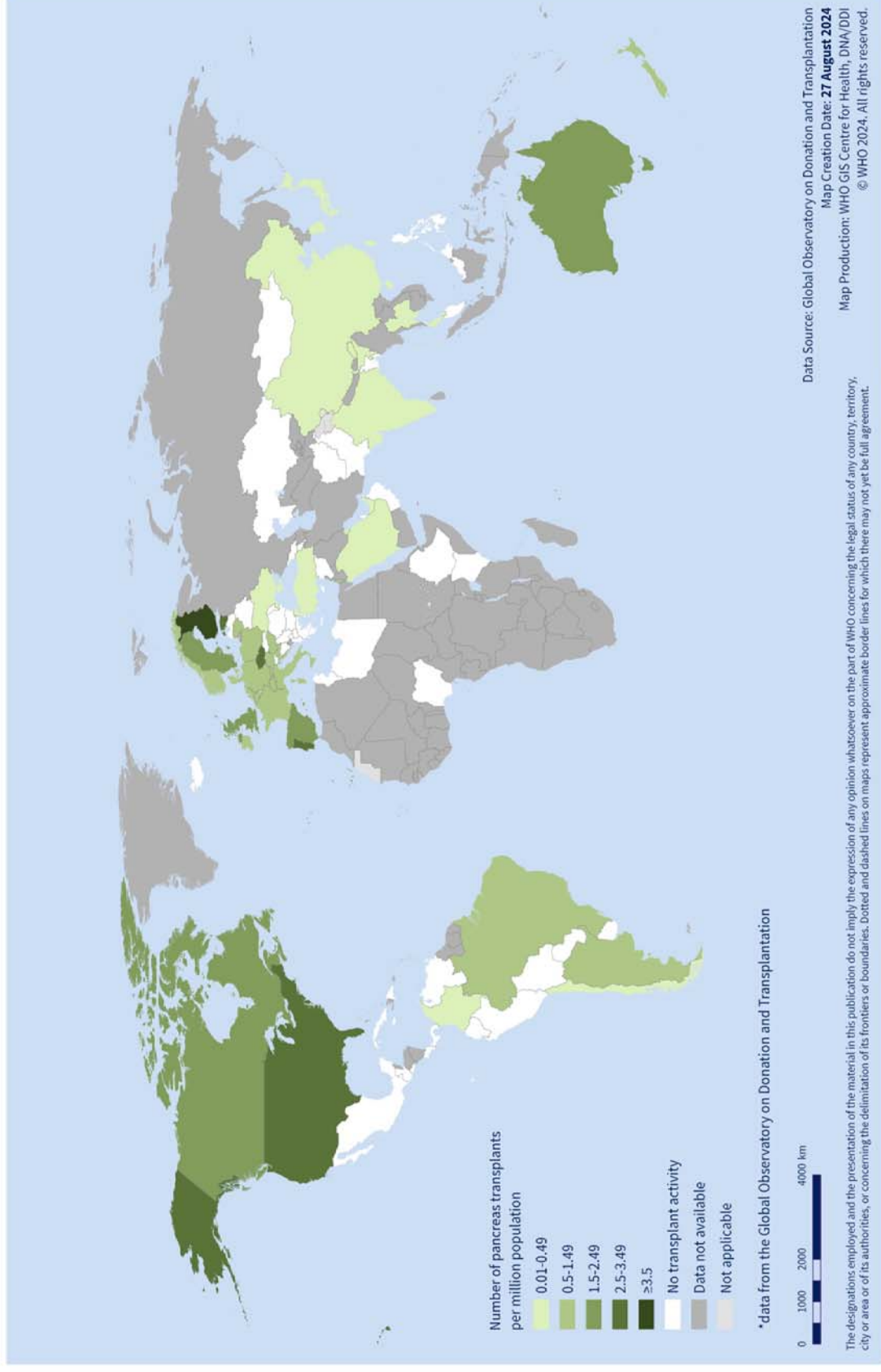
Heart transplantation activities, 2023*



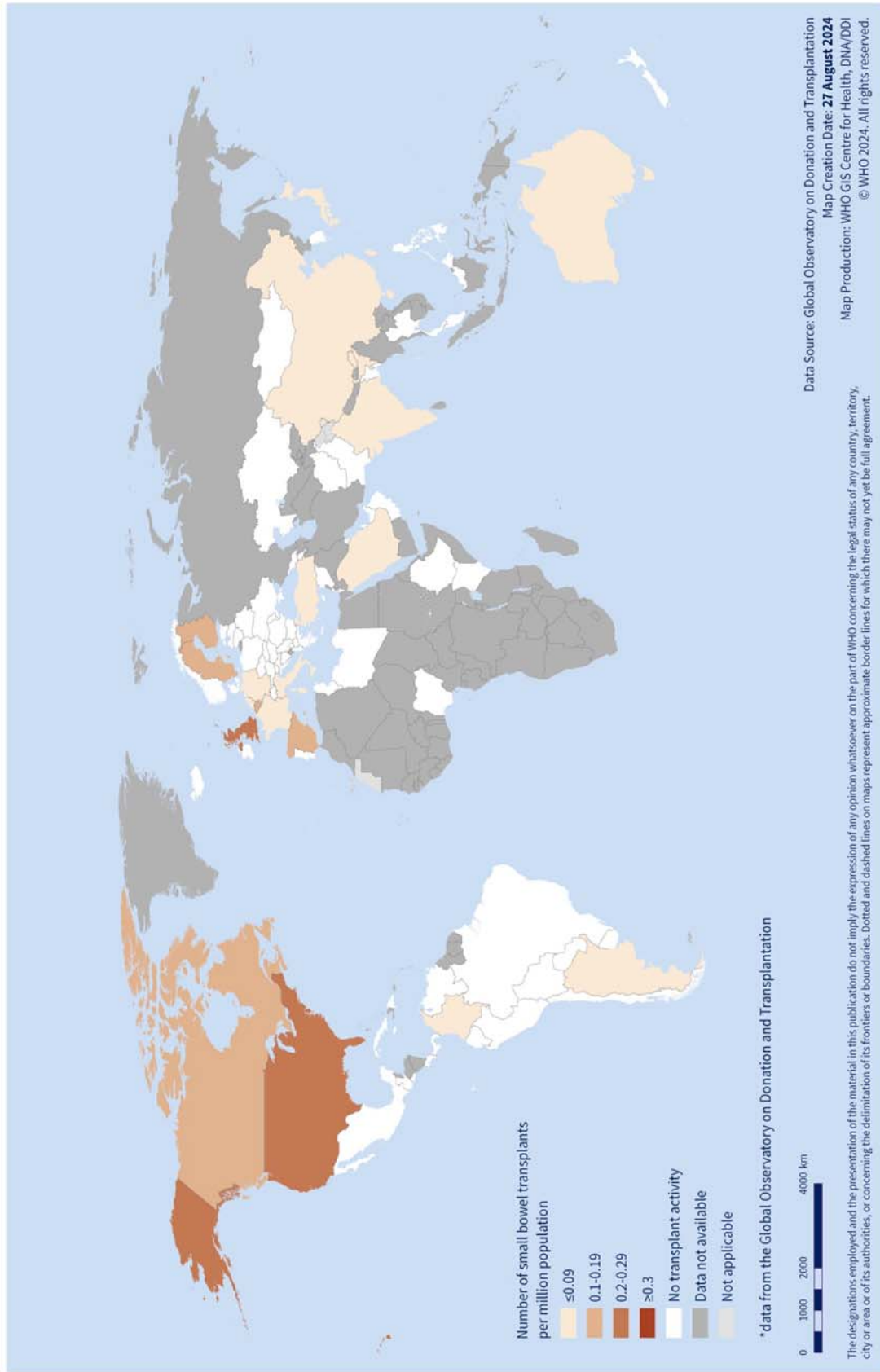
Lung transplantation activities, 2023*



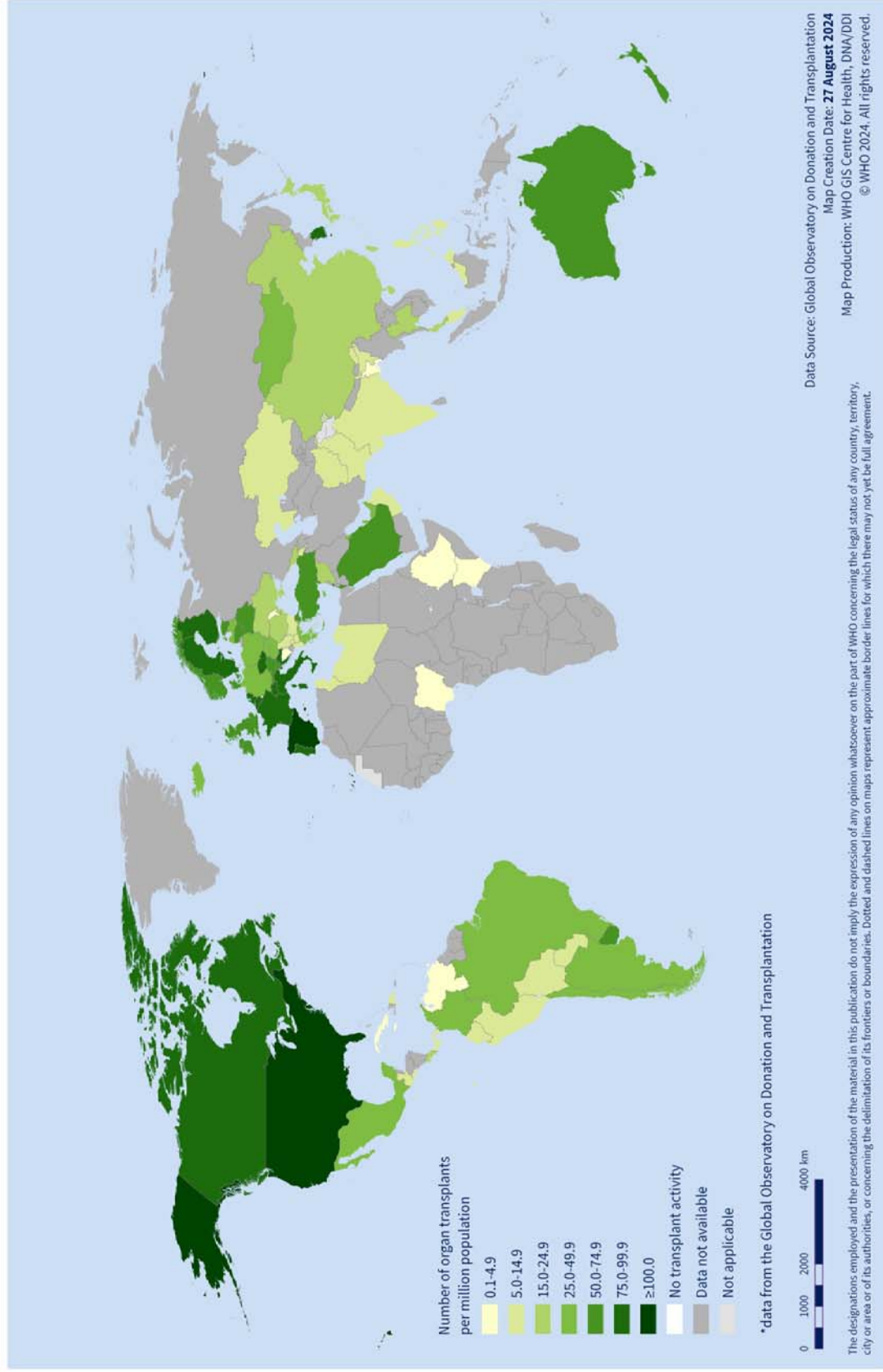
Pancreas transplantation activities, 2023*



Small bowel transplantation activities, 2023*



Global transplantation activities of solid organs, 2023*



International Data on Organ Donation and Transplantation Activity and Waiting Lists. Year 2023



DONATION ACTIVITY

[illegible]

DONATION ACTIVITY

EUROPEAN UNION COUNTRIES

COUNTRIES	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg
Population (million inhabitants): UNFPA	64.8	83.3	10.3	10.2	5.1	58.9	1.8	2.7	0.7
DONATION									
Actual deceased organ donors	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
Actual deceased organ donors (both DNDD and DCDD included)	1791	27.6	87	8.4	95	18.6	25	13.9	7
Actual deceased donors (men)	1028	15.9	53	5.1	60	11.8	17	9.4	5
Actual deceased donors (> 60 years)	855	13.2	38	3.7	17	3.3	6	3.3	4
Actual donors after the circulatory determination of death (DCDD)	279	4.3	0	0.0	24	4.7	0	0.0	0
II/ Witnessed cardiac arrest (uncontrolled)	6	0.1			0	0.0	31	0.5	2
III/ Withdrawal of life-sustaining therapy (controlled)	273	4.2			24	4.7	197	3.3	0
IV/ Cardiac arrest while brain dead	0	0.0			0	0.0	0	0.0	0
V/ Medical assistance in dying	0	0.0			0	0.0	0	0.0	0
Utilised deceased organ donors	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
Utilised deceased organ donors (both DNDD and DCDD included)	1764	27.2	80	7.8	91	17.8	24	13.3	7
Utilised deceased donors (men)	1014	15.6	48	4.7	58	11.4	16	8.9	5
Utilised deceased donors (> 60 years)	863	13.3	33	3.2	14	2.7	5	2.8	4
Utilised donors after the circulatory determination of death (DCDD)	276	4.3	0	0.0	24	4.7	0	0.0	0
II/ Witnessed cardiac arrest (uncontrolled)	5	0.1			0	0.0	25	0.4	2
III/ Withdrawal of life-sustaining therapy (controlled)	271	4.2			24	4.7	186	3.2	0
IV/ Cardiac arrest while brain dead	0	0.0			0	0.0	0	0.0	0
V/ Medical assistance in dying	0	0.0			0	0.0	0	0.0	0
Living organ donors	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
Total living kidney donors	557	8.6	608	7.3	103	10.0	44	4.3	30
Living kidney donors (men)	204	3.1			27	2.6	18	1.8	12
Total living liver donors	18	0.3	50	0.6	0	0.0	0	0.0	0
Living liver donors (men)	12	0.2							
Total domino liver donors	1	0.0	2	0.0	0	0.0	0	0.0	0
Domino liver donors (men)	1	0.0							
Total living lung donors	0	0.0	0	0.0	0	0.0	0	0.0	0
Living lung donors (men)									

DONATION ACTIVITY

[illegible]

DONATION ACTIVITY													
COUNTRIES	OTHER COUNTRIES												
	Afghanistan	Albania	Armenia	Australia	Bangladesh	Barbados	Belarus	Bosnia and Herzegovina	Canada	China	Ethiopia	Georgia	
Population (million inhabitants): UNFPA	42.2	2.8	2.8	26.4	173.0	0.3	9.5	3.2	38.8	1433.9	126.5	3.7	
	DONATION												
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
Actual deceased organ donors													
Actual deceased organ donors (both DNDD and DCDD included)	0	0.0	0	0.0	513	19.4	1	0.0	0	0.0	240	25.3	2
Actual deceased donors (men)					298	11.3	0	0.0			161	16.9	2
Actual deceased donors (> 60 years)					138	5.2	0	0.0			50	5.3	0
Actual donors after the circulatory determination of death (DCDD)													
II/ Witnessed cardiac arrest (uncontrolled)					179	6.8	0	0.0			0	0.0	0
III/ Withdrawal of life-sustaining therapy (controlled)					0	0.0							
IV/ Cardiac arrest while brain dead					177	6.7					1401	1.0	
V/ Medical assistance in dying					2	0.1					490	0.3	
Utilised deceased organ donors													
Utilised deceased organ donors (both DNDD and DCDD included)	0	0.0	0	0.0	490	18.6	1	0.0	0	0.0	236	24.8	2
Utilised deceased donors (men)					282	10.7	0	0.0			159	16.7	2
Utilised deceased donors (> 60 years)					126	4.8	0	0.0			49	5.2	0
Utilised donors after the circulatory determination of death (DCDD)													
II/ Witnessed cardiac arrest (uncontrolled)					168	6.4	0	0.0			0	0.0	0
III/ Withdrawal of life-sustaining therapy (controlled)					0	0.0							
IV/ Cardiac arrest while brain dead					166	6.3					1386	1.0	
V/ Medical assistance in dying					2	0.1					486	0.3	
Living organ donors													
Total living kidney donors	459	10.9	26	9.3	253	9.6	317	1.8	1	3.3	3	0.3	10
Living kidney donors (men)	331	7.8	4	1.4	107	4.1	75	0.4	0	0.0	1	0.1	1
Total living liver donors	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	0.6	0
Living liver donors (men)											4	0.4	
Total domino liver donors	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Domino liver donors (men)													
Total living lung donors	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Living lung donors (men)													

DONATION ACTIVITY

[illegible]

DONATION ACTIVITY												
COUNTRIES	OTHER COUNTRIES											
	New Zealand	Nigeria	Norway	Oman	Pakistan	Philippines	Qatar	Republic of Korea	Republic of Moldova	Republic of North Macedonia	Saudi Arabia	
Population (million inhabitants): UNFPA	5.2	223.8	6	4.6	240.5	117.3	2.7	51.8	3.4	2.1	36.9	
DONATION												
Actual deceased organ donors Actual deceased organ donors (both DNDD and DCDD included) Actual deceased donors (men) Actual deceased donors (> 60 years) Actual donors after the circulatory determination of death (DCDD) II/ Witnessed cardiac arrest (uncontrolled) III/ Withdrawal of life-sustaining therapy (controlled) IV/ Cardiac arrest while brain dead V/ Medical assistance in dying	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
	64	12.3	0	0.0	122	22.2	2	0.4	2	0.0	15	0.1
	38	7.3			66	12.0	1	0.2	2	0.0	9	0.1
	11	2.1			56	10.2	0	0.0	0	0.0	0	0.0
	10	1.9			19	3.5	0	0.0	0	0.0	0	0.0
					0	0.0						
Utilised deceased organ donors Utilised deceased organ donors (both DNDD and DCDD included) Utilised deceased donors (men) Utilised deceased donors (> 60 years) Utilised donors after the circulatory determination of death (DCDD) II/ Witnessed cardiac arrest (uncontrolled) III/ Withdrawal of life-sustaining therapy (controlled) IV/ Cardiac arrest while brain dead V/ Medical assistance in dying	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
	63	12.1	0	0.0	119	21.6	2	0.4	2	0.0	15	0.1
	38	7.3			64	11.6	1	0.2	2	0.0	9	0.1
	10	1.9			53	9.6	0	0.0	0	0.0	0	0.0
	9	1.7			18	3.3	0	0.0	0	0.0	0	0.0
					0	0.0						
Living organ donors Total living kidney donors Living kidney donors (men) Total living liver donors Living liver donors (men) Total domino liver donors Domino liver donors (men) Total living lung donors Living lung donors (men)	74	14.2	253	1.1	43	7.8	15	3.3	1321	5.5	581	5.0
	27	5.2	204	0.9	17	3.1	10	2.2	370	3.2	19	7.0
	2	0.4	0	0.0	1	0.2	10	2.2	0	0.0	3	1.1
					0	0.0	7	1.5			1	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	0	0.0	0	0.0			0	0.0

DONATION ACTIVITY

COUNTRIES		OTHER COUNTRIES																				
Population (million inhabitants): UNFPA		Serbia	Switzerland	Syrian Arab Republic	Thailand	Trinidad and Tobago	Tunisia	Türkiye	Ukraine	United Arab Emirates	United Kingdom	United States of America										
		7.1	8.8	23.2	71.8	1.5	12.5	85.8	36.7	9.5	67.7	340.0										
DONATION																						
Actual deceased organ donors Actual deceased organ donors (both DNDD and DCDD included) Actual deceased donors (men) Actual deceased donors (> 60 years) Actual donors after the circulatory determination of death (DCDD) II/ Witnessed cardiac arrest (uncontrolled) III/ Withdrawal of life-sustaining therapy (controlled) IV/ Cardiac arrest while brain dead V/ Medical assistance in dying	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP										
	13	1.8	200	22.7	0	0.0	446	6.2	0	0.0	17	1.4	305	3.6	149	4.1	87	9.2	1513	22.3	16336	48.0
	0	0.0	121	13.8	336	4.7	15	1.2	194	2.3	3	0.2	95	1.1	45	1.2	66	6.9	905	13.4	10126	29.8
	0	0.0	100	11.4	28	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7	0.7	569	8.4	3228	9.5
	0	0.0	96	10.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	753	11.1	5895	17.3
	0	0.0	0	0.0	96	10.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	734	10.8	5833	17.2
Utilised deceased organ donors Utilised deceased organ donors (both DNDD and DCDD included) Utilised deceased donors (men) Utilised deceased donors (> 60 years) Utilised donors after the circulatory determination of death (DCDD) II/ Witnessed cardiac arrest (uncontrolled) III/ Withdrawal of life-sustaining therapy (controlled) IV/ Cardiac arrest while brain dead V/ Medical assistance in dying	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP										
	13	1.8	185	21.0	0	0.0	430	6.0	0	0.0	16	1.3	190	2.2	135	3.7	85	8.9	1423	21.0	14332	42.2
	0	0.0	109	12.4	326	4.5	26	0.4	0	0.0	15	1.2	117	1.4	81	2.2	65	6.8	849	12.5	8928	26.3
	0	0.0	88	10.0	26	0.4	0	0.0	0	0.0	3	0.2	57	0.7	39	1.1	7	0.7	504	7.4	2327	6.8
	0	0.0	87	9.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	689	10.2	4523	13.3
	0	0.0	0	0.0	87	9.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	671	9.9	4473	13.2
Living organ donors Total living kidney donors Living kidney donors (men) Total living liver donors Living liver donors (men) Total domino liver donors Domino liver donors (men) Total living lung donors Living lung donors (men)	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP										
	28	3.9	109	12.4	348	15.0	194	2.7	4	2.7	44	3.5	3151	36.7	151	4.1	131	13.8	932	13.8	6293	18.5
	0	0.0	1	0.1	0	0.0	96	1.3	1	0.7	2	0.2	1454	16.9	51	1.4	2	0.2	448	6.6	2299	6.8
	0	0.0	0	0.0	0	0.0	36	0.5	0	0.0	0	0.0	1600	18.6	57	1.6	0	0.0	28	0.4	652	1.9
	0	0.0	0	0.0	0	0.0	15	0.2	0	0.0	0	0.0	911	10.6	34	0.9	0	0.0	10	0.1	265	0.8
	0	0.0	0	0.0	0	0.0	2	0.0	0	0.0	0	0.0	12	0.1	0	0.0	0	0.0	0	0.0	6	0.0
0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	6	0.1	0	0.0	0	0.0	0	0.0	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	0.0	0	0.0	0	0.0	0	0.0	

DONATION ACTIVITY																		
LATIN AMERICAN COUNTRIES																		
COUNTRIES	Argentina	Bolivia	Brazil	Chile	Colombia	Costa Rica	Cuba	Dominican Republic	Ecuador									
Population (million inhabitants): UNFPA	45.8	12.4	216.4	19.6	52.1	5.2	11.2	11.3	18.2									
DONATION																		
Actual deceased organ donors Actual deceased organ donors (both DNDD and DCDD included) Actual deceased donors (men) Actual deceased donors (> 60 years) Actual donors after the circulatory determination of death (DCDD) II/ Witnessed cardiac arrest (uncontrolled) III/ Withdrawal of life-sustaining therapy (controlled) IV/ Cardiac arrest while brain dead V/ Medical assistance in dying	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP						
	816	17.8	4	0.3	3759	17.4	192	9.8	388	7.4	21	4.0	7	0.6	8	0.7	88	4.8
	484	10.6			2238	10.3	118	6.0	256	4.9	14	2.7	4	0.4	5	0.4	63	3.5
	136	3.0	1	0.1	860	4.0	42	2.1	44	0.8	1	0.2	2	0.2	0	0.0	3	0.2
	26	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Utilised deceased organ donors Utilised deceased organ donors (both DNDD and DCDD included) Utilised deceased donors (men) Utilised deceased donors (> 60 years) Utilised donors after the circulatory determination of death (DCDD) II/ Witnessed cardiac arrest (uncontrolled) III/ Withdrawal of life-sustaining therapy (controlled) IV/ Cardiac arrest while brain dead V/ Medical assistance in dying	740	16.2	4	0.3	3299	15.2	190	9.7	385	7.4	21	4.0	7	0.6	8	0.7	88	4.8
	438	9.6			1980	9.1	117	6.0	254	4.9	14	2.7	4	0.4	5	0.4	63	3.5
	105	2.3	1	0.1	613	2.8	41	2.1	43	0.8	1	0.2	2	0.2	0	0.0	3	0.2
	23	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Living organ donors Total living kidney donors Living kidney donors (men) Total living liver donors Living liver donors (men) Total domino liver donors Domino liver donors (men) Total living lung donors Living lung donors (men)	274	6.0	55	4.4	528	2.4	84	4.3	224	4.3	36	6.9	4	0.4	64	5.7	15	0.8
	112	2.4	26	2.1	192	0.9	29	1.5	81	1.6	13	2.5	2	0.2	26	2.3	6	0.3
	54	1.2	0	0.0	55	0.3	24	1.2	80	1.5	5	1.0	0	0.0	1	0.1	0	0.0
	26	0.6	0	0.0	33	0.2	9	0.5	29	0.6	3	0.6			1	0.1		
	0	0.0			2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
					0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

DONATION ACTIVITY

[illegible]

