

# Latin America Transplantation Registry 2023 - 2024



**Editor**

**Valter Duro Garcia**

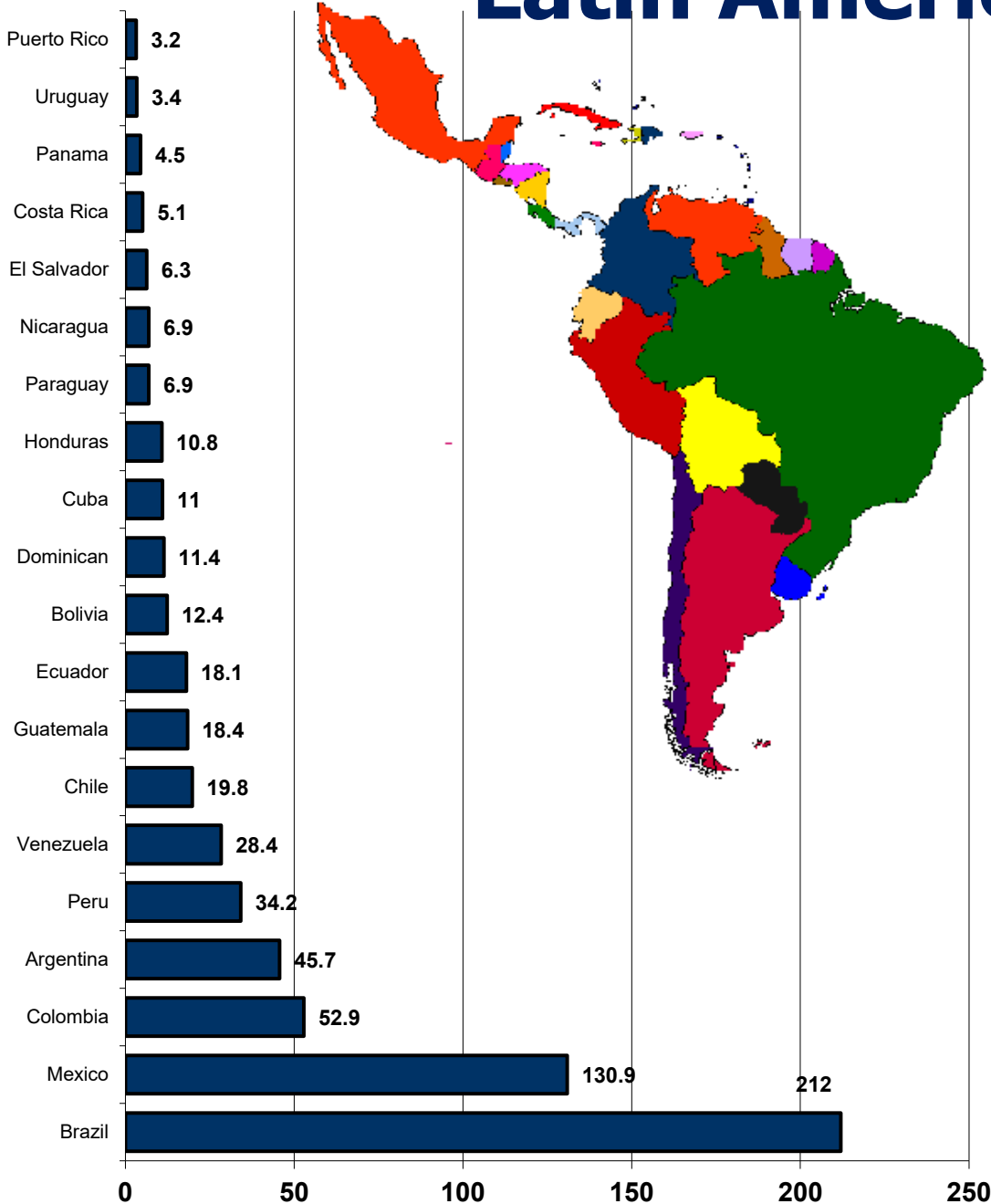
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Editors**



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- **Mário Abud Filho**
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- **Maria da Glória Orue Simón**
- **Alícia Chaparro**



# Latin American population



**642,3 millions**

**World Bank: 42 countries**  
**STALYC: 20 countries**

<b>South America</b>	<b>(10)</b>	<b>433.8 mi</b>
<b>North America</b>	<b>(1)</b>	<b>130.9 mi</b>
<b>Central America</b>	<b>(6)</b>	<b>52.0 mi</b>
<b>Caribbean Islands</b>	<b>(3)</b>	<b>25.6 mi</b>

**World Bank, 2024**

# Data obtained

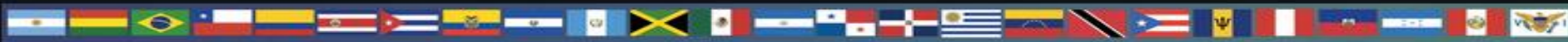
## International registries

- The Transplantation Society of Latin America and the Caribbean –STALYC [www.stalyc.org](http://www.stalyc.org)
- Global Observatory for Donation and Transplantation – GODT <http://www.transplant-observatory.org>
- International Donation and Transplantation Activity.- IRODAT. [www.irodat.org](http://www.irodat.org)

## National registries

- |             |  |           |  |
|-------------|--|-----------|--|
| ▪ Argentina | ❖ <a href="http://www.incucai.gov.ar">www.incucai.gov.ar</a> | ▪ Cuba    | ❖ <a href="http://www.sld.cu">www.sld.cu</a>                                       |
| ▪ Brazil    | ❖ <a href="http://www.abto.org.br">www.abto.org.br</a>       | ▪ Mexico  | ❖ <a href="http://www.cenatra.gob.mx">www.cenatra.gob.mx</a>                       |
| ▪ Chile     | ❖ <a href="http://www.trasplante.cl">www.trasplante.cl</a>   | ▪ Uruguay | ❖ <a href="http://www.indt.edu.uy">www.indt.edu.uy</a>                             |
| ▪ Colombia  | ❖ <a href="http://www.acto.org">www.acto.org</a>             | ▪ Ecuador | ❖ <a href="http://www.donaciontrasplante.gob.ec">www.donaciontrasplante.gob.ec</a> |

## Publications, presentations, internet, personal information



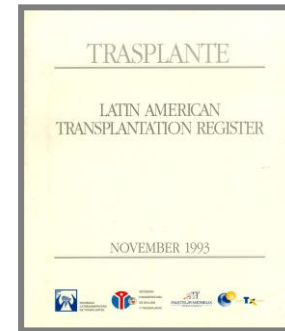
# National Transplant Organizations

- **Uruguay** 1978 Instituto Nacional de Donación y Trasplante
- **Argentina** 1979 Instituto Nacional Central Único Coordinador de Ablación y Implante (INCUCAI)
- **Cuba** 1982 Centro Coordinador Nacional de Trasplante
- **Mexico** 1984 Centro Nacional de Trasplante
- **Salvador** 1988 Consejo Nacional de Trasplantes
- **Chile** 1990 Corporación del Trasplante
- **P Rico** 1993 Agencia de Recuperación de Órganos y Tejidos
- **Venezuela** 1997 Organización Nacional de Trasplante de Venezuela (ONTV) 2014:
- **Brazil** 1997 Sistema Nacional de Trasplante (SNT)
- **Guatemala** 1997 Unidad Nacional de Atención al Enfermo Renal Crónico (UNAERC)
- **Bolivia** 1999 Comisión Coordinadora Nacional de Trasplante de Órganos y Tejidos (CCNTO)
- **Ecuador** 1999 Organización Nacional de Trasplante de Órganos y Tejidos (ONTOT)
- **Dominican** 2000 Instituto Nacional de Coordinación de Trasplante (INCORT)
- **Paraguay** 2001 Instituto Nacional de Ablación y Trasplante (INAT)
- **Panama** 2001 Programa Nacional de Trasplantes / Organización Panamenha de Trasplante (2010)
- **Colombia** 2004 Rede Nacional de Doação e Trasplante (DAVIDA)
- **Peru** 2008 Organización Nacional de Donación y Trasplante (ONDT)
- **Honduras**
- **Nicaragua**

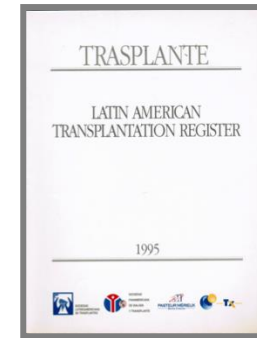
# First Latin American Transplantation Registries

- ❖ **Martinez L, Pereira J. Renal transplantation in South America.** *Transplant Proc* 1987, 19:3642-3644
- ❖ **Santiago Delpin, EA. Transplantation on Latin America.** *Transplant Proc* 1991, 23:1855-1860
- ❖ **Duro Garcia V. Kidney donors in Latin America.** *Nefrologia* 1993, 13 (supl 2): 12-17

1993



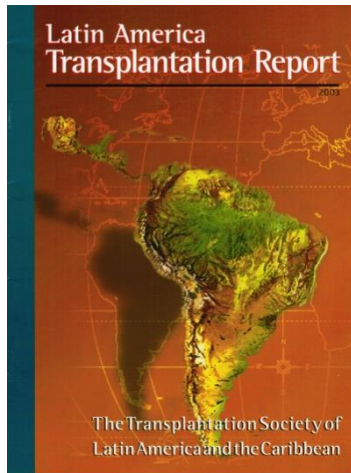
1995



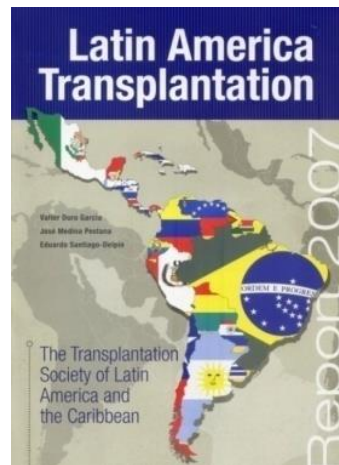
1999



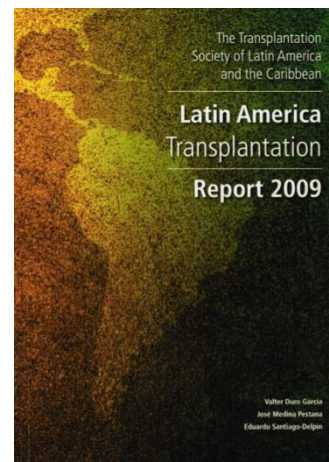
2003



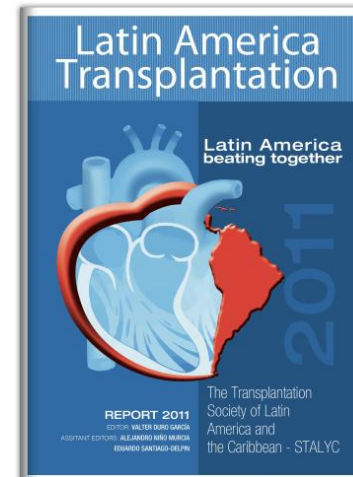
2007



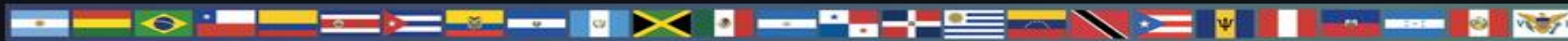
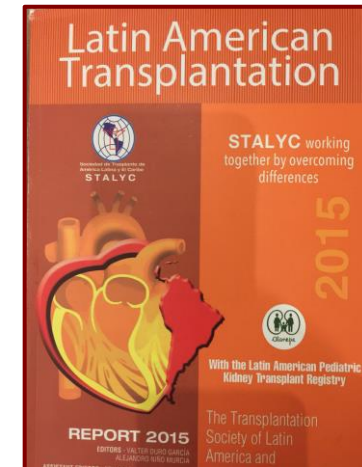
2009



2011



2015





# First transplantation activities

## Historical series

heroic  
age  
50' – 70'

<b>kidney</b>	1957	Argentina
<b>Lung</b>	1967	Argentina
<b>Heart</b>	1968	Brazil / Argentina / Chile / Venezuela
<b>Liver</b>	1968	Brazil
<b>Pancreas</b>	1968	Brazil
<b>Small bowel</b>	1968	Brazil

## Transplant programs

<b>kidney</b>	1961	Argentina
<b>Heart</b>	1984	Brazil / Argentina
<b>Liver</b>	1985	Brazil
<b>Pancreas</b>	1986	Cuba
<b>Lung</b>	1989	Mexico / Brazil
<b>Small bowel</b>	1999	Argentina



# Beginning of transplantation activities

	kidney	<u>Liiver</u>	Heart	Pancreas	Lung	Small bowel	Multivisceral
Argentina	1957	1988	1968	1993	1967	1999	2008
Bolivia	1979	1996	1998	-----	-----	-----	-----
Brazil	1964	1968	1968	1968	1989	1968	2012
Chile	1966	1969	1968	1994	1999	2004	
Colombia	1966	1976	1985	1988	1997	2004	2010
Costa Rica	1969	1993	1991	1994	1994	2013	-----
Cuba	1970	1986	1985	1986	1989	----	-----
<u>Dominican R</u>	1972	2007	2012	---	---	----	-----
Ecuador	1976	2000	1988	1991	2016	-----	-----
Guatemala	1982	2007	---	---	---	---	-----
Honduras	1986	-----	-----	----	-----	-----	-----
Mexico	196	1985	1987	1987	1989	1991	-----
Nicaragua	2000	-----	-----	-----	-----	-----	-----
Panamá	1990	2011	2016	-----	-----	-----	-----
Paraguay	1978	2015	1999	-----	-----	-----	-----
Peru	1969	1974	1972	2011	2006	-----	-----
Puerto Rico	1968	2011	1999	2007	-----	-----	-----
Salvador	1985	2013	-----	-----	-----	-----	-----
Uruguay	1969	1998	1996	2002	2002	-----	-----
Venezuela	1967	1989	1987	1991	-----	-----	-----
<b>total</b>	<b>20</b>	<b>18</b>	<b>16</b>	<b>12</b>	<b>10</b>	<b>6</b>	<b>3</b>