TRANSPLANTATION ACTIVITY

EUROPEAN UNION COUNTRIES

COUNTRIES Population (million inhabitants): UNFPA	Austria 9.0	Belgium 11.7	Bulgaria 6.7	Croatia 4.0	Cyprus 1.3	Czechia 10.5	Denmark 5.9	Estonia 1.3	Finland 5.5
TRANSPLANTATION									
KIDNEY	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
Total TX (all combinations included)	327	36.3	27	4.0	35	26.9	298	39.2	321
Kidney TX (men)	209	23.2	19	2.8	23	17.7	200	20.8	202
Paediatric (<18 years)	16	1.8	0	0.0	0	0.0	11	0.0	10
TX from deceased donors	254	28.2	25	3.7	18	13.8	209	35.4	276
-TX from deceased donors	32	3.6	0	0.0	0	0.0	12	0.8	40
-Single TX	252	28.0	25	3.7	18	13.8	209	35.4	276
-Double TX	2	0.2	0	0.0	0	0.0	0	0.0	0
TX from living donors	73	8.1	2	0.3	17	13.1	89	15.1	45
-TX from related living donors	72	8.0	2	0.3	14	10.8	78	13.2	42
-TX from unrelated living donors	1	0.1	0	0.0	3	2.3	11	1.9	3
Paired exchange or cross-over	1	0.1	0	0.0	2	1.5	8	1.4	1
Non-directed altruistic or anonymous	0	0.0	0	0.0	1	0.8	0	0.0	2
Directed altruistic	0	0.0	1	0.1	0	0.0	3	0.5	0
LIVER	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
Total TX (all combinations included)	123	13.7	12	1.8	0	0.0	63	10.7	78
Liver TX (men)	86	9.6	10	1.5	0	0.0	38	6.4	41
Paediatric (<18 years)	12	1.3	0	0.0	0	0.0	6	1.0	5
Split TX	6	0.7	0	0.0	0	0.0	4	0.7	0
Domino TX	0	0.0	0	0.0	0	0.0	0	0.0	0
TX from living donors	6	0.7	0	0.0	3	0.8	0	0.0	0
TX from DCD	13	1.4	0	0.0	0	0.0	0	0.0	1
HEART	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
Total TX (all combinations included)	64	7.1	3	0.4	0	0.0	33	5.6	19
Heart TX (men)	42	4.7	3	0.4	0	0.0	24	4.1	14
Paediatric (<18 years)	5	0.6	0	0.0	0	0.0	3	0.5	2
TX from DCD	3	0.3	0	0.0	0	0.0	0	0.0	0
HEART-LUNG	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
Total TX	0	0.0	0	0.0	0	0.0	1	0.2	0
Paediatric (<18 years)	0	0.0	0	0.0	0	0.0	0	0.0	0
LUNG	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
Total TX (all combinations included)	124	13.8	0	0.0	0	0.0	40	6.8	28
Lung TX (men)	74	8.2	0	0.0	0	0.0	25	4.2	20
Paediatric (<18 years)	1	0.1	0	0.0	0	0.0	0	0.0	0
Single TX	7	0.8	0	0.0	0	0.0	0	0.0	0
Double TX (heart-lung TX included)	117	13.0	0	0.0	0	0.0	40	6.8	28
TX from DCD (double + single)	17	1.9	0	0.0	0	0.0	0	0.0	0
PANCREAS	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
Total TX (all combinations included)	10	1.1	0	0.0	0	0.0	3	0.5	28
Pancreas TX (men)	6	0.7	0	0.0	0	0.0	2	0.3	19
Paediatric (<18 years)	0	0.0	0	0.0	0	0.0	0	0.0	0
Pancreas TX alone	0	0.0	0	0.0	0	0.0	0	0.0	3
Kidney – Pancreas TX	10	1.1	0	0.0	0	0.0	3	0.5	25
TX from DCD	1	0.1	0	0.0	0	0.0	0	0.0	0
SMALL BOWEL	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
Total TX (all combinations included)	0	0.0	0	0.0	0	0.0	0	0.0	1
Small bowel TX (men)	0	0.0	0	0.0	0	0.0	0	0.0	0
Paediatric (<18 years)	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	1
TX from DCD	0	0.0	0	0.0	0	0.0	0	0.0	0
RECIPIENTS	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number
Total number of patients transplanted	630	70.0	42	6.3	35	26.9	430	72.9	442
Male recipients	403	44.8	32	4.8	23	17.7	285	48.3	274
Paediatric (<18 years)	34	3.8	0	0.0	0	0.0	20	3.4	17
Patients transplanted from living donors	79	8.8	2	0.3	17	13.1	89	15.1	45

TRANSPLANTATION ACTIVITY

EUROPEAN UNION COUNTRIES

COUNTRIES Population (million inhabitants): UNFPA	France 64.8	Germany 83.3	Greece 10.3	Hungary 10.2	Ireland 5.1	Italy 58.9	Latvia 1.8	Lithuania 2.7	Luxembourg 0.7									
TRANSPLANTATION																		
KIDNEY	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP								
Total TX (all combinations included)	3525	54.4	2122	25.5	241	23.4	265	26.0	189	37.1	2244	38.1	103	38.1	46	25.6	0	0.0
Kidney TX (men)	2228	34.4	1362	16.4	176	17.1	150	14.7	124	24.3	1417	24.1	60	22.2	26	14.4	0	0.0
Paediatric (<18 years)	98	1.5	109	1.3	12	1.2	16	1.6	4	0.8	85	1.4	1	0.4	0	0.0	0	0.0
TX from deceased donors	2968	45.8	1514	18.2	138	13.4	221	21.7	159	31.2	1898	32.2	97	35.9	43	23.9	0	0.0
-TX from DCD	470	7.3	0	0.0	0	0.0	0	0.0	45	8.8	211	3.6	4	1.5	0	0.0	0	0.0
-Single TX	2957	45.6	1498	18.0	138	13.4	221	21.7	114	22.4	1701	28.9	95	35.2	43	23.9	0	0.0
-Double TX	11	0.2	16	0.2	0	0.0	0	0.0	0	0.0	197	3.3	2	0.7	0	0.0	0	0.0
TX from living donors	557	8.6	608	7.3	103	10.0	44	4.4	30	5.9	346	5.9	6	2.2	3	1.7	0	0.0
-TX from related living donors	557	8.6	608	7.3	101	9.8	44	4.4	28	5.5	335	5.7	6	2.2	3	1.7	0	0.0
-TX from unrelated living donors	0	0.0	0	0.0	2	0.2	0	0.0	2	0.4	11	0.2	0	0.0	0	0.0	0	0.0
Paired exchange or cross-over					0	0.0			0	0.4	11	0.2						
Non-directed altruistic or anonymous					2	0.2			0	0.0	0	0.0						
Directed altruistic					0	0.0			0	0.0	0	0.0						
LIVER	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	1342	20.7	868	10.4	40	3.9	70	6.9	46	9.0	1701	28.9	30	11.1	1	0.6	0	0.0
Liver TX (men)	913	14.1	576	6.9	36	3.5	37	3.6	24	4.7	1244	21.1	21	7.8	1	0.6	0	0.0
Paediatric (<18 years)	90	1.4	98	1.2	0	0.0	4	0.4	0	0.0	100	1.7	0	0.0	0	0.0	0	0.0
Split TX	75	1.2	76	0.9	0	0.0	3	0.3	0	0.0	94	1.6	0	0.0	0	0.0	0	0.0
Domino TX	1	0.0	2	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	18	0.3	50	0.6	0	0.0	0	0.0	0	0.0	39	0.7	0	0.0	0	0.0	0	0.0
TX from DCD	183	2.8	0	0.0	0	0.0	0	0.0	0	0.0	192	3.3	0	0.0	0	0.0	0	0.0
HEART	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	393	6.1	330	4.0	14	1.4	52	5.1	5	1.0	370	6.3	12	4.4	3	1.7	0	0.0
Heart TX (men)	281	4.3	222	2.7	10	1.0	42	4.1	5	1.0	276	4.7	10	3.7	2	1.1	0	0.0
Paediatric (<18 years)	21	0.3	37	0.4	0	0.0	5	0.5	1	0.2	35	0.6	1	0.4	0	0.0	0	0.0
TX from DCD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	15	0.3	0	0.0	0	0.0	0	0.0
HEART-LUNG	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX	9	0.1	2	0.0	0	0.0	0	0.0	0	0.0	5	0.1	0	0.0	0	0.0	0	0.0
Paediatric (<18 years)	0	0.0	0	0.0							0	0.0						
LUNG	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	307	4.7	266	3.2	12	1.2	11	1.1	19	3.7	189	3.2	0	0.0	0	0.0	0	0.0
Lung TX (men)	164	2.5	167	2.0	11	1.1	5	0.5	14	2.7	119	2.0	0	0.0	0	0.0	0	0.0
Paediatric (<18 years)	4	0.1	10	0.1	0	0.0	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0	0	0.0
Single TX	32	0.5	20	0.2	12	1.2	0	0.0	14	2.7	15	0.3	0	0.0	0	0.0	0	0.0
Double TX (heart-lung TX included)	275	4.2	246	3.0	0	0.0	11	1.1	5	1.0	173	2.9	0	0.0	0	0.0	0	0.0
TX from DCD (double + single)	24	0.4	0	0.0	0	0.0	0	0.0	3	0.6	27	0.5	0	0.0	0	0.0	0	0.0
PANCREAS	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	74	1.1	59	0.7	0	0.0	11	1.1	6	1.2	38	0.6	2	0.7	0	0.0	0	0.0
Pancreas TX (men)	44	0.7	28	0.3	0	0.0	5	0.5	3	0.6	13	0.2	1	0.4	0	0.0	0	0.0
Paediatric (<18 years)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Pancreas TX alone	1	0.0	3	0.0	0	0.0	0	0.0	1	0.2	5	0.1	0	0.0	0	0.0	0	0.0
Kidney – Pancreas TX	73	1.1	55	0.7	0	0.0	11	1.1	5	1.0	30	0.5	2	0.7	0	0.0	0	0.0
TX from DCD	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SMALL BOWEL	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Small bowel TX (men)	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Paediatric (<18 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
Small bowel TX alone	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TX from DCD	0	0.0	0	0.0														
RECIPIENTS	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total number of patients transplanted	5450	84.1	3566	42.8	307	29.8	394	38.6	260	51.0	4466	75.8	145	53.7	50	27.8	0	0.0
Male recipients	3529	54.5	2313	27.8	233	22.6	233	22.8	167	32.7	3035	51.5	93	34.4	29	16.1	0	0.0
Paediatric (<18 years)	208	3.2	249	3.0	12	1.2	25	2.5	5	1.0	220	3.7	2	0.7	0	0.0	0	0.0
Patients transplanted from living donors	575	8.9	658	7.9	103	10.0	44	4.3	30	5.9	386	6.6	6	2.2	3	1.7	0	0.0

TRANSPLANTATION ACTIVITY EUROPEAN UNION COUNTRIES

COUNTRIES		Malta		Netherlands		Poland		Portugal		Romania		Slovakia		Slovenia		Spain		Sweden					
Population (million inhabitants): UNFPA		0.5		17.6		41.0		10.2		19.9		5.8		2.1		47.5		10.6					
TRANSPLANTATION																							
KIDNEY	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP			
	5	10.0	1020	58.0	1073	26.2	547	53.6	219	11.0	130	22.4	53	25.2	3690	77.7	523	49.3	327	30.8			
	Total TX (all combinations included)																						
	Kidney TX (men)																						
	0	0.0	619	35.2	663	16.2	354	34.7	148	7.4	90	15.5	37	17.6	2358	49.6	16	1.5	16	1.5			
	Paediatric (<18 years)																						
	2	4.0	515	29.3	995	24.3	476	46.7	161	8.1	114	19.7	52	24.8	3255	68.5	423	39.9	423	39.9			
	TX from deceased donors																						
	0	0.0	316	18.0	0	0.0	44	4.3	0	0.0	0	0.0	0	0.0	1487	31.3	115	10.8	115	10.8			
	-TX from DCD																						
0	0.0	511	29.0	995	24.3	473	46.4	161	8.1	112	19.3	52	24.8	3246	68.3	420	39.6	420	39.6				
-Double TX																							
0	0.0	4	0.2	0	0.0	3	0.3	0	0.0	2	0.3	0	0.0	9	0.2	3	0.3	3	0.3				
TX from living donors																							
3	6.0	505	28.7	78	1.9	71	7.0	58	2.9	16	2.8	1	0.5	435	9.2	100	9.4	100	9.4				
-TX from related living donors																							
3	6.0	433	24.6	76	1.9	68	6.7	57	2.9	16	2.8	1	0.5	419	8.8	93	8.8	93	8.8				
-TX from unrelated living donors																							
0	0.0	72	4.1	2	0.0	3	0.3	1	0.1	0	0.0	0	0.5	16	0.3	7	0.7	7	0.7				
Paired exchange or cross-over																							
Non-directed altruistic or anonymous																							
Directed altruistic																							
LIVER	0	0.0	207	11.8	550	13.4	249	24.4	94	4.7	40	6.9	23	11.0	1262	26.6	198	18.7	198	18.7			
	Total TX (all combinations included)																						
	Liver TX (men)																						
	123	7.0	123	7.0	333	8.1	178	17.5	51	2.6	30	5.2	14	6.7	898	18.9	131	12.4	131	12.4			
	Paediatric (<18 years)																						
	26	1.5	26	1.5	41	1.0	9	0.9	8	0.4	0	0.0	0	0.0	81	1.7	18	1.7	18	1.7			
	Split TX																						
	0	0.0	0	0.0	14	0.3	4	0.4	3	0.2	0	0.0	0	0.0	48	1.0	18	1.7	18	1.7			
	Domino TX																						
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0			
TX from living donors																							
29	1.6	29	1.6	27	0.7	2	0.2	8	0.4	0	0.0	0	0.0	2	0.0	0	0.0	0	0.0				
TX from DCD																							
85	4.8	85	4.8	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	474	10.0	31	2.9	31	2.9				
HEART	0	0.0	74	4.2	182	4.4	52	5.1	11	0.6	18	3.1	21	10.0	325	6.8	69	6.5	69	6.5			
	Total TX (all combinations included)																						
	Heart TX (men)																						
	47	2.7	47	2.7	141	3.4	31	3.0	9	0.5	14	2.4	18	8.6	230	4.8	45	4.2	45	4.2			
Paediatric (<18 years)																							
4	0.2	4	0.2	12	0.3	1	0.1	1	0.1	0	0.0	0	0.0	33	0.7	14	1.3	14	1.3				
TX from DCD																							
HEART-LUNG	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	1	0.1	1	0.1			
	Total TX																						
Paediatric (<18 years)																							
LUNG	0	0.0	109	6.2	99	2.4	44	4.3	1	0.1	0	0.0	11	5.2	479	10.1	86	8.1	86	8.1			
	Total TX (all combinations included)																						
	Lung TX (men)																						
	53	3.0	53	3.0	54	1.3	28	2.7	1	0.1	0	0.0	10	4.8	312	6.6	45	4.2	45	4.2			
	Paediatric (<18 years)																						
	1	0.1	1	0.1	3	0.1	4	0.4	0	0.0	0	0.0	0	0.0	6	0.1	4	0.4	4	0.4			
	Single TX																						
	2	0.1	2	0.1	23	0.6	1	0.1	0	0.0	0	0.0	0	0.0	73	1.5	2	0.2	2	0.2			
	Double TX (heart-lung TX included)																						
	107	6.1	107	6.1	76	1.9	43	4.2	1	0.1	11	5.2	406	7.9	84	8.5	84	7.9	84	7.9			
TX from DCD (double + single)																							
59	3.4	59	3.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	195	4.1	12	1.1	12	1.1				
PANCREAS	0	0.0	16	0.9	28	0.7	28	2.7	0	0.0	0	0.0	0	0.0	100	2.1	23	2.2	23	2.2			
	Total TX (all combinations included)																						
	Pancreas TX (men)																						
	11	0.6	11	0.6	11	0.3	12	1.2	0	0.0	0	0.0	0	0.0	69	1.5	14	1.3	14	1.3			
	Paediatric (<18 years)																						
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0			
	Pancreas TX alone																						
	3	0.2	3	0.2	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	8	0.2	4	0.4	4	0.4			
	Kidney – Pancreas TX																						
	13	0.7	13	0.7	24	0.6	28	2.7	0	0.0	0	0.0	0	0.0	86	1.8	17	1.6	17	1.6			
TX from DCD																							
11	0.6	11	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	31	0.7	2	0.2	2	0.2				
SMALL BOWEL	0	0.0	1	0.1	0	0.0														7	0.1	2	0.2
	Total TX (all combinations included)																						
	Small bowel TX (men)																						
	0	0.0	0	0.0	0	0.0														6	0.1	2	0.2
	Paediatric (<18 years)																						
1	0.1	1	0.1	0	0.0														1	0.0	0	0.0	
Small bowel TX alone																							
0	0.0	0	0.0	0	0.0														1	0.0	0	0.0	
TX from DCD																							
RECIPIENTS	5	10.0	1406	79.9	1799	43.9	920	90.2	325	16.3	188	32.4	106	50.5	5721	120.4	873	82.4	873	82.4			
	Total number of patients transplanted																						
	Male recipients																						
	0	0.0	837	47.6	1136	27.7	603	59.1	209	10.5	134	23.1	78	37.1	3776	79.5	546	51.5	546	51.5			
Paediatric (<18 years)																							
3	6.0	61	3.5	90	2.2	25	2.5	17	0.9	4	0.7	3	1.4	186	3.9	51	4.8	51	4.8				
Patients transplanted from living donors																							

TRANSPLANTATION ACTIVITY

OTHER COUNTRIES													
COUNTRIES	Afghanistan	Albania	Armenia	Australia	Bangladesh	Barbados	Belarus	Bosnia and Herzegovina	Canada	China	Ethiopia	Georgia	
Population (million inhabitants): UNFPA	42.2	2.8	2.8	26.4	173.0	0.3	9.5	3.2	38.8	1433.9	126.5	3.7	
TRANSPLANTATION													
KIDNEY	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	
	Total TX (all combinations included)	459	10.9	26	9.3	319	1.8	1	3.3	355	37.4	14	4.4
	Kidney TX (men)	347	8.2	22	7.9	253	1.5	1	3.3	222	23.4	7	2.2
	Paediatric (<18 years)			0	0.0	48	1.8	0	0.0	19	2.0	0	0.0
	TX from deceased donors	0	0.0	0	0.0	829	31.4	2	0.0	352	37.1	4	1.3
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	
	-TX from DCD				290	11.0	0	0.0	0	0.0	0	0.0	
	-Single TX				820	31.1	2	0.0	352	37.1	4	1.3	
	-Double TX				9	0.3	0	0.0	0	0.0	0	0.0	
	TX from living donors	459	10.9	26	9.3	317	1.8	1	3.3	3	0.3	10	3.1
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	
	-TX from unrelated living donors	148	3.5	26	9.3	317	1.8	1	3.3	3	0.3	3	0.3
	-TX from related living donors	311	7.4	0	0.0	59	2.2	0	0.0	0	0.0	0	0.0
	Paired exchange or cross-over	311	7.4			57	2.2						
	Non-directed altruistic or anonymous	0	0.0			2	0.1						
Directed altruistic	0	0.0			0	0.0							
LIVER	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	
	Total TX (all combinations included)	0	0.0	0	0.0	287	10.9	0	0.0	83	8.7	0	0.0
	Liver TX (men)			3	1.1					30	3.2		
	Paediatric (<18 years)			3	1.1					7	0.7		
	Split TX			0	0.0	38	1.4			0	0.0		
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	
	Domino TX			0	0.0	0	0.0			0	0.0		
	TX from living donors			5	1.8	0	0.0			6	0.6		
	TX from DCD			0	0.0	33	1.3			0	0.0		
HEART	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	
	Total TX (all combinations included)	0	0.0	0	0.0	129	4.9	0	0.0	45	4.7	0	0.0
	Heart TX (men)									35	3.7		
	Paediatric (<18 years)					16	0.6			1	0.1		
	TX from DCD									0	0.0		
HEART-LUNG	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	
	Total TX	0	0.0	0	0.0	3	0.1	0	0.0	0	0.0	0	0.0
	Paediatric (<18 years)												
LUNG	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	
	Total TX (all combinations included)	0	0.0	0	0.0	164	6.2	0	0.0	7	0.7	0	0.0
	Lung TX (men)									4	0.4		
	Paediatric (<18 years)									0	0.0		
	Single TX					24	0.9			1	0.1		
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	
	Double TX (heart-lung TX included)					140	5.3			6	0.6		
	TX from DCD (double + single)					35	1.3			0	0.0		
PANCREAS	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	
	Total TX (all combinations included)	0	0.0	0	0.0	47	1.8	0	0.0	0	0.0	0	0.0
	Pancreas TX (men)					0	0.0						
	Paediatric (<18 years)					3	0.1						
	Pancreas TX alone					41	1.6						
	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	
	Kidney – Pancreas TX					3	0.1						
	TX from DCD												
SMALL BOWEL	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	
	Total TX (all combinations included)	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0
	Small bowel TX (men)					0	0.0						
	Paediatric (<18 years)					0	0.0						
	Small bowel TX alone					0	0.0						
RECIPIENTS	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	
	Total number of patients transplanted	459	10.9	26	9.3	1655	62.7	319	1.8	1	3.3	23786	16.6
	Male recipients	347	8.2	22	7.9			253	1.5	1	3.3	16986	11.8
	Paediatric (<18 years)			3	1.1			0	0.0			2021	1.4
	Patients transplanted from living donors	459	10.9	26	9.3	257	9.7	317	1.8	1	3.3	4318	3.0

TRANSPLANTATION ACTIVITY

OTHER COUNTRIES

COUNTRIES	Iceland	India	Iran	Israel	Jamaica	Japan	Kazakhstan	Kenya	Kuwait	Libyan Arab Jamahiriya	Malaysia	Mongolia
Population (million inhabitants): UNFPA	0.4	1428.6	89.2	9.2	2.8	123.3	19.6	55.1	4.3	6.9	34.3	3.4
TRANSPLANTATION												
KIDNEY	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	10	25.0	13426	9.4	0	0.0	1792	14.5	180	9.2	53	1.0
Kidney TX (men)	9	22.5	8486	5.9	0	0.0	1106	9.0	122	6.2	279	8.1
Paediatric (<18 years)	0	0.0	227	0.2	0	0.0	86	0.7	12	0.6	166	4.8
TX from deceased donors	8	20.0	1635	1.1	0	0.0	248	2.0	60	1.2	82	2.4
-TX from DCD	0	0.0	2	0.0	0	0.0	29	0.2	0	0.0	0	0.0
-Single TX	8	20.0	1597	1.1	0	0.0	244	2.0	59	1.3	82	2.4
-Double TX	0	0.0	38	0.0	0	0.0	4	0.0	1	0.2	0	0.0
TX from living donors	0	0.0	11791	8.3	0	0.0	1544	12.5	80	18.6	197	5.7
-TX from related living donors	2	5.0	9062	6.3	0	0.0	1544	12.5	80	18.6	167	4.9
-TX from unrelated living donors	0	0.0	2729	1.9	0	0.0	0	0.0	0	0.0	30	0.9
Paired exchange or cross-over	0	0.0	198	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Non-directed altruistic or anonymous	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Directed altruistic	0	0.0	2531	1.8	0	0.0	0	0.0	0	0.0	0	0.0
LIVER	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	0	0.0	4491	3.1	2	0.7	470	3.8	50	2.6	26	0.8
Liver TX (men)	0	0.0	3124	2.2	0	0.0	231	1.9	22	1.1	17	0.5
Paediatric (<18 years)	0	0.0	511	0.4	2	0.7	119	1.0	10	0.5	1	0.0
Split TX	0	0.0	14	0.0	0	0.0	4	0.0	0	0.0	0	0.0
Domino TX	0	0.0	8	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TX from living donors	0	0.0	3643	2.6	2	0.7	352	2.9	45	2.3	2	0.1
TX from DCD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
HEART	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	0	0.0	221	0.2	0	0.0	115	0.9	5	0.3	1	0.2
Heart TX (men)	0	0.0	169	0.1	0	0.0	72	0.6	4	0.2	1	0.2
Paediatric (<18 years)	0	0.0	29	0.0	0	0.0	18	0.1	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-LUNG	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX	0	0.0	17	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Paediatric (<18 years)	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LUNG	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	0	0.0	197	0.1	0	0.0	128	1.0	1	0.1	0	0.0
Lung TX (men)	0	0.0	104	0.1	0	0.0	66	0.5	0	0.0	0	0.0
Paediatric (<18 years)	0	0.0	4	0.0	0	0.0	14	0.1	0	0.0	0	0.0
Single TX	0	0.0	20	0.0	0	0.0	79	0.6	1	0.1	0	0.0
Double TX (heart-lung TX included)	0	0.0	177	0.1	0	0.0	40	0.3	0	0.0	0	0.0
TX from DCD (double + single)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
PANCREAS	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	0	0.0	27	0.0	0	0.0	37	0.3	0	0.0	0	0.0
Pancreas TX (men)	0	0.0	20	0.0	0	0.0	16	0.1	0	0.0	0	0.0
Paediatric (<18 years)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pancreas TX alone	0	0.0	4	0.0	0	0.0	2	0.0	1	0.2	1	0.2
Kidney – Pancreas TX	0	0.0	23	0.0	0	0.0	35	0.3	0	0.0	0	0.0
TX from DCD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
SMALL BOWEL	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	0	0.0	16	0.0	0	0.0	3	0.0	0	0.0	0	0.0
Small bowel TX (men)	0	0.0	13	0.0	0	0.0	3	0.0	0	0.0	0	0.0
Paediatric (<18 years)	0	0.0	2	0.0	0	0.0	2	0.0	0	0.0	0	0.0
Small bowel TX alone	0	0.0	13	0.0	0	0.0	2	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
RECIPIENTS	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total number of patients transplanted	10	25.0	18336	12.8	2	0.7	2497	20.3	236	12.0	53	1.0
Male recipients	9	22.5	11957	8.4	0	0.0	1470	11.9	148	7.6	79	18.4
Paediatric (<18 years)	0	0.0	773	0.5	2	0.7	233	1.9	22	1.1	9	2.1
Patients transplanted from living donors	2	5.0	15435	10.8	2	0.7	1905	15.5	217	11.1	80	18.6

TRANSPLANTATION ACTIVITY

COUNTRIES		OTHER COUNTRIES												Saudi Arabia					
Population (million inhabitants): UNFPA		New Zealand	Nigeria	Norway	Oman	Pakistan	Philippines	Qatar	Republic of Korea	Republic of Moldova	Republic of North Macedonia	36.9							
		5.2	223.8	6	4.6	240.5	117.3	2.7	51.8	3.4	2.1								
TRANSPLANTATION																			
KIDNEY		Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP						
	Total TX (all combinations included)	175	33.7	237	43.1	19	4.1	1324	5.5	610	5.2	74	27.4	1	0.3	22	10.5	1435	38.9
	Kidney TX (men)	103	19.8	148	26.9	11	2.4	11	2.4	411	3.5	53	19.6	1	0.3	11	5.2		
	Paediatric (<18 years)	7	1.3	10	1.8	4	0.9	38	0.2	3	0.0	0	0.0	0	0.0	1	0.5		
	TX from deceased donors	101	19.4	194	35.3	4	0.9	3	0.0	29	0.2	26	9.6	0	0.0	6	2.9	177	4.8
	-TX from DCD	8	1.5	32	5.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	-Single TX	100	19.2	194	35.3	4	0.9	0	0.0	28	0.2	23	8.5	0	0.0	0	0.0	173	4.7
	-Double TX	1	0.2	0	0.0	0	0.0	0	0.0	1	0.0	3	1.1	0	0.0	4	0.1		
	TX from living donors	74	14.2	43	7.8	15	3.3	1321	5.5	581	5.0	48	17.8	1	0.3	16	7.6	1258	34.1
	-TX from related living donors	53	10.2	42	7.6	15	3.3	1321	5.5	231	2.0	48	17.8	1	0.3	16	7.6	1018	27.6
-TX from unrelated living donors	21	4.0	1	0.2	0	0.0	0	0.0	350	3.0	0	0.0	0	0.0	0	0.0	240	6.5	
LIVER		Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP						
	Total TX (all combinations included)	55	10.6	92	16.7	11	2.4	526	2.2	3	0.0	11	4.1	3	0.9	1	0.5	499	13.5
	Liver TX (men)			59	10.7	5	1.1			3	0.0	8	3.0	1	0.3	1	0.5		
	Paediatric (<18 years)			11	2.0	0	0.0	4	0.0	0	0.0	0	0.0	0	0.0	0	0.0		
	Split TX	7	1.3	6	1.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.1
	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	2	0.4	1	0.2	10	2.2	525	2.2	0	0.0	3	1.1	1	0.3	0	0.0	404	10.9
	TX from DCD	8	1.5	6	1.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total TX (all combinations included)	16	3.1	32	5.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.0	55	1.5
	Heart TX (men)			23	4.2											2	1.0	43	1.2
HEART-LUNG		Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP						
	Total TX	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Paediatric (<18 years)																		
	Total TX (all combinations included)	25	4.8	37	6.7	0	0.0	0	0.0	0	0.0	3	1.1	202	3.9	0	0.0	41	1.1
	Lung TX (men)			20	3.6					0	0.0	0	0.0					20	0.5
PANCREAS		Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP						
	Total TX (all combinations included)	3	0.6	4	0.7	0	0.0	0	0.0	0	0.0	0	0.0	24	0.5	0	0.0	18	0.5
	Pancreas TX (men)			3	0.5					3	0.0	0	0.0			9	0.2	9	0.2
	Paediatric (<18 years)			0	0.0					0	0.0	0	0.0			1	0.0	1	0.0
	Pancreas TX alone	0	0.0	2	0.4					0	0.0	0	0.0			8	0.2	8	0.2
SMALL BOWEL		Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP						
	Total TX (all combinations included)	3	0.6	4	0.7	0	0.0	0	0.0	0	0.0	0	0.0	24	0.5	0	0.0	10	0.3
	Small bowel TX (men)			3	0.5					3	0.0	0	0.0			0	0.0	0	0.0
RECIPIENTS		Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP						
	Total number of patients transplanted	269	51.7	398	72.4	30	6.5	1850	7.7	613	5.2	88	32.6	4	1.2	25	11.9	2037	55.2
	Male recipients			249	45.3	16	3.5	414	3.5	414	3.5	60	22.2	2	0.6	14	6.7		
	Paediatric (<18 years)			24	4.4	4	0.9	42	0.2	3	0.0	0	0.0	0	0.0	1	0.5		
	Patients transplanted from living donors	76	14.6	44	8.0	25	5.4	1846	7.7	581	5.0	51	18.9	2	0.6	16	7.6	1662	45.0