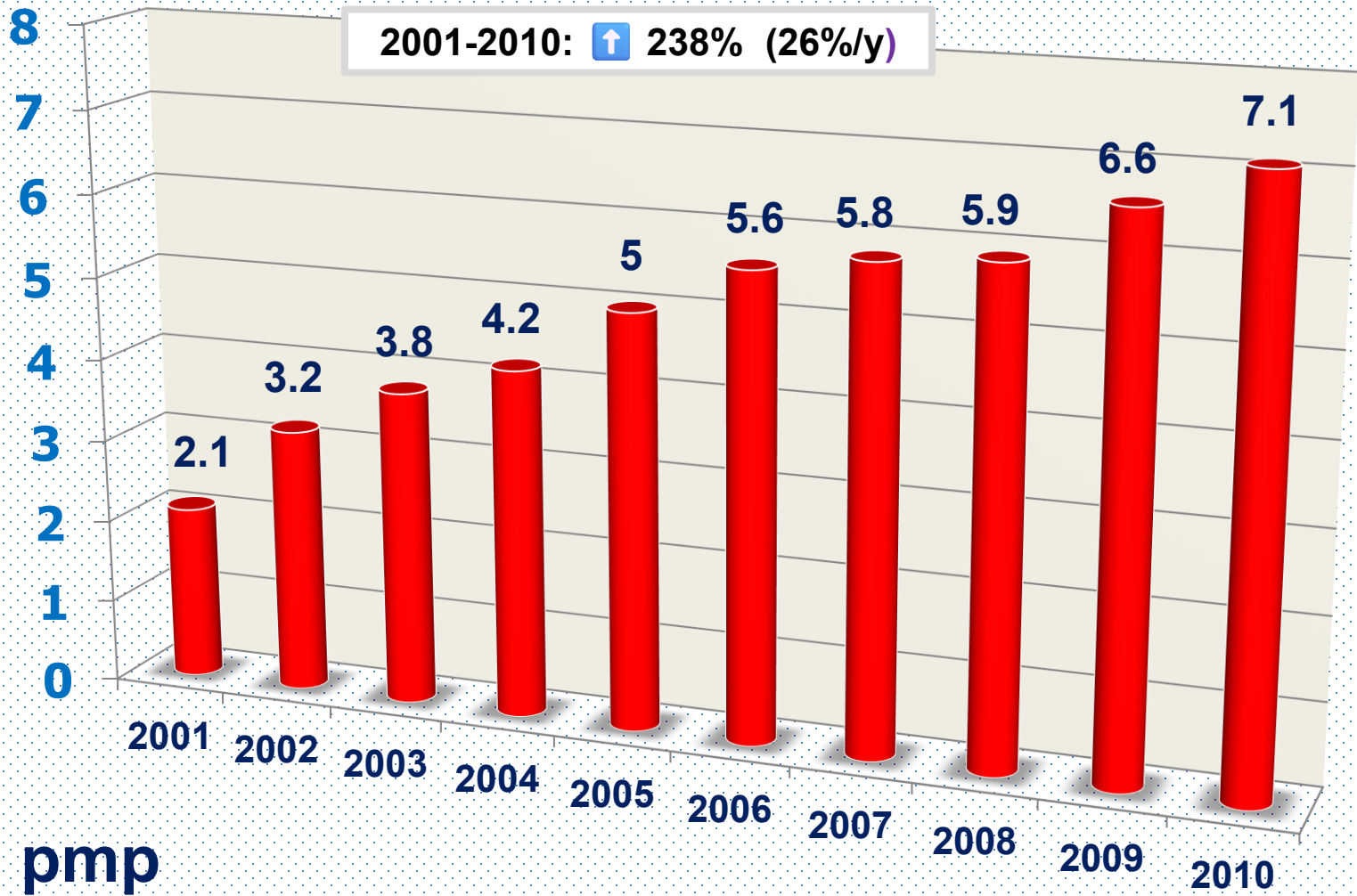




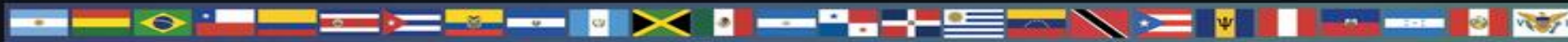
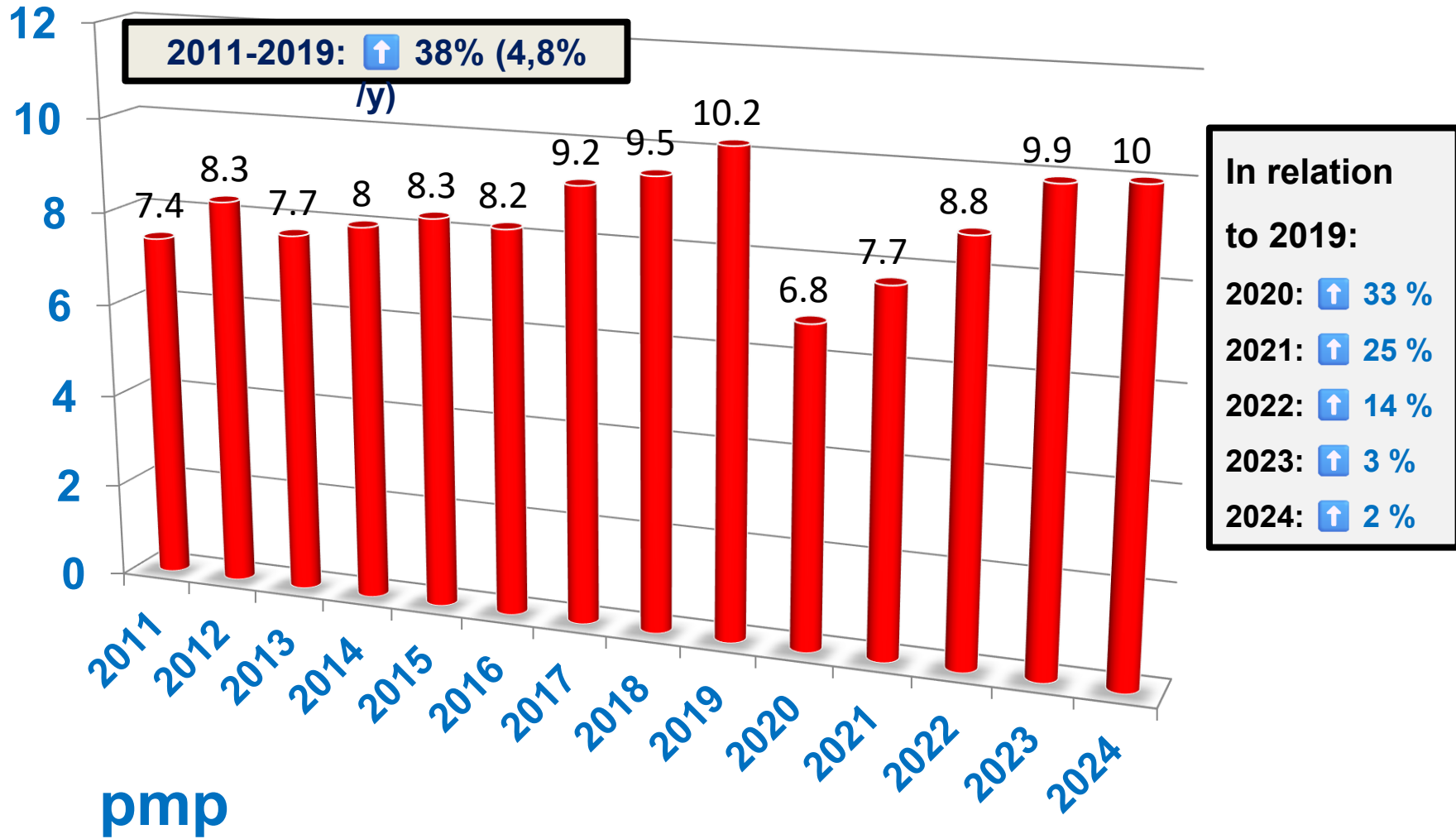
# Donation activities



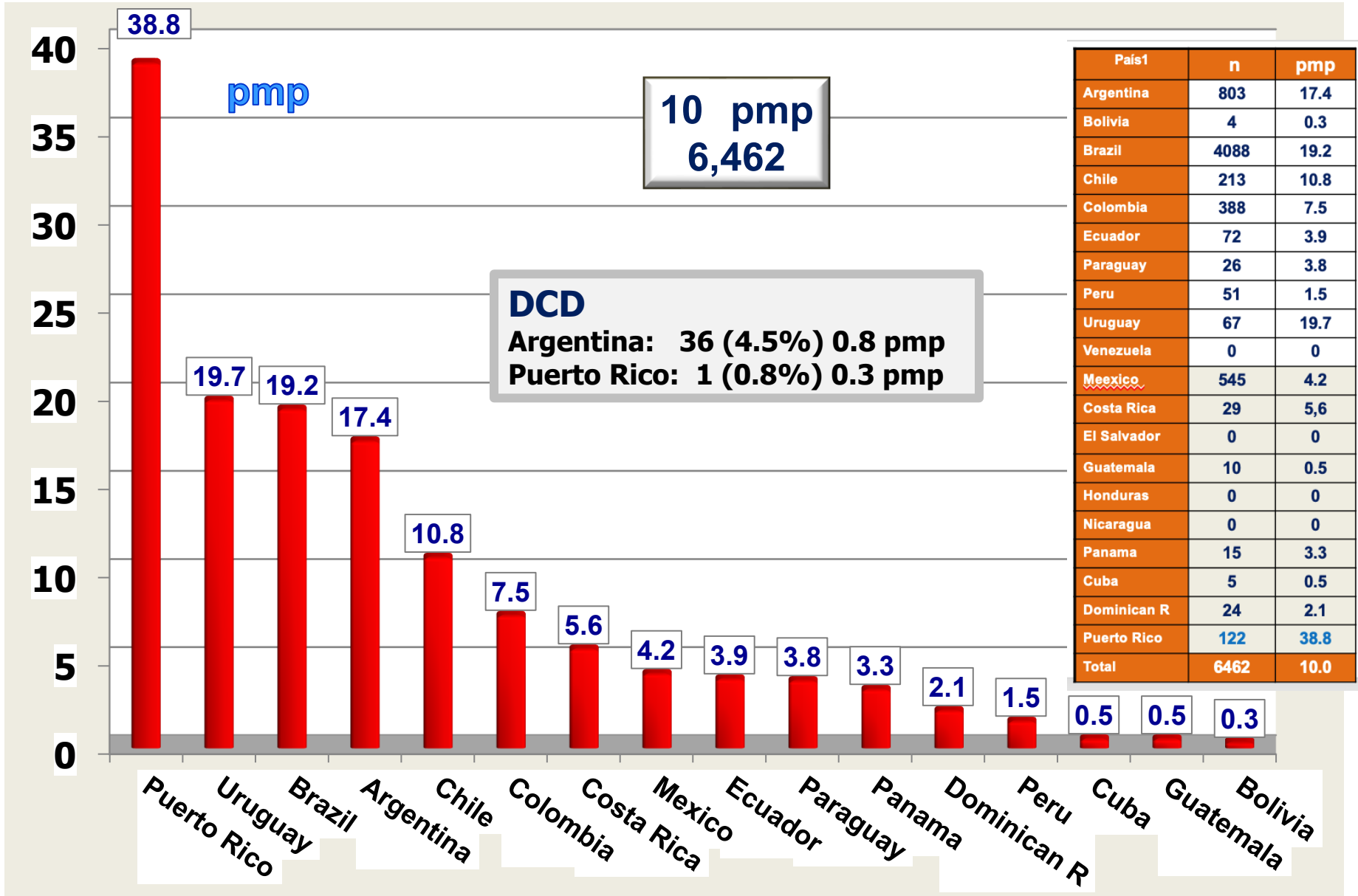
# Deceased donors rate 2001 - 2010



# Deceased donors rate 2011 - 2024

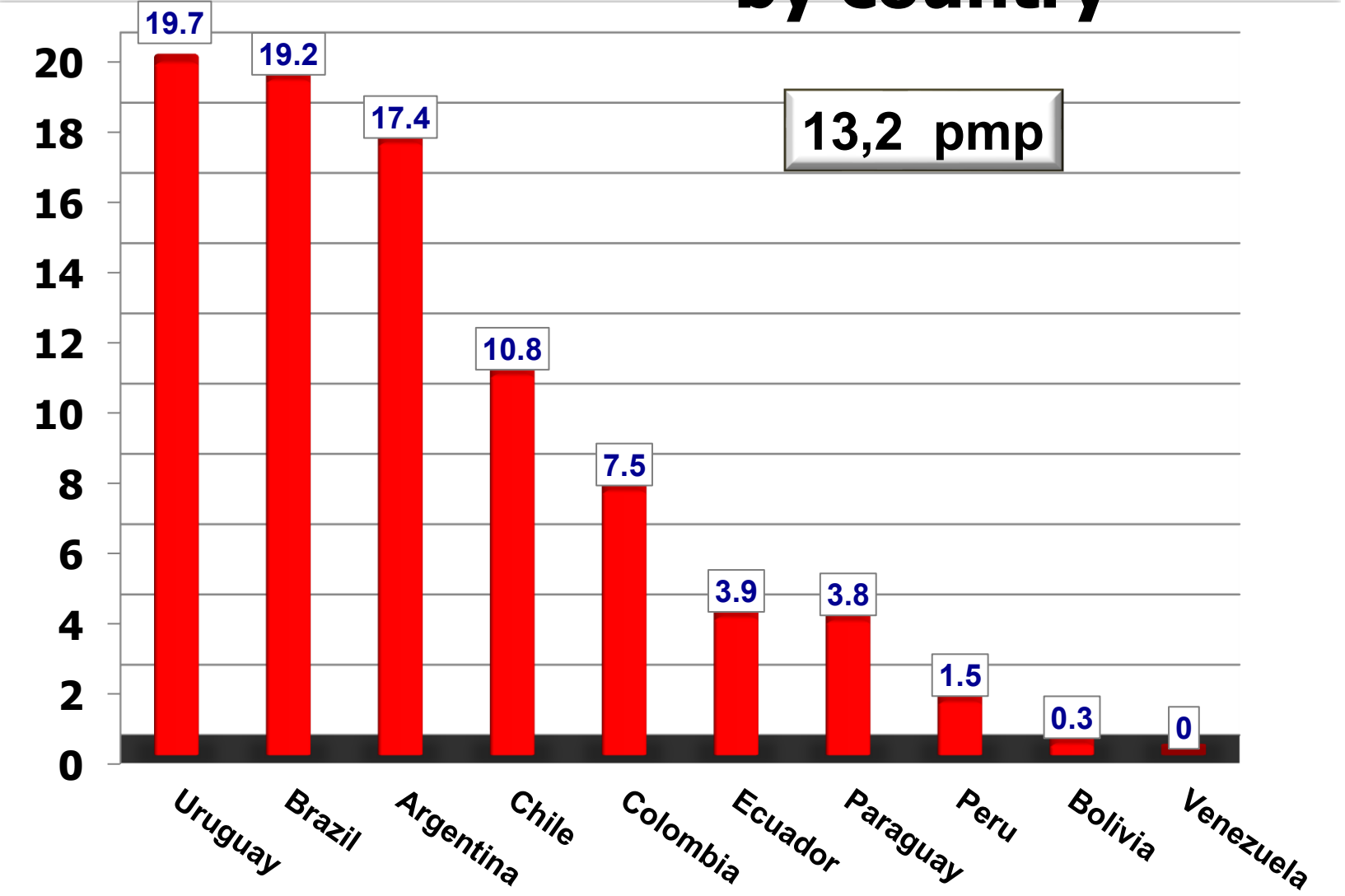


# Deceased donors rate by country - 2024



# Deceased donors rate in South America - 2024

## by country

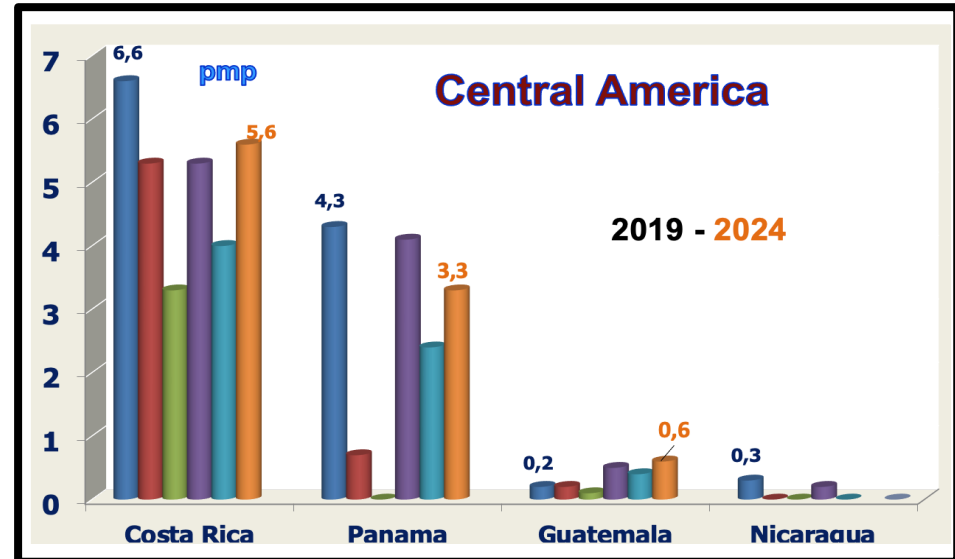
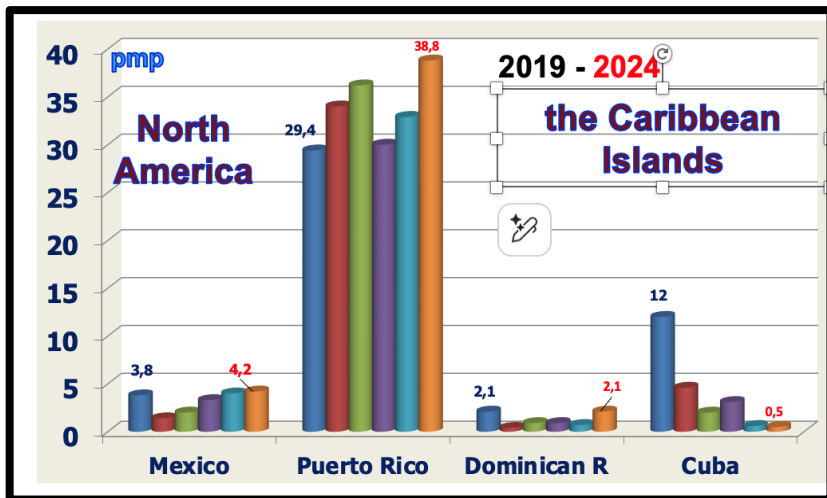
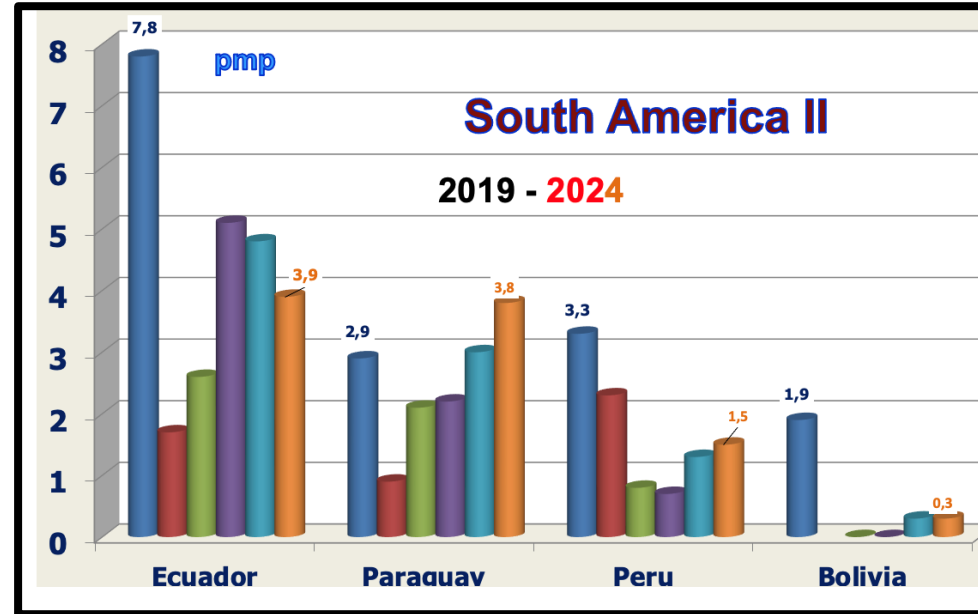
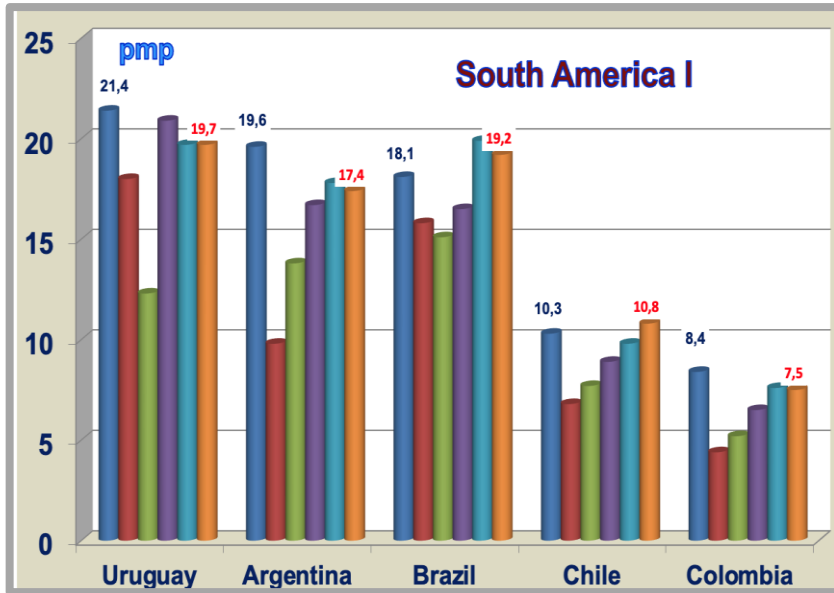