TRANSPLANTATION ACTIVITY

OTHER COUNTRIES

COUNTRIES	Serbia 7.1	Switzerland 8.8	Syrian Arab Republic 23.2	Thailand 71.8	Trinidad and Tobago 1.5	Tunisia 12.5	Türkiye 85.8	Ukraine 36.7	United Arab Emirates 9.5	United Kingdom 67.7	United States of America 340.0
Population (million inhabitants): UNFPA											
TRANSPLANTATION											
KIDNEY	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Total TX (all combinations included)	51	400	348	985	4	71	3452	396	274	3370	28144
Kidney TX (men)		258		595	2		2292	237		2053	1740
Paediatric (<18 years)	2	6	33	24	0		217	39	143	130	791
TX from deceased donors	23	291	0	791	0	27	301	245	0	2438	21854
-TX from DCD	0	135	0	0	0	0	0	0	0	1199	7339
-Single TX	23	291		767		27	299	245	135	2402	21483
-Double TX	0	0		15		0	2	0	8	36	371
TX from living donors	28	109	348	194	4	44	3151	151	131	932	6290
-TX from related living donors	28	105	139	194	4	44	2750	151	131	932	6290
-TX from unrelated living donors	0	4	209	0	0	0	401	0	0	413	1760
Paired exchange or cross-over	0	2	0	0	0	0	154	0	0	153	1279
Non-directed altruistic or anonymous		2	0	0	0	0				63	447
Directed altruistic		0	209	0	0	0				197	1.3
							1.8			2.9	
LIVER											
Total TX (all combinations included)	4	146	0	156	0	10	1756	126	100	877	10660
Liver TX (men)		104		112			1079	81	47	560	6460
Paediatric (<18 years)	0	9		40		2	342	15	4	89	534
Split TX	0	7		0		0	8	2	0	55	197
Domino TX	0	0		2		0	12	0	0	0	6
TX from living donors	0	1		36		2	1588	57	2	28	652
TX from DCD	0	47		0		0	0	0	0	260	1696
							0.0			3.8	5.0
HEART											
Total TX (all combinations included)	5	58	0	31	0	7	40	62	6	238	4599
Heart TX (men)		46		24		5	27	53	4	163	3236
Paediatric (<18 years)	0	5		4		2	8	5	0	45	507
TX from DCD	0	9		0		0	0	0	0	62	614
							0.0			0.9	1.8
HEART-LUNG											
Total TX	0	0	0	1	0	0	0	1	0	4	54
Paediatric (<18 years)				0						1	1
										0.0	0.0
LUNG											
Total TX (all combinations included)	0	71	0	3	0	0	15	5	16	143	3080
Lung TX (men)		45		3			11	3	11	93	1740
Paediatric (<18 years)	0	0		0			0	0	0	5	31
Single TX	0	6		0			0	0	16	6	502
Double TX (heart-lung TX included)		65		3			0	5	0	137	2578
TX from DCD (double + single)		29		0			0	0	0	38	311
							0.0			0.6	0.9
PANCREAS											
Total TX (all combinations included)	0	11	0	3	0	0	1	2	3	166	914
Pancreas TX (men)		11		1			0	0	2	90	531
Paediatric (<18 years)	0	0		0			0	0	0	3	23
Pancreas TX alone	1	1		0			1	0	0	9	102
Kidney – Pancreas TX		10		3			0	2	3	142	812
TX from DCD		1		0			0	0	0	61	35
							0.0			0.9	0.1
SMALL BOWEL											
Total TX (all combinations included)	0	0	0	0	0	0	1	0	0	19	95
Small bowel TX (men)							0	0	0	12	49
Paediatric (<18 years)	0	0		0			1	1	0	3	33
Small bowel TX alone		1		0			1	0	0	4	49
TX from DCD							0	0	0	0	0
							0.0			0.0	0.0
RECIPIENTS											
Total number of patients transplanted	60	675	348	1168	4	88	5261	589	377	4671	44917
Male recipients		453		727	2		3408		2885	2885	27489
Paediatric (<18 years)	2	19	3	57	0	46	557	59	133	276	1827
Patients transplanted from living donors	28	110	348	230	4		4739	208		959	6934
							55.2			14.2	20.4

TRANSPLANTATION ACTIVITY

LATIN AMERICAN COUNTRIES

COUNTRIES	Argentina	Bolivia	Brazil	Chile	Colombia	Costa Rica	Cuba	Dominican Republic	Ecuador	
Population (million inhabitants): UNFPA	45.8	12.4	216.4	19.6	52.1	5.2	11.2	11.3	18.2	
TRANSPLANTATION										
KIDNEY	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	1584	34.6	5811	26.9	965	18.5	13	1.2	182	10.0
Kidney TX (men)	905	19.8	3547	16.4	561	10.8	6	0.5	104	5.7
Paediatric (<18 years)	114	2.5	339	1.6	51	1.0	0	0.0	19	1.0
TX from deceased donors	1311	28.6	5283	24.4	741	14.2	9	0.8	167	9.2
-TX from DCD	43	0.9	0	0.0	0	0.0	0	0.0	0	0.0
-Single TX	1304	28.5	5269	24.3	740	14.2	9	0.8	167	9.2
-Double TX	7	0.2	14	0.1	1	0.0	0	0.0	0	0.0
TX from living donors	273	6.0	528	2.4	224	4.3	4	0.4	15	0.8
-TX from related living donors	254	5.5	491	2.3	224	4.3	3	0.3	55	4.9
-TX from unrelated living donors	19	0.4	37	0.2	0	0.0	1	0.1	9	0.8
Paired exchange or cross-over	0	0.0							0	0.0
Non-directed altruistic or anonymous										
Directed altruistic										
LIVER	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	442	9.7	2284	10.6	307	5.9	0	0.0	35	1.9
Liver TX (men)	244	5.3	1478	6.8	172	3.3	0	0.0	17	0.9
Paediatric (<18 years)	90	2.0	132	0.6	83	1.6	7	1.3	1	0.1
Split TX	12	0.3	11	0.1	6	0.1	0	0.0	0	0.0
Domino TX	0	0.0	2	0.0	0	0.0	0	0.0	0	0.0
TX from living donors	54	1.2	55	0.3	80	1.5	5	1.0	1	0.1
TX from DCD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
HEART	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	110	2.4	429	2.0	99	1.9	0	0.0	22	1.2
Heart TX (men)	88	1.9	289	1.3	66	1.3	3	0.6	15	0.8
Paediatric (<18 years)	15	0.3	45	0.2	12	0.2	0	0.0	0	0.0
TX from DCD	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
HEART-LUNG	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Paediatric (<18 years)	0	0.0								
LUNG	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	28	0.6	81	0.4	36	0.7	6	1.2	0	0.0
Lung TX (men)	12	0.3	42	0.2	22	0.4	3	0.6	0	0.0
Paediatric (<18 years)	1	0.0	3	0.0	0	0.0	0	0.0	0	0.0
Single TX	9	0.2	13	0.1	0	0.0	0	0.0	0	0.0
Double TX (heart-lung TX included)	19	0.4	68	0.3	36	0.7	6	1.2	0	0.0
TX from DCD (double + single)	0	0.0	0	0.0	0	0.0	0	0.0		
PANCREAS	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	29	0.6	119	0.5	15	0.3	0	0.0	0	0.0
Pancreas TX (men)	21	0.5	62	0.3	9	0.2				
Paediatric (<18 years)	0	0.0	0	0.0	0	0.0				
Pancreas TX alone	3	0.1	26	0.1	0	0.0				
Kidney – Pancreas TX	26	0.6	93	0.4	15	0.3				
TX from DCD	0	0.0	0	0.0	0	0.0				
SMALL BOWEL	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total TX (all combinations included)	2	0.0	1	0.0	1	0.0	0	0.0	0	0.0
Small bowel TX (men)	2	0.0	1	0.0	1	0.0				
Paediatric (<18 years)	1	0.0	0	0.0	0	0.0				
Small bowel TX alone	1	0.0	0	0.0	1	0.0				
TX from DCD	0	0.0	0	0.0	0	0.0				
RECIPIENTS	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
Total number of patients transplanted	2149	46.9	8569	39.6	1394	26.8	13	1.2	239	13.1
Male recipients	1240	27.1	5320	24.6	817	15.7	6	0.5	136	7.5
Paediatric (<18 years)	219	4.8	511	2.4	145	2.8	0	0.0	19	1.0
Patients transplanted from living donors	327	7.1	582	2.7	304	5.8	4	0.4	15	0.8

TRANSPLANTATION ACTIVITY

LATIN AMERICAN COUNTRIES

COUNTRIES Population (million inhabitants): UNFPA	El Salvador 6.4	Guatemala 18.1	Honduras 10.6	Mexico 128.5	Panama 4.5	Paraguay 6.9	Peru 34.4	Uruguay 3.4	Venezuela 28.8							
TRANSPLANTATION																
KIDNEY Total TX (all combinations included) Kidney TX (men) Paediatric (<18 years) TX from deceased donors -TX from DCD -Single TX -Double TX TX from living donors -TX from related living donors -TX from unrelated living donors Paired exchange or cross-over Non-directed altruistic or anonymous Directed altruistic	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP						
	47	7.3	111	6.1	3082	24.0	35	7.8	39	5.7	171	5.0	138	40.6	89	3.1
	23	3.6	61	3.4	1935	15.1	22	4.9	22	3.2	93	2.7	82	24.1	57	2.0
	2	0.3	9	0.5	204	1.6	0	0.0	6	0.9	24	0.7	6	1.8	4	0.1
	0	0.0	7	0.4	918	7.1	15	3.3	35	5.1	91	2.6	122	35.9	0	0.0
					0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
					907	7.1	0	0.0	0	0.0	89	2.6	122	35.9	0	0.0
					11	0.1	20	4.4	4	0.6	2	0.1	0	0.0	89	3.1
					2164	16.8	20	4.4	4	0.6	80	2.3	16	4.7	70	2.4
					1722	13.4	20	4.4	4	0.6	80	2.3	16	4.7	19	0.7
				442	3.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
LIVER Total TX (all combinations included) Liver TX (men) Paediatric (<18 years) Paediatric TX Split TX Domino TX TX from living donors TX from DCD	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
	0	0.0	0	0.0	298	2.3	6	1.3	2	0.3	43	1.3	26	7.6	0	0.0
					147	1.1	5	1.1	2	0.3	18	0.5	12	3.5	0	0.0
					44	0.3	0	0.0	0	0.0	19	0.6	4	1.2	0	0.0
					4	0.0	0	0.0	0	0.0	0	0.2	0	0.0	0	0.0
HEART Total TX (all combinations included) Heart TX (men) Paediatric (<18 years) TX from DCD	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
	0	0.0	0	0.0	40	0.3	0	0.0	5	0.7	8	0.2	9	2.6	0	0.0
					25	0.2	0	0.0	4	0.6	6	0.2	4	1.2	0	0.0
HEART-LUNG Total TX Paediatric (<18 years)	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
LUNG Total TX (all combinations included) Lung TX (men) Paediatric (<18 years) Paediatric TX Single TX Double TX (heart-lung TX included) TX from DCD (double + single)	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
	0	0.0	0	0.0	6	0.0	0	0.0	0	0.0	1	0.0	1	0.3	0	0.0
					4	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
					0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
					1	0.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0
PANCREAS Total TX (all combinations included) Pancreas TX (men) Paediatric (<18 years) Pancreas TX alone Kidney – Pancreas TX TX from DCD	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
					0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
					0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
					5	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
SMALL BOWEL Total TX (all combinations included) Small bowel TX (men) Paediatric (<18 years) Small bowel TX alone TX from DCD	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
					0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
					0	0.0	0	0.0	0	0.0	0	0.0	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 Male recipients Paediatric (<18 years) Patients transplanted from living donors	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP	Number	PMP
	47	7.3	111	6.1	3417	26.6	41	9.1	46	6.7	223	6.5	168	49.4	89	3.1
	23	3.6	61	3.4	2107	16.4	27	6.0	28	4.1	117	3.4	97	28.5	57	2.0
	2	0.3	9	0.5	250	1.9	0	0.0	2	0.3	44	1.3	8	2.4	4	0.1
	47	7.3	104	5.7	2186	17.0	20	4.4	4	0.6	92	2.7	16	4.7	89	3.1

WAITING LISTS

EUROPEAN UNION COUNTRIES

COUNTRIES	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czechia	Denmark	Estonia	Finland
Population (million inhabitants): UNFPA	9.0	11.7	6.7	4.0	1.3	10.5	5.9	1.3	5.5
KIDNEY									
N. TX CENTRES	4	7	3	4	1	7	3	1	1
Patients included on the WL for the first time in the course of 2023	447	647	138	217	42	588	335	61	314
Total number of patients ever active on the WL during 2023	1034		1007	413	96	688	889	111	772
Patients awaiting for a transplant (only active candidates) on 31/12/2023	635	1186	858	260	67	450	376	45	261
Patients who died while on the WL during 2023	38	34	54	12	2	39	23	0	13
Patients on dialysis on 31/12/2023	5256		676	2500				441	
LIVER									
N. TX CENTRES	3	6	2	2		2	1	1	1
Patients included on the WL for the first time in the course of 2023	170	394	14	179		254	59	26	93
Total number of patients ever active on the WL during 2023	227		42	329		111	94	31	104
Patients awaiting for a transplant (only active candidates) on 31/12/2023	57	128	17	188		88	22	7	19
Patients who died while on the WL during 2023	26	26	8	33		18	1	2	3
HEART									
N. TX CENTRES	3	7	1	2		2	2	0	1
Patients included on the WL for the first time in the course of 2023	96	59	15	60		101	39		17
Total number of patients ever active on the WL during 2023	136		37	83		88	60		52
Patients awaiting for a transplant (only active candidates) on 31/12/2023	53	75	23	34		53	20		19
Patients who died while on the WL during 2023	6	14	8	2		9	2		5
LUNG									
N. TX CENTRES	2	5	2	1		1	1	1	1
Patients included on the WL for the first time in the course of 2023	138	101	0	10		86	43	4	19
Total number of patients ever active on the WL during 2023	173		9	8		56	67	5	51
Patients awaiting for a transplant (only active candidates) on 31/12/2023	50	77	7	10		46	25	3	20
Patients who died while on the WL during 2023	3	8	2	2		3	2	0	0
PANCREAS									
N. TX CENTRES	3	7		1	1	1	1	1	1
Patients included on the WL for the first time in the course of 2023	18	19	0	10	0	37	3	2	35
Total number of patients ever active on the WL during 2023	29		1	18	0	59	6	5	44
Patients awaiting for a transplant (only active candidates) on 31/12/2023	15	31	0	12	0	36	2	1	10
Patients who died while on the WL during 2023	3	0	0	1	0	3	2	0	0
SMALL BOWEL									
N. TX CENTRES	1	6		1		1	0	0	1
Patients included on the WL for the first time in the course of 2023			0	0		1			2
Total number of patients ever active on the WL during 2023			2	0		2			2
Patients awaiting for a transplant (only active candidates) on 31/12/2023			2	0		1			1
Patients who died while on the WL during 2023			0	0		0			0

WAITING LISTS

EUROPEAN UNION COUNTRIES

COUNTRIES	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg
Population (million inhabitants): UNFPA	64.8	83.3	10.3	10.2	5.1	58.9	1.8	2.7	0.7
KIDNEY									
N. TX CENTRES	48	38	5	4	1	39	1	2	0
Patients included on the WL for the first time in the course of 2023	5945	6683	235	330	198	2344	58	95	40
Total number of patients ever active on the WL during 2023	15761	9299	1387	1054	535	8436	96	115	115
Patients awaiting for a transplant (only active candidates) on 31/12/2023	10775	6683	1218	701	434	5998	43	126	88
Patients who died while on the WL during 2023	598	367	21	54	6	177	0	6	3
Patients on dialysis on 31/12/2023		12489		6103	2314		750		
LIVER									
N. TX CENTRES	24	21	2	1	1	22	1	2	0
Patients included on the WL for the first time in the course of 2023	1791	841	30	116	56	1822	6	50	11
Total number of patients ever active on the WL during 2023	2380	2236	78	183	80	2800	9	16	16
Patients awaiting for a transplant (only active candidates) on 31/12/2023	283	841	42	89	23	922	8	34	6
Patients who died while on the WL during 2023	195	286	10	12	4	105	0	18	1
HEART									
N. TX CENTRES	24	19	1	2	1	16	1	2	0
Patients included on the WL for the first time in the course of 2023	514	699	16	67	11	463	2	16	0
Total number of patients ever active on the WL during 2023	718	1184	38	111	13	1143	17	26	3
Patients awaiting for a transplant (only active candidates) on 31/12/2023	236	699	31	36	6	669	14	26	3
Patients who died while on the WL during 2023	51	84	5	3	1	45	0	7	0
LUNG									
N. TX CENTRES	11	14	1	1	1	9	0	1	0
Patients included on the WL for the first time in the course of 2023	332	286	4	15	26	226	1	2	3
Total number of patients ever active on the WL during 2023	444	664	10	22	53	506	1	7	5
Patients awaiting for a transplant (only active candidates) on 31/12/2023	117	286	6	8	24	255	1	7	3
Patients who died while on the WL during 2023	13	50	1	1	4	44	0	1	1
PANCREAS									
N. TX CENTRES	6	26	2	2	1	7	1	0	0
Patients included on the WL for the first time in the course of 2023	119	326		8	7	64	0		0
Total number of patients ever active on the WL during 2023	222	445		40	26	276	0		1
Patients awaiting for a transplant (only active candidates) on 31/12/2023	112	326		18	17	219	0		1
Patients who died while on the WL during 2023	7	24		2	0	3	0		0
SMALL BOWEL									
N. TX CENTRES	3	9		0		2	0	0	0
Patients included on the WL for the first time in the course of 2023	5	4		0	0	3	0		0
Total number of patients ever active on the WL during 2023	7	10		0	0	9	0		0
Patients awaiting for a transplant (only active candidates) on 31/12/2023	4	4		0	0	6	0		0
Patients who died while on the WL during 2023	2	1		0	0	2	0		0

WAITING LISTS

EUROPEAN UNION COUNTRIES

COUNTRIES	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden
Population (million inhabitants): UNFPA	0.5	17.6	41.0	10.2	19.9	5.8	2.1	47.5	10.6
KIDNEY									
N. TX CENTRES	1	7	20	8	4	4	1	42	4
Patients included on the WL for the first time in the course of 2023	12	1616	1276	587	630	164	16		467
Total number of patients ever active on the WL during 2023	102	1941	2636	1137	3846	496	74	7667	1100
Patients awaiting for a transplant (only active candidates) on 31/12/2023	93	1084	1234	1881	2489	284	16	3977	337
Patients who died while on the WL during 2023	2	80	82	36	84	75	1		11
Patients on dialysis on 31/12/2023	347		25000	13336	1420	3500		27190	
LIVER									
N. TX CENTRES	0	3	9	4	6	1	1	26	2
Patients included on the WL for the first time in the course of 2023		313	605	197	176	60	7	1455	187
Total number of patients ever active on the WL during 2023		303	811	336	692	95	36	1776	257
Patients awaiting for a transplant (only active candidates) on 31/12/2023		92	165	99	462	41	7	330	38
Patients who died while on the WL during 2023		25	35	21	110	12	4	35	6
HEART									
N. TX CENTRES	0	3	7	4	2	1	1	19	2
Patients included on the WL for the first time in the course of 2023		78	337	67	37	24	27	383	62
Total number of patients ever active on the WL during 2023		226	782	92	66	52	75	538	95
Patients awaiting for a transplant (only active candidates) on 31/12/2023		121	421	33	52	27	27	154	20
Patients who died while on the WL during 2023		3	63	6	3	7	4	8	1
LUNG									
N. TX CENTRES	0	3	7	1	1	0	1	9	2
Patients included on the WL for the first time in the course of 2023		139	151	36	4	0	4	588	78
Total number of patients ever active on the WL during 2023		268	301	109	7	0	20	788	117
Patients awaiting for a transplant (only active candidates) on 31/12/2023		141	140	61	6	0	4	255	15
Patients who died while on the WL during 2023		12	44	10	0	0	1	19	8
PANCREAS									
N. TX CENTRES	0	2	4	2	1	1	1	13	4
Patients included on the WL for the first time in the course of 2023		45	43	29	0	0	1	95	17
Total number of patients ever active on the WL during 2023		73	87	47	0	0	1	187	40
Patients awaiting for a transplant (only active candidates) on 31/12/2023		37	53	29	0	0	1	0	10
Patients who died while on the WL during 2023		2	7	1	0	0		70	0
SMALL BOWEL									
N. TX CENTRES	0	1	1		0	0	1	3	1
Patients included on the WL for the first time in the course of 2023		3	1			0		6	1
Total number of patients ever active on the WL during 2023		3	4			0		9	4
Patients awaiting for a transplant (only active candidates) on 31/12/2023		1	0			0		3	0
Patients who died while on the WL during 2023		0	1			0		0	0

WAITING LISTS

OTHER COUNTRIES

COUNTRIES	Afghanistan	Albania	Armenia	Australia	Bangladesh	Barbados	Belarus	Bosnia and Herzegovina	Canada	China	Ethiopia	Georgia
Population (million inhabitants): UNFPA	42.2	2.8	2.8	26.4	173.0	0.3	9.5	3.2	38.8	1433.9	126.5	3.7
KIDNEY												
N. TX CENTRES	4	3	1	26	10	1	7	2	26	149	1	3
Patients included on the WL for the first time in the course of 2023		21		1196	650		332	11		46125	115	
Total number of patients ever active on the WL during 2023		52		2600	1865		693			134011		
Patients awaiting for a transplant (only active candidates) on 31/12/2023		9		1448	550		336	178	1390	105458	97	
Patients who died while on the WL during 2023		0		12	125		2	17	87	859	1	
Patients on dialysis on 31/12/2023		1370		15812	18600		1852	1500		1086000		
LIVER												
N. TX CENTRES	0	0	2	8	3	0	1	1	10	118		2
Patients included on the WL for the first time in the course of 2023				250			125	18		14525		
Total number of patients ever active on the WL during 2023				409			284			21940		
Patients awaiting for a transplant (only active candidates) on 31/12/2023				112			187	40	339	8288		
Patients who died while on the WL during 2023				22			14	2	75	1187		
HEART												
N. TX CENTRES	0	0	0	5	0	0	1	2	12	76		0
Patients included on the WL for the first time in the course of 2023				129			50	4		2047		0
Total number of patients ever active on the WL during 2023				204			127			3182		0
Patients awaiting for a transplant (only active candidates) on 31/12/2023				61			78	29	92	1457		0
Patients who died while on the WL during 2023				4			4		13	215		0
LUNG												
N. TX CENTRES	0	0	0	4	0	0	2	0	5	60		0
Patients included on the WL for the first time in the course of 2023				183			8			1361		0
Total number of patients ever active on the WL during 2023				283			34			1634		0
Patients awaiting for a transplant (only active candidates) on 31/12/2023				98			24		127	352		0
Patients who died while on the WL during 2023				12			3		30	123		0
PANCREAS												
N. TX CENTRES	0	0	0	3	0	0	1	0	7	50		0
Patients included on the WL for the first time in the course of 2023				65			1					0
Total number of patients ever active on the WL during 2023				129			14					0
Patients awaiting for a transplant (only active candidates) on 31/12/2023				73			14		52			0
Patients who died while on the WL during 2023				1			0		2			0
SMALL BOWEL												
N. TX CENTRES	0	0	0	1	0	0	1	0	3	45		0
Patients included on the WL for the first time in the course of 2023				0			0					0
Total number of patients ever active on the WL during 2023				3			0					0
Patients awaiting for a transplant (only active candidates) on 31/12/2023				2			0		1			0
Patients who died while on the WL during 2023				0			0		2			0

WAITING LISTS

OTHER COUNTRIES

COUNTRIES	Iceland	India	Iran	Israel	Jamaica	Japan	Kazakhstan	Kenya	Kuwait	Libyan Arab Jamahiriya	Malaysia	Mongolia
Population (million inhabitants): UNFPA	0.4	1428.6	89.2	9.2	2.8	123.3	19.6	55.1	4.3	6.9	34.3	3.4
KIDNEY												
N. TX CENTRES	1	640		6	2	123	7	9	1	1	8	1
Patients included on the WL for the first time in the course of 2023				463	2	1471	655		203		87	85
Total number of patients ever active on the WL during 2023		29760		1375	2	15551	4003		241		148	615
Patients awaiting for a transplant (only active candidates) on 31/12/2023		26644		970	2	14337	3613		143		61	572
Patients who died while on the WL during 2023		1277		21	0	197	264		9		1	0
Patients on dialysis on 31/12/2023		81683		6972	0	347474	15762		2000		53277	2988
LIVER												
N. TX CENTRES	0	261		3	1	23	4	0	0		2	2
Patients included on the WL for the first time in the course of 2023	0			167	2	308	82				25	151
Total number of patients ever active on the WL during 2023	0	9344		279	2	645	256				36	542
Patients awaiting for a transplant (only active candidates) on 31/12/2023	0	7334		116	0	306	174				12	439
Patients who died while on the WL during 2023	0	1146		19	0	98	53				2	2
HEART												
N. TX CENTRES	0	168		2		11	1	0	1		1	0
Patients included on the WL for the first time in the course of 2023	0			54		123	10				9	
Total number of patients ever active on the WL during 2023	0	999		161		1021	160				18	
Patients awaiting for a transplant (only active candidates) on 31/12/2023	0	712		97		829	137				13	
Patients who died while on the WL during 2023	0	120		6		37	16				5	
LUNG												
N. TX CENTRES	0	103		2		11	1	0	0		1	0
Patients included on the WL for the first time in the course of 2023	0			132		235	3				6	
Total number of patients ever active on the WL during 2023	0	992		341		774	23				8	
Patients awaiting for a transplant (only active candidates) on 31/12/2023	0	312		225		435	17				6	
Patients who died while on the WL during 2023	0	66		21		71	3				1	
PANCREAS												
N. TX CENTRES	0	63		2		21	0	0	1		0	1
Patients included on the WL for the first time in the course of 2023	0			6		37			8			
Total number of patients ever active on the WL during 2023	0	208		15		218			25			
Patients awaiting for a transplant (only active candidates) on 31/12/2023	0	116		4		100			22			
Patients who died while on the WL during 2023	0	20		0		6			1			
SMALL BOWEL												
N. TX CENTRES	0	33		1		13	0	0	0		0	0
Patients included on the WL for the first time in the course of 2023	0			0		2						
Total number of patients ever active on the WL during 2023	0	33		0		12						
Patients awaiting for a transplant (only active candidates) on 31/12/2023	0	9		0		9			9			
Patients who died while on the WL during 2023	0	7		0		0						

WAITING LISTS

OTHER COUNTRIES

COUNTRIES	New Zealand	Nigeria	Norway	Oman	Pakistan	Philippines	Qatar	Republic of Korea	Republic of Moldova	Republic of North Macedonia	Saudi Arabia
Population (million inhabitants): UNFPA	5.2	223.8	6	4.6	240.5	117.3	2.7	51.8	3.4	2.1	36.9
KIDNEY											
N. TX CENTRES	4	12	1	2	32	42	1		1	1	14
Patients included on the WL for the first time in the course of 2023		275	239			156	112		1	41	650
Total number of patients ever active on the WL during 2023		325	765			295	231		32	148	
Patients awaiting for a transplant (only active candidates) on 31/12/2023		169	330			194	146	33568	0	124	560
Patients who died while on the WL during 2023		127	19			3	5		0	2	
Patients on dialysis on 31/12/2023		700		2856	38000	34000	800		1184	1400	23320
LIVER											
N. TX CENTRES	2	0	1	1	8	3	1		1	1	4
Patients included on the WL for the first time in the course of 2023			105	115		7	12		16	5	385
Total number of patients ever active on the WL during 2023			154	115		20	24		74	20	361
Patients awaiting for a transplant (only active candidates) on 31/12/2023			38	48		12	13	6690	64	17	304
Patients who died while on the WL during 2023			9	1		0	0		7	0	
HEART											
N. TX CENTRES	1	0	1	0	0	1	1		1	1	3
Patients included on the WL for the first time in the course of 2023			32				6		0	4	160
Total number of patients ever active on the WL during 2023			49				30		0	30	149
Patients awaiting for a transplant (only active candidates) on 31/12/2023			11				1	1068	0	27	105
Patients who died while on the WL during 2023			1				0		0	0	28
LUNG											
N. TX CENTRES	1	0	1	0	0	1	1		0	0	2
Patients included on the WL for the first time in the course of 2023			34				3		0	0	100
Total number of patients ever active on the WL during 2023			64				6		0	0	78
Patients awaiting for a transplant (only active candidates) on 31/12/2023			15				1	466		0	65
Patients who died while on the WL during 2023			6				1			0	
PANCREAS											
N. TX CENTRES	1	0	1	0	0	0			0	0	3
Patients included on the WL for the first time in the course of 2023			7							0	
Total number of patients ever active on the WL during 2023			18							0	
Patients awaiting for a transplant (only active candidates) on 31/12/2023			10					26		0	
Patients who died while on the WL during 2023			0							0	
SMALL BOWEL											
N. TX CENTRES		0	1	0	0	0			0	0	1
Patients included on the WL for the first time in the course of 2023										0	
Total number of patients ever active on the WL during 2023						1				0	
Patients awaiting for a transplant (only active candidates) on 31/12/2023						1				0	
Patients who died while on the WL during 2023						0		21		0	

WAITING LISTS

OTHER COUNTRIES

COUNTRIES	Serbia	Switzerland	Syrian Arab Republic	Thailand	Trinidad and Tobago	Tunisia	Türkiye	Ukraine	United Arab Emirates	United Kingdom	United States of America
Population (million inhabitants): UNFPA	7.1	8.8	23.2	71.8	1.5	12.5	85.8	36.7	9.5	67.7	340.0
KIDNEY											
N. TX CENTRES	5	6	7	46	1	6	76	22	7	24	230
Patients included on the WL for the first time in the course of 2023	110	449		1740	64	91	5817	978	168	3668	36036
Total number of patients ever active on the WL during 2023	832			6821	115		30051		393	9938	90472
Patients awaiting for a transplant (only active candidates) on 31/12/2023	736	464		5441	93	1506	24551	581	245	6007	48262
Patients who died while on the WL during 2023	45	30		74	5		2048			259	3796
Patients on dialysis on 31/12/2023	5000	722		215000	2000	13000	64157		4000	3412	808536
LIVER											
N. TX CENTRES	1	3	0	11	0	4	52	9	3	7	143
Patients included on the WL for the first time in the course of 2023	10	226		187		47	2389	389		968	13267
Total number of patients ever active on the WL during 2023	69			531		32	4541			1794	22773
Patients awaiting for a transplant (only active candidates) on 31/12/2023	51	114		405		8	406	161		686	7610
Patients who died while on the WL during 2023	14	48		34		6	535			64	941
HEART											
N. TX CENTRES	2	3	0	6	0	4	15	10	1	7	149
Patients included on the WL for the first time in the course of 2023	6	44		29		19	348	320		277	5282
Total number of patients ever active on the WL during 2023	62			53		32	1742			622	8432
Patients awaiting for a transplant (only active candidates) on 31/12/2023	52	30		36		16	1450	163		315	2730
Patients who died while on the WL during 2023	5	6		6		9	252			14	209
LUNG											
N. TX CENTRES	0	2	0	5	0	2	3	2	1	6	72
Patients included on the WL for the first time in the course of 2023	0	63		3			97	54		209	3154
Total number of patients ever active on the WL during 2023	0			8			271			516	4251
Patients awaiting for a transplant (only active candidates) on 31/12/2023	0	28		7			198	26		309	919
Patients who died while on the WL during 2023	0	9		0			58			43	88
PANCREAS											
N. TX CENTRES	0	2	0	4	0	0	9	2	1	8	124
Patients included on the WL for the first time in the course of 2023	0	11		1			24	12		211	1543
Total number of patients ever active on the WL during 2023	0			2			302			517	2689
Patients awaiting for a transplant (only active candidates) on 31/12/2023	0	14		2			277	1		291	1136
Patients who died while on the WL during 2023	0	2		0			21			23	112
SMALL BOWEL											
N. TX CENTRES	0	2	0	2	0	0	6	0	0	4	18
Patients included on the WL for the first time in the course of 2023	0	0					1	0		26	116
Total number of patients ever active on the WL during 2023	0	0					3	0		48	278
Patients awaiting for a transplant (only active candidates) on 31/12/2023	0	0					1	0		19	135
Patients who died while on the WL during 2023	0	0					2	0		2	8

WAITING LISTS

LATIN AMERICAN COUNTRIES

COUNTRIES	Argentina	Bolivia	Brazil	Chile	Colombia	Costa Rica	Cuba	Dominican Republic	Ecuador
Population (million inhabitants): UNFPA	45.8	12.4	216.4	19.6	52.1	5.2	11.2	11.3	18.2
KIDNEY									
N. TX CENTRES	61	10	168	21	30	7	8	5	10
Patients included on the WL for the first time in the course of 2023	2385	2	15395	519	1788	124	70	68	285
Total number of patients ever active on the WL during 2023	7897	9	45411	1791	5374	567	252	315	562
Patients awaiting for a transplant (only active candidates) on 31/12/2023	5468	9	32896	1024	3748	408	174	291	480
Patients who died while on the WL during 2023	322	1	1719	22	83	56	69	16	3
Patients on dialysis on 31/12/2023	29815	6090	120438		35863	1412	3000	5000	19496
LIVER									
N. TX CENTRES	32	1	98	9	11	5	3	1	2
Patients included on the WL for the first time in the course of 2023	993		4003	332	392	38	11	2	69
Total number of patients ever active on the WL during 2023	2049		5334	210	600	67	23	9	46
Patients awaiting for a transplant (only active candidates) on 31/12/2023	981		1436	210	183	25	18	8	18
Patients who died while on the WL during 2023	113		649	39	12	14	5	1	3
HEART									
N. TX CENTRES	25	0	59	8	12	1	1	0	2
Patients included on the WL for the first time in the course of 2023	208		655	82	105	9	3	0	32
Total number of patients ever active on the WL during 2023	350		1003	16	147	11	5	0	26
Patients awaiting for a transplant (only active candidates) on 31/12/2023	162		362	16	17	6	2	0	7
Patients who died while on the WL during 2023	36		138	2	5	0	3	0	0
LUNG									
N. TX CENTRES	11		14	4	6	1	0	0	
Patients included on the WL for the first time in the course of 2023	117		154	101	57	12	0	0	0
Total number of patients ever active on the WL during 2023	403		326	44	113	17	0	0	0
Patients awaiting for a transplant (only active candidates) on 31/12/2023	291		128	44	60	12	0	0	0
Patients who died while on the WL during 2023	38		46	9	9	2	0	0	0
PANCREAS									
N. TX CENTRES	17		39	3	10	1	0	1	
Patients included on the WL for the first time in the course of 2023	2		282	10	31	0	0	2	0
Total number of patients ever active on the WL during 2023	10		628	22	72	0	0	10	0
Patients awaiting for a transplant (only active candidates) on 31/12/2023	1		193	22	45	0	0	6	0
Patients who died while on the WL during 2023	0		32	0	0	0	0	4	0
SMALL BOWEL									
N. TX CENTRES	4		5		4	1	0	0	
Patients included on the WL for the first time in the course of 2023	5		6		2	0	0	0	0
Total number of patients ever active on the WL during 2023	16		12		3	0	0	0	0
Patients awaiting for a transplant (only active candidates) on 31/12/2023	13		5		1	0	0	0	0
Patients who died while on the WL during 2023	0		0		0	0	0	0	0

WAITING LISTS

LATIN AMERICAN COUNTRIES

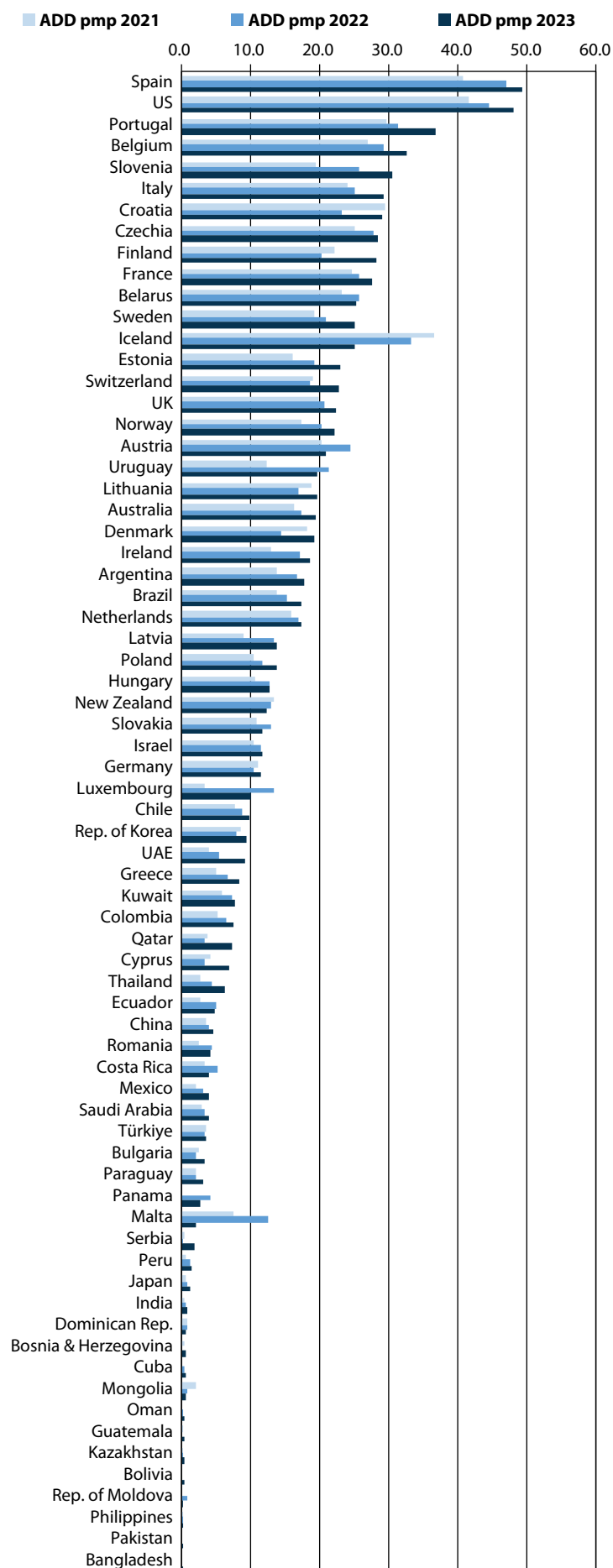
COUNTRIES	El Salvador	Guatemala	Honduras	Mexico	Panama	Paraguay	Peru	Uruguay	Venezuela
Population (million inhabitants): UNFPA	6.4	18.1	10.6	128.5	4.5	6.9	34.4	3.4	28.8
KIDNEY									
N. TX CENTRES	4	4		291	2	6	14	4	3
Patients included on the WL for the first time in the course of 2023				5696	60	37		207	0
Total number of patients ever active on the WL during 2023				21150	165	132		633	0
Patients awaiting for a transplant (only active candidates) on 31/12/2023				16370	125	82	609	443	0
Patients who died while on the WL during 2023				213	5	1		14	0
Patients on dialysis on 31/12/2023	5485				2750	2400			9000
LIVER									
N. TX CENTRES		0		90	1	1	3	1	0
Patients included on the WL for the first time in the course of 2023		0		376	6	4		32	0
Total number of patients ever active on the WL during 2023		0		624	8	10		73	0
Patients awaiting for a transplant (only active candidates) on 31/12/2023		0		204	2	5	23	37	0
Patients who died while on the WL during 2023		0		5158	0	0		5	0
HEART									
N. TX CENTRES		0		68	1	3	2	3	0
Patients included on the WL for the first time in the course of 2023		0		88	0	10		34	0
Total number of patients ever active on the WL during 2023		0		24	0	14		96	0
Patients awaiting for a transplant (only active candidates) on 31/12/2023		0		8	0	7	7	72	0
Patients who died while on the WL during 2023		0		8	0	3		9	0
LUNG									
N. TX CENTRES		0		23	0	0	1	1	0
Patients included on the WL for the first time in the course of 2023		0		1	0	0		6	0
Total number of patients ever active on the WL during 2023		0		11	0	0		28	0
Patients awaiting for a transplant (only active candidates) on 31/12/2023		0		5	0	0	7	26	0
Patients who died while on the WL during 2023		0		0	0	0		0	0
PANCREAS									
N. TX CENTRES		0		34	0	0	1	0	0
Patients included on the WL for the first time in the course of 2023		0		2	0	0		0	0
Total number of patients ever active on the WL during 2023		0		2	0	0		0	0
Patients awaiting for a transplant (only active candidates) on 31/12/2023		0		3	0	0	0	0	0
Patients who died while on the WL during 2023		0		0	0	0		0	0
SMALL BOWEL									
N. TX CENTRES		0		8	0	0	0	0	0
Patients included on the WL for the first time in the course of 2023		0		0	0	0		0	0
Total number of patients ever active on the WL during 2023		0		0	0	0		0	0
Patients awaiting for a transplant (only active candidates) on 31/12/2023		0		0	0	0	0	0	0
Patients who died while on the WL during 2023		0		0	0	0		0	0

International Data on Organ Donation and Transplantation Activity. Year 2023 vs 2022 vs 2021



2023 VS 2022 VS 2021. GLOBAL DATA ON ORGAN DONATION AND TRANSPLANTATION

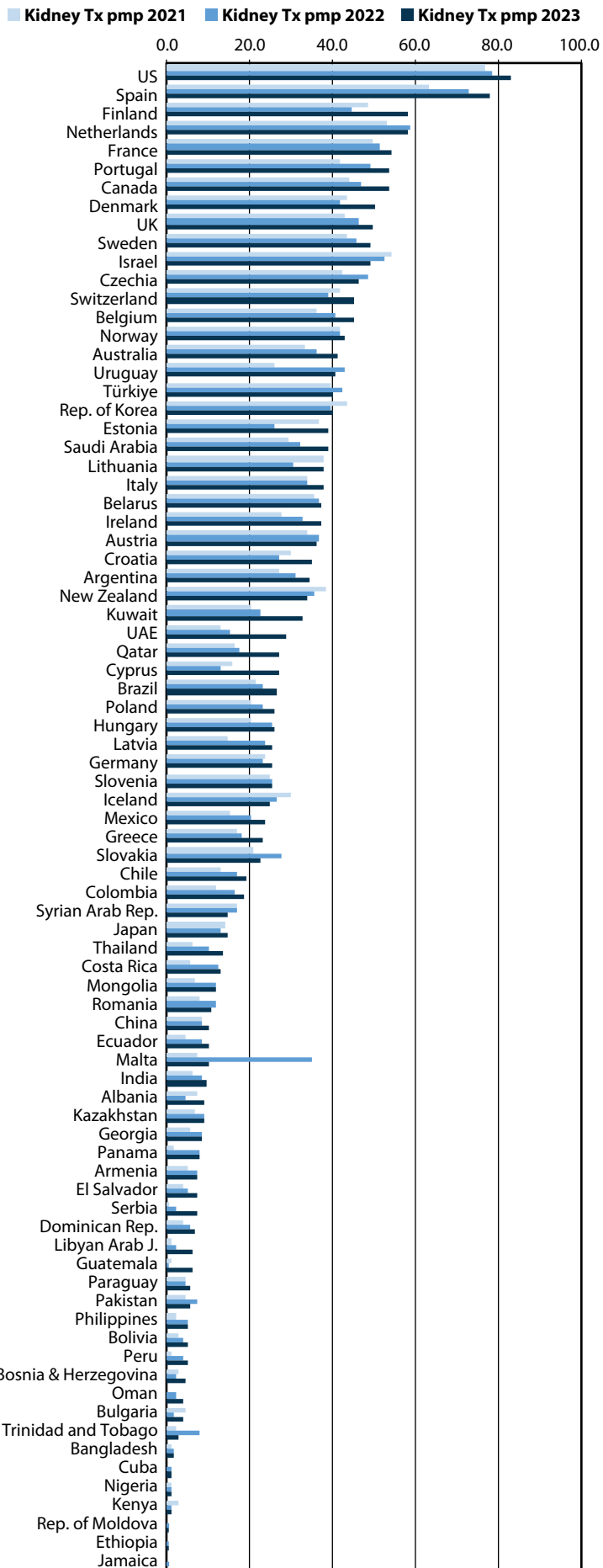
Actual Deceased Donors (ADD)



COUNTRY	2021		2022		2023	
	N	PMP	N	PMP	N	PMP
Argentina	630	13.8	767	16.7	816	17.8
Australia	421	16.3	454	17.4	513	19.4
Austria	182	20.2	222	24.4	188	20.9
Bangladesh	0	0.0	0	0.0	1	0.0
Belarus	218	23.2	241	25.6	240	25.3
Belgium	312	26.9	342	29.2	383	32.7
Bolivia	0	0.0	0	0.0	4	0.3
Bosnia & Herzegovina	1	0.3	0	0.0	2	0.6
Brazil	2937	13.7	3266	15.2	3759	17.4
Bulgaria	17	2.5	14	2.1	22	3.3
Chile	147	7.7	171	8.9	192	9.8
China	5272	3.6	5628	3.9	6454	4.5
Colombia	268	5.2	332	6.4	388	7.4
Costa Rica	17	3.3	27	5.2	21	4.0
Croatia	121	29.5	95	23.2	116	29.0
Cuba	0	0.0	5	0.4	7	0.6
Cyprus	5	4.2	4	3.3	9	6.9
Czechia	268	25.0	298	27.9	299	28.5
Denmark	105	18.1	84	14.5	113	19.2
Dominican Rep.	9	0.8	10	0.9	8	0.7
Ecuador	47	2.6	91	5.0	88	4.8
Estonia	21	16.2	25	19.2	30	23.1
Finland	122	22.2	114	20.4	155	28.2
France	1614	24.7	1694	25.8	1791	27.6
Germany	933	11.1	869	10.4	965	11.6
Greece	52	5.0	69	6.7	87	8.4
Guatemala	1	0.1	0	0.0	7	0.4
Hungary	102	10.6	122	12.7	131	12.8
Iceland	11	36.7	10	33.3	10	25.0
India	552	0.4	941	0.7	1099	0.8
Ireland	65	13.0	86	17.2	95	18.6
Israel	92	10.5	102	11.5	107	11.6
Italy	1458	24.1	1509	25.0	1731	29.4
Japan	78	0.6	108	0.9	145	1.2
Kazakhstan	4	0.2	4	0.2	7	0.4
Kuwait	25	5.8	32	7.3	33	7.7
Latvia	17	8.9	24	13.3	25	13.9
Lithuania	51	18.9	46	17.0	53	19.6
Luxembourg	2	3.3	8	13.3	7	10.0
Malta	3	7.5	5	12.5	1	2.0
Mexico	260	2.0	398	3.0	513	4.0
Mongolia	7	2.1	3	0.9	2	0.6
Netherlands	273	15.9	293	17.0	304	17.3
New Zealand	66	13.5	63	12.9	64	12.3
Norway	96	17.5	111	20.2	122	22.2
Oman	0	0.0	1	0.2	2	0.4
Pakistan	0	0.0	0	0.0	2	0.0
Panama	0	0.0	18	4.1	12	2.7
Paraguay	15	2.1	15	2.1	21	3.0
Peru	23	0.7	42	1.2	50	1.5
Philippines	3	0.0	20	0.2	15	0.1
Poland	396	10.5	445	11.8	566	13.8
Portugal	302	29.6	318	31.5	375	36.8
Qatar	11	3.8	10	3.3	20	7.4
Rep. of Korea	442	8.6	405	7.9	483	9.3
Rep. of Moldova	0	0.0	3	0.8	1	0.3
Romania	47	2.5	85	4.5	82	4.1
Saudi Arabia	102	2.9	118	3.3	146	4.0
Serbia	3	0.3	2	0.2	13	1.8
Slovakia	60	10.9	71	12.9	68	11.7
Slovenia	41	19.5	54	25.7	64	30.5
Spain	1905	40.8	2196	47.0	2346	49.4
Sweden	197	19.3	213	20.9	267	25.2
Switzerland	166	19.1	164	18.6	200	22.7
Thailand	190	2.7	303	4.3	446	6.2
Türkiye	305	3.6	289	3.4	305	3.6
UAE	39	3.9	55	5.4	87	9.2
UK	1350	19.8	1413	20.6	1513	22.3
Uruguay	43	12.3	75	21.4	67	19.7
US	13863	41.6	14905	44.5	16336	48.0

2023 VS 2022 VS 2021. GLOBAL DATA ON ORGAN DONATION AND TRANSPLANTATION

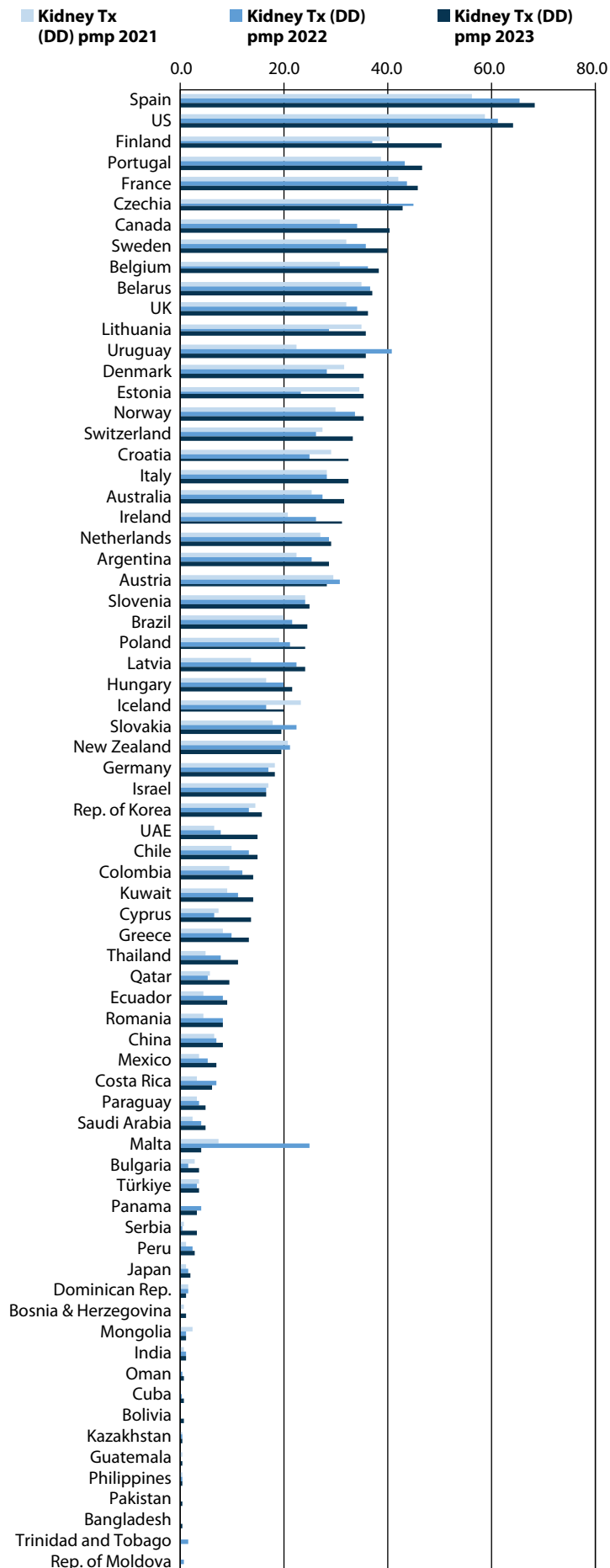
Kidney Transplants



COUNTRY	2021		2022		2023	
	N	PMP	N	PMP	N	PMP
Albania	21	7.2	13	4.5	26	9.3
Argentina	1239	27.2	1434	31.2	1584	34.6
Armenia	16	5.3	22	7.3	21	7.5
Australia	858	33.3	941	36.1	1086	41.1
Austria	306	34.0	336	36.9	327	36.3
Bangladesh	228	1.4	269	1.6	319	1.8
Belarus	336	35.7	348	37.0	355	37.4
Belgium	417	35.9	478	40.9	529	45.2
Bolivia	35	3.0	50	4.2	62	5.0
Bosnia & Herzegovina	10	3.0	8	2.5	14	4.4
Brazil	4559	21.3	5029	23.3	5811	26.9
Bulgaria	33	4.8	12	1.8	27	4.0
Canada	1673	43.9	1795	46.7	2078	53.6
Chile	246	12.8	326	16.9	378	19.3
China	12039	8.3	12712	8.7	14968	10.4
Colombia	623	12.1	841	16.3	965	18.5
Costa Rica	30	5.9	66	12.7	68	13.1
Croatia	124	30.2	112	27.3	141	35.3
Cuba	0	0.0	11	1.0	13	1.2
Cyprus	19	15.8	16	13.3	35	26.9
Czechia	456	42.6	520	48.6	488	46.5
Denmark	252	43.4	242	41.7	298	50.5
Dominican Rep.	45	4.1	61	5.5	79	7.0
Ecuador	87	4.9	151	8.3	182	10.0
El Salvador	27	4.2	35	5.3	47	7.3
Estonia	48	36.9	34	26.2	51	39.2
Ethiopia	0	0.0	9	0.1	8	0.1
Finland	268	48.7	250	44.6	321	58.4
France	3252	49.7	3377	51.5	3525	54.4
Georgia	22	5.5	34	8.5	31	8.4
Germany	1992	23.7	1966	23.4	2122	25.5
Greece	175	16.8	187	18.2	241	23.4
Guatemala	17	0.9	9	0.5	111	6.1
Hungary	194	20.2	246	25.6	265	26.0
Iceland	9	30.0	8	26.7	10	25.0
India	9105	6.5	11705	8.3	13426	9.4
Ireland	139	27.8	163	32.6	189	37.1
Israel	476	54.1	468	52.6	451	49.0
Italy	2043	33.8	2033	33.7	2244	38.1
Jamaica	0	0.0	2	0.7	0	0.0
Japan	1772	14.1	1656	13.2	1792	14.5
Kazakhstan	129	6.8	176	9.2	180	9.2
Kenya	160	2.9	55	1.0	53	1.0
Kuwait	87	20.2	99	22.5	140	32.6
Latvia	28	14.7	43	23.9	46	25.6
Libyan Arab J.	7	1.0	18	2.6	45	6.5
Lithuania	102	37.8	82	30.4	103	38.1
Malta	3	7.5	14	35.0	5	10.0
Mexico	1974	15.1	2713	20.6	3082	24.0
Mongolia	22	6.7	40	11.8	40	11.8
Netherlands	916	53.3	1008	58.6	1020	58.0
New Zealand	187	38.2	174	35.5	175	33.7
Nigeria	199	0.9	222	1.0	253	1.1
Norway	231	42.0	229	41.6	237	43.1
Oman	0	0.0	11	2.1	19	4.1
Pakistan	1003	4.5	1709	7.4	1324	5.5
Panama	8	1.8	35	8.0	35	7.8
Paraguay	33	4.6	32	4.4	39	5.7
Peru	49	1.5	130	3.9	171	5.0
Philippines	262	2.4	590	5.2	610	5.2
Poland	770	20.4	874	23.2	1073	26.2
Portugal	429	42.1	495	49.0	547	53.6
Qatar	48	16.6	53	17.7	74	27.4
Rep. of Korea	2227	43.4	2034	39.6	2070	40.0
Rep. of Moldova	0	0.0	3	0.8	1	0.3
Romania	156	8.2	230	12.1	219	11.0
Saudi Arabia	1044	29.6	1160	32.4	1435	38.9
Serbia	5	0.6	18	2.1	51	7.2
Slovakia	115	20.9	154	28.0	130	22.4
Slovenia	52	24.8	53	25.2	53	25.2
Spain	2950	63.2	3404	72.9	3690	77.7
Sweden	445	43.6	465	45.6	523	49.3
Switzerland	362	41.6	342	38.9	400	45.5
Syrian Arab Rep.	315	17.2	329	17.0	348	15.0
Thailand	432	6.2	722	10.3	985	13.7
Trinidad and Tobago	3	2.1	11	7.9	4	2.7
Türkiye	3375	39.7	3621	42.3	3452	40.2
UAE	130	13.0	152	15.0	274	28.8
UK	2917	42.8	3192	46.6	3370	49.8
Uruguay	92	26.3	150	42.9	138	40.6
US	25490	76.6	26310	78.6	28144	82.8