pmp

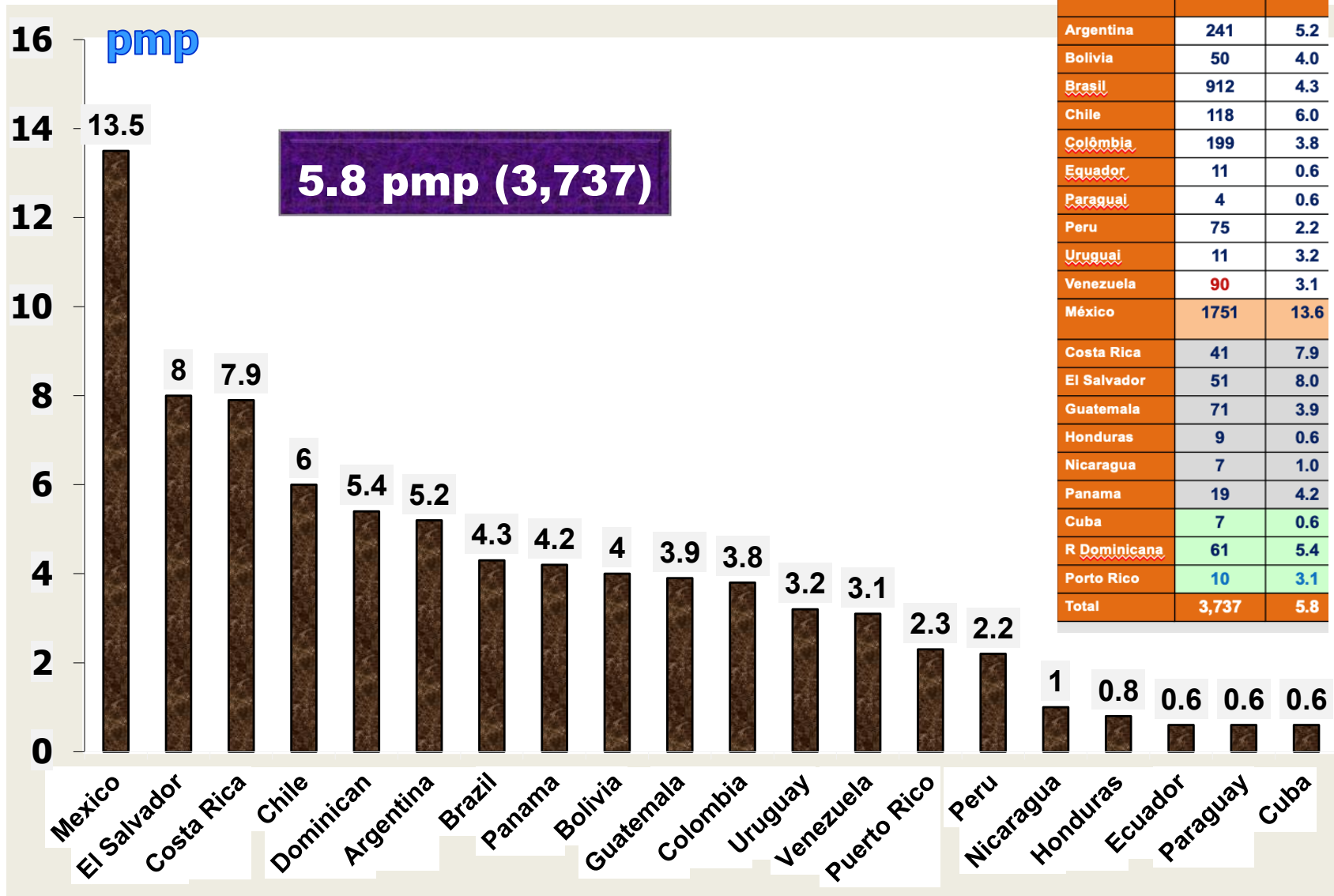


# Deceased donors rate in Latin America

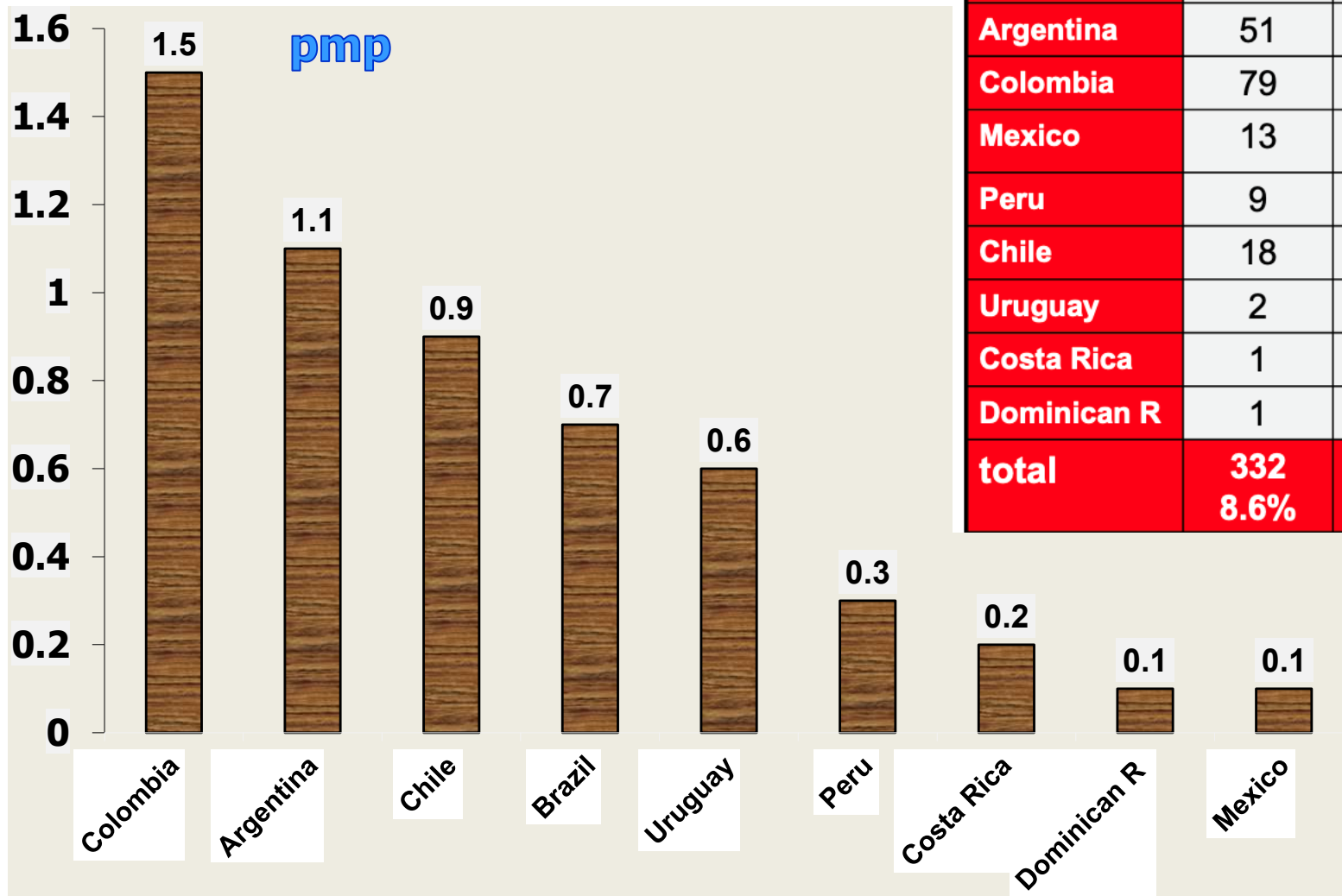
## Influence of Covid-19



# Living donor kidney transplantation in 2024



# Living donor liver transplantation in 2024



LDLT 2024	n	pmp
Brazil	158	0.7
Argentina	51	1.1
Colombia	79	1.5
Mexico	13	0.1
Peru	9	0.3
Chile	18	0.9
Uruguay	2	0.6
Costa Rica	1	0.2
Dominican R	1	0.1
<b>total</b>	<b>332</b> <b>8.6%</b>	<b>0.5</b>

# Transplantation activities



# Organ Transplants in Latin America: 2023 - 2024

## 2023

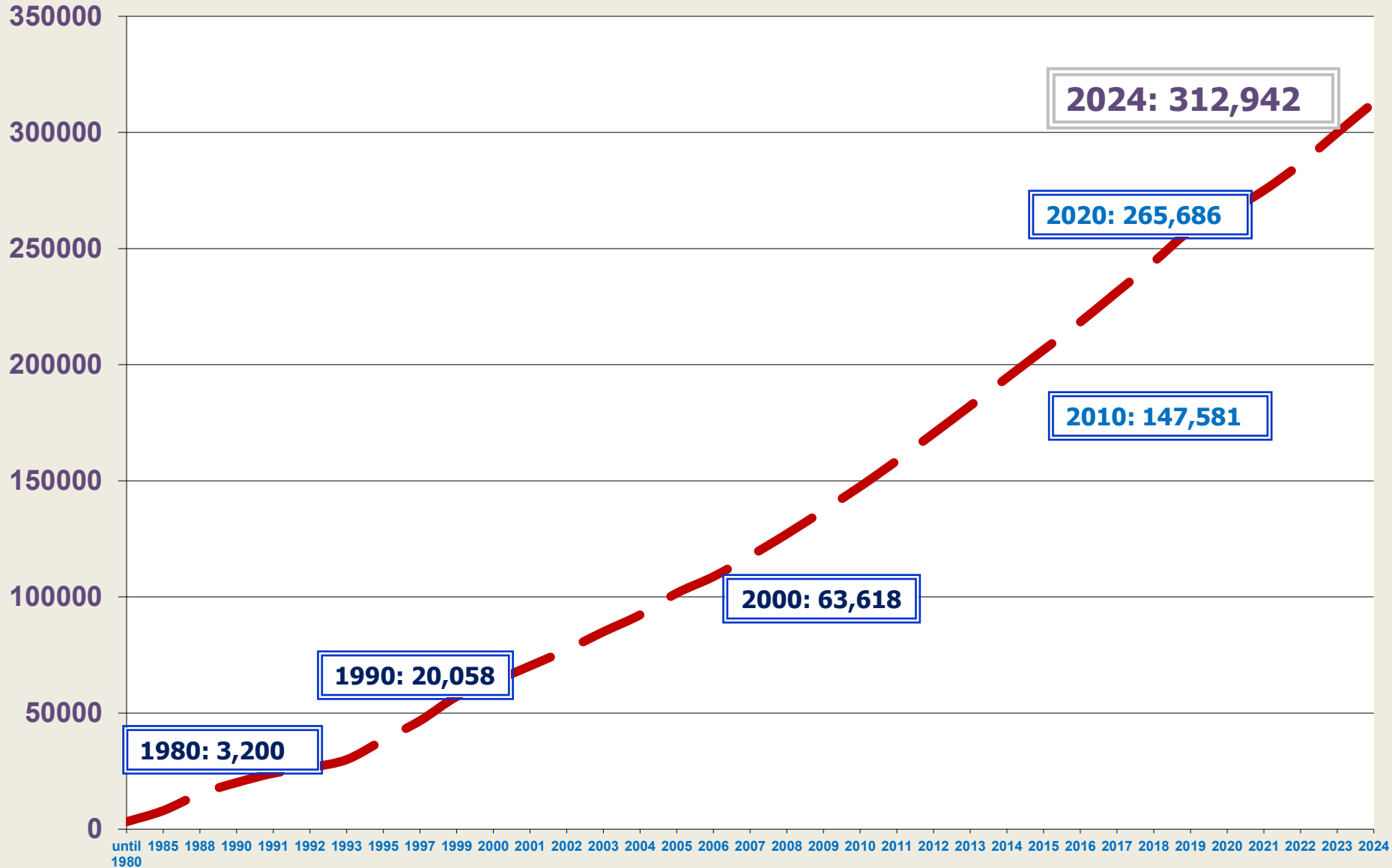
Kidney	Liver	Heart	Lung	Pancreas
13,344	3,818	766	186	182
20.8 pmp	5.9 pmp	1,2 pmp	0.3 pmp	0.4 pmp
32% LD	10.0% LD			

## 2024

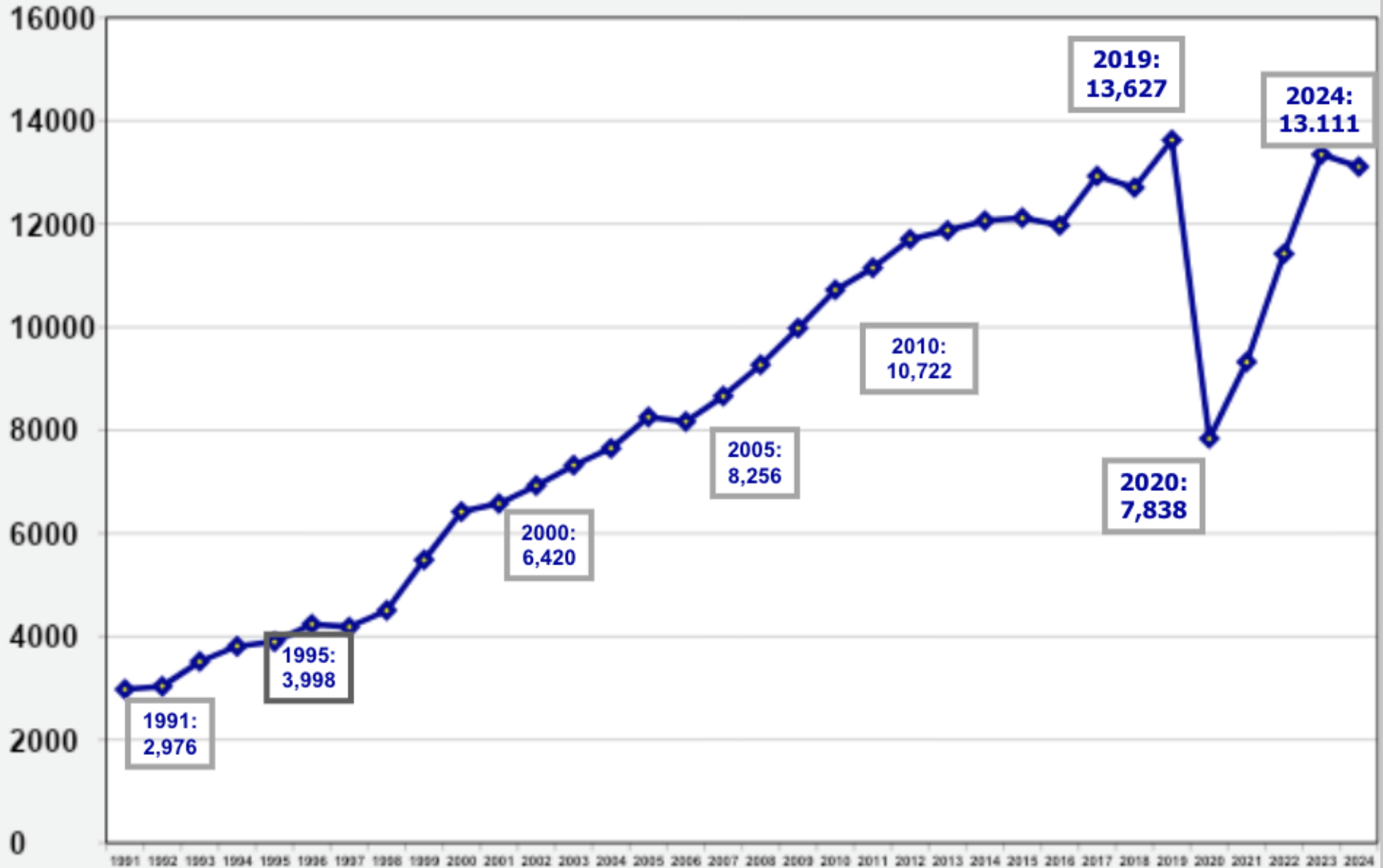
Kidney	Liver	Heart	Lung	Pancreas
13,111	3,877	765	202	222
20.4 pmp	6.0 pmp	1.2 pmp	0.3 pmp	0.3 pmp
28% LD	8.6% LD			
↓ 1.7%	▢ 1.5%	=	▢ 8.6%	▢ 22%