2023 VS 2022 VS 2021. GLOBAL DATA ON ORGAN DONATION AND TRANSPLANTATION

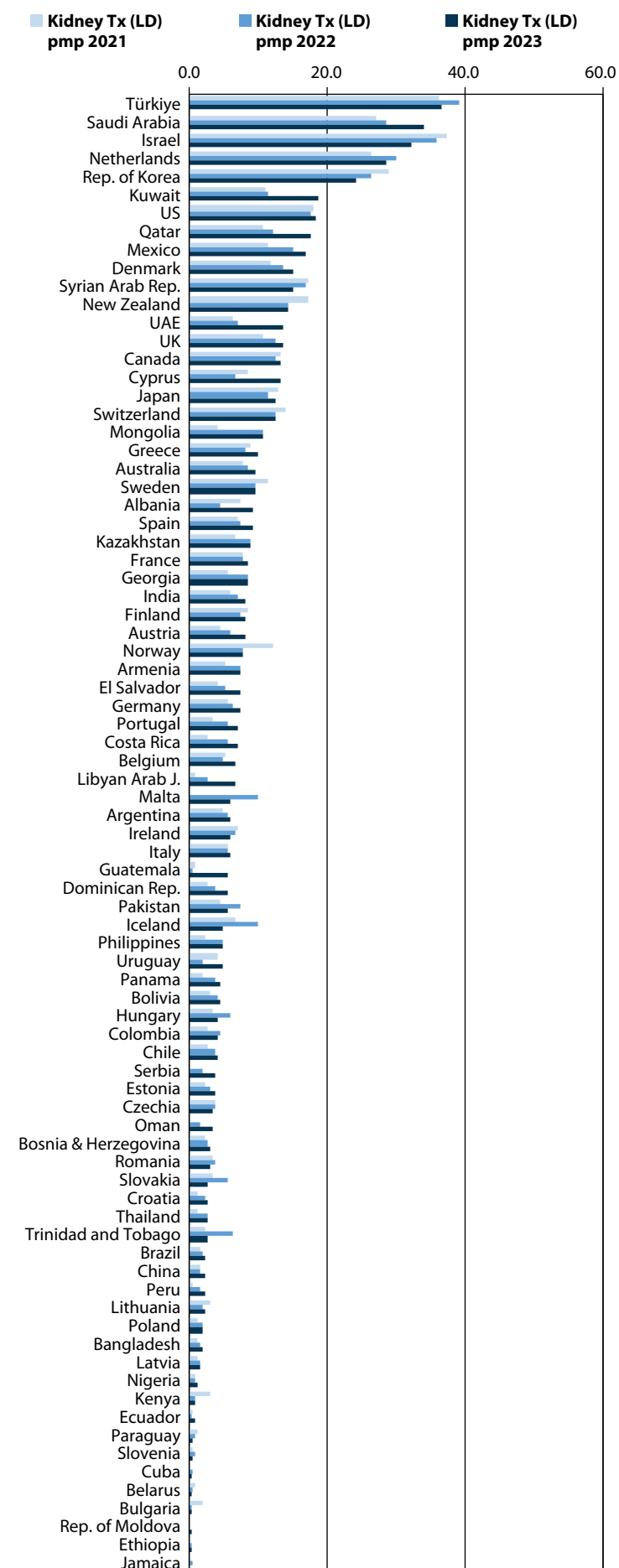
Kidney Transplants (from Deceased Donors)



COUNTRY	2021		2022		2023	
	N	PMP	N	PMP	N	PMP
Argentina	1018	22.3	1175	25.5	1311	28.6
Australia	656	25.4	715	27.4	829	31.4
Austria	264	29.3	281	30.9	254	28.2
Bangladesh	0	0.0	0	0.0	2	0.0
Belarus	328	34.9	343	36.5	352	37.1
Belgium	358	30.9	423	36.2	449	38.4
Bolivia	0	0.0	0	0.0	7	0.6
Bosnia & Herzegovina	2	0.6	0	0.0	4	1.3
Brazil	4222	19.7	4611	21.4	5283	24.4
Bulgaria	19	2.8	11	1.6	25	3.7
Canada	1171	30.7	1310	34.1	1567	40.4
Chile	192	10.0	253	13.1	294	15.0
China	9577	6.6	10187	7.0	11575	8.1
Colombia	478	9.3	607	11.8	741	14.2
Costa Rica	16	3.1	37	7.1	32	6.2
Croatia	119	29.0	102	24.9	130	32.5
Cuba	0	0.0	5	0.4	9	0.8
Cyprus	9	7.5	8	6.7	18	13.8
Czechia	414	38.7	480	44.9	452	43.0
Denmark	184	31.7	164	28.3	209	35.4
Dominican Rep.	16	1.5	19	1.7	15	1.3
Ecuador	77	4.3	149	8.2	167	9.2
Estonia	45	34.6	30	23.1	46	35.4
Finland	222	40.4	208	37.1	276	50.2
France	2750	42.0	2863	43.6	2968	45.8
Germany	1517	18.1	1431	17.1	1514	18.2
Greece	84	8.1	104	10.1	138	13.4
Guatemala	2	0.1	0	0.0	7	0.4
Hungary	160	16.7	190	19.8	221	21.7
Iceland	7	23.3	5	16.7	8	20.0
India	830	0.6	1541	1.1	1635	1.1
Ireland	104	20.8	130	26.0	159	31.2
Israel	149	16.9	149	16.7	154	16.7
Italy	1702	28.2	1697	28.1	1898	32.2
Japan	125	1.0	198	1.6	248	2.0
Kazakhstan	5	0.3	7	0.4	8	0.4
Kuwait	39	9.1	49	11.1	60	14.0
Latvia	26	13.7	40	22.2	43	23.9
Lithuania	94	34.8	77	28.5	97	35.9
Malta	3	7.5	10	25.0	2	4.0
Mexico	475	3.6	725	5.5	918	7.1
Mongolia	8	2.4	4	1.2	4	1.2
Netherlands	464	27.0	492	28.6	515	29.3
New Zealand	102	20.8	104	21.2	101	19.4
Norway	164	29.8	186	33.8	194	35.3
Oman	0	0.0	2	0.4	4	0.9
Pakistan	0	0.0	0	0.0	3	0.0
Panama	0	0.0	18	4.1	15	3.3
Paraguay	24	3.3	26	3.6	35	5.1
Peru	31	0.9	81	2.4	91	2.6
Philippines	6	0.1	37	0.3	29	0.2
Poland	726	19.2	801	21.2	995	24.3
Portugal	393	38.5	437	43.3	476	46.7
Qatar	17	5.9	16	5.3	26	9.6
Rep. of Korea	747	14.6	677	13.2	814	15.7
Rep. of Moldova	0	0.0	3	0.8	0	0.0
Romania	88	4.6	157	8.3	161	8.1
Saudi Arabia	91	2.6	138	3.9	177	4.8
Serbia	5	0.6	2	0.2	23	3.2
Slovakia	97	17.6	124	22.5	114	19.7
Slovenia	51	24.3	51	24.3	52	24.8
Spain	2627	56.3	3054	65.4	3255	68.5
Sweden	327	32.1	366	35.9	423	39.9
Switzerland	240	27.6	231	26.3	291	33.1
Thailand	351	5.0	547	7.8	791	11.0
Trinidad and Tobago	0	0.0	2	1.4	0	0.0
Türkiye	298	3.5	281	3.3	301	3.5
UAE	66	6.6	80	7.9	143	15.1
UK	2184	32.0	2338	34.1	2438	36.0
Uruguay	78	22.3	143	40.9	122	35.9
US	19519	58.6	20446	61.1	21854	64.3

2023 VS 2022 VS 2021. GLOBAL DATA ON ORGAN DONATION AND TRANSPLANTATION

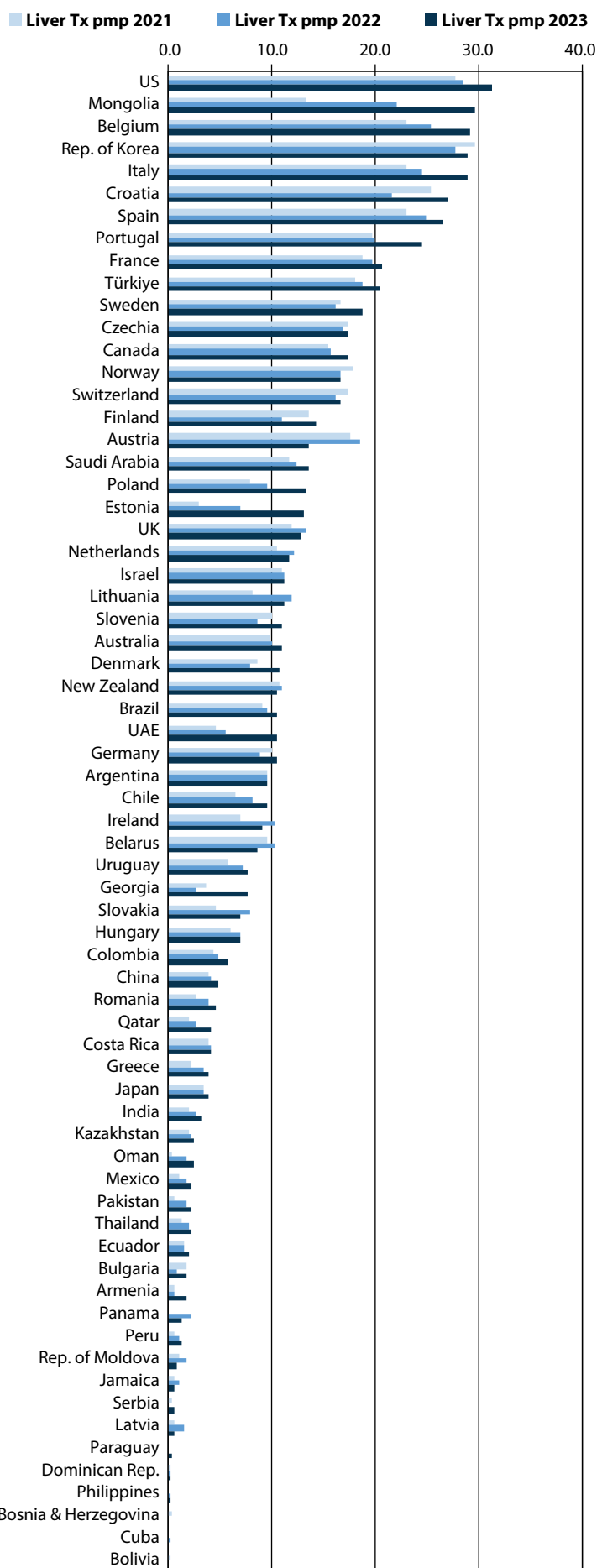
Kidney Transplants (from Living Donors)



COUNTRY	2021		2022		2023	
	N	PMP	N	PMP	N	PMP
Albania	21	7.2	13	4.5	26	9.3
Argentina	221	4.8	259	5.6	273	6.0
Armenia	16	5.3	22	7.3	21	7.5
Australia	202	7.8	226	8.7	257	9.7
Austria	42	4.7	55	6.0	73	8.1
Bangladesh	228	1.4	269	1.6	317	1.8
Belarus	8	0.9	5	0.5	3	0.3
Belgium	59	5.1	55	4.7	80	6.8
Bolivia	35	3.0	50	4.2	55	4.4
Bosnia & Herzegovina	8	2.4	8	2.5	10	3.1
Brazil	337	1.6	418	1.9	528	2.4
Bulgaria	14	2.0	1	0.1	2	0.3
Canada	502	13.2	485	12.6	511	13.2
Chile	54	2.8	73	3.8	84	4.3
China	2462	1.7	2525	1.7	3393	2.4
Colombia	145	2.8	234	4.5	224	4.3
Costa Rica	14	2.7	29	5.6	36	6.9
Croatia	5	1.2	10	2.4	11	2.8
Cuba	0	0.0	6	0.5	4	0.4
Cyprus	10	8.3	8	6.7	17	13.1
Czechia	42	3.9	40	3.7	36	3.4
Denmark	68	11.7	78	13.4	89	15.1
Dominican Rep.	29	2.6	42	3.8	64	5.7
Ecuador	10	0.6	2	0.1	15	0.8
El Salvador	27	4.2	35	5.3	47	7.3
Estonia	3	2.3	4	3.1	5	3.8
Ethiopia	0	0.0	9	0.1	8	0.1
Finland	46	8.4	42	7.5	45	8.2
France	502	7.7	514	7.8	557	8.6
Georgia	22	5.5	34	8.5	31	8.4
Germany	475	5.7	535	6.4	608	7.3
Greece	91	8.8	83	8.1	103	10.0
Guatemala	15	0.8	9	0.5	104	5.7
Hungary	34	3.5	56	5.8	44	4.3
Iceland	2	6.7	3	10.0	2	5.0
India	8275	5.9	10164	7.2	11791	8.3
Ireland	35	7.0	33	6.6	30	5.9
Israel	327	37.2	319	35.8	297	32.3
Italy	341	5.6	336	5.6	346	5.9
Jamaica	0	0.0	2	0.7	0	0.0
Japan	1647	13.1	1458	11.6	1544	12.5
Kazakhstan	124	6.5	169	8.8	172	8.8
Kenya	160	2.9	55	1.0	53	1.0
Kuwait	48	11.2	50	11.4	80	18.6
Latvia	2	1.1	3	1.7	3	1.7
Libyan Arab J.	7	1.0	18	2.6	45	6.5
Lithuania	8	3.0	5	1.9	6	2.2
Malta	0	0.0	4	10.0	3	6.0
Mexico	1499	11.5	1988	15.1	2164	16.8
Mongolia	14	4.2	36	10.6	36	10.6
Netherlands	452	26.3	516	30.0	505	28.7
New Zealand	85	17.3	70	14.3	74	14.2
Nigeria	199	0.9	222	1.0	253	1.1
Norway	67	12.2	43	7.8	43	7.8
Oman	0	0.0	9	1.7	15	3.3
Pakistan	1003	4.5	1709	7.4	1321	5.5
Panama	8	1.8	17	3.9	20	4.4
Paraguay	9	1.3	6	0.8	4	0.6
Peru	18	0.5	49	1.5	80	2.3
Philippines	256	2.3	553	4.9	581	5.0
Poland	44	1.2	73	1.9	78	1.9
Portugal	36	3.5	58	5.7	71	7.0
Qatar	31	10.7	37	12.3	48	17.8
Rep. of Korea	1480	28.8	1357	26.5	1256	24.2
Rep. of Moldova	0	0.0	0	0.0	1	0.3
Romania	68	3.6	73	3.8	58	2.9
Saudi Arabia	953	27.0	1022	28.5	1258	34.1
Serbia	0	0.0	16	1.8	28	3.9
Slovakia	18	3.3	30	5.5	16	2.8
Slovenia	1	0.5	2	1.0	1	0.5
Spain	323	6.9	350	7.5	435	9.2
Sweden	118	11.6	99	9.7	100	9.4
Switzerland	122	14.0	111	12.6	109	12.4
Syrian Arab Rep.	315	17.2	329	17.0	348	15.0
Thailand	81	1.2	175	2.5	194	2.7
Trinidad and Tobago	3	2.1	9	6.4	4	2.7
Türkiye	3077	36.2	3340	39.0	3151	36.7
UAE	64	6.4	72	7.1	131	13.8
UK	733	10.7	854	12.5	932	13.8
Uruguay	14	4.0	7	2.0	16	4.7
US	5971	17.9	5864	17.5	6290	18.5

2023 VS 2022 VS 2021. GLOBAL DATA ON ORGAN DONATION AND TRANSPLANTATION

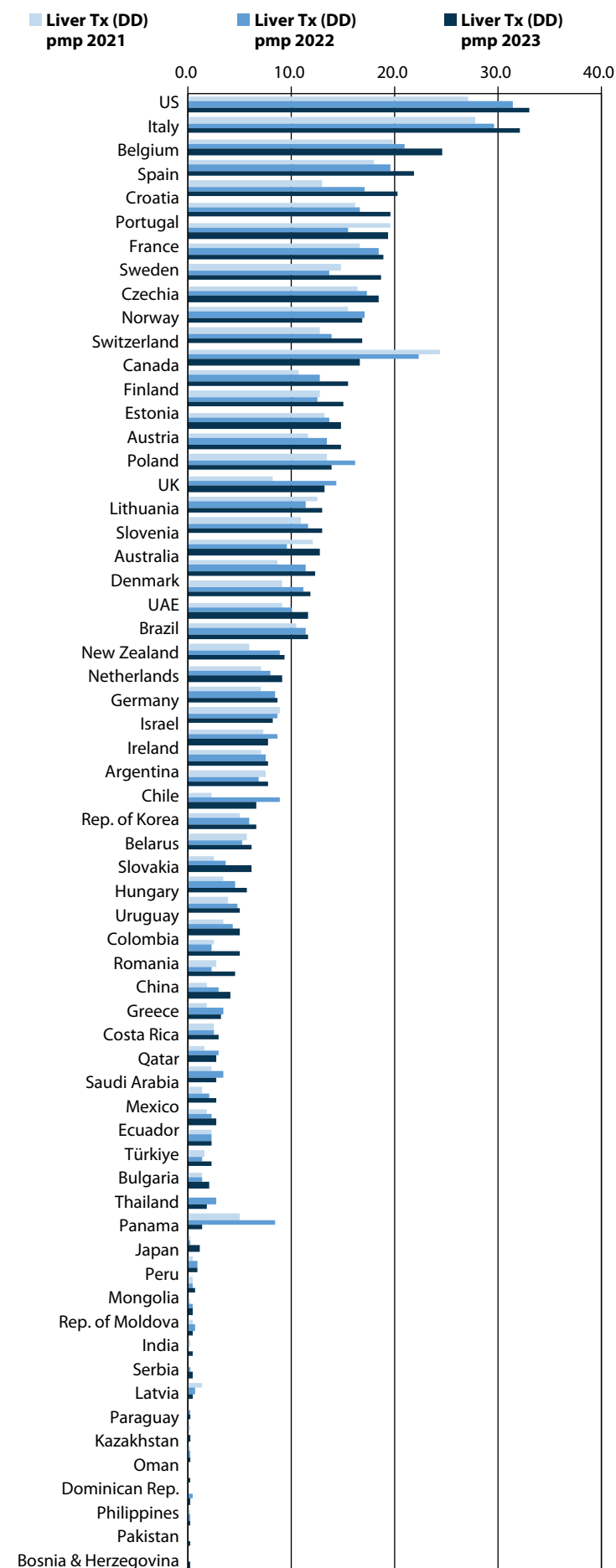
Liver Transplants



COUNTRY	2021		2022		2023	
	N	PMP	N	PMP	N	PMP
Argentina	438	9.6	443	9.6	442	9.7
Armenia	2	0.7	2	0.7	5	1.8
Australia	254	9.8	260	10.0	287	10.9
Austria	159	17.7	169	18.6	123	13.7
Belarus	91	9.7	96	10.2	83	8.7
Belgium	268	23.1	297	25.4	341	29.1
Bolivia	1	0.1	0	0.0	0	0.0
Bosnia & Herzegovina	1	0.3	0	0.0	0	0.0
Brazil	1944	9.1	2049	9.5	2284	10.6
Bulgaria	13	1.9	6	0.9	12	1.8
Canada	589	15.5	599	15.6	669	17.2
Chile	125	6.5	156	8.1	188	9.6
China	5834	4.0	6053	4.2	6896	4.8
Colombia	229	4.5	248	4.8	307	5.9
Costa Rica	20	3.9	22	4.2	21	4.0
Croatia	104	25.4	89	21.7	108	27.0
Cuba	0	0.0	1	0.1	0	0.0
Czechia	186	17.4	180	16.8	183	17.4
Denmark	50	8.6	46	7.9	63	10.7
Dominican Rep.	1	0.1	1	0.1	2	0.2
Ecuador	27	1.5	28	1.5	35	1.9
Estonia	4	3.1	9	6.9	17	13.1
Finland	75	13.6	62	11.1	78	14.2
France	1225	18.7	1294	19.7	1342	20.7
Georgia	15	3.8	11	2.8	28	7.6
Germany	834	9.9	748	8.9	868	10.4
Greece	24	2.3	36	3.5	40	3.9
Hungary	59	6.1	67	7.0	70	6.9
India	2847	2.0	3920	2.8	4491	3.1
Ireland	35	7.0	51	10.2	46	9.0
Israel	96	10.9	99	11.1	103	11.2
Italy	1396	23.1	1479	24.5	1701	28.9
Jamaica	2	0.7	3	1.0	2	0.7
Japan	421	3.3	422	3.4	470	3.8
Kazakhstan	40	2.1	43	2.2	50	2.6
Latvia	1	0.5	3	1.7	1	0.6
Lithuania	22	8.1	32	11.9	30	11.1
Mexico	135	1.0	238	1.8	298	2.3
Mongolia	44	13.3	75	22.1	101	29.7
Netherlands	181	10.5	211	12.3	207	11.8
New Zealand	53	10.8	54	11.0	55	10.6
Norway	98	17.8	92	16.7	92	16.7
Oman	2	0.4	10	1.9	11	2.4
Pakistan	131	0.6	401	1.7	526	2.2
Panama	0	0.0	10	2.3	6	1.3
Paraguay	0	0.0	0	0.0	2	0.3
Peru	23	0.7	36	1.1	43	1.3
Philippines	0	0.0	1	0.0	3	0.0
Poland	297	7.9	362	9.6	550	13.4
Portugal	202	19.8	202	20.0	249	24.4
Qatar	6	2.1	8	2.7	11	4.1
Rep. of Korea	1514	29.5	1428	27.8	1497	28.9
Rep. of Moldova	4	1.0	7	1.8	3	0.9
Romania	53	2.8	75	3.9	94	4.7
Saudi Arabia	411	11.6	440	12.3	499	13.5
Serbia	3	0.3	0	0.0	4	0.6
Slovakia	26	4.7	43	7.8	40	6.9
Slovenia	21	10.0	18	8.6	23	11.0
Spain	1078	23.1	1159	24.8	1262	26.6
Sweden	170	16.7	166	16.3	198	18.7
Switzerland	151	17.4	142	16.1	146	16.6
Thailand	89	1.3	147	2.1	156	2.2
Türkiye	1528	18.0	1610	18.8	1756	20.5
UAE	46	4.6	57	5.6	100	10.5
UK	821	12.0	922	13.5	877	13.0
Uruguay	20	5.7	25	7.1	26	7.6
US	9236	27.7	9528	28.5	10660	31.4

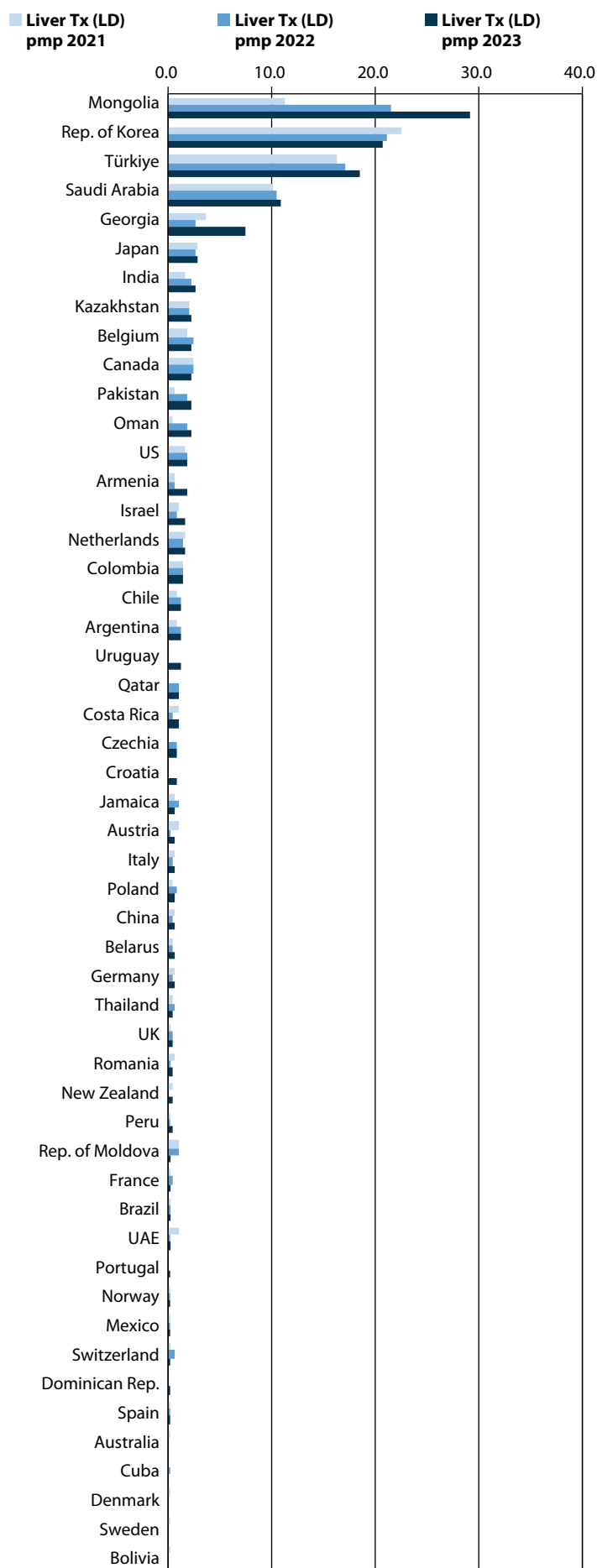
2023 VS 2022 VS 2021. GLOBAL DATA ON ORGAN DONATION AND TRANSPLANTATION

Liver Transplants (from Deceased Donors)



2023 VS 2022 VS 2021. GLOBAL DATA ON ORGAN DONATION AND TRANSPLANTATION

Liver Transplants (from Living Donors)



COUNTRY	2021		2022		2023	
	N	PMP	N	PMP	N	PMP
Argentina	40	0,9	59	1,3	54	1,2
Armenia	2	0,7	2	0,7	5	1,8
Australia	1	0,0	0	0,0	0	0,0
Austria	9	1,0	2	0,2	6	0,7
Belarus	4	0,4	4	0,4	6	0,6
Belgium	21	1,8	28	2,4	26	2,2
Bolivia	1	0,1	0	0,0	0	0,0
Brazil	50	0,2	61	0,3	55	0,3
Canada	93	2,4	91	2,4	86	2,2
Chile	15	0,8	23	1,2	24	1,2
China	811	0,6	749	0,5	918	0,6
Colombia	69	1,3	75	1,5	80	1,5
Costa Rica	5	1,0	2	0,4	5	1,0
Croatia	0	0,0	0	0,0	3	0,8
Cuba	0	0,0	1	0,1	0	0,0
Czechia	0	0,0	8	0,7	8	0,8
Denmark	1	0,2	0	0,0	0	0,0
Dominican Rep.	0	0,0	0	0,0	1	0,1
France	20	0,3	25	0,4	18	0,3
Georgia	15	3,8	11	2,8	28	7,6
Germany	54	0,6	41	0,5	50	0,6
India	2363	1,7	3174	2,3	3643	2,6
Israel	9	1,0	7	0,8	16	1,7
Italy	36	0,6	32	0,5	39	0,7
Jamaica	2	0,7	3	1,0	2	0,7
Japan	361	2,9	336	2,7	352	2,9
Kazakhstan	37	1,9	41	2,1	45	2,3
Mexico	11	0,1	20	0,2	22	0,2
Mongolia	37	11,2	73	21,5	99	29,1
Netherlands	28	1,6	26	1,5	29	1,6
New Zealand	2	0,4	0	0,0	2	0,4
Norway	1	0,2	1	0,2	1	0,2
Oman	2	0,4	10	1,9	10	2,2
Pakistan	131	0,6	401	1,7	525	2,2
Peru	6	0,2	5	0,1	12	0,3
Poland	20	0,5	28	0,7	27	0,7
Portugal	0	0,0	0	0,0	2	0,2
Qatar	0	0,0	3	1,0	3	1,1
Rep. of Korea	1157	22,6	1086	21,2	1077	20,8
Rep. of Moldova	4	1,0	4	1,0	1	0,3
Romania	11	0,6	4	0,2	8	0,4
Saudi Arabia	355	10,1	374	10,4	404	10,9
Spain	1	0,0	5	0,1	2	0,0
Sweden	1	0,1	0	0,0	0	0,0
Switzerland	2	0,2	5	0,6	1	0,1
Thailand	32	0,5	42	0,6	36	0,5
Türkiye	1387	16,3	1462	17,1	1588	18,5
UAE	10	1,0	2	0,2	2	0,2
UK	21	0,3	27	0,4	28	0,4
Uruguay	0	0,0	0	0,0	4	1,2
US	567	1,7	597	1,8	652	1,9

2023 VS 2022 VS 2021. GLOBAL DATA ON ORGAN DONATION AND TRANSPLANTATION

Heart Transplants



COUNTRY	2021		2022		2023	
	N	PMP	N	PMP	N	PMP
Argentina	114	2.5	110	2.4	110	2.4
Australia	112	4.3	117	4.5	129	4.9
Austria	59	6.6	62	6.8	64	7.1
Belarus	48	5.1	37	3.9	45	4.7
Belgium	52	4.5	63	5.4	49	4.2
Brazil	334	1.6	362	1.7	429	2.0
Bulgaria	2	0.3	2	0.3	3	0.4
Canada	142	3.7	153	4.0	184	4.7
Chile	28	1.5	40	2.1	35	1.8
China	738	0.5	710	0.5	994	0.7
Colombia	69	1.3	81	1.6	99	1.9
Costa Rica	1	0.2	4	0.8	4	0.8
Croatia	34	8.3	38	9.3	48	12.0
Czechia	74	6.9	81	7.6	84	8.0
Denmark	24	4.1	27	4.7	33	5.6
Ecuador	3	0.2	13	0.7	22	1.2
Finland	22	4.0	19	3.4	19	3.5
France	415	6.3	419	6.4	393	6.1
Germany	329	3.9	356	4.2	330	4.0
Greece	13	1.3	12	1.2	14	1.4
Hungary	34	3.5	40	4.2	52	5.1
India	151	0.1	243	0.2	221	0.2
Ireland	10	2.0	10	2.0	5	1.0
Israel	24	2.7	32	3.6	33	3.6
Italy	252	4.2	253	4.2	370	6.3
Japan	59	0.5	79	0.6	115	0.9
Kazakhstan	2	0.1	4	0.2	5	0.3
Kuwait	0	0.0	1	0.2	1	0.2
Latvia	2	1.1	2	1.1	3	1.7
Lithuania	6	2.2	9	3.3	12	4.4
Mexico	26	0.2	42	0.3	40	0.3
Netherlands	44	2.6	51	3.0	74	4.2
New Zealand	14	2.9	15	3.1	16	3.1
Norway	23	4.2	30	5.5	32	5.8
Panama	0	0.0	1	0.2	0	0.0
Paraguay	5	0.7	6	0.8	5	0.7
Peru	7	0.2	14	0.4	8	0.2
Poland	200	5.3	173	4.6	182	4.4
Portugal	49	4.8	37	3.7	52	5.1
Rep. of Korea	168	3.3	167	3.3	245	4.7
Romania	3	0.2	7	0.4	11	0.6
Saudi Arabia	48	1.4	41	1.1	55	1.5
Serbia	1	0.1	0	0.0	5	0.7
Slovakia	17	3.1	20	3.6	18	3.1
Slovenia	17	8.1	29	13.8	21	10.0
Spain	302	6.5	311	6.7	325	6.8
Sweden	66	6.5	55	5.4	69	6.5
Switzerland	33	3.8	35	4.0	58	6.6
Thailand	24	0.3	31	0.4	31	0.4
Türkiye	24	0.3	26	0.3	40	0.5
UAE	3	0.3	0	0.0	6	0.6
UK	169	2.5	202	2.9	238	3.5
Uruguay	7	2.0	8	2.3	9	2.6
US	3863	11.6	4162	12.4	4599	13.5

2023 VS 2022 VS 2021. GLOBAL DATA ON ORGAN DONATION AND TRANSPLANTATION

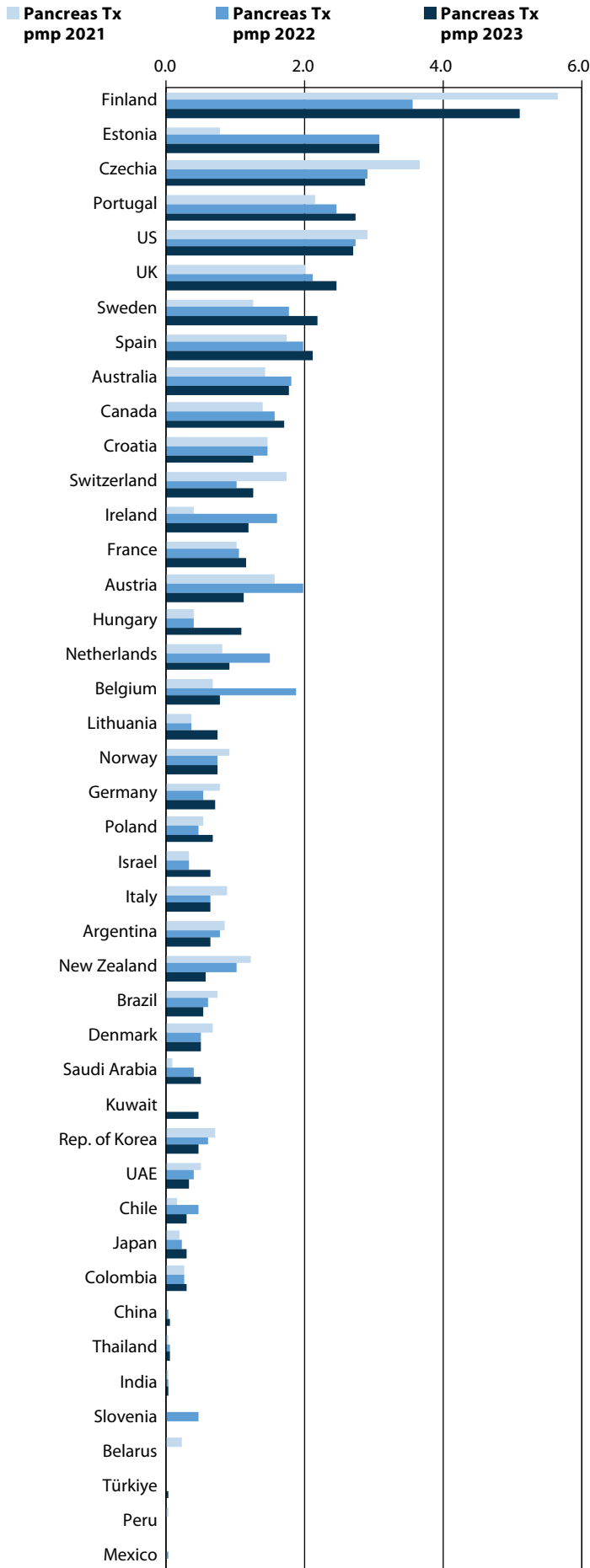
Lung Transplants



COUNTRY	2021		2022		2023	
	N	PMP	N	PMP	N	PMP
Argentina	37	0.8	33	0.7	28	0.6
Australia	171	6.6	142	5.4	164	6.2
Austria	123	13.7	102	11.2	124	13.8
Belarus	6	0.6	6	0.6	7	0.7
Belgium	94	8.1	95	8.1	116	9.9
Brazil	84	0.4	106	0.5	81	0.4
Canada	352	9.2	352	9.2	450	11.6
Chile	22	1.1	30	1.6	28	1.4
China	775	0.5	798	0.5	959	0.7
Colombia	21	0.4	27	0.5	36	0.7
Costa Rica	2	0.4	4	0.8	6	1.2
Croatia	9	2.2	10	2.4	6	1.5
Czechia	52	4.9	54	5.0	67	6.4
Denmark	22	3.8	23	4.0	40	6.8
Estonia	2	1.5	3	2.3	2	1.5
Finland	24	4.4	20	3.6	28	5.1
France	322	4.9	342	5.2	307	4.7
Germany	283	3.4	254	3.0	266	3.2
Greece	5	0.5	11	1.1	12	1.2
Hungary	14	1.5	12	1.3	11	1.1
India	133	0.1	144	0.1	197	0.1
Ireland	20	4.0	18	3.6	19	3.7
Israel	55	6.3	61	6.9	60	6.5
Italy	117	1.9	139	2.3	189	3.2
Japan	93	0.7	108	0.9	128	1.0
Kazakhstan	0	0.0	3	0.2	1	0.1
Lithuania	1	0.4	1	0.4	0	0.0
Mexico	6	0.0	11	0.1	6	0.0
Netherlands	92	5.3	122	7.1	109	6.2
New Zealand	26	5.3	15	3.1	25	4.8
Norway	24	4.4	31	5.6	37	6.7
Peru	1	0.0	3	0.1	1	0.0
Poland	68	1.8	93	2.5	99	2.4
Portugal	34	3.3	39	3.9	44	4.3
Qatar	1	0.3	2	0.7	3	1.1
Rep. of Korea	167	3.3	136	2.7	202	3.9
Romania	1	0.1	2	0.1	1	0.1
Saudi Arabia	32	0.9	38	1.1	41	1.1
Slovenia	15	7.1	10	4.8	11	5.2
Spain	362	7.8	415	8.9	479	10.1
Sweden	51	5.0	50	4.9	86	8.1
Switzerland	42	4.8	51	5.8	71	8.1
Thailand	1	0.0	0	0.0	3	0.0
Türkiye	21	0.2	11	0.1	15	0.2
UAE	0	0.0	6	0.6	16	1.7
UK	105	1.5	95	1.4	143	2.1
Uruguay	2	0.6	4	1.1	1	0.3
US	2569	7.7	2743	8.2	3080	9.1

2023 VS 2022 VS 2021. GLOBAL DATA ON ORGAN DONATION AND TRANSPLANTATION

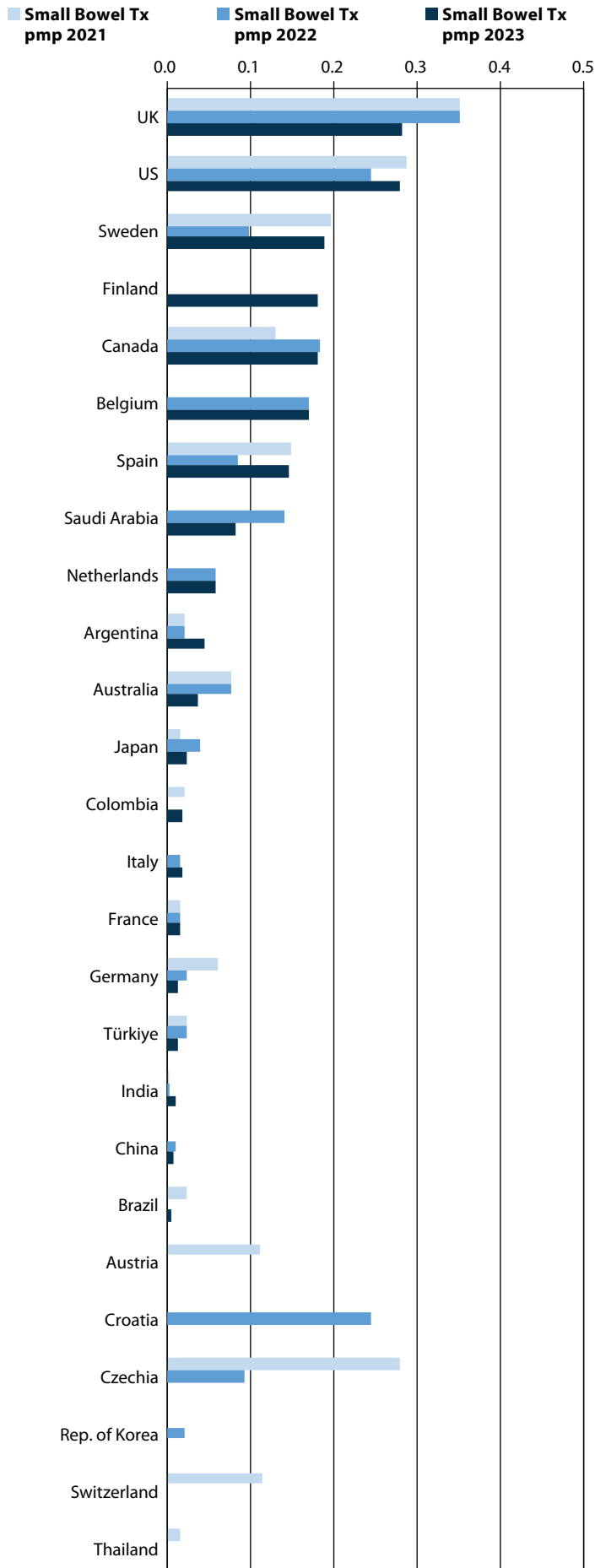
Pancreas Transplants



COUNTRY	2021		2022		2023	
	N	PMP	N	PMP	N	PMP
Argentina	39	0.9	36	0.8	29	0.6
Australia	37	1.4	47	1.8	47	1.8
Austria	14	1.6	18	2.0	10	1.1
Belarus	2	0.2	0	0.0	0	0.0
Belgium	8	0.7	22	1.9	9	0.8
Brazil	162	0.8	133	0.6	119	0.5
Canada	53	1.4	60	1.6	66	1.7
Chile	3	0.2	9	0.5	6	0.3
China			45	0.0	76	0.1
Colombia	13	0.3	13	0.3	15	0.3
Croatia	6	1.5	6	1.5	5	1.3
Czechia	39	3.6	31	2.9	30	2.9
Denmark	4	0.7	3	0.5	3	0.5
Estonia	1	0.8	4	3.1	4	3.1
Finland	31	5.6	20	3.6	28	5.1
France	67	1.0	70	1.1	74	1.1
Germany	65	0.8	44	0.5	59	0.7
Hungary	4	0.4	4	0.4	11	1.1
India	19	0.0	26	0.0	27	0.0
Ireland	2	0.4	8	1.6	6	1.2
Israel	3	0.3	3	0.3	6	0.7
Italy	54	0.9	38	0.6	38	0.6
Japan	23	0.2	30	0.2	37	0.3
Kuwait	0	0.0	0	0.0	2	0.5
Lithuania	1	0.4	1	0.4	2	0.7
Mexico	0	0.0	2	0.0	0	0.0
Netherlands	14	0.8	26	1.5	16	0.9
New Zealand	6	1.2	5	1.0	3	0.6
Norway	5	0.9	4	0.7	4	0.7
Peru	1	0.0	0	0.0	0	0.0
Poland	20	0.5	18	0.5	28	0.7
Portugal	22	2.2	25	2.5	28	2.7
Rep. of Korea	37	0.7	31	0.6	24	0.5
Saudi Arabia	3	0.1	14	0.4	18	0.5
Slovenia	0	0.0	1	0.5	0	0.0
Spain	82	1.8	92	2.0	100	2.1
Sweden	13	1.3	18	1.8	23	2.2
Switzerland	15	1.7	9	1.0	11	1.3
Thailand	1	0.0	4	0.1	3	0.0
Türkiye	0	0.0	0	0.0	1	0.0
UAE	5	0.5	4	0.4	3	0.3
UK	137	2.0	146	2.1	166	2.5
US	963	2.9	918	2.7	914	2.7

2023 VS 2022 VS 2021. GLOBAL DATA ON ORGAN DONATION AND TRANSPLANTATION

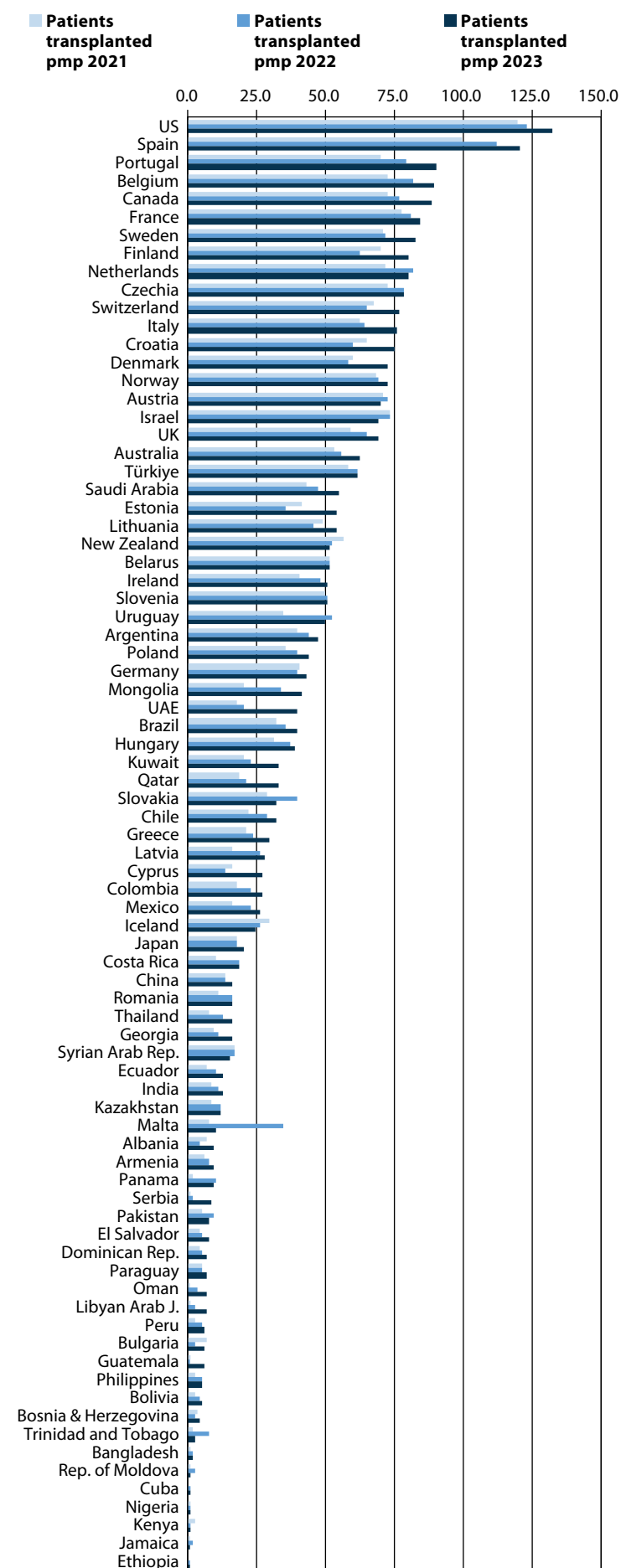
Small Bowel Transplants



COUNTRY	2021		2022		2023	
	N	PMP	N	PMP	N	PMP
Argentina	1	0.0	1	0.0	2	0.0
Australia	2	0.1	2	0.1	1	0.0
Austria	1	0.1	0	0.0	0	0.0
Belgium	0	0.0	2	0.2	2	0.2
Brazil	5	0.0	0	0.0	1	0.0
Canada	5	0.1	7	0.2	7	0.2
China	0	0.0	15	0.0	12	0.0
Colombia	1	0.0	0	0.0	1	0.0
Croatia	0	0.0	1	0.2	0	0.0
Czechia	3	0.3	1	0.1	0	0.0
Finland	0	0.0	0	0.0	1	0.2
France	1	0.0	1	0.0	1	0.0
Germany	5	0.1	2	0.0	1	0.0
India	4	0.0	3	0.0	16	0.0
Italy	0	0.0	1	0.0	1	0.0
Japan	2	0.0	5	0.0	3	0.0
Netherlands	0	0.0	1	0.1	1	0.1
Rep. of Korea	0	0.0	1	0.0	0	0.0
Saudi Arabia	0	0.0	5	0.1	3	0.1
Spain	7	0.1	4	0.1	7	0.1
Sweden	2	0.2	1	0.1	2	0.2
Switzerland	1	0.1	0	0.0	0	0.0
Thailand	1	0.0	0	0.0	0	0.0
Türkiye	2	0.0	2	0.0	1	0.0
UK	24	0.4	24	0.4	19	0.3
US	96	0.3	82	0.2	95	0.3

2023 VS 2022 VS 2021. GLOBAL DATA ON ORGAN DONATION AND TRANSPLANTATION

Patients transplanted



COUNTRY	2021		2022		2023	
	N	PMP	N	PMP	N	PMP
Albania	21	7.2	13	4.5	26	9.3
Argentina	1809	39.7	2004	43.6	2149	46.9
Armenia	18	6.0	24	8.0	26	9.3
Australia	1377	53.4	1447	55.4	1655	62.7
Austria	641	71.2	663	72.9	630	70.0
Bangladesh	228	1.4	269	1.6	319	1.8
Belarus	481	51.2	484	51.5	490	51.6
Belgium	839	72.3	957	81.8	1046	89.4
Bolivia	36	3.1	51	4.3	62	5.0
Bosnia & Herzegovina	11	3.3	8	2.5	14	4.4
Brazil	6879	32.1	7679	35.6	8569	39.6
Bulgaria	48	7.0	20	2.9	42	6.3
Canada	2777	72.9	2932	76.4	3426	88.3
Chile	422	22.0	561	29.1	629	32.1
China	19326	13.3	20244	13.9	23786	16.6
Colombia	937	18.3	1191	23.1	1394	26.8
Costa Rica	53	10.4	96	18.5	99	19.0
Croatia	268	65.4	245	59.8	300	75.0
Cuba	0	0.0	11	1.0	13	1.2
Cyprus	19	15.8	16	13.3	35	26.9
Czechia	778	72.7	839	78.4	827	78.8
Denmark	348	60.0	338	58.3	430	72.9
Dominican Rep.	46	4.2	62	5.6	81	7.2
Ecuador	117	6.5	192	10.6	239	13.1
El Salvador	27	4.2	35	5.3	47	7.3
Estonia	54	41.5	46	35.4	70	53.8
Ethiopia	0	0.0	9	0.1	8	0.1
Finland	387	70.4	350	62.5	442	80.4
France	5097	77.9	5318	81.1	5450	84.1
Georgia	37	9.3	45	11.3	59	15.9
Germany	3422	40.8	3311	39.5	3566	42.8
Greece	217	20.9	246	23.9	307	29.8
Guatemala	17	0.9	9	0.5	111	6.1
Hungary	299	31.1	360	37.5	394	38.6
Iceland	9	30.0	8	26.7	10	25.0
India	12218	8.8	15968	11.4	18336	12.8
Ireland	202	40.4	242	48.4	260	51.0
Israel	647	73.5	656	73.7	636	69.1
Italy	3795	62.8	3876	64.3	4466	75.8
Jamaica	2	0.7	5	1.7	2	0.7
Japan	2235	17.7	2263	18.0	2497	20.3
Kazakhstan	171	9.0	226	11.8	236	12.0
Kenya	160	2.9	55	1.0	53	1.0
Kuwait	87	20.2	100	22.7	142	33.0
Latvia	31	16.3	48	26.7	50	27.8
Libyan Arab J.	7	1.0	18	2.6	45	6.5
Lithuania	132	48.9	123	45.6	145	53.7
Malta	3	7.5	14	35.0	5	10.0
Mexico	2139	16.4	3000	22.8	3417	26.6
Mongolia	66	20.0	115	33.8	141	41.5
Netherlands	1231	71.6	1402	81.5	1402	79.9
New Zealand	277	56.5	258	52.7	269	51.7
Nigeria	199	0.9	222	1.0	253	1.1
Norway	374	68.0	381	69.3	398	72.4
Oman	2	0.4	21	4.0	30	6.5
Pakistan	1134	5.0	2110	9.2	1850	7.7
Panama	8	1.8	46	10.5	41	9.1
Paraguay	38	5.3	38	5.2	46	6.7
Peru	80	2.4	183	5.4	223	6.5
Philippines	262	2.4	590	5.2	613	5.2
Poland	1333	35.3	1495	39.7	1799	43.9
Portugal	710	69.6	798	79.0	920	90.2
Qatar	55	19.0	63	21.0	88	32.6
Rep. of Moldova	4	1.0	10	2.5	4	1.2
Romania	213	11.2	314	16.5	325	16.3
Saudi Arabia	1535	43.5	1684	47.0	2037	55.2
Serbia	9	1.0	19	2.2	60	8.5
Slovakia	158	28.7	217	39.5	188	32.4
Slovenia	105	50.0	107	51.0	106	50.5
Spain	4655	99.7	5251	112.4	5721	120.4
Sweden	724	71.0	733	71.9	873	82.4
Switzerland	587	67.5	570	64.8	675	76.7
Syrian Arab Rep.	315	17.2	329	17.0	348	15.0
Thailand	542	7.7	894	12.8	1168	16.3
Trinidad and Tobago	3	2.1	11	7.9	4	2.7
Türkiye	4948	58.2	5268	61.5	5261	61.3
UAE	177	17.7	210	20.8	377	39.7
UK	4038	59.2	4453	65.0	4671	69.0
Uruguay	120	34.3	184	52.6	168	49.4
US	39862	119.7	41292	123.3	44917	132.1

International Data on Tissues and Haematopoietic Progenitor Cell Donation and Transplantation Activity. Year 2023



Data provided by National Competent Authorities:

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Lithuania

Evaldas Valys

Luxembourg

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Slovakia

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Magdalena Krátka

Slovenia

Gorazd Čebulc

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Sweden

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Switzerland

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Rita Barallon

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Milka Bengochea

Venezuela

Candelaria Rodríguez

Glossary (Tissues)

A

Adipose tissue: loose connective tissue, composed of adipocytes and stromal vascular fraction, which serves as energy storage and endocrine organ.