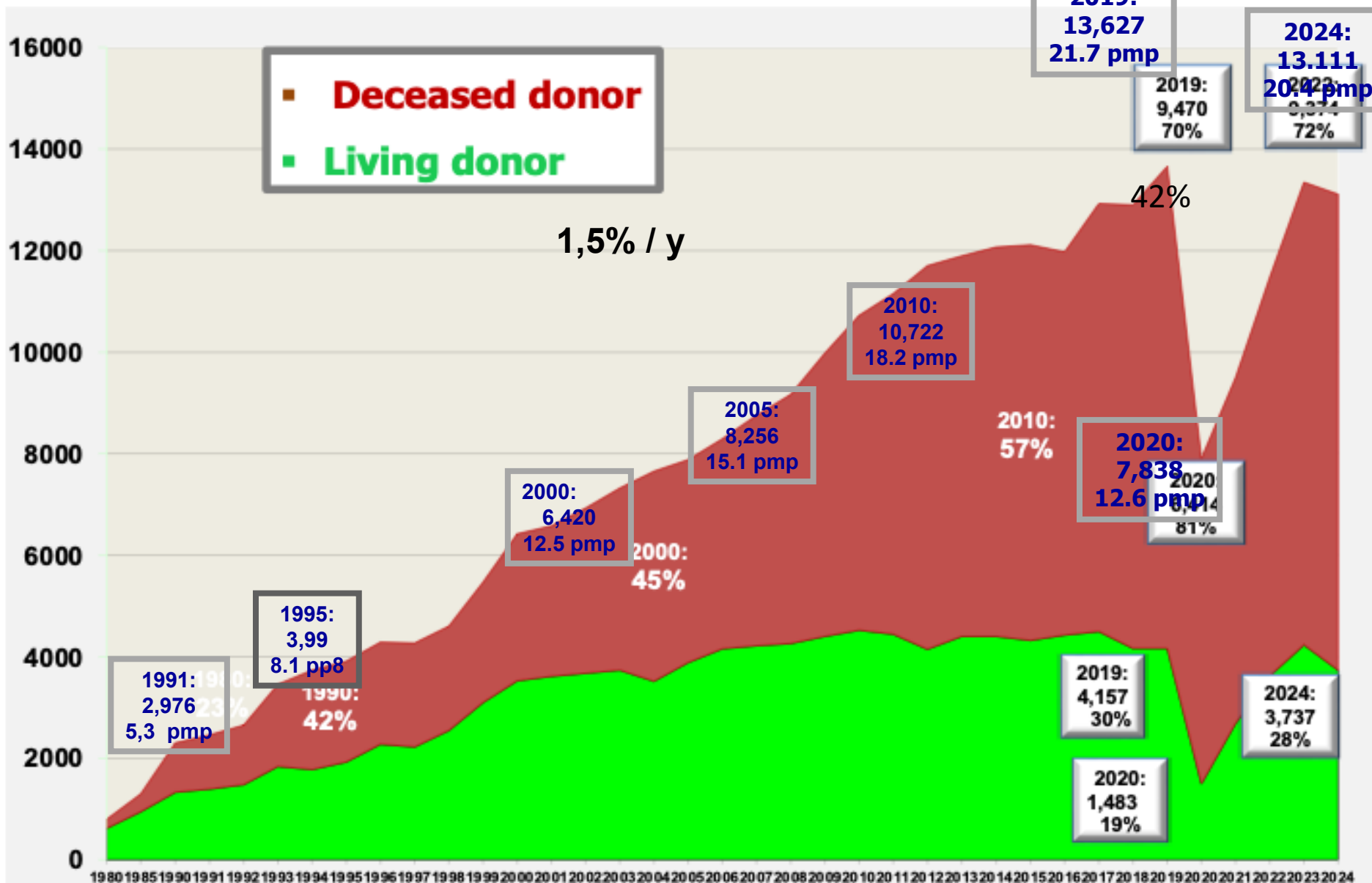
# Cumulative kidney transplant number



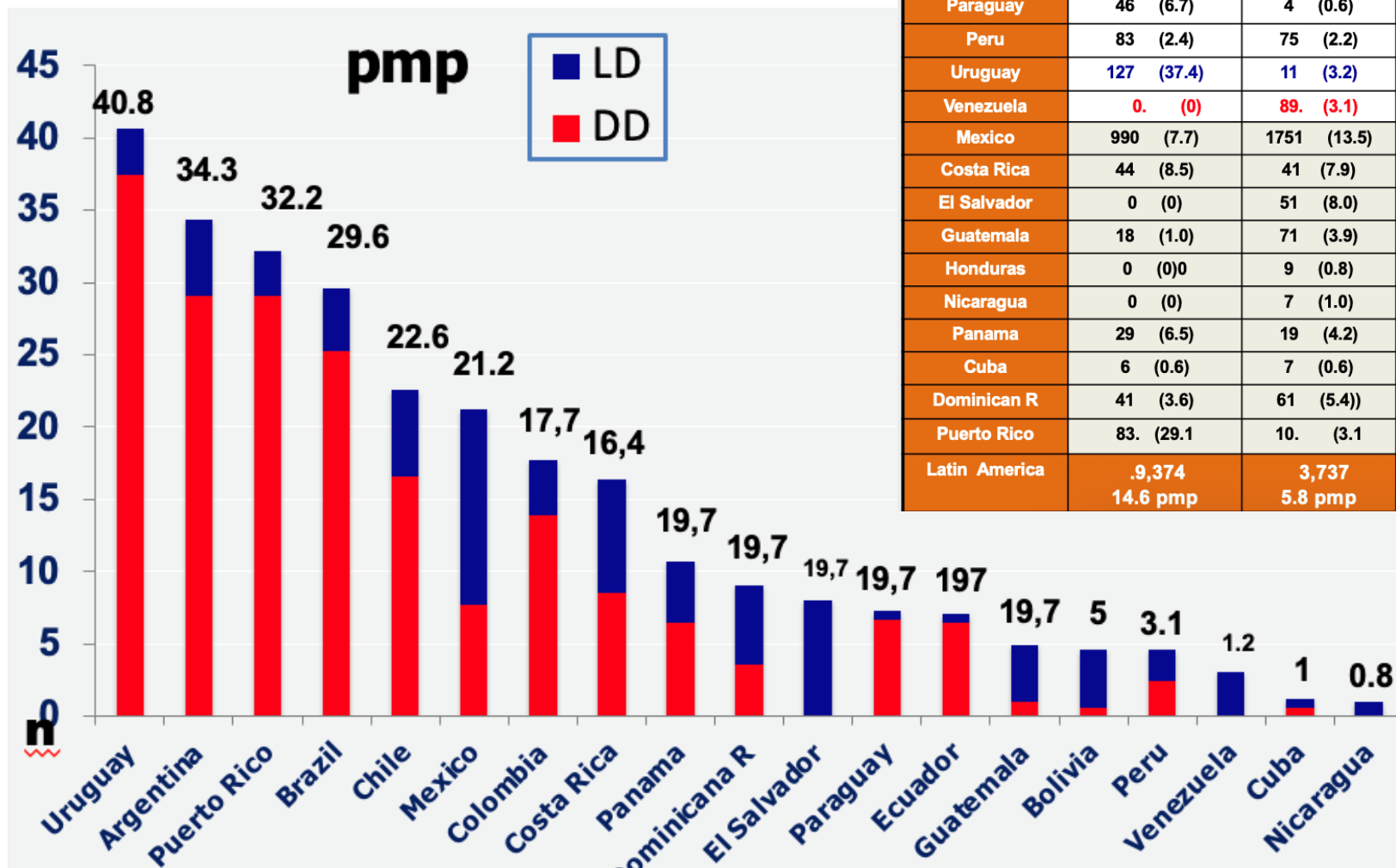
# Kidney transplant number by year



# Kidney transplantation: living and deceased donor



# Kidney transplantation by country - 2024



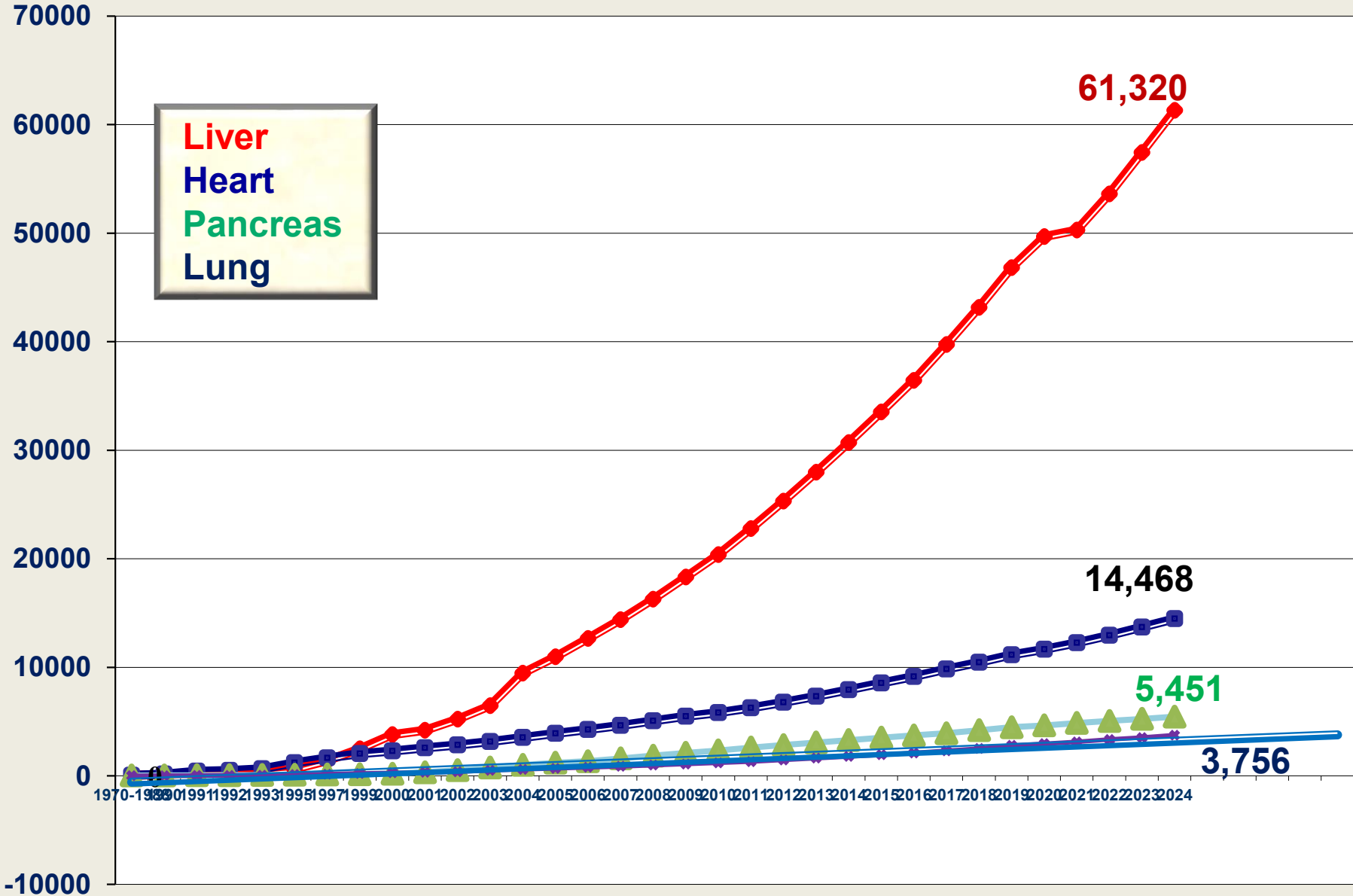
Country	Deceased donor N (pmp)	Living donor N (pmp)	total N (pmp)
Argentina	1341 (29.1)	241 (5.2)	1582 (34.3)
Bolivia	8 (0.6)	50 (4.0)	58 (4.6)
Brazil	5385 (25.3)	912 (4.3)	6297 (29.6)
Chile	327 (16.6)	118 (6.0)	445 (22.6)
Colombia	726 (13.9)	199 (3,8)	925 (17.7)
Ecuador	120 (6.5)	11 (0.6)	131 (7.1)
Paraguay	46 (6.7)	4 (0.6)	50 (7.3)
Peru	83 (2.4)	75 (2.2)	158 (4.6)
Uruguay	127 (37.4)	11 (3.2)	138. (40.6)
Venezuela	0. (0)	89. (3.1)	89. (3.1)
Mexico	990 (7.7)	1751 (13.5)	2741 (21.2)
Costa Rica	44 (8.5)	41 (7.9)	85 (16.4)
El Salvador	0 (0)	51 (8.0)	51 (8.0)
Guatemala	18 (1.0)	71 (3.9)	89 (4.8)
Honduras	0 (0)	9 (0.8)	9 (0.8)
Nicaragua	0 (0)	7 (1.0)	7 (1.0)
Panama	29 (6.5)	19 (4.2)	48 (10.7)
Cuba	6 (0.6)	7 (0.6)	13 (1.2)
Dominican R	41 (3.6)	61 (5.4))	102 (9.0)
Puerto Rico	83. (29.1)	10. (3.1)	93 (32.2)
Latin America	9,374 (14.6 pmp)	3,737 (5.8 pmp)	13,111 (20.4 pmp)

# Kidney transplantation by era

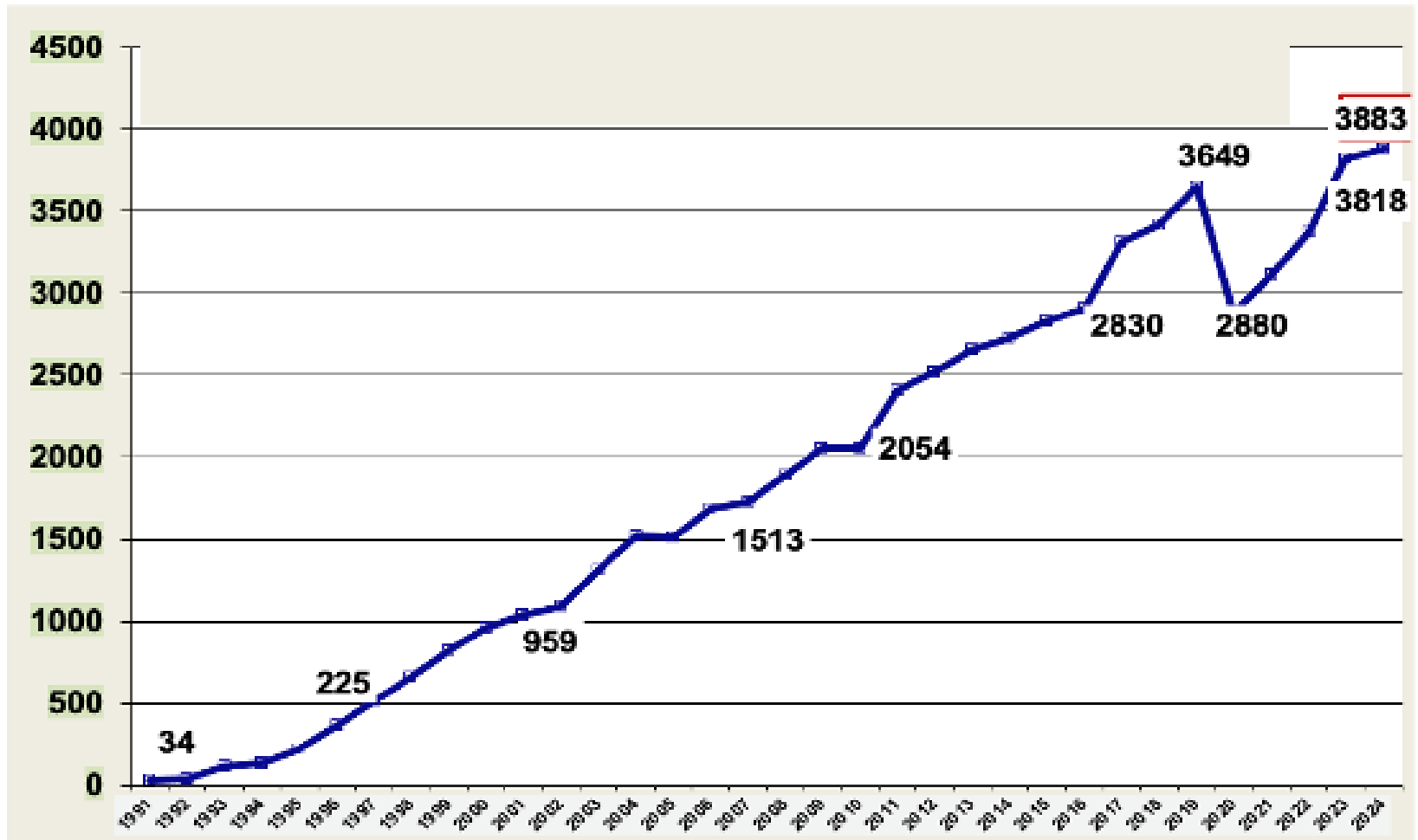
	Population (millions)	Transplants pmp	Deceased donor (%)	Cumulative number of transplants	
<b>1980</b>	350	780	2.2	23	3,200
<b>1985</b>	390	1,280	3.3	27	8,000
<b>1990</b>	40	2,300	5.3	42	20,058
<b>1995</b>	480	3,910	8.1	51	38,405
<b>2000</b>	518	6,450	12.5	47	63,618
<b>2005</b>	536	8,256	15.4	48	100.460
<b>2010</b>	562	10,423	18.5	57	146,385
<b>2015</b>	611	12,116	19.8	64	206,524
<b>2019</b>	626	13,627	21.7	69	257,848
<b>2020</b>	626	7,838	12.6	81	265,686
<b>2022</b>	634,5	11,478	18.,1	68	286,487
<b>2024</b>	642,3	13,111	20.4	72	312,942



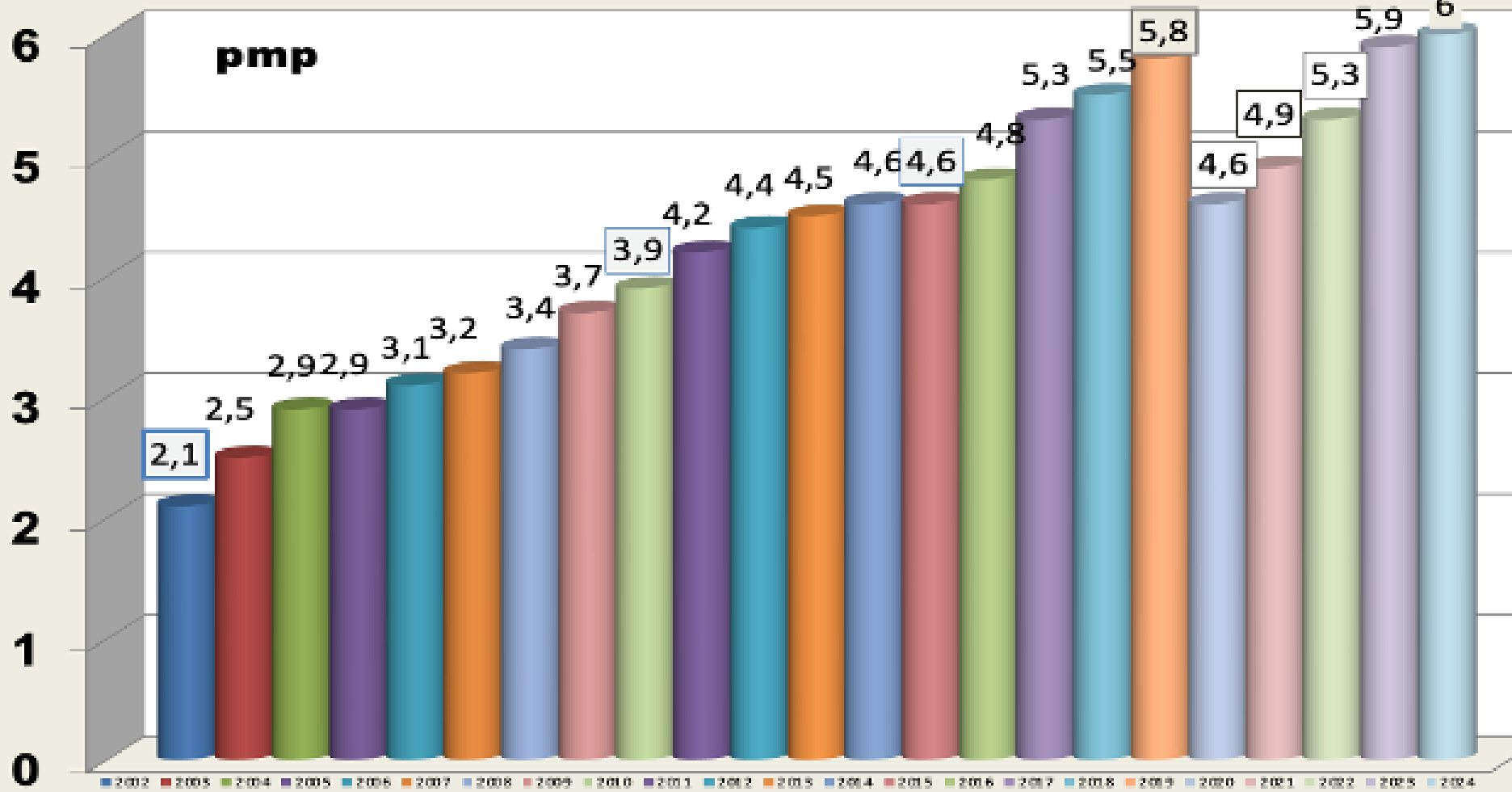
# Cumulative organ transplant number



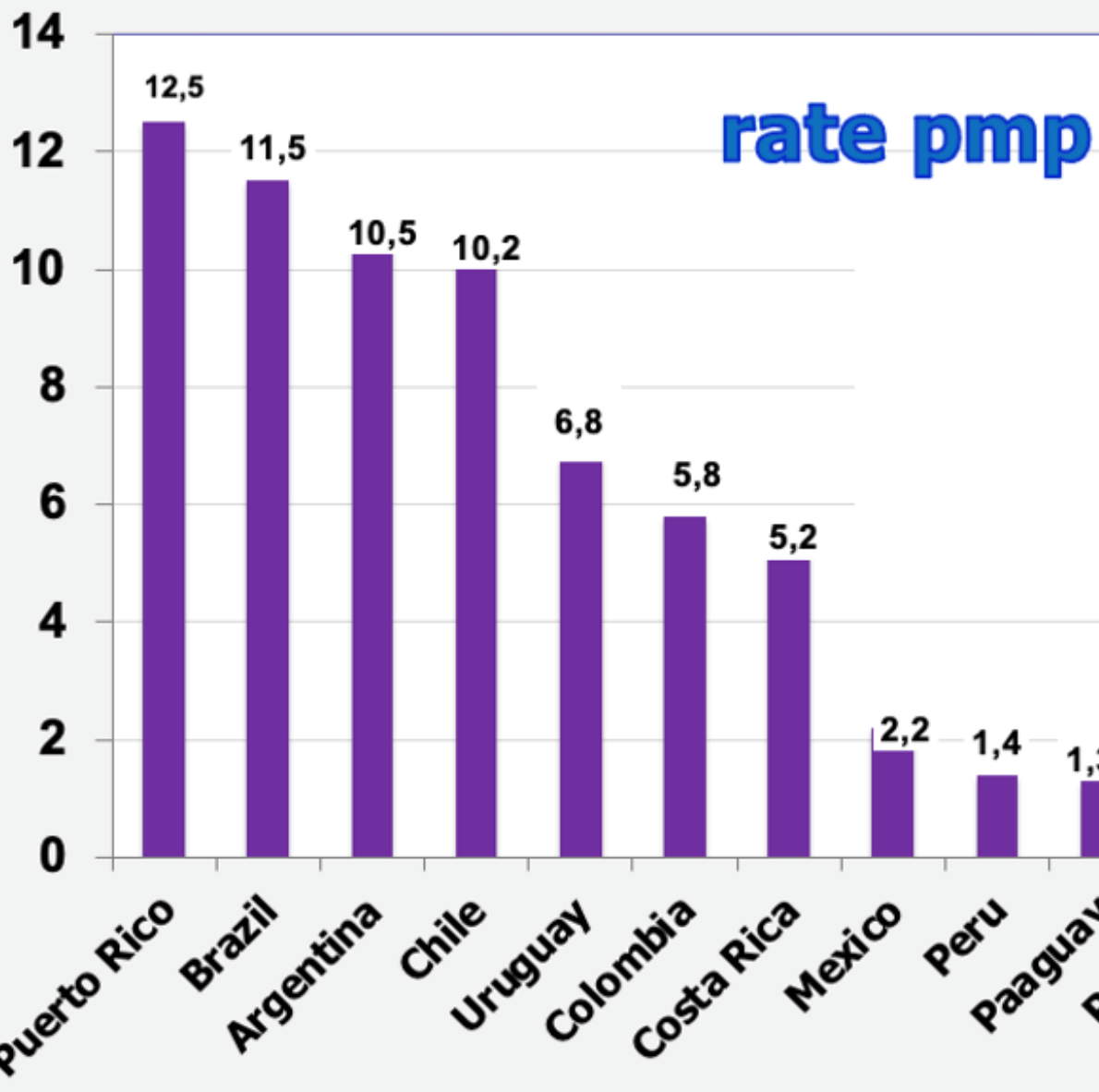
# Annual number of Liver transplantation



# Evolution of Liver Transplantation rate

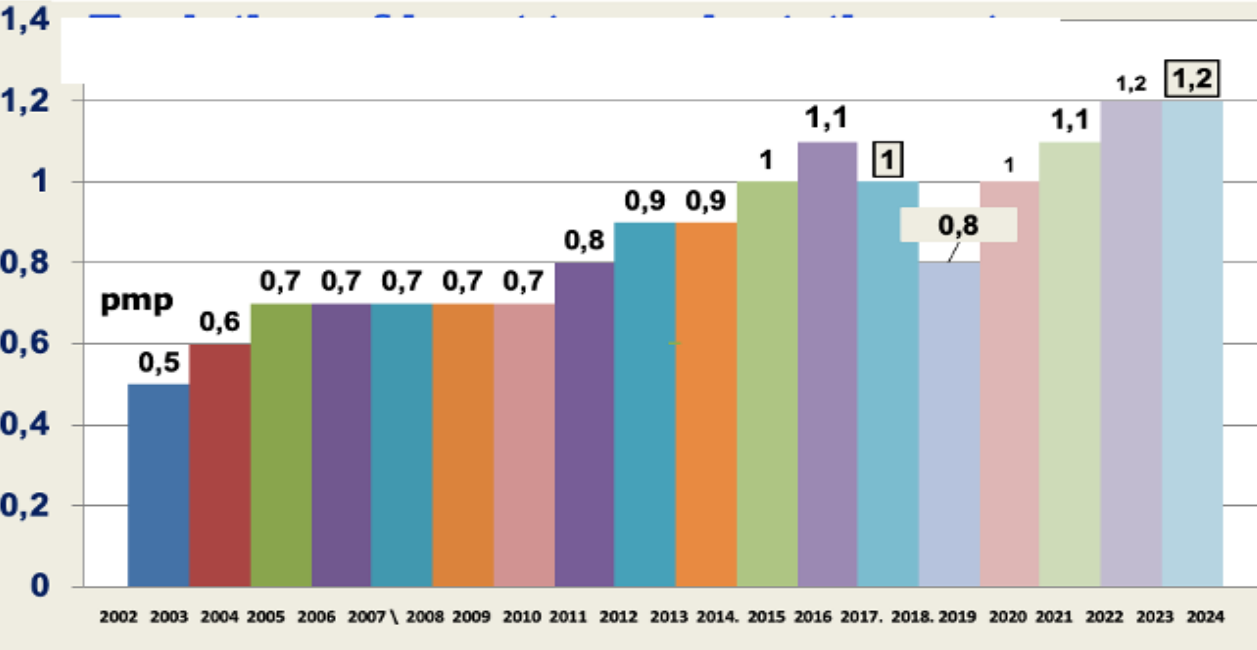
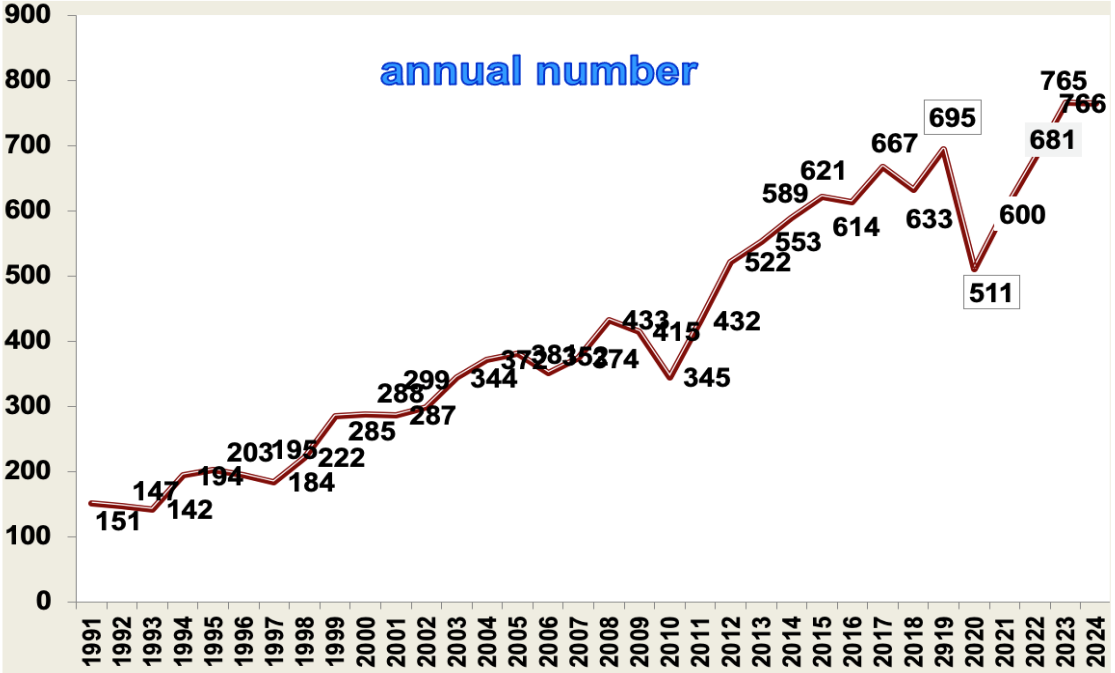


# Liver transplantation by country – 2024



2024	n	pmp	LD (%)
Brazil	2449	11.5	6.5
Argentina	483	10.5	10.6
Colombia	302	5.8	9.0
Chile	201	10.2	9.0
Mexico	280	2.2	4.6
Peru	48	1.4	18.8
Puerto Rico	40		12.5
Costa Rica	27	5.2	3.7
Uruguay	23	6.8	8.7
Ecuador	17	0.9	0
Panama	6	1.3	0
Dominican	1	0.1	100
total	3,877	6.0	8,6

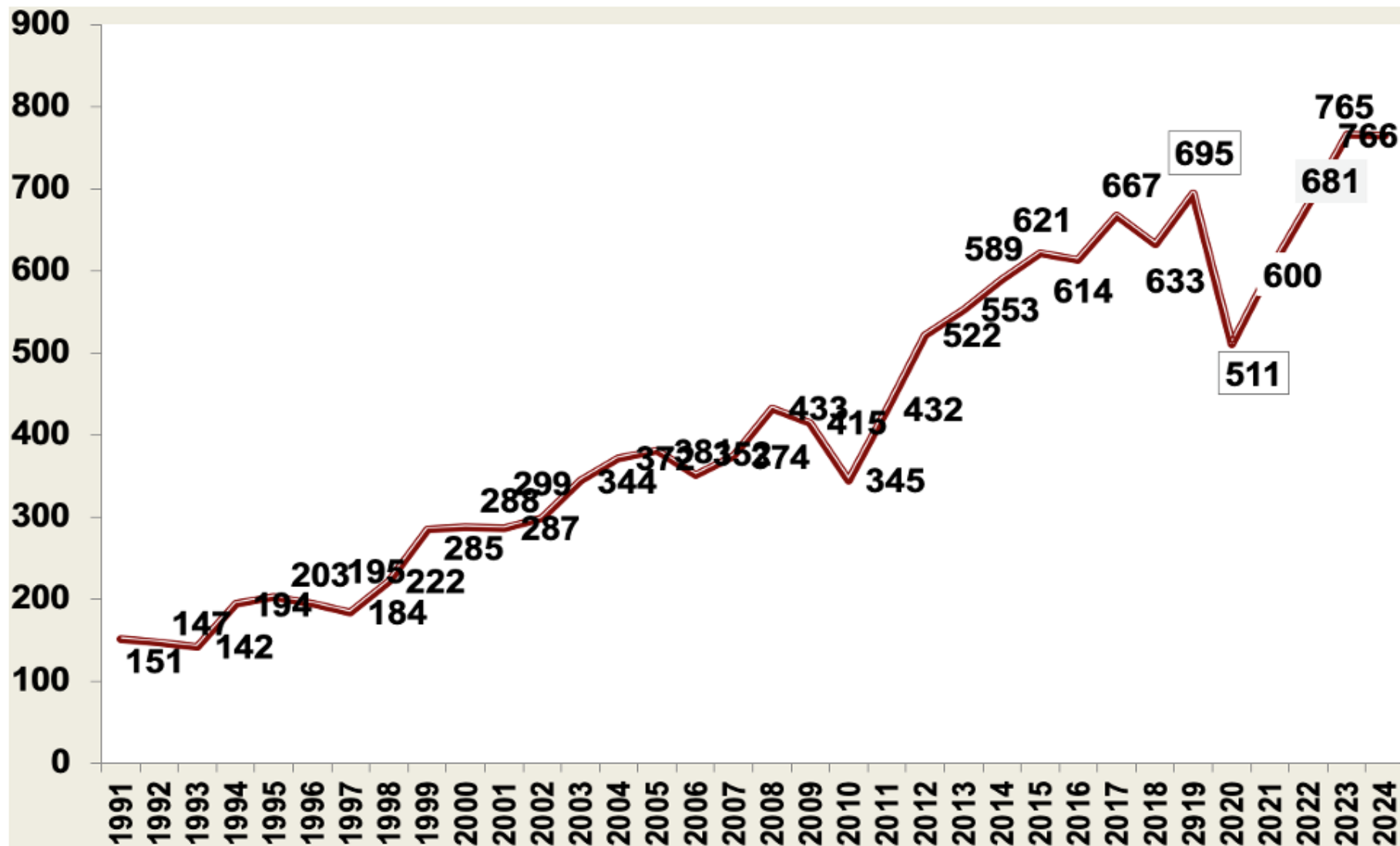
# Annual number of Heart transplantation



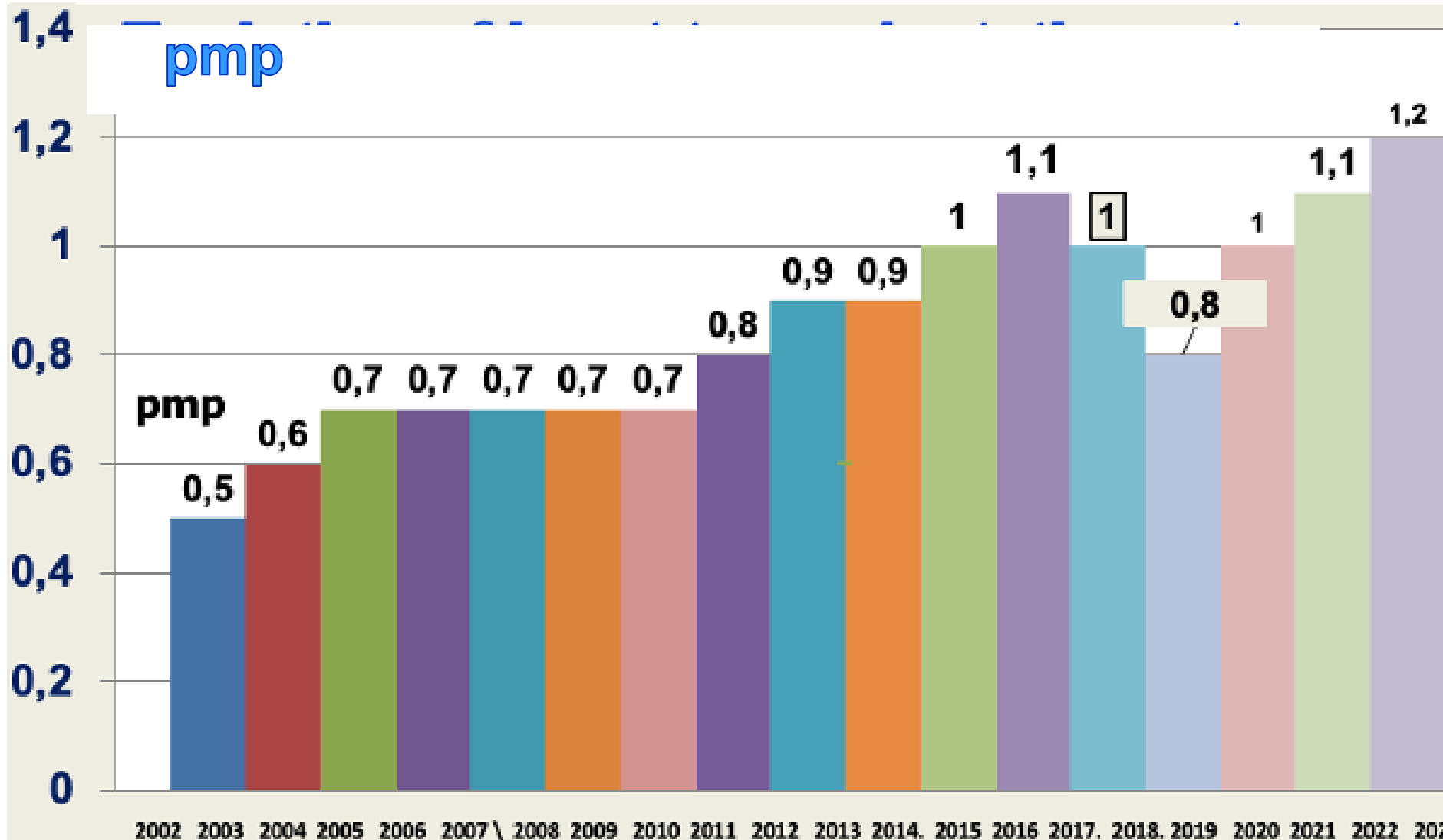
# Evolution of Heart transplantation rate - pmp