Amniotic membrane: the innermost layer of the placenta consisting of a thick basement membrane and an avascular stromal matrix.

Autologous: refers to tissues or cells removed from and applied in the same individual.

B

Blood vessels: part of the circulatory system that transport blood throughout the body. They include arteries (ducts transporting blood from the heart to the periphery) and veins (ducts transporting blood from the periphery to the heart).

C

Cornea: the transparent anterior part of the outer fibrous coat of the eye. A collagenous tissue bounded by an outer stratified epithelium and an inner monolayer of endothelial cells. The major refractive component of the eye.

Craniectomy: the surgical removal of a portion of the skull.

D

Distribution: the transportation and delivery of tissues and cells intended for human application to other tissue establishments or the organisation responsible for human application in the EU. It does not include the issuing of tissues and cells for immediate transplantation.

Donation: donating human tissues or cells intended for human applications. One donation may include more units of the same tissue.

E

Export: the transportation and delivery of tissues and cells intended for human application to tissue establishments or the organisation responsible for human application outside the EU (third country).

H

Heart valve: one of the four structures within the heart that prevent backflow of blood by opening and closing with each heartbeat. They include two semilunar valves (aortic and pulmonary), the mitral (or bicuspid) valve, and the tricuspid valve. They permit blood flow in only one direction.

I

Import: the act of bringing tissues or cells into a EU Member State from a country outside the EU (third country) for the purpose of human application, further processing or storage.

M

Musculoskeletal: tissues that are part of the skeleton and muscular system, including muscles, bones, cartilage, tendons and ligaments, which function in the support and movement of the body.

N

Number of tissues distributed: number of tissue transported and delivered for human application.

Number of tissues processed: number of tissues that were declared suitable for human application after having undergone the required operations (preparation, manipulation, preservation, storage and packaging).

Number of tissue procured: the number of donated tissue made available through the process of procurement.

Number of recipients for each type of tissues: the total number of patients who had at least one unit of tissues or cells applied during the year concerned in a given country.

O

Ocular tissue: tissue from the eye ball such as corneal tissue, scleral tissue or limbal tissue procured from a donor for human application.

Other tissue: all human tissues for human application that does not have a dedicated row on the form.

P

Pancreas: a large lobulated gland that in humans lies in front of the upper lumbar vertebrae

and behind the stomach and is somewhat hammer-shaped and firmly attached anteriorly to the curve of the duodenum with which it communicates through one or more pancreatic ducts.

Pancreatic islets: preparation of a group of heterogeneous cells containing functional insulin-producing cells (beta cells) and glucagon-producing cells (alpha cells) for human application.

Parathyroid: endocrine glands producing and secreting parathyroid hormone.

Placenta: an organ that connects the developing foetus to the uterine wall to allow nutrient uptake, waste elimination and gas exchange via the mother's blood supply.

R

Recipient: person to whom human tissues, cells or reproductive cells and embryos are applied.

Retrieval or procurement: a process by which tissues or cells are made available for banking or human application. This process includes donor identification, evaluation, obtaining

consent for donation, donor maintenance and retrieval of tissues, cells or organs.

S

Skin: an allograft comprising of the epidermis and part or all of the dermis.

T

Tissue: an aggregate of cells joined together by, for example, connective structures and performing a particular function.

Tissue donation (effective): when tissue intended for human application is retrieved from a human body.

Transplantation/implantation/grafting: transfer (engraftment) of human tissues or cells from a donor to a recipient with the aim of restoring function(s) in the body.

U

Unit: a single piece of tissue or a packaging containing a defined amount of tissue ready for distribution.

Glossary (Haematopoietic Progenitor Cells)

A

Allogeneic: refers to tissues or cells removed from one individual and applied to another of the same species.

Autologous use: refers to tissues or cells removed from and applied in the same individual.

B

Banking: processing, preservation, storage and distribution of cells for human application or other purposes, including research and training.

C

Collection: any procedure for procuring a cellular therapy product regardless of technique or source (Synonym: harvest).

Cord blood: blood collected from placental vessels and umbilical cord blood vessels after the umbilical cord is clamped and/or severed as a source of haematopoietic progenitor cells.

Cord blood bank: a specific type of tissue establishment in which haematopoietic progenitor cells collected from placental and umbilical cord blood vessels are processed, cryopreserved and stored. It may also be responsible for collection, testing or distribution.

D

Distribution: the transportation and delivery of tissues and cells intended for human application to other tissue establishments or the organisation responsible for human application in the EU. It does not include the issuing of tissues and cells for immediate transplantation.

Donation: donating human tissues or cells intended for human applications.

Donor: a person who is the source of cells or tissue for a cellular therapy product.

Donor registry: an organisation responsible for coordinating the search for hematopoietic cells from donors (including cord blood) unrelated to the potential recipient.

H

Haematopoietic progenitor cells (HPC): primitive haematopoietic cells capable of self-renewal as well as maturation into any of the haematopoietic lineages, including committed and lineage-restricted progenitor cells, unless otherwise specified and regardless of tissue source. Also referred to as 'haematopoietic stem cells.

R

Recipient: person to whom human tissues, cells or reproductive cells and embryos are applied.

Related: existence of a genetic relationship between donor and recipient.

S

Search: the process of identifying a suitable stem cell source for a patient in need of a transplant.

T

Transplantation: the administration of allogeneic, autologous, or syngeneic HPC with the intent of providing transient or permanent engraftment in support of therapy of disease.

U

Unrelated: where there exists no genetic relationship between donor and recipient.

PRELIMINARY DATA ON TISSUES - YEAR 2023

EUROPEAN UNION COUNTRIES

Country	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czechia	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy
Population (Source: UNFPA, State of world population, 2023 - in millions)	9.0	11.7	6.7	4.0	1.3	10.5	5.9	1.3	5.5	64.8	83.3	10.3	10.2	5.1	58.9
TYPE OF TISSUE	TYPE OF DATA														
CORNEA/OCULAR	N. of cornea donations	74	210	4	638	540	27	272	171	11167					
	Tissue donations PMP	11.0	52.5	3.1	60.8	91.5	20.8	49.5	16.8	189.6					
	N. of cornea retrieved	148	408	4	1285	540	54	538	144	19595	13757		16.8		
	N. of ocular tissue processed (units)	148	228	4	1052	1078	54	390	181		13672		144		
	N. of ocular tissue distributed nationally (units)	138	233	4	818	745	49	378	52	7792	9929	0			
	N. of ocular tissue imported (units)	31	5	29	0	0	0	0	910						
	N. of ocular tissue exported (units)	0	0	98	0	0	0	0	176			0	1372		
	N. of ocular tissue transplanted	160	227	111	818	745	61		164						
	N. of patients transplanted	160	212	109	814	774	55	361	153						
	N. of transplant procedures	160	227	111	812				164	7912					
SKIN	N. of tissue donations	100	0	259	5	37	0	37	0	492					
	Tissue donations PMP	14.9	0.0	24.7	3.8	6.7		6.7	0.0	8.4					
	N. of tissues retrieved (cm²)	16886.75	0	224277	20	1986		221901	0	110240	10572		0		
	N. of tissues processed (units)	0	0	1062	9	920		1986	0		69406		0		
	N. of tissues distributed nationally (units)	0	67	437	0	0		0	0	9450	243430		0		
	N. of tissues imported (units)	0	67	0	0	0		0	0		34017		0		
	N. of tissues exported (units)	8	0	1864	0	0		0	0		12200		0		
	N. of tissues transplanted	0	0	437	9	896		9	0				0		
	N. of patients transplanted	0	0	81	3	27		3	0				0		
	N. of transplant procedures	0	0	437					0	1642			0		
HEART VALVE	N. of tissue donations	4	116	45	51	9		51	9	234					
	Tissue donations PMP	1.0	7.6	9.3	0.9	0.9		9.3	0.9	4.0					
	N. of tissues retrieved (units)	6	161	10	69	0		69	0	389	752		0		
	N. of tissues processed (units)	5	161	45	31	0		31	0	221	572		0		
	N. of tissues distributed nationally (units)	10	179	0	35	0		35	0	215	236		0		
	N. of tissues imported (units)	2	0	85	0	0		0	0		7		0		
	N. of tissues exported (units)	0	0	0	1	0		1	0		58		0		
	N. of tissues transplanted	9	167	12	35	0		35	0				0		
	N. of patients transplanted	9	164	8					0				0		
	N. of transplant procedures	9	167						0	185			0		
BLOOD VESSEL	N. of tissue donations	1	20	22	9	14		9	14	269					
	Tissue donations PMP	0.3	1.9	16.9	1.6	1.4		1.6	1.4	4.6					
	N. of tissues retrieved (units)	2	39	30	86	0		86	0	486	319		0		
	N. of tissues processed (units)	2	31	0	37	51		37	51	412	279				
	N. of tissues distributed nationally (units)	3	23	12	40	0		40	0	366	112		0		
	N. of tissues imported (units)	0	0	80	0	0		0	0		0		0		
	N. of tissues exported (units)	0	0	0	0	0		0	0		0		0		
	N. of tissues transplanted	3	23	110	12	140		12	140						
	N. of patients transplanted	3	21	110	40	51		40	51	310					
	N. of transplant procedures	3	21	110					51				51		

PRELIMINARY DATA ON TISSUES - YEAR 2023

EUROPEAN UNION COUNTRIES

Country	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czechia	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy
Population (Source: UNFPA, State of world population, 2023 - in millions)	9.0	11.7	6.7	4.0	1.3	10.5	5.9	1.3	5.5	64.8	83.3	10.3	10.2	5.1	58.9
TYPE OF TISSUE	TYPE OF DATA														
MUSCULOSKELETAL	N. of tissue donations	5093		243		1599	2982	180	641				699		2680
	Tissue donations PMP	760.1		60.8		152.3	505.4	138.5	116.5				68.5		45.5
	N. of tissues retrieved	7200		306		5896	2122	213	1725		21639		809		6448
	N. of tissues processed (units)	239		250	141	4937	2929	1251	1461		127525		2631		
	N. of tissues distributed nationally (units)	232		226		2135	2239	719	1718		83432		2788		12735
	N. of tissues imported (units)	11830		5	46	0	0	0	597		21089		0		
	N. of tissues exported (units)	204		0		2766	0	0	0		47809		0		10
	N. of tissues transplanted	185		228	46	2268	3705	445					194		
	N. of patients transplanted	179		160	46	2222	2619	219	1456				85		
	N. of transplant procedures	179		162	46	2268							192		11347
PLACENTA/AMNIOTIC MEMBRANES	N. of tissue donations	98		12		484	38	4	10				2		395
	Tissue donations PMP	0.6		0.1		0.6	0.0	0.1	0.0				0.0		
	N. of tissues retrieved	130		12		484	38	4	10		176		1		395
	N. of tissues processed (units)	771		119		2582	37	111	217		7018		169		
	N. of tissues distributed nationally (units)	419		116		649	34	44	300		4875		67		2827
	N. of tissues imported (units)	0		0	0	0	25	0	249		0		0		
	N. of tissues exported (units)	0		0		88	0	0	0		198		0		787
	N. of tissues transplanted	381		250	27	724	34	44					90		
	N. of patients transplanted	376		165	27	322	34	36	197				84		
	N. of transplant procedures	376		195	27	724							88		3481
PANCREAS/PANCREATIC ISLETS	N. of tissue donations			0		10							0		60
	Tissue donations PMP			0.0		0.1							0.0		1.0
	N. of tissues retrieved			0		10					7		0		60
	N. of tissues processed (units)			0		5					7		0		
	N. of tissues distributed nationally (units)			0		5					6		0		26
	N. of tissues imported (units)			0		0					0		0		
	N. of tissues exported (units)			0		0					0		0		
	N. of tissues transplanted			0		5					0		0		
	N. of patients transplanted			0		5					0		0		
	N. of transplant procedures			0		5					0		0		0
HEPATIC	N. of tissue donations			0									0		
	Tissue donations PMP			0.0									0		
	N. of tissues retrieved			0							0		0		
	N. of tissues processed (units)			0							0		0		
	N. of tissues distributed nationally (units)			0							0		0		
	N. of tissues imported (units)			0							0		0		
	N. of tissues exported (units)			0							0		0		
	N. of tissues transplanted			0							0		0		
	N. of patients transplanted			0							0		0		
	N. of transplant procedures			0							0		0		

PRELIMINARY DATA ON TISSUES - YEAR 2023

EUROPEAN UNION COUNTRIES

Country Population (Source: UNFPA, State of world population, 2023 - in millions)	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czechia	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy
	9.0	11.7	6.7	4.0	1.3	10.5	5.9	1.3	5.5	64.8	83.3	10.3	10.2	5.1	58.9
TYPE OF TISSUE	TYPE OF DATA														
ADIPOSE	N. of tissue donations			0		3			12				0		15
	Tissue donations PMP			0.0		0.3			2.2				0.0		0.3
	N. of tissues retrieved			0		3			12		112		0		15
	N. of tissues processed (units)			0		3			2447		108		0		
	N. of tissues distributed nationally (units)			0		0			371		37		0		25
	N. of tissues imported (units)			0		0			0		0		0		
	N. of tissues exported (units)			0		0			40		0		0		
	N. of tissues transplanted			0		0							0		
PARATHYROID	N. of patients transplanted			0					143				0		22
	N. of transplant procedures			0									0		
	N. of tissue donations			0		0							0		15
	Tissue donations PMP			0.0		0.0							0.0		0.3
	N. of tissues retrieved			0		0					0		0		280
	N. of tissues processed (units)			0		0					0		0		
	N. of tissues distributed nationally (units)			0		0					0		0		0
	N. of tissues imported (units)			0		0					0		0		
NEURONAL	N. of tissues exported (units)			0		0					0		0		
	N. of tissues transplanted			0		0					0		0		
	N. of patients transplanted			0		0							0		
	N. of transplant procedures			0		0							0		0
	N. of tissue donations			0		0			0				0		
	Tissue donations PMP			0.0		0.0			0.0				0.0		
	N. of tissues retrieved			0		16			0		0		0		
	N. of tissues processed (units)			0		16					0		0		
AUTOLOGOUS CRANECTOMY PIECES	N. of tissues distributed nationally (units)			0		141			0		0		0		
	N. of tissues imported (units)			0		1			0		0		0		
	N. of tissues exported (units)			0		0			0		0		0		
	N. of tissues transplanted			0		16					0		0		
	N. of patients transplanted			0		16			0				0		
	N. of transplant procedures			0									0		
	N. of tissues retrieved			0		209			7		0		0		721
	N. of tissues processed (units)			0		1130			12				106		
OTHER TISSUE	N. of tissues distributed nationally (units)			0		107.6			2.2				10.4		
	N. of tissues imported (units)			0		0			12		1609		106		
	N. of tissues exported (units)			0		239			1		2682		3448		
	N. of tissues transplanted			0		0							0		
	N. of patients transplanted			0		1608			4		1150		0		
	N. of transplant procedures			0		0			0		1440		0		
	N. of tissues imported (units)			0		1			0		16		1		
	N. of tissues exported (units)			0		0			0		0		0		

PRELIMINARY DATA ON TISSUES - YEAR 2023

Country	EUROPEAN UNION COUNTRIES												OTHER COUNTRIES			
	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	Moldova, Republic of	Northern Ireland	Norway	Switzerland
<i>Population (Source: UNFPA, State of world population, 2023 - in millions)</i>	1.8	2.7	0.7	0.5	17.6	41	10.2	19.9	5.8	2.1	47.5	10.6	3.4		5.5	8.8
TYPE OF TISSUE	TYPE OF DATA															
CORNEA/OCULAR	N. of cornea donations	13	43	88	2327		642	50	444	67	4251	528	24		531	387
	Tissue donations PMP	7.2	15.9	125.7	132.2		62.9	2.5	76.6	31.9	89.5	49.8	7.1		96.5	44.0
	N. of cornea retrieved	26	66		4654		1250	100	725	130	8201	1108	46		489	698
	N. of ocular tissue processed (units)	26	66		5199		1165		725	97		1281	31		477	
	N. of ocular tissue distributed nationally (units)	26	56		4021		888		377	97	5409	815	41		266	508
	N. of ocular tissue imported (units)	6	0		1		325	142	6	0		30	0	23	38	568
	N. of ocular tissue exported (units)	0	0		787		0		267	0	38	0	0		0	0
	N. of ocular tissue transplanted	59	59		3019		1135	238	376	97		779	41	22	397	1063
	N. of patients transplanted	54	54		2934		1123	238	343	97	6291	817	41		387	1014
	N. of transplant procedures	59	59				1135	238	391	97		900	41		398	1083
SKIN	N. of tissue donations				419		0		0	13	248	112	103			
	Tissue donations PMP				23.8		0.0		0.0	6.2	5.2	10.6	2.5			
	N. of tissues retrieved (cm²)						0		0	1120	534802	112	13605		0	
	N. of tissues processed (units)				715		13		0	12		112	62			
	N. of tissues distributed nationally (units)				1854		13		139	12	288170.5	23	18		0	
	N. of tissues imported (units)				141		13		0	0	37	0	0		796	
	N. of tissues exported (units)				12160		0		0	0	108271	0	0		0	
	N. of tissues transplanted				1445		33		134	12		37	18		786	
	N. of patients transplanted				126		3		53	3		22	2		26	
	N. of transplant procedures						5		54	3	223	52	3		45	
HEART VALVE	N. of tissue donations			3	242		4		0	0	218	195	0			62
	Tissue donations PMP			4.3	13.8		0.4		0.0	0.0	4.6	18.4				7.0
	N. of tissues retrieved				484		4		0	0	218	373	0			62
	N. of tissues processed (units)				484		4		0	0		373	0			0
	N. of tissues distributed nationally (units)				90		4		0	0	94	90	0	1		0
	N. of tissues imported (units)				0		3		0	0		0	0	7		12
	N. of tissues exported (units)				30		0		0	0	83	20	0			45
	N. of tissues transplanted				85		4		0	0		110	0	7	36	22
	N. of patients transplanted				84		2		0	0		114	0		36	22
	N. of transplant procedures						4		0	0	234	116	0		36	22
BLOOD VESSEL	N. of tissue donations	4			12				0	20	237	231	0		119	14
	Tissue donations PMP	5.7			0.3				0.0	0.4	22.4	21.8			21.6	1.6
	N. of tissues retrieved	6			12				0	40	272	398	0		119	14
	N. of tissues processed (units)	6			115				0	2		398	0		119	0
	N. of tissues distributed nationally (units)	4		28	33				0	2	261	61	0		119	0
	N. of tissues imported (units)			28	0				0	0		0	0		0	15
	N. of tissues exported (units)				9				0	2	1	9	0		0	13
	N. of tissues transplanted	4			37				0	2		70	0		40	14
	N. of patients transplanted	3			36				0	1		59	0		40	5
	N. of transplant procedures	3							0	2	196	62	0		40	5

PRELIMINARY DATA ON TISSUES - YEAR 2023

EUROPEAN UNION COUNTRIES

OTHER COUNTRIES

Country	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	Moldova, Republic of	Northern Ireland	Norway	Switzerland
Population (Source: UNFPA, State of world population, 2023 - in millions)	1.8	2.7	0.7	0.5	17.6	41	10.2	19.9	5.8	2.1	47.5	10.6	3.4		5.5	8.8
TYPE OF TISSUE	TYPE OF DATA															
MUSCULOSKELETAL	N. of tissue donations	50	89		3506		62	213	587	0	2603	1250	67		406	178
	Tissue donations PMP	27.8	33.0		199.2		6.1	10.7	101.2	0.0	54.8	117.9	19.7		73.8	20.2
	N. of tissues retrieved	50	93		3506		241	238	707	0	48410	1419	69		361	222
	N. of tissues processed (units)	50	145		6871		462	237	996	0		1419	409		168	
	N. of tissues distributed nationally (units)	50	111	466	13159		431	182	538	0	44927	956	571	62	22	179
	N. of tissues imported (units)	0	0	7459	292		169		0	0	14252	64	0	295	71	333
	N. of tissues exported (units)	0	0	6993	29652				230	0	1167	0	0		0	0
	N. of tissues transplanted	0	111		5394		500	173	478	0		900	541	95	297	404
	N. of patients transplanted	89	89		5000		391	133	242	0		916	220		287	401
	N. of transplant procedures		89				391	133	242	0	28573	882	220		263	401
PLACENTA/AMNIOTIC MEMBRANES	N. of tissue donations	6	2		2		6		274	3	948	5	11		1	13
	Tissue donations PMP	3.3	0.7		0.1		0.6		47.2	1.4	20.0	0.5	3.2		0.2	1.5
	N. of tissues retrieved	6	2		2		6		274	3	948	5	11		1	109
	N. of tissues processed (units)		63		13		217		310	88		458	142		71	
	N. of tissues distributed nationally (units)		55	13	266		211		384	88	2229	283	162		42	24
	N. of tissues imported (units)		0	13	11		0	3	14	0	1	0	0	11	38	9
	N. of tissues exported (units)		0	0	32		0		0	0		2	0		0	0
	N. of tissues transplanted		55		112		205	3	454	88		285	162	11	99	85
	N. of patients transplanted		51		110		169	3	348	88		222	137		85	82
	N. of transplant procedures		55				194	3	381	88	2301	291	139		99	85
PANCREAS/PANCREATIC ISLETS	N. of tissue donations				28				0			59			8	45
	Tissue donations PMP				1.6				0.0			5.6			1.5	5.1
	N. of tissues retrieved				28				0			25			8	45
	N. of tissues processed (units)				28				0			25			7	
	N. of tissues distributed nationally (units)				14				0			11			0	7
	N. of tissues imported (units)				0				0			0			0	25
	N. of tissues exported (units)				0				0			1			0	18
	N. of tissues transplanted				14				0			12			3	26
	N. of patients transplanted				14				0			11			3	24
	N. of transplant procedures								0			11			3	26
HEPATIC	N. of tissue donations				0				0							
	Tissue donations PMP				0.0				0.0							
	N. of tissues retrieved				0				0							
	N. of tissues processed (units)				0				0							
	N. of tissues distributed nationally (units)				0				0							
	N. of tissues imported (units)				0				0							
	N. of tissues exported (units)				0				0							
	N. of tissues transplanted				14				0			12			3	26
	N. of patients transplanted				14				0			11			3	24
	N. of transplant procedures								0			11			3	26

PRELIMINARY DATA ON TISSUES - YEAR 2023

EUROPEAN UNION COUNTRIES

OTHER COUNTRIES

Country	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	Moldova, Republic of	Northern Ireland	Norway	Switzerland
Population (Source: UNFPA, State of world population, 2023 - in millions)																
TYPE OF TISSUE	1.8	2.7	0.7	0.5	17.6	41	10.2	19.9	5.8	2.1	47.5	10.6	3.4		5.5	8.8
TYPE OF DATA																
ADIPOSE	N. of tissue donations								57				0			
	Tissue donations PMP								9.8				0.0			
	N. of tissues retrieved	0							57				0			
	N. of tissues processed (units)		0						57				0			
	N. of tissues distributed nationally (units)		9						57				0			
	N. of tissues imported (units)								0				0			
	N. of tissues exported (units)								0				0			
	N. of tissues transplanted	11							57				0			
N. of patients transplanted	8							57				0				
N. of transplant procedures	9							57				0				
PARATHYROID	N. of tissue donations								0							
	Tissue donations PMP								0.0							
	N. of tissues retrieved								0						136	
	N. of tissues processed (units)								0						0	
	N. of tissues distributed nationally (units)								0						0	
	N. of tissues imported (units)								0						0	
	N. of tissues exported (units)								0						136	
	N. of tissues transplanted								0							
N. of patients transplanted								0								
N. of transplant procedures								0								
NEURONAL	N. of tissue donations								0				0			
	Tissue donations PMP								0.0				0.0			
	N. of tissues retrieved								0				0			
	N. of tissues processed (units)								6				0			
	N. of tissues distributed nationally (units)								13				0			
	N. of tissues imported (units)								0				0			
	N. of tissues exported (units)								0				0			
	N. of tissues transplanted								0				0			
N. of patients transplanted								0				0				
N. of transplant procedures								0					0			
AUTOLOGOUS CRANIECTOMY PIECES	N. of tissues retrieved															
	100															
OTHER TISSUE	N. of tissue donations	197			19				2371	39	960	89	1		16	
	Tissue donations PMP	109.4			1.1				408.8		292	31	1		193	
	N. of tissues retrieved	198			19				2371		6.1	2.9	0.3		35.1	
	N. of tissues processed (units)	0			19				2655		554	67	1		193	
	N. of tissues distributed nationally (units)	0			14								2		108	
	N. of tissues imported (units)	0							541				0		98	
	N. of tissues exported (units)	0							443				0		0	
	N. of tissues transplanted	0							241				0		0	
N. of patients transplanted					14			517				0		236		
N. of transplant procedures					14			439			527	0		101		
									497				0		236	