# Annual number of Heart transplantation



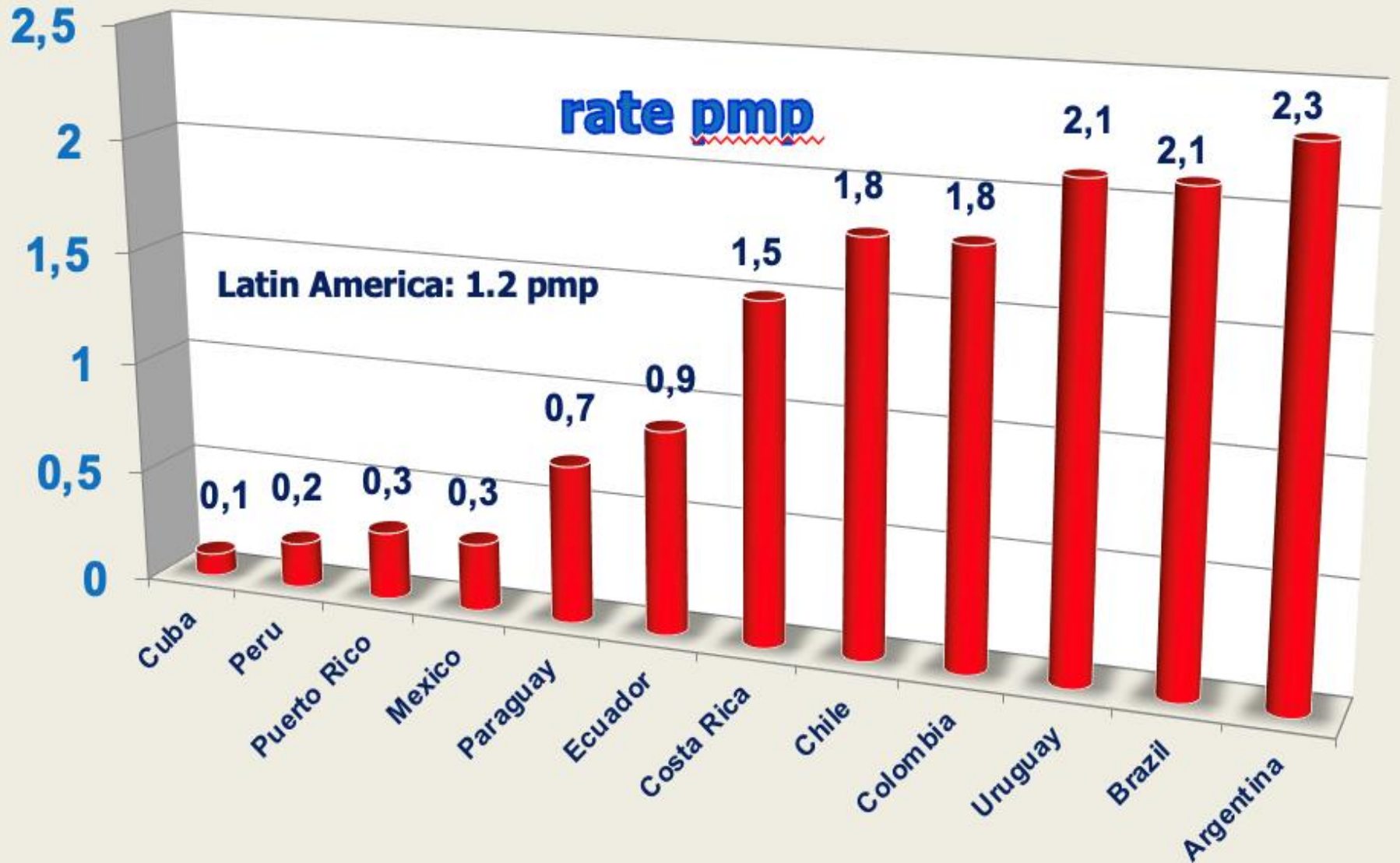
# Evolution of Heart Transplantation rate



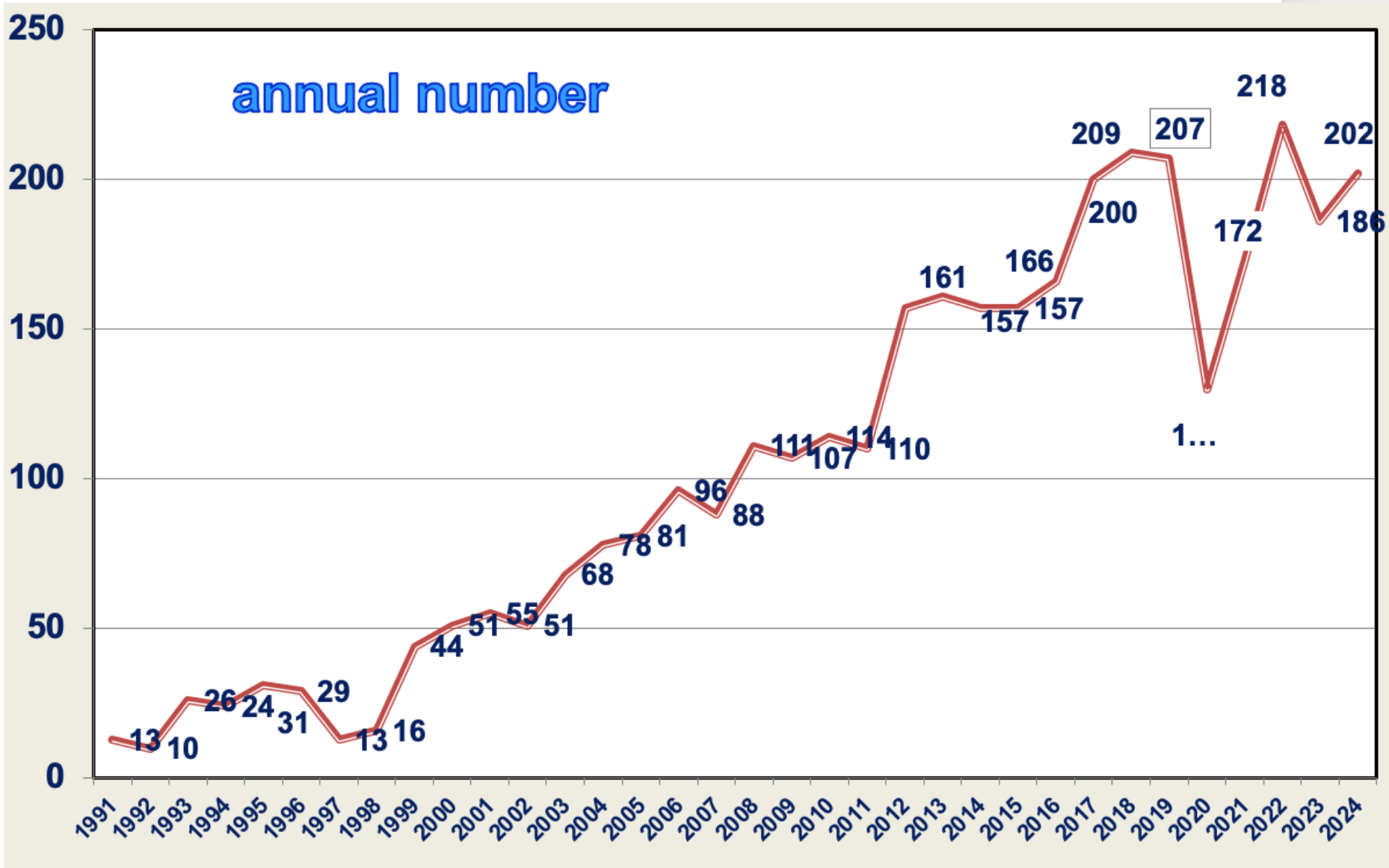
# Heart Transplantation by country - 2024



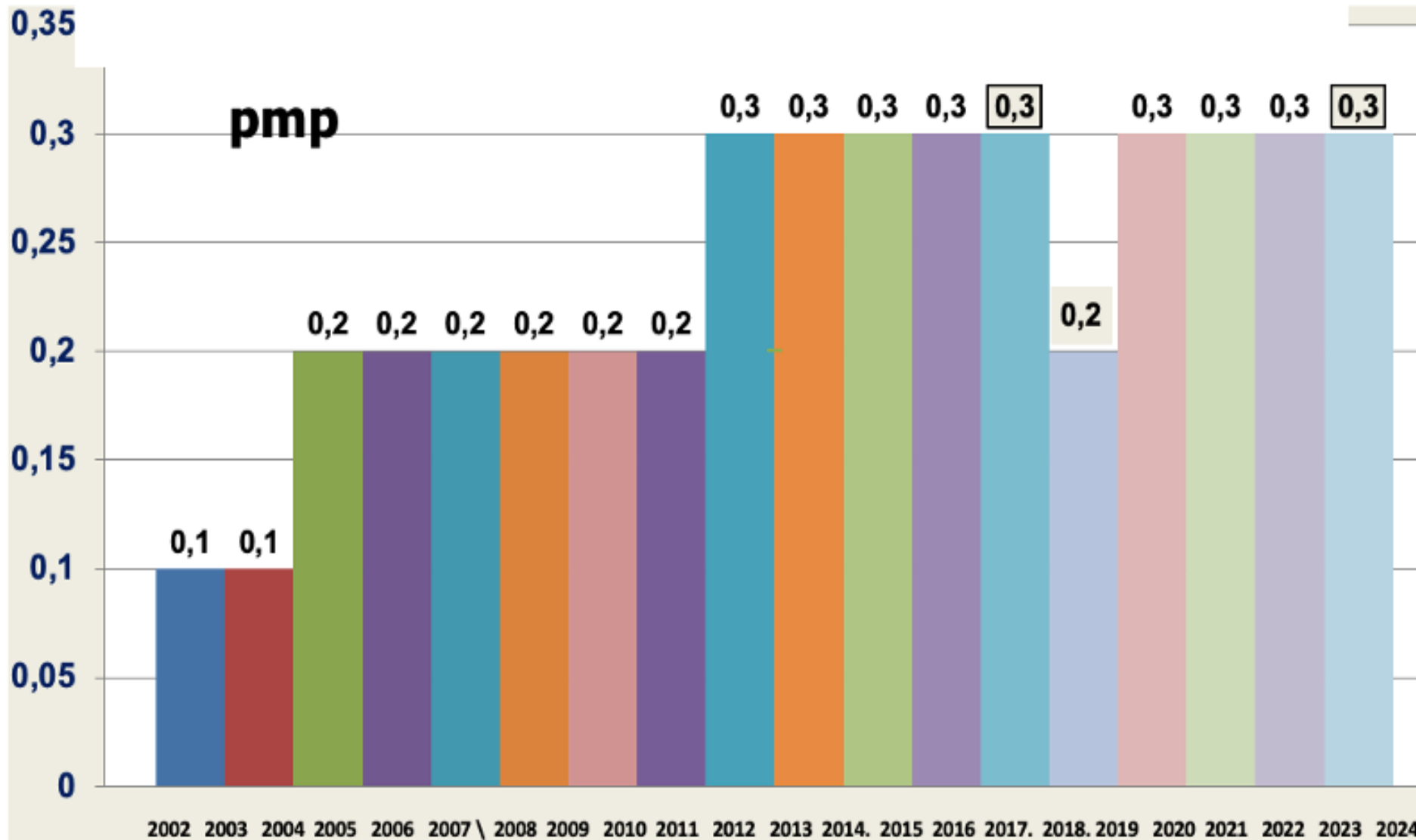
# Heart Transplantation by country - 2024



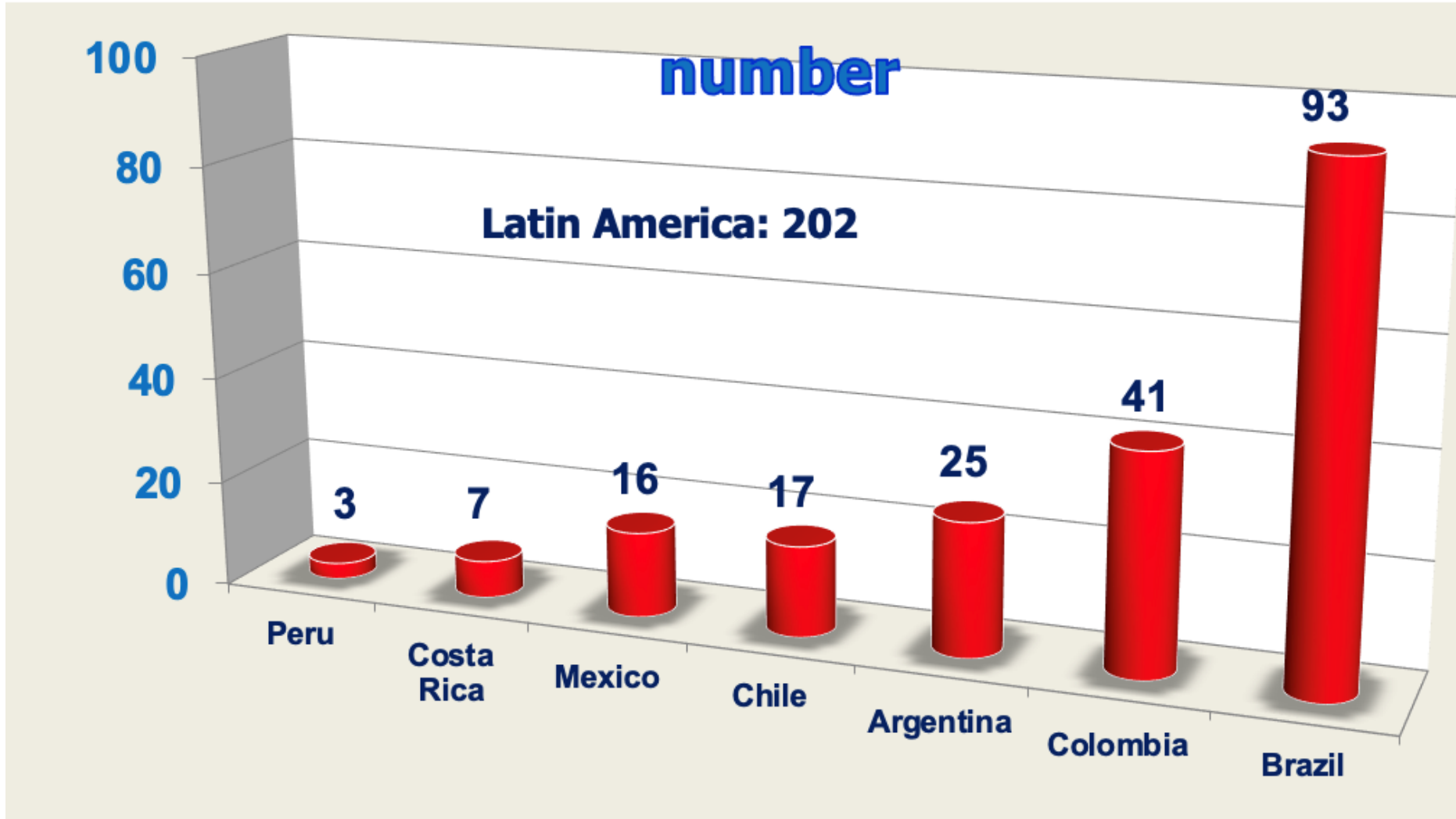
# Annual number of Lung transplantation



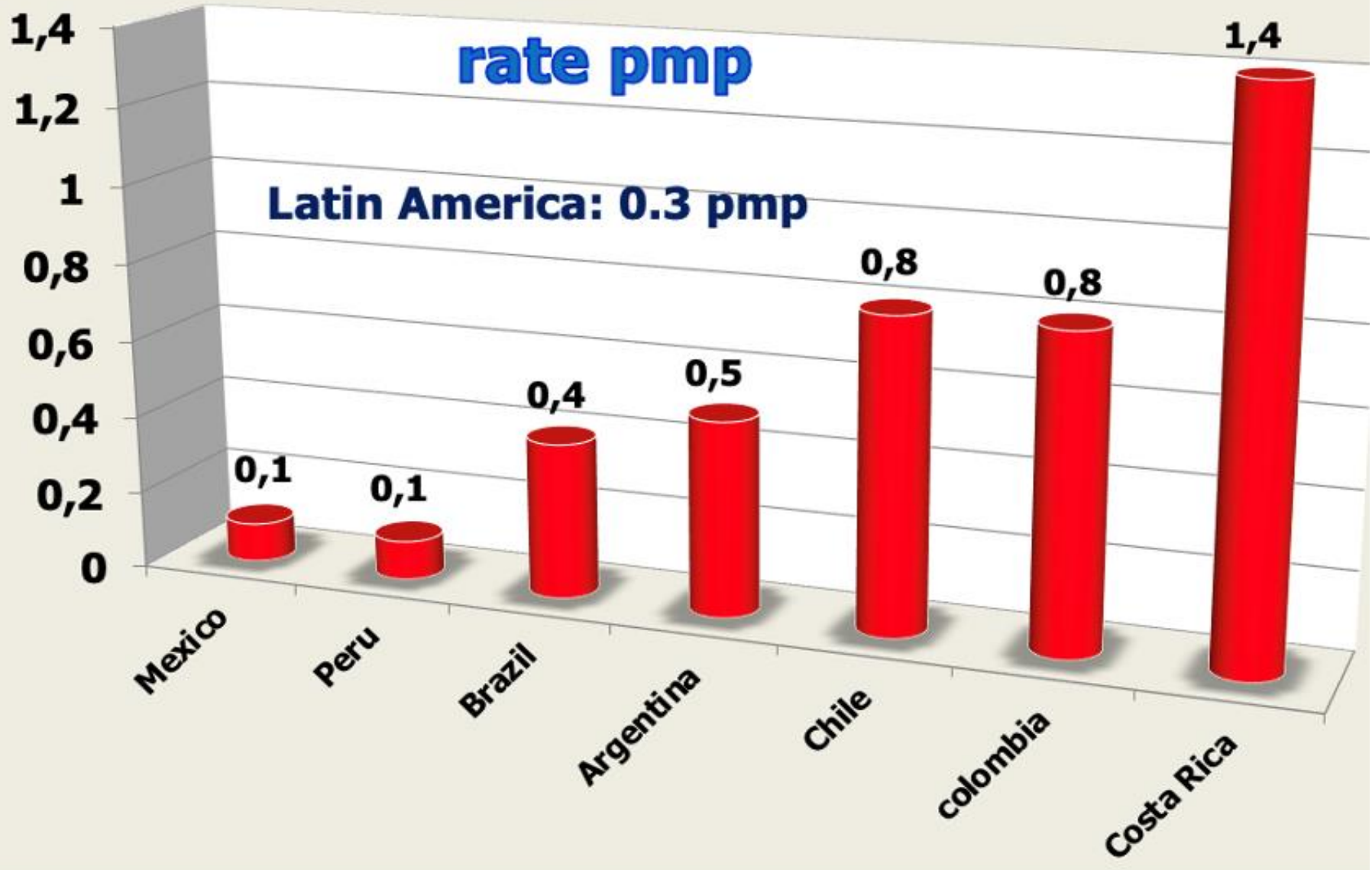
# Evolution of Lung Transplantation rate



# Lung Transplantation by country - 2024

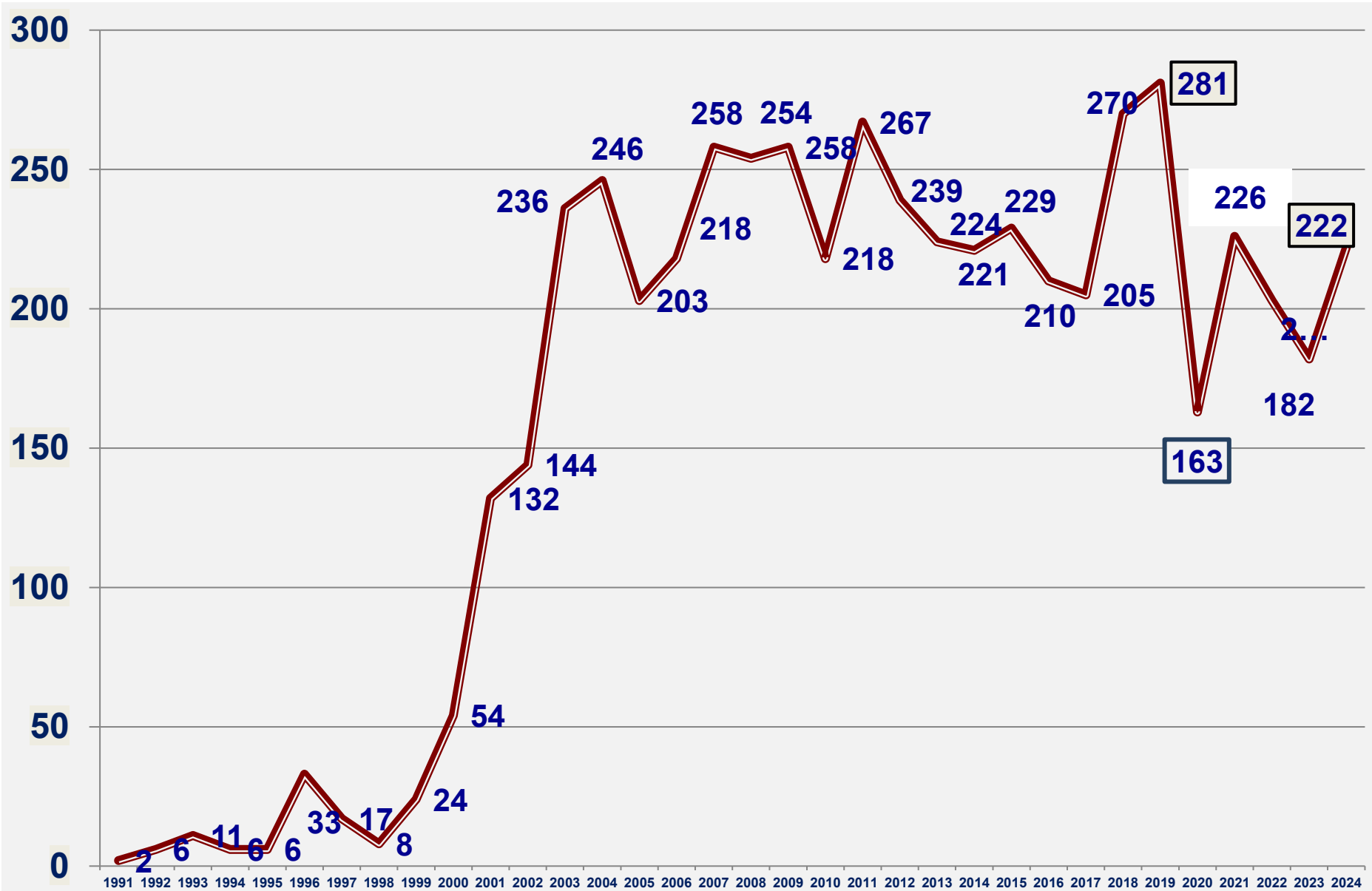


# Lung Transplantation by country - 2024

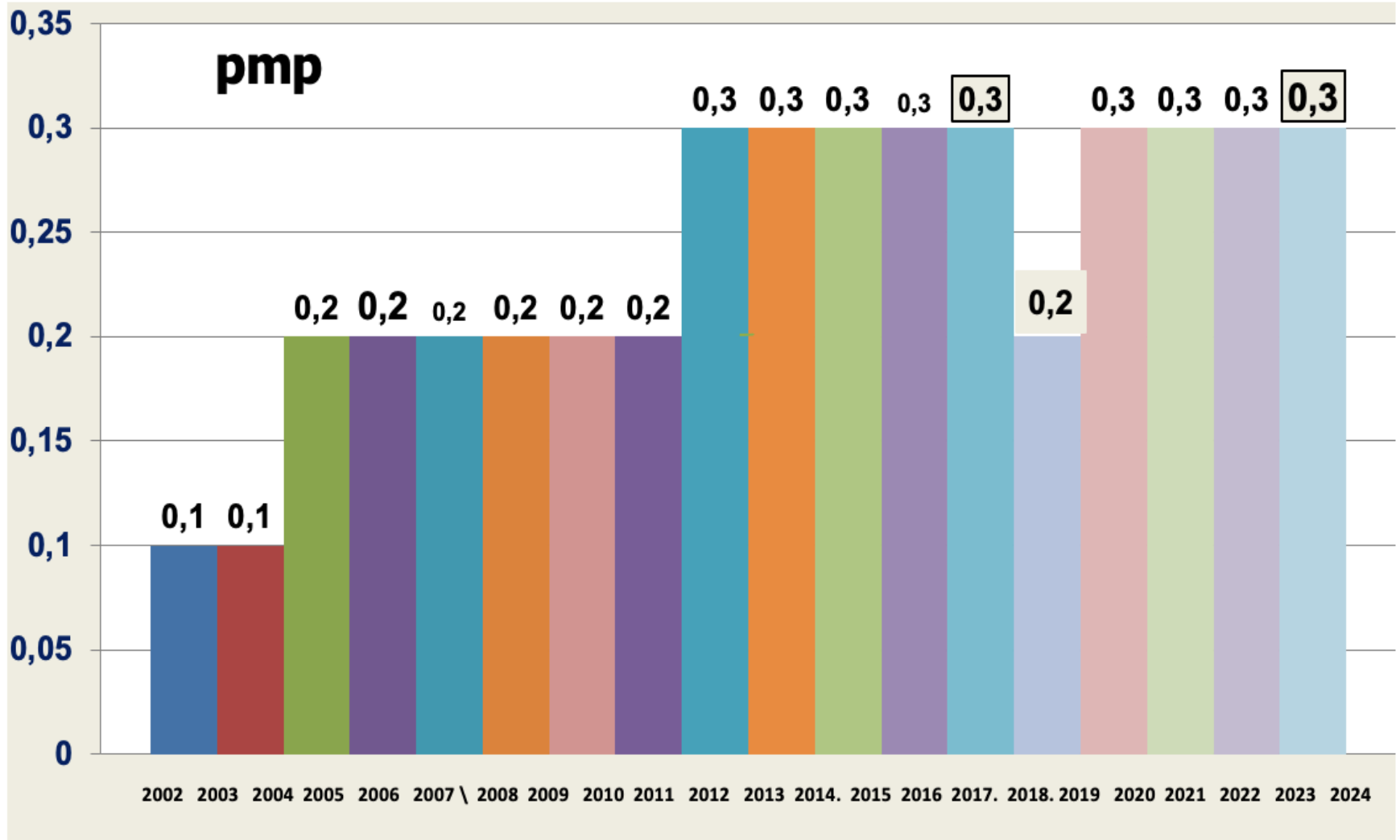




# Annual number of Pancreas transplantation



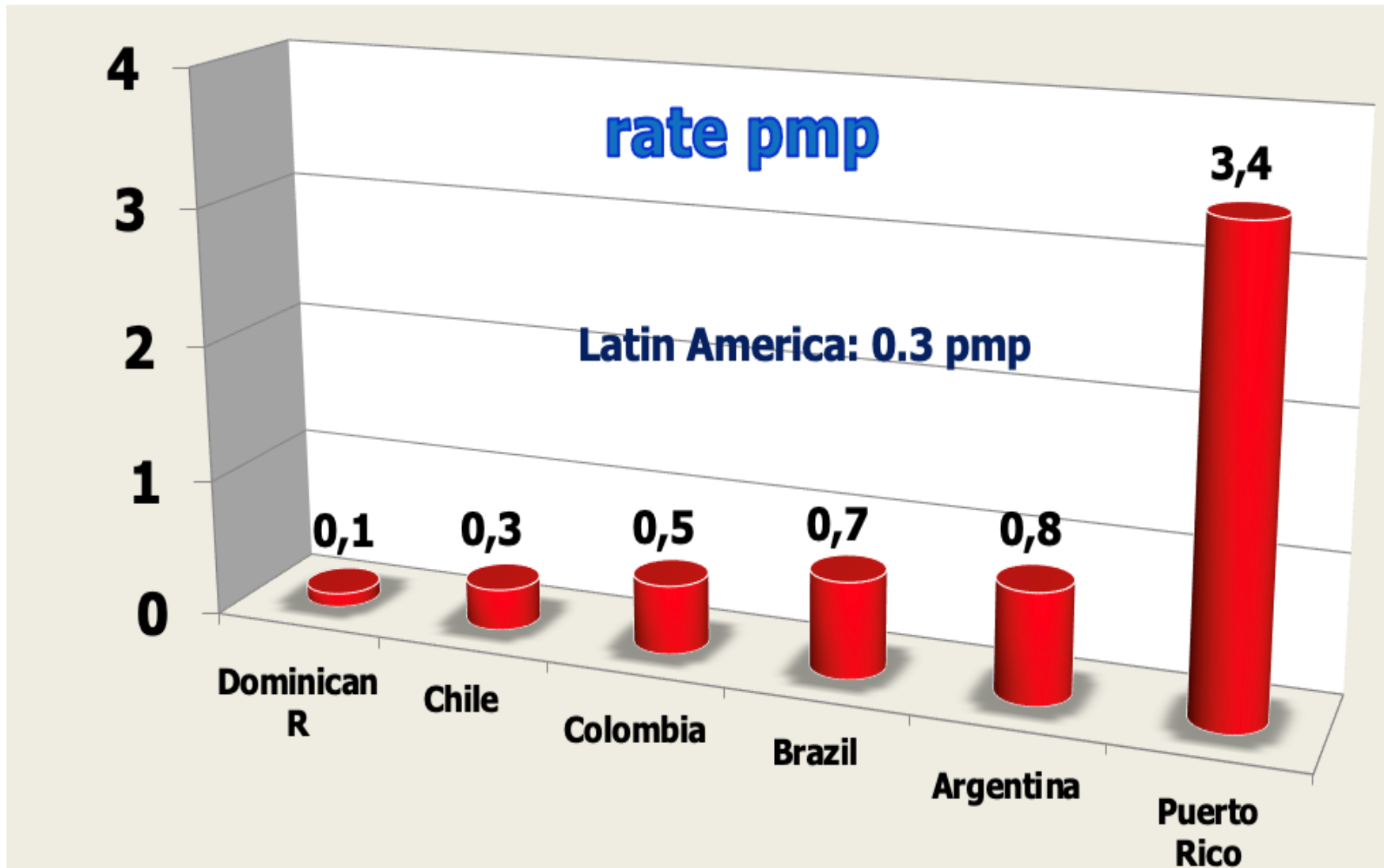
# Evolution of Pancreas Transplantation rate