PRELIMINARY DATA ON TISSUES - YEAR 2023

LATIN AMERICAN COUNTRIES

Country	Argentina	Bolivia	Brazil	Chile	Colombia	Costa Rica	Cuba	Dominican Republic	Ecuador	Mexico	Panama	Paraguay	Peru	Uruguay
Population (Source: UNFPA, State of world population, 2023 - in millions)														
	45.8	12.4	216.4	19.6	52.1	5.2	11.2	11.3	18.2	128.5	4.5	6.9	34.4	3.4
TYPE OF TISSUE	TYPE OF DATA													
OCULAR	N. of tissue donations	1489	35854	1784	31	211	452	4580	112	421	135			
	Tissue donations PMP	32.5	165.7	34.2	2.8	18.7	24.8	35.6	16.2	12.2	39.7			
	N. of tissues retrieved	2945	31699	3499	31	211	440	4455	112	167	315			
	N. of tissues transplanted	1608	16016	3384	10	211	537	3426	94	421	299			
	N. of patients transplanted	1555				211	537	3426	94	421	281			
	N. of transplant procedures	1608	16016		179	211	537	3426	94	421	299			
SKIN	N. of tissue donations	69	532	97	3	16	149	68	11					
	Tissue donations PMP	1.5	2.5	1.9	0.6	0.9	1.2	2.0	3.2					
	N. of tissues retrieved		96792.05		3961	0	190	102		0	21400			
	N. of tissues transplanted		75846.75	1082	13	0	107			68	428			
	N. of patients transplanted				4	0	107			2	14			
	N. of transplant procedures		75846.75		13	0	107			2	20			
HEART VALVE	N. of tissue donations	166	355	0	10	7				0	0			
	Tissue donations PMP	3.6	1.6	0.0	1.9	0.4				0.0	0.0			
	N. of tissues retrieved	330	149	0	24	3		1		0	0			
	N. of tissues transplanted	194	152	0	8	7		1		0	0			
	N. of patients transplanted	182			8	7		1		0	0			
	N. of transplant procedures	194	152		8	7		1		0	0			
BLOOD VESSEL	N. of tissue donations			29	7	20				0	7			
	Tissue donations PMP			0.6	1.3	1.1				0.0	2.1			
	N. of tissues retrieved		0	91	51	36				0	11			
	N. of tissues transplanted			31	6	1				0	9			
	N. of patients transplanted				6	1				0	7			
	N. of transplant procedures				6	1				0	7			
MUSCULOSKELETAL	N. of tissue donations	896	1998	5284	5	218	182	619	0	26				
	Tissue donations PMP	19.6	9.2	101.4	1.0	19.5	10.0	4.8	0.0	7.6				
	N. of tissues retrieved	2596	15474	9301	15	218	778	610	0	47				
	N. of tissues transplanted	5034	11218	14574	18	80	1078		0	488				
	N. of patients transplanted	2619			18		1078		0	116				
	N. of transplant procedures	5034	11218		18	80	1078		0	116				

PRELIMINARY DATA ON TISSUES - YEAR 2023

LATIN AMERICAN COUNTRIES

Country	Argentina	Bolivia	Brazil	Chile	Colombia	Costa Rica	Cuba	Dominican Republic	Ecuador	Mexico	Panama	Paraguay	Peru	Uruguay
Population (Source: UNFPA, State of world population, 2023 - in millions)	45.8	12.4	216.4	19.6	52.1	5.2	11.2	11.3	18.2	128.5	4.5	6.9	34.4	3.4
TYPE OF TISSUE	TYPE OF DATA													
PLACENTA	N. of tissue donations				85	1	0	30				82	0	83
	Tissue donations PMP				1.6	0.2	0.0		1.6			11.9	0.0	24.4
	N. of tissues retrieved				85	1	0	317				82	0	44
	N. of tissues transplanted				921	18	0	279				240	0	227
	N. of patients transplanted					18	0	279				240	0	58
	N. of transplant procedures					18	0	279				240	0	72
PANCREATIC TISSUE/ PANCREAS	N. of tissue donations						0	0					0	
	Tissue donations PMP						0.0	0.0					0.0	
	N. of tissues retrieved						0	0					0	
	N. of tissues transplanted						0	0					0	
	N. of patients transplanted						0	0					0	
	N. of transplant procedures						0	0					0	
ADIPOSE	N. of tissue donations						0	0					0	
	Tissue donations PMP						0.0	0.0					0.0	
	N. of tissues retrieved						0	0					0	
	N. of tissues transplanted						0	0					0	
	N. of patients transplanted						0	0					0	
	N. of transplant procedures						0	0					0	
AUTOLOGOUS CRANIECTOMY PIECES	N. of tissues retrieved (units)							6					0	
OTHER TISSUE	N. of tissue donations						0	0					0	
	Tissue donations PMP						0.0	0.0					0.0	
	N. of tissues retrieved						0	4					0	
	N. of tissues transplanted						0	4					0	
	N. of patients transplanted						0	4					0	
	N. of transplant procedures						0	4					0	

PRELIMINARY DATA ON HPC CELLS - YEAR 2023

EUROPEAN UNION COUNTRIES

Country	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czechia	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy
Population (Source: UNFPA, State of world population, 2023 - in millions)															
CATEGORY OF DATA	TYPE OF DATA														
POTENTIAL FOR DONATION AND SEARCHING IN THE NATIONAL REGISTRIES	123152			62197	192958	158527			72976	385559		6944			496754
	80			3729	3254	8204			3127	38450		0			38401
				433	29987	59182			30649	32737					3797
				60	54	333			140	1402		74			1172
DONATIONS	604		2778	537	42	1611	895*	103	223	3201	9599		357		3792
	272		157	369	54	236		4	137	1232	9674		158		8870
	139		27	48		28		4	63	943	946		81		945
	133		130	321	54	208		0	74	289	8728		77		7925
BANKING OF CORD BLOOD			104	314		0				38450	5		2		7465
			0	0	2	0			0	59			2		15
			2647	9	244	776		40			298		1		87
			0	0		1			0				0		5
TRANSPLANTS	319		131	158	25	443		64	234	2727	4604		295		3366
	270		131	130		356			233		3856		236		2764
	258		53	88		255		21	150	2170	3739		175		1991
	240		53	81		231			150		3767		170		1897
	113		27	35		45		4	58	939	896		99		968
	104		27	32		39			58		873		96		908
	145		26	53		210		17	92	1231	2843		76		1023
	136		26	49		192			92		2894		74		989
*auto-allo combined															

PRELIMINARY DATA ON HPC CELLS - YEAR 2023

Country	EUROPEAN UNION COUNTRIES											OTHER COUNTRIES			
	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	Moldova, Republic of	Northern Ireland	Switzerland
Population (Source: UNFPA, State of world population, 2023 - in millions)	1.8	2.7	0.7	0.5	17.6	41	10.2	19.9	5.8	2.1	47.5	10.6	3.4	5.5	8.8
CATEGORY OF DATA	TYPE OF DATA														
POTENTIAL FOR DONATION AND SEARCHING IN THE NATIONAL REGISTRIES	N. of potential donors at 31.12	14052			412620		383904	78130	23838	21829	484175	239583		38210	183091
	N. of cord blood units at 31.12	0			4709		157600	0	2525	341	62097	5454		0	5501
	N. of searches requested	106			781		1814		29472	96	1260				748
	N. of unrelated donation	68			482		141		66	30	396			176	274
DONATIONS	N. of donations - Autologous	307			1468		680	12012	2807	89		742	55	146	525
	N. of donations - Allogeneic	150			475		141	86	1728	39	368	702		8	204
	N. of donations - Allogeneic related	138			210		68	75	40	15		402		0	129
	N. of donations - Allogeneic unrelated	12			265		73	11	1688	24	368	300		8	75
BANKING OF CORD BLOOD	N. of unrelated cord blood units collected	0	0		196		0		1682	2		15			124
	N. of unrelated cord blood units distributed	0	0		3				951	2		1			1
	N. of related cord blood units collected	209	0		1		7363		11	545		316	27		
	N. of related cord blood units distributed	0	95		0		2		5	545		0	0		
TRANSPLANTS	N. of transplants - Autologous	168		38	4329		482	238	129	89	2261	461	28	406	454
	N. of patients transplanted - Autologous	125			1008		451	238	118	89		346			352
	N. of transplants - Allogeneic	92			893		158	53	82	47	1378	295	0	1	327
	N. of patients transplanted - Allogeneic														
	N. of transplants - Allogeneic related	84			665		150	112	82	47	0	287	0	0	281
	N. of transplants - Allogeneic related	29			253		63	53	29	15	841	88		1	128
	N. of patients transplanted - Allogeneic related														
	N. of transplants - Allogeneic unrelated	25			188		62	42	29	15		87			113
	N. of patients transplanted - Allogeneic unrelated	63			640		95	0	53	32	537	207		143	199
	N. of patients transplanted - Allogeneic unrelated	59			477		88	70	53	32		200			168
*auto-allo combined															

PRELIMINARY DATA ON HPC CELLS - YEAR 2023

LATIN AMERICAN COUNTRIES

[illegible]

Reference Documents. Year 2023



WHO Resolution WHA77.4

Increasing availability, ethical access and oversight of transplantation of human cells, tissues and organs

SEVENTY-SEVENTH WORLD HEALTH ASSEMBLY. Agenda item 11.2

WHA77.4. 1 June 2024

The Seventy-seventh World Health Assembly,

Having considered the consolidated report by the Director-General;¹

Recalling resolutions WHA40.13 (1987) on development of guiding principles for human organ transplants, WHA42.5 (1989) on preventing the purchase and sale of human organs and WHA44.25 (1991) on human organ transplantation, WHA57.18 (2004) on human organ and tissue transplantation and WHA63.22 (2010) on human organ and tissue transplantation (updated WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation);²

Noting initiatives by the WHO regions in advancing the implementation of current resolutions on transplantation, including decisions taken by the WHO Regional Committee for the Americas³ and the WHO Regional Committee for Africa;⁴

Noting also the report by the Secretariat on principles on the donation and management of blood, blood components and other medical products of human origin, which promotes respect for human dignity, availability and safety, and good governance;⁵

Welcoming United Nations General Assembly resolution 77/236 (2022) on strengthening and promoting effective measures and international cooperation on organ donation and transplantation to prevent and combat trafficking in persons for the purpose of organ removal and trafficking in human organs;

Noting the Madrid resolution on organ donation and transplantation (2011),⁶ an outcome of the Third WHO Global Consultation on Organ Donation and Transplantation (2010) that provides recommendations for countries to progress towards meeting the transplant needs of patients;

Aware that transplantation is currently the preferred, if not the only, therapeutic alternative for patients with end-stage organ failure and that many other diseases benefit from the clinical application of human cells and tissues, and that such treatments depend on the altruistic donation of cells, tissues and organs;

Conscious that, despite the priority given by many Member States to prevention strategies, the burden of non communicable diseases treatable through transplantation continues to grow, as does the commensurate need for transplantation of human cells, tissues and organs;

¹ Document A77/4.

² In resolution WHA63.22, the Health Assembly endorsed the updated WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation. See document WHA63/2010/REC/1, resolution WHA63.22 and Annex 8.

³ See document CD57/11 and resolution CD57.R11 (2019).

⁴ See document AFR/RC70/12.

⁵ Document A70/19.

⁶ The Madrid resolution on organ donation and transplantation: national responsibility in meeting the needs of patients, guided by the WHO principles. Transplantation. 2011; 91: S29–S31. doi: 10.1097/01.tp.0000399131.74618.a5.

Mindful that facilitating access to transplantation of human cells, tissues and organs can reduce the premature mortality associated with non communicable and other diseases, improve the quality of life of thousands of patients throughout the world, and help communities to diminish the high costs of alternative treatment modalities;

Noting that expanded access to transplant therapies might contribute to the achievement of the United Nations Sustainable Development Goals, in particular, targets 3.4 (reduction of premature mortality from non communicable diseases) and 3.8 (access to universal health care);⁷

Aware that, despite the progress made over the past two decades, transplantation is not fully developed in all Member States, making access to these therapies neither universal nor equitable, a problem that impacts countries regardless of their level of development;⁸

Noting with concern that the pandemic of coronavirus disease (COVID-19) had a profound, negative effect on donation and transplantation activities,⁹ revealing the need to consider including transplant therapies in approaches designed to strengthen the resilience of health care systems;

Convinced that insufficient access to transplantation therapies is one of the root causes of trafficking in persons for the purpose of organ removal and trafficking in human organs, practices that undermine human rights and pose serious risks to public health;

Alarmed that armed conflicts, natural disasters and humanitarian emergencies are fuelling migration, particularly among disadvantaged populations and those in the most vulnerable situations, thereby increasing the risk of trafficking in persons for the purpose of organ removal and trafficking in human organs and exacerbating inequities in access to therapies based on human cells, tissues and organs;

Noting with concern the lack of full implementation of the WHO Guiding Principles on Human Cell, Tissue and

Organ Transplantation, particularly regarding transparent data reporting and health authority oversight of transplant practices;

Aware that technological innovations applicable to human cells, tissues and organs are increasingly enabling therapies that, given the unique origin of these novel treatments, require specific regulations with a particular focus on ethical considerations,¹⁰

1. URGES Member States, in accordance with their national contexts:
 - (1) to implement or strengthen existing preventive strategies targeted at reducing the burden of non communicable and other diseases treatable with transplantation;
 - (2) to integrate donation, transplantation and transplant follow-up activities into health care systems, so deceased donation is routinely considered as an option at the end of life and transplantation is incorporated in the continuum of care of patients with non communicable and other diseases or conditions that may benefit from this therapy, by pursuing policies that support universal health coverage and eliminate financial barriers to access quality, safe, effective, affordable and essential health services;¹¹
 - (3) to protect living donors by requiring informed consent and appropriate medical and psychosocial evaluation, as well as by providing proper follow-up care;
 - (4) to increase the availability of human cells, tissues and organs for transplantation with special attention to developing deceased donation to its maximum therapeutic potential, including donation after the neurological determination of death and, where appropriate, donation after the circulatory determination of death, and in line with the relevant WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation;

⁷ Domínguez-Gil B, Ascher NL, Fadhil RAS, Muller E, Cantarovich M, Ahn C, et al. The reality of inadequate patient care and the need for a global action framework in organ donation and transplantation. *Transplantation*. 2022; 1;106(11):2111-2117. doi: 10.1097/TP.0000000000004186.

⁸ See document A75/41.

⁹ Aubert O, Yoo D, Zielinski D, Cozzi E, Cardillo M, Durr M, et al. COVID-19 pandemic and worldwide organ transplantation: a population-based study. *Lancet Public Health*. 2021;6(10):e709-e719. doi: 10.1016/S2468-2667(21)00200-0.

¹⁰ WHO Expert Committee on Biological Standardization: seventy-seventh report. Geneva: World Health Organization; 2023 (WHO Technical Report Series, No. 1048) (<https://iris.who.int/bitstream/handle/10665/373128/9789240078116-eng.pdf?sequence=1>, accessed 30 December 2023).

¹¹ See United Nations General Assembly resolution 78/4 (2023).

- (5) to establish, where appropriate, official international cooperation for the exchange of human cells, tissues and organs or transplant services, based on the principles of reciprocity and solidarity, as a means of facilitating universal access to transplantation therapies;
- (6) to develop and implement regulatory frameworks aligned with the WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation, in particular by encouraging donation as an altruistic, voluntary and non-remunerated act and by promoting equitable access to transplantation therapies;
- (7) to designate authorities and improve capacities to provide governance and implementation of donation and transplantation activities in their jurisdictions;
- (8) to ensure that donation and transplantation activities take place in centres specifically authorized, accredited or registered, and establish control measures, such as periodic or risk-based inspections and the collection and timely reporting of data on every donation and transplant procedure, including transplants carried out on residents in other jurisdictions;
- (9) to promote the safety and efficacy of transplantation by collecting data on the outcomes of recipients and living donors, conducting biovigilance and relevant surveillance, ensuring capacity to trace cells, tissues and organs from donor to recipient, and vice versa, and encouraging the use of globally consistent coding systems for human cells, tissues and organs;
- (10) to consider including donation and transplantation in national and regional preparedness plans designed to increase the resilience of health care systems and to facilitate an effective response to transplant needs in the event of crisis;
- (11) to take measures to prevent and combat trafficking in persons for the purpose of organ removal and trafficking in human organs and

to protect victims and survivors of these crimes by strengthening legislative frameworks, enforcing clinical protocols for the psychosocial evaluation of prospective living donors, engaging health care professionals, governments and other stakeholders in reporting suspected or confirmed cases of trafficking to law enforcement agencies, promoting international cooperation,¹² and collecting data and conducting research on the trends in both crimes;¹³

- (12) to promote research and innovation to maximize the use and optimize the outcomes of transplantation of human cells, tissues and organs, as well as to enable development of alternative therapies to those based on the clinical use of human cells, tissues and organs;
- (13) to implement regulatory frameworks applicable to innovative therapies developed from substantially manipulated cells, tissues and organs that ensure the protection of donors and recipients, and that pursue equity in access to these novel therapies and sustainable health care systems;
- (14) to participate in consultations organized by WHO to develop a global strategy on donation and transplantation;
- (15) to consider providing appropriate support to WHO in implementing this resolution;

2. REQUESTS the Director-General:

- (1) to provide Member States, upon request, with technical assistance for developing national legislation and regulations aligned with the WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation, assessing transplantation needs, establishing or strengthening national authorities, improving capacities to increase the availability of cells, tissues and organs, and implementing ethical, effective and safe transplant programmes;
- (2) to assist Member States, upon request, to strengthen their regulatory capacity to effectively

¹² World Medical Assembly statement on measures for the prevention and fight against transplant-related crimes. Seventy-first World Medical Assembly General Assembly. Cordoba; 2020 (<https://www.wma.net/policies-post/wma-statement-on-measures-for-the-prevention-and-fight-against-transplant-related-crimes/#~:text=The%20WMA%20emphasises%20the%20responsibility,assisting%20international%20organisations%2C%20medical%20associations,> accessed 26 December 2023).

¹³ The Global Report on Trafficking in Persons prepared by the United Nations Office on Drugs and Crime, in accordance with the provisions set out in United Nations General Assembly resolution 70/179 (2015).

oversee donation and transplantation practices, including through monitoring and evaluating transplantation programme performance and donor and recipient outcomes;

- (3) to continue collecting, analysing and making available to Member States global data on the legislation, regulations, practices, safety, quality, effectiveness, epidemiology and ethics of donation and transplantation of human cells, tissues and organs;
- (4) to revise the WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation to incorporate additional principles that address new ethical challenges posed by scientific advancements in the field, in particular principles to safeguard the intrinsic value of novel products and treatments that are developed from human cells, tissues and organs;
- (5) to continue and strengthen cooperation with United Nations agencies, including the United Nations Office on Drugs and Crime, inter-agency mechanisms, Member State ministries and other relevant stakeholders to improve country, regional and global capacity to respond to identified cases of trafficking in persons for the purpose of organ removal and of trafficking in human organs;
- (6) to provide, in cooperation with key international professional associations and other relevant stakeholders, reference guidance to Member States on the diagnosis of death by neurological and by circulatory criteria;
- (7) to develop, in consultation with Member States, nongovernmental organizations and other relevant stakeholders in accordance with the Framework of Engagement with Non-State Actors and within existing resources, a global strategy

on donation and transplantation, for consideration by the Seventy-ninth World Health Assembly, through the Executive Board at its 158th session, that supports Member States to integrate donation and transplantation into health care systems and promotes the implementation of the WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation;

- (8) to further explore, as part of the global strategy referred to in operative paragraph 2(7), and in accordance with the current framework for world health days, the feasibility and potential impact of establishing a World Donor Day to raise public awareness and enhance understanding on the need for altruistic donation of human cells, tissues and organs and propel global action by Member States to structure appropriate donation and transplantation systems, taking into consideration the existence of other relevant events either observed by WHO or established by other international entities;
- (9) to establish an expert committee in accordance with the Regulations for Expert Advisory Panels and Committees,¹⁴ to assist the Secretariat in developing the proposed global strategy on donation and transplantation and support its implementation;
- (10) to provide a consolidated report on progress in the implementation of this resolution in 2026 to the Seventy-ninth World Health Assembly, through the Executive Board at its 158th session, as well as on progress in the implementation of resolution WHA63.22 on human organ and tissue transplantation.

Eighth plenary meeting, 1 June 2024
A/77/VR/8

¹⁴ Regulations for Expert Advisory Panels and Committees. Geneva: World Health Organization; 2022 (<https://apps.who.int/gb/bd/PDF/bd47/EN/regu-for-expert-en.pdf>, accessed 30 December 2023).

TOWARDS GLOBAL CONVERGENCE IN TRANSPLANTATION: SUFFICIENCY, TRANSPARENCY & OVERSIGHT

09-10/NOV/2023
High Level Meeting



SANTANDER STATEMENT

On 9 and 10 November 2023, the Organización Nacional de Trasplantes (ONT), under the Spanish Presidency of the Council of the European Union, convened in Santander a Global Summit entitled “Towards Global Convergence in Transplantation: Sufficiency, Transparency and Oversight”. The Summit was co-organised by the European Directorate for the Quality of Medicines and Healthcare (EDQM) of the Council of Europe, the European Society for Organ Transplantation (ESOT), and The Transplantation Society (TTS). The Summit was co-sponsored by the World Health Organization (WHO) and supported by the International Society of Nephrology (ISN).

The Summit’s objective was to pave the way for global action in transplantation for the next decade. In particular, the Summit aimed to critically review the current state of donation and transplantation of organs, tissues, and cells, identify key challenges, and shape the future direction of transplant activities worldwide to ensure that advances in this field benefit citizens across the globe.

The Summit, attended by 183 participants from 57 countries, international organisations and professional associations, concluded with the following set of recommendations targeted to national and regional governments, though acknowledging the role of other key stakeholders, including health authorities, relevant professional associations, healthcare professionals and institutions, law enforcement agencies, academic and research institutions, and civil society organisations. The Summit also called upon international organisations, in particular the European Union, the Council of Europe, and the WHO, to provide guidance and support States in taking effective measures to implement these recommendations to ensure that no one is left behind.

TOWARDS GLOBAL CONVERGENCE IN TRANSPLANTATION: SUFFICIENCY, TRANSPARENCY & OVERSIGHT

09-10/NOV/2023
High Level Meeting



RECOMMENDATIONS

Participants in the Global Convergence in Transplantation Summit urge governments to:

1. Improve patient care by

- implementing preventive strategies to reduce the burden of diseases that give rise to the need for transplantation;
- integrating donation and transplantation of organs, tissues, and cells into their healthcare systems, taking into account the resources available to address the population's health needs;
- prioritising transplant therapy when that is the most cost-beneficial treatment modality for patients;
- incorporating opportunities for donation of organs, tissues and cells into end-of-life care;
- working towards a unified concept of death, recognising that death can be defined as the permanent cessation of brain functions;
- supporting low-resource countries in developing and strengthening their transplant systems;
- making donation and transplant programs resilient by establishing emergency preparedness plans designed to ensure a timely and effective response to transplant needs in the event of crisis;
- identifying and relieving inequities in access to donation and transplantation and to Substances of Human Origin (SoHO)-based therapies.

2. Make progress towards sufficiency in transplantation by

- developing and expanding deceased donation to its maximum therapeutic potential, including donation after both the neurological and the circulatory determination of death;
- developing living donation programs, preferably as supplements to deceased donation, that ensure informed consent, optimal care of, and long-term follow-up for donors;
- removing financial disincentives for living and deceased donation, while prohibiting financial incentives, in order to ensure that donation is a financially neutral act.

TOWARDS GLOBAL CONVERGENCE IN TRANSPLANTATION: SUFFICIENCY, TRANSPARENCY & OVERSIGHT

09-10/NOV/2023
High Level Meeting



RECOMMENDATIONS

3. Ensure transparency and oversight of practices by

- designating health authorities at the national or regional level that are responsible for the authorisation and monitoring of donation and transplant activities;
- mandating the reporting of data on every donation and transplant procedure, as well as demographic, clinical, and outcome data of recipients and living donors to a registry established or recognized by the relevant health authority;
- establishing a biovigilance system and ensuring the traceability of organs, tissues, and cells from donors to recipients and vice versa;
- supporting data sharing, including by health authorities with relevant international bodies and registries, with due regard for the protection of patients' and donors' privacy.

4. Strengthen the prevention of human trafficking for the removal of SoHO and trafficking in SoHO by

- ensuring appropriate psychosocial evaluation of all prospective living donors;
- establishing a mechanism for the mandatory reporting of suspected or confirmed cases of trafficking, while respecting professional obligations towards patients and maintaining a human rights-based approach focusing on early identification and appropriate protection of victims;
- criminalising and prosecuting all illicit transplant-related activities within their jurisdiction, including by establishing extraterritorial jurisdiction over such activities of their residents in other countries;
- strengthening national and international cooperation in combatting transplant-related crimes.

5. Foster responsible innovation for the clinical use of SoHO by

- actively supporting and funding efforts to overcome the research and economic challenges in developing sustainable innovation;
- mandating the demonstration of quality, safety, and effectiveness of SoHO-based therapies before permitting them to be incorporated into healthcare systems;
- reinforcing the capacity of donation and transplant systems to oversee ethical conduct and clinical translation of research;
- ensuring that human organs, tissues and cells do not become marketable products and that necessary fees for services relating to SoHO and benefits from SoHO-derived products are proportionate and consistent with the altruistic nature of donation;
- ensuring transparency in costs, pricing, and profits from all SoHO-based therapies, and making such therapies affordable to patients;
- promoting social responsibility in public-private collaboration in the development of SoHO-based therapies.

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NOTES

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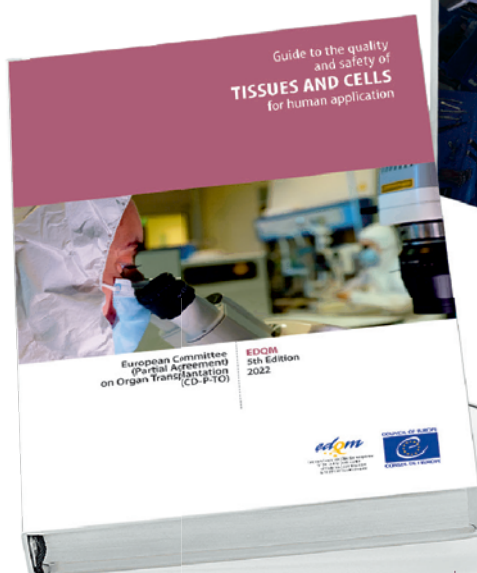
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