# Pancreas Transplantation by country 2024

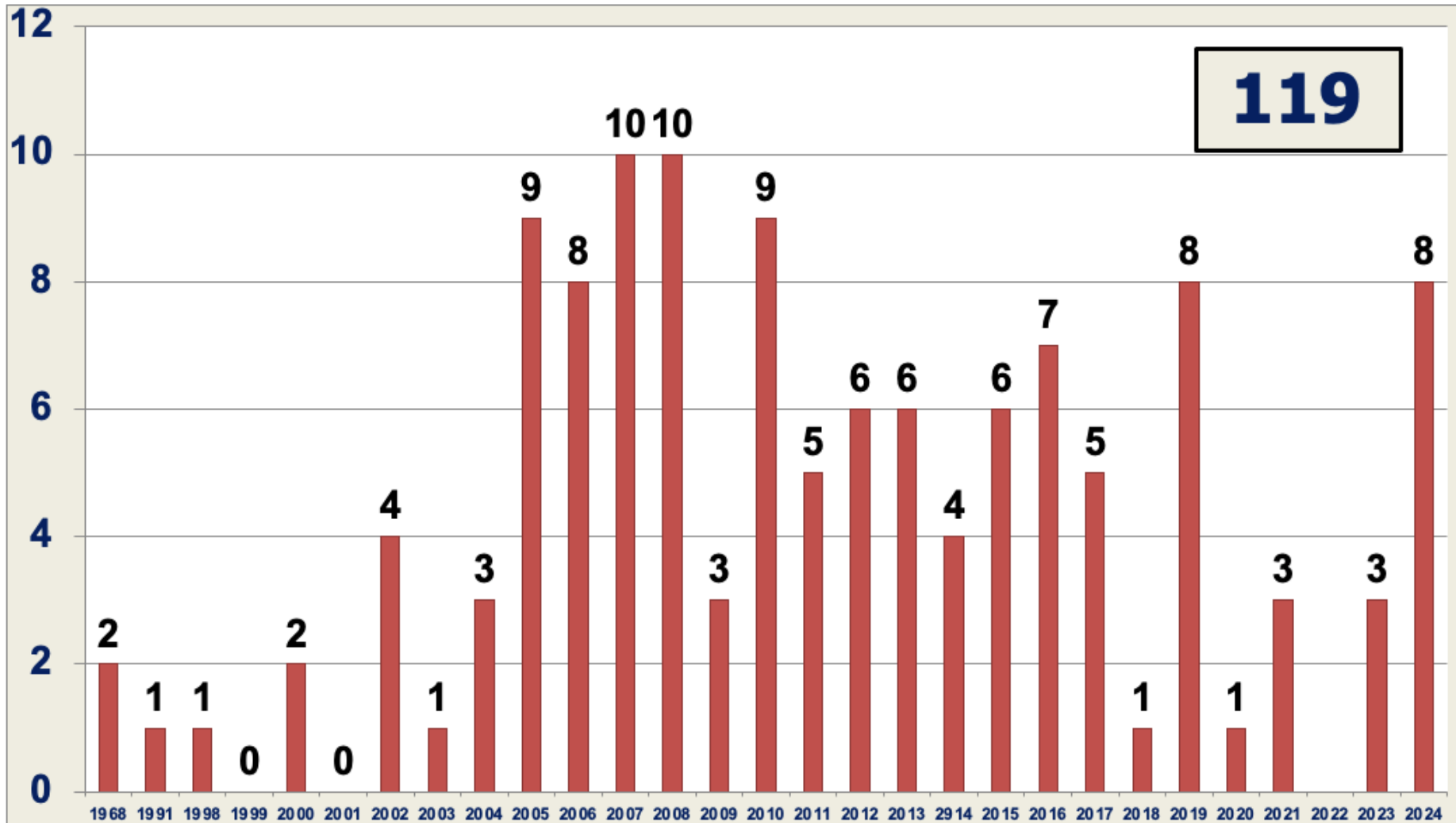


# Pancreas Transplantation by country 2024



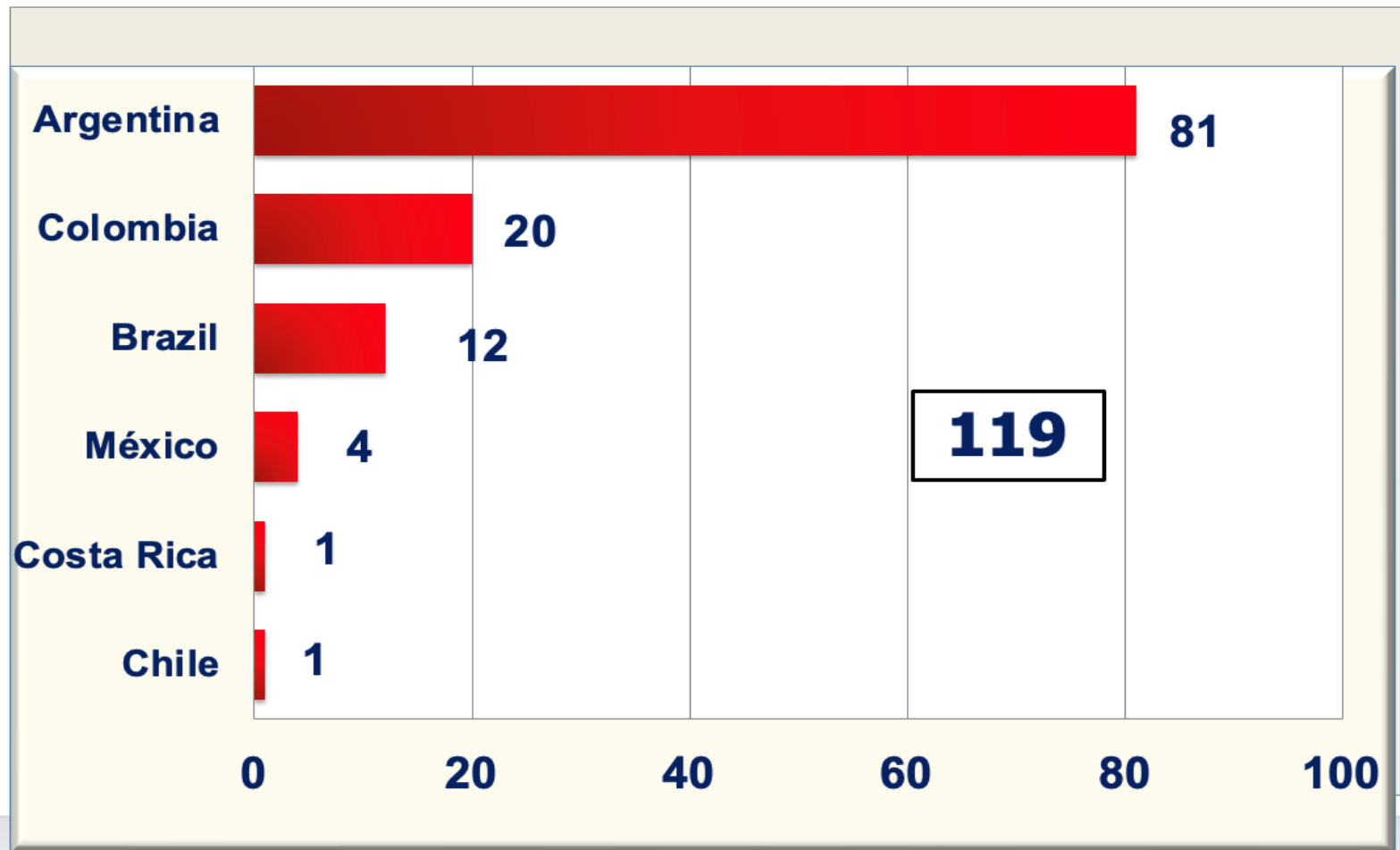
# Small bowel transplantation

number per year



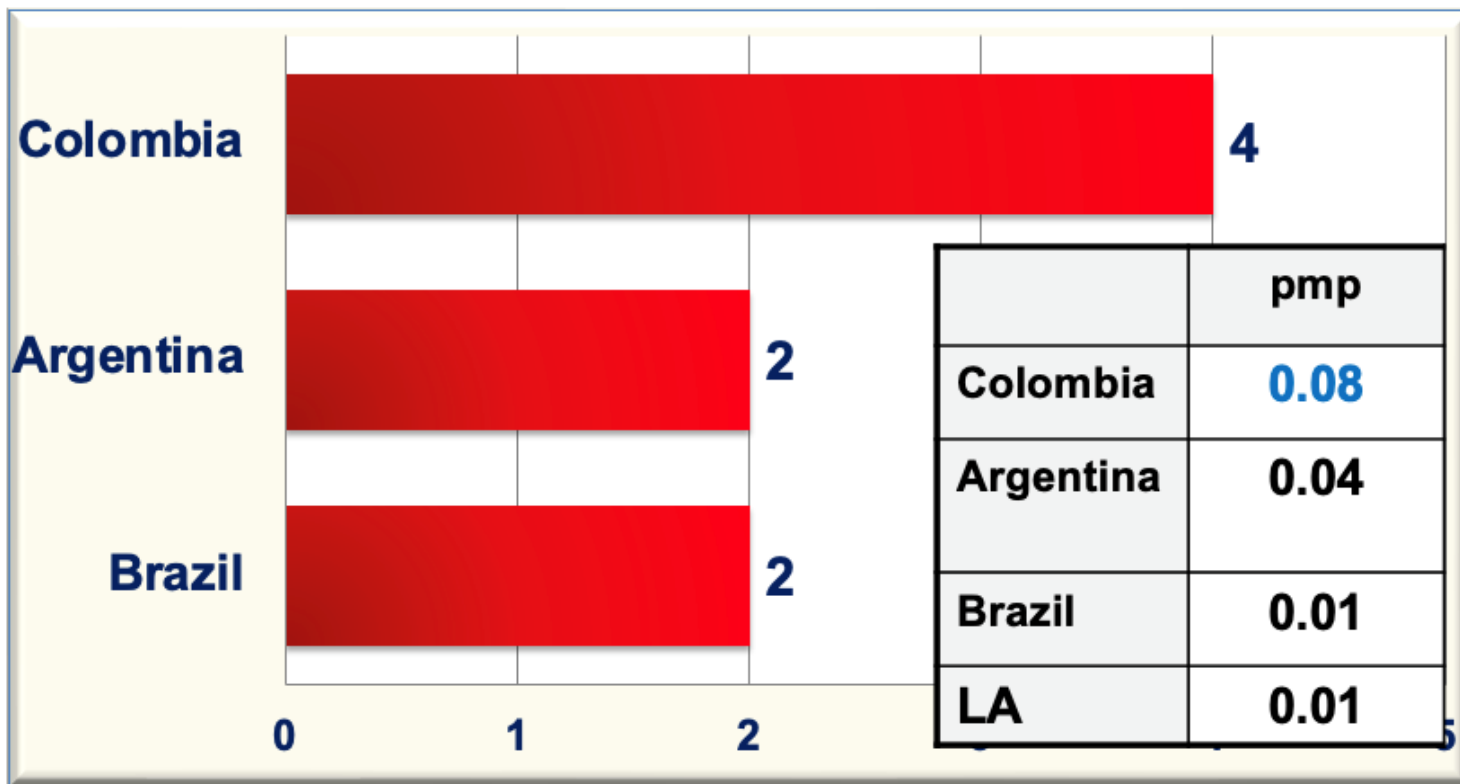
# Small bowel transplantation

total number per country



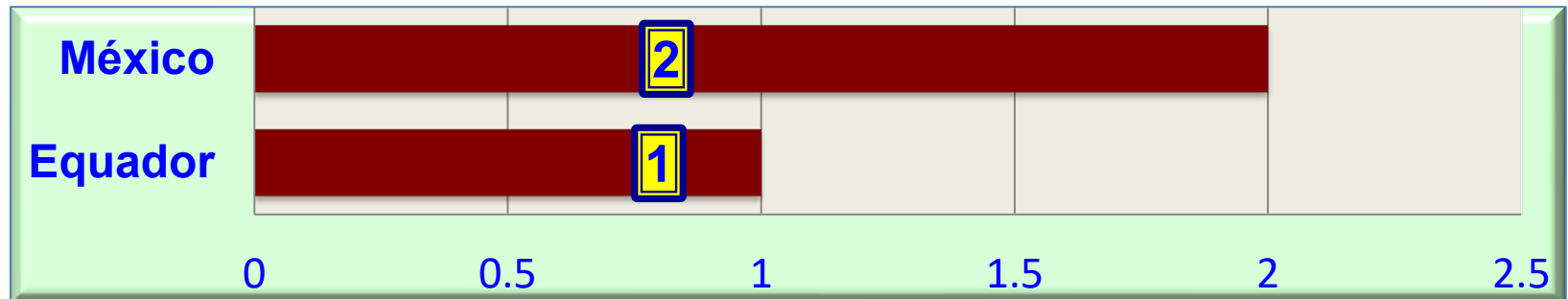
# Small bowel transplantation

Number per country - 2024

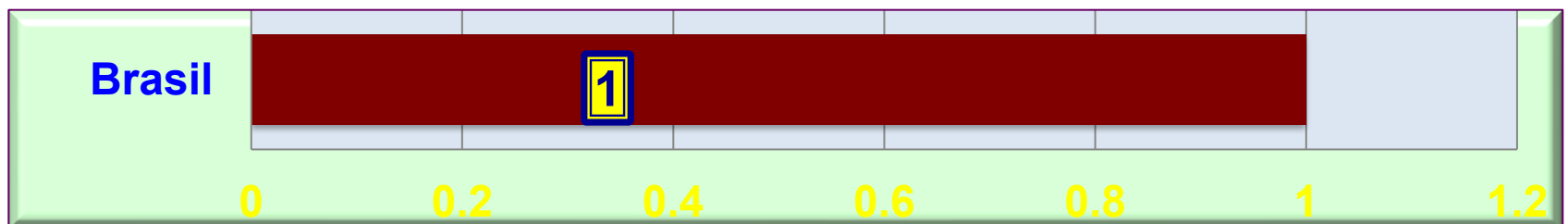


# Transplantation of Vascularized Composite Allograft (VCA)

## Arm transplantation



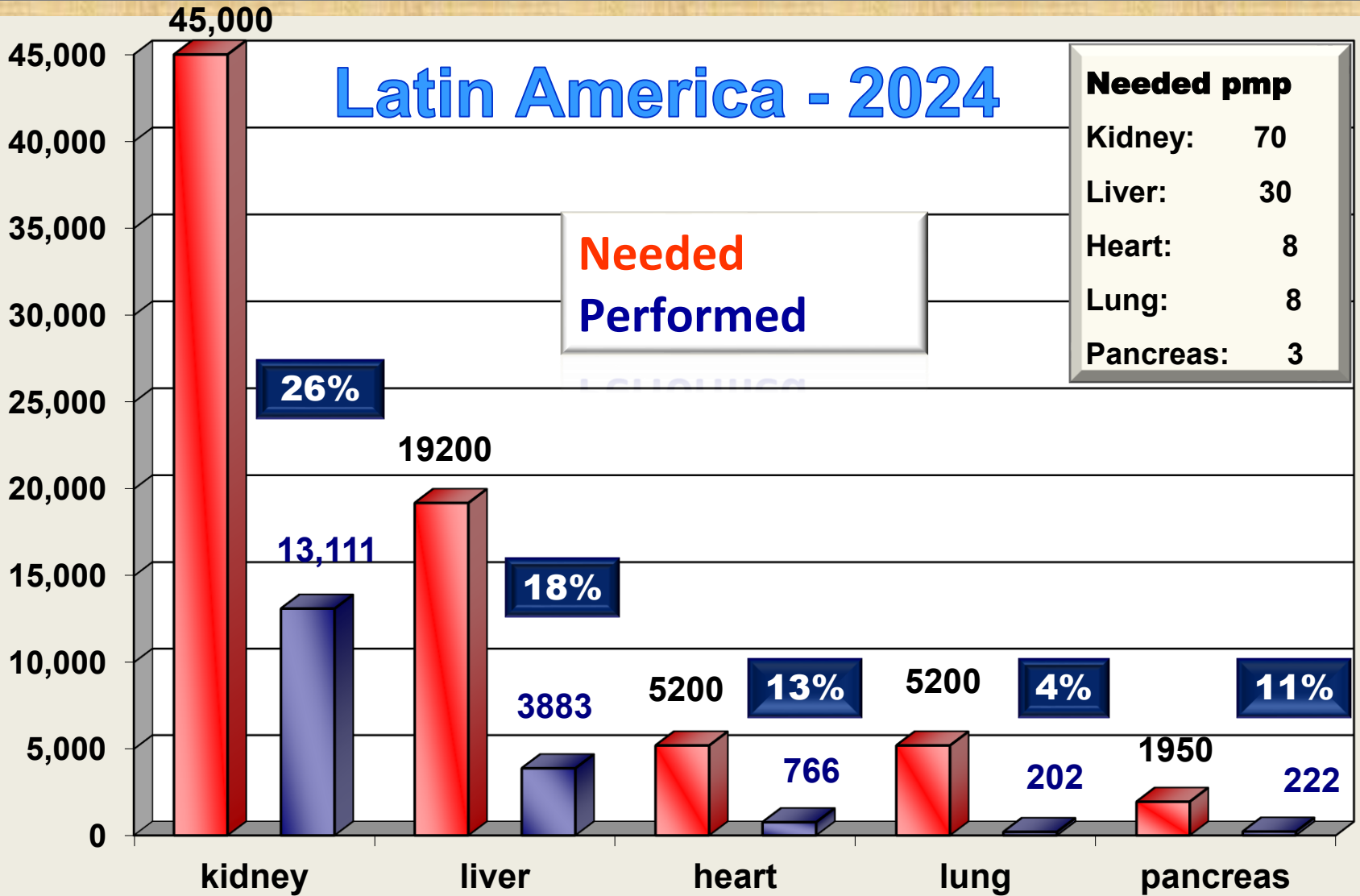
## Womb transplantation





# Needed and performed transplants

## Latin America - 2024

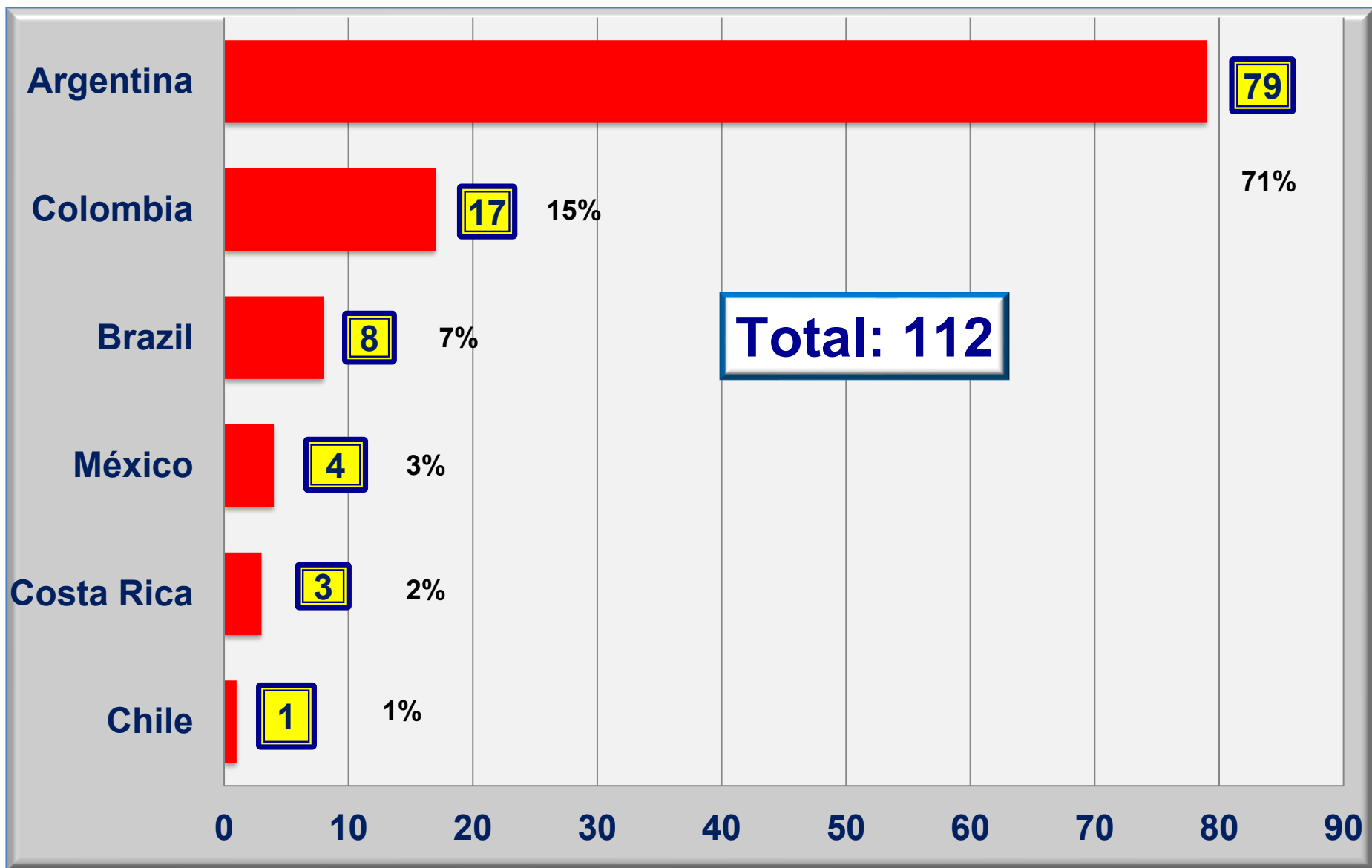




**STALYC**

Sociedad de Trasplante de  
América Latina y el Caribe

# Número cumulativo de transplante de Intestino delgado por país



# Transplantation by country

## Small bowel

2019	n	pmp
Argentina	4	0,1
Brazil	2	< 0,1
Colombia	1	< 1
Mexico	1	< 0.1
Total	8	< 0.1

2020	n	pmp
Argentina	1	< 0,1
Brazil	0	0
Total	1	< 0,1

2021	n	pmp
Argentina	1	< 0,1
Brazil	1	< 0,1
Colombia	1	< 1
Total	3	< 0.1

## Multivisceral

2019	n	pmp
Brazil	1	< 0,1
Argentina	0	0
Total	1	< 0.1

2020	n	pmp
Brazil	0	0
Argentina	0	0
Total	0	0

2021	n	pmp
Brazil	2	< 0.1
Argentina	0	0
Total	2	< 0.1

# Transplantation by country

## Small bowel

<b>2023</b>	n	pmp
Argentina	2	0.02
Brazil	1	< 0.01
Colombia	0	0
Total	3	

## Multivisceral

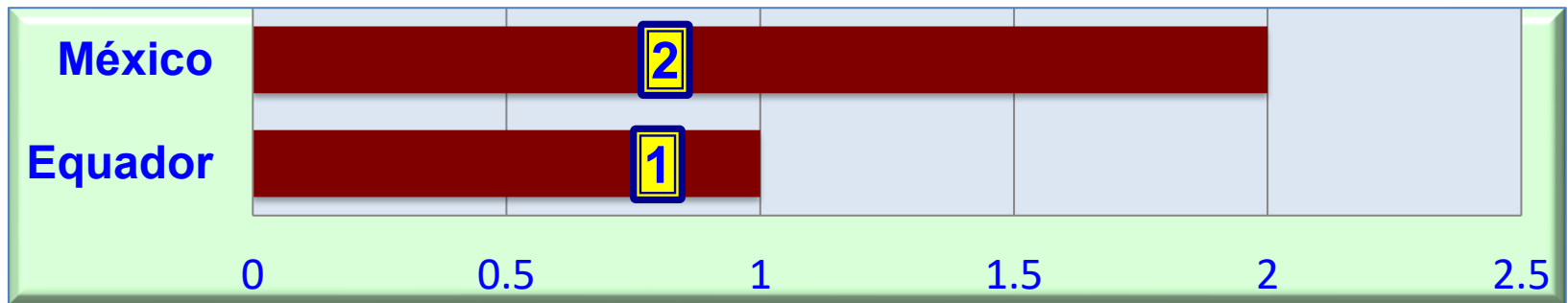
<b>2023</b>	n	pmp
Brazil		
Argentina		
Total		

<b>2024</b>	n	pmp
Colombia	4	0.08
Argentina	2	0.04
Brazil	2	0.01
Total	8	

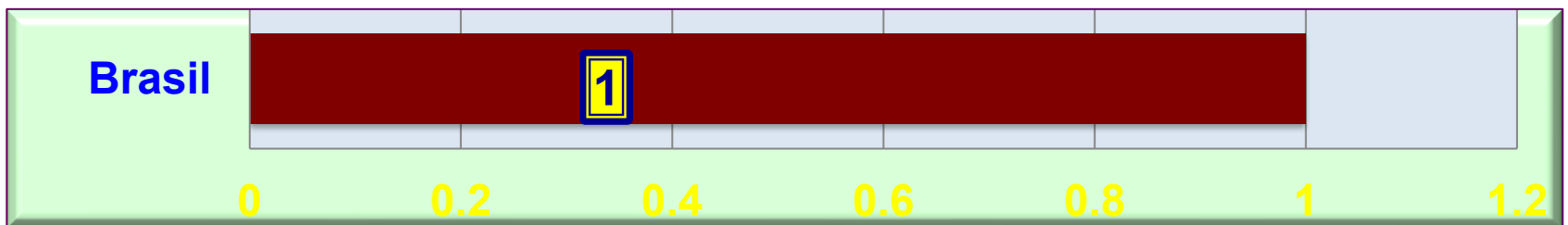
<b>2024</b>	n	pmp
Brazil		
Argentina		
Total		

# Transplantation of Vascularized Composite Allograft (VCA)

## Arm transplantation



## Womb transplantation





# Sociedad de Trasplante de América Latina y El Caribe



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