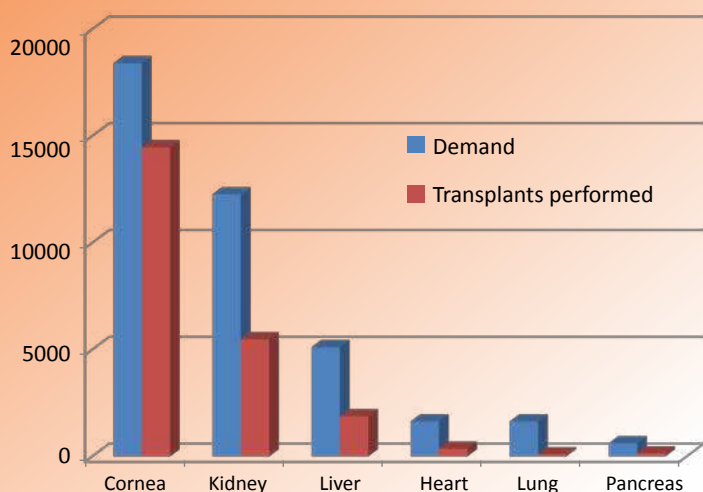


Organ Transplantation in Brazil

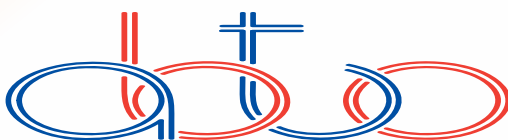
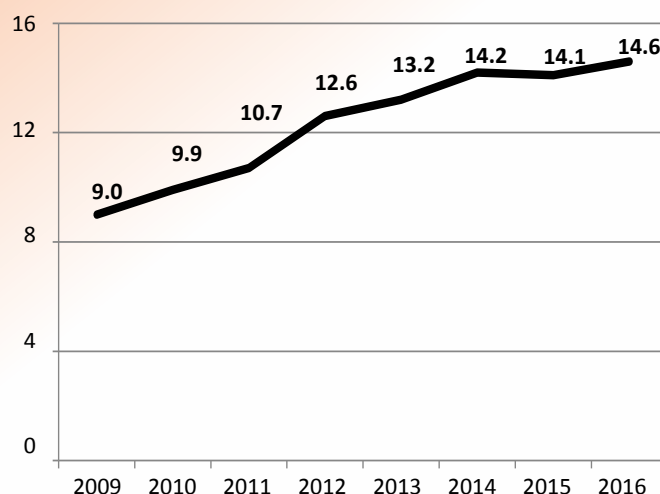
(2009-2016)

In absolute numbers Brazil holds the second largest kidney and liver transplant programs in the world. However organ donation and the allocation systems still have to improve and there are regional disparities to be solved. The population trust in organ donation and fairness of the system along with government and medical societies support as much as the dedication of health care professional are of utmost importance for the success of the Brazilian Transplantation Program.

Estimated demand and number of transplants performed in Brazil in 2016



Effective donors in Brazil - pmp (per million population) by year



RBT

Brazilian Transplantation Registry
Official report of Brazilian Organ Transplantation Society



Associação Brasileira de Transplante de Órgãos

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Year of difficulties, but some progress.

In Brazil, in the year of 2016 the number of effective donors increased by 3.5% reaching 14.6 donors per million population (pmp). This rate is however 3.4% lower than the established target for the year. Brazilian regions were again very asymmetrical in the donation rates. Southern Brazil reached 30.1 donors pmp, Southeast 15.5 pmp, Northeast 9.9 pmp, Central region 9.6 pmp and the North region reached only 3.5 donors pmp. Santa Catarina state reached 36.8 donors pmp and Parana state increased its rate by 42% within one year reaching 30.9 pmp. The goal for the year of 2017 in Brazil is to reach the rate of 16.6 effective donors pmp.

The notification rate of potential donors has increased slowly over the years reaching 49.7 pmp in 2016. Refusal of organ donation by Brazilian families remains quite elevated at 43%. In some states more than 75% of the families did not consent organ donation in 2016. Only 11% of the potential donors were seniors (65 years-older or more) indicating that aged donors are not being effectively achieved in the majority of Brazilian states.

In 2016 it was observed an increment in the number of lung transplants (24.3%), pancreas transplants (11.7%), liver transplants (4.1%) and heart transplants (1.1%). The total number of kidney transplants decreased by 1.7%. This decrease is attributed to a lower number of deceased donor transplants (-2.4%) in spite of the increment of almost 1% in the number of living donor transplants, reverting a trend observed in the last ten years. The decrement in the number of deceased donor kidney transplants occurred in spite of an increment in the rate in effective donation indicating an increment of discarded kidneys. Only three Brazilian states (SC, RS and SP) reached a rate superior to 45 kidney transplants pmp in the year.

The increase in the number of liver transplants occurred both, and in the same magnitude, in transplant with living and deceased donors. Three Brazilian states surpassed 20 liver transplants pmp (DF, SC and CE). Heart transplants were performed in eleven states and the number of heart donors was substantially higher in one state (DF 14.8 pmp). Lung transplants were performed in 6 centers and were kept in a low volume except for two centers. Only one state performed more than 2 transplants pmp (RS with a rate of 3.1 pmp). The increment in the small number of pancreas transplants reveals a possible recover, however the number of these transplants remains very low and one state (PR) performed 3.9 pancreas transplants pmp in 2016. No intestine transplants and only one multi visceral transplant was performed in 2016.

In December 2016 the number of patients in the kidney waiting list was 21.264 (104 patients pmp) reaching only about half of the expected estimated number, between 36.000 – 42.000 patients. The vast majority of the wait listed patients come from three states (SP, MG and PR) that have 36.6% of the Brazilian population and 71.4% of the patients in the waiting list. In the North region there are less than 35 patients pmp in the waiting list. 13.078 patients entered the kidney waiting list in 2016 (70 to 85% of the expected number) and the mortality in the list was 4.7% per year.

The liver transplant waiting list finished the year with 1331 patients (6.5 pmp). Three states have a higher percentage of listed patients (PR: 15.2 pmp; SP: 13.6 pmp and RS: 13.5 pmp). 3728 patients entered the list (18.2 pmp), around 73% of the expected number of 25 pmp. Liver waiting list mortality was 15% in the year. The number of patients entering the waiting lists for heart (3.1 pmp), pancreas-kidney (1.2 pmp) and lung transplants (0.6 pmp) remains very small and well below the anticipated needed number.

Therefore, we consider that, as important as increasing the number of effective donors and improve results is to promote access to the waiting list to all patients in the need of a transplant. Improvements of the waiting list access, donation and transplants rates remain as main objectives for 2017.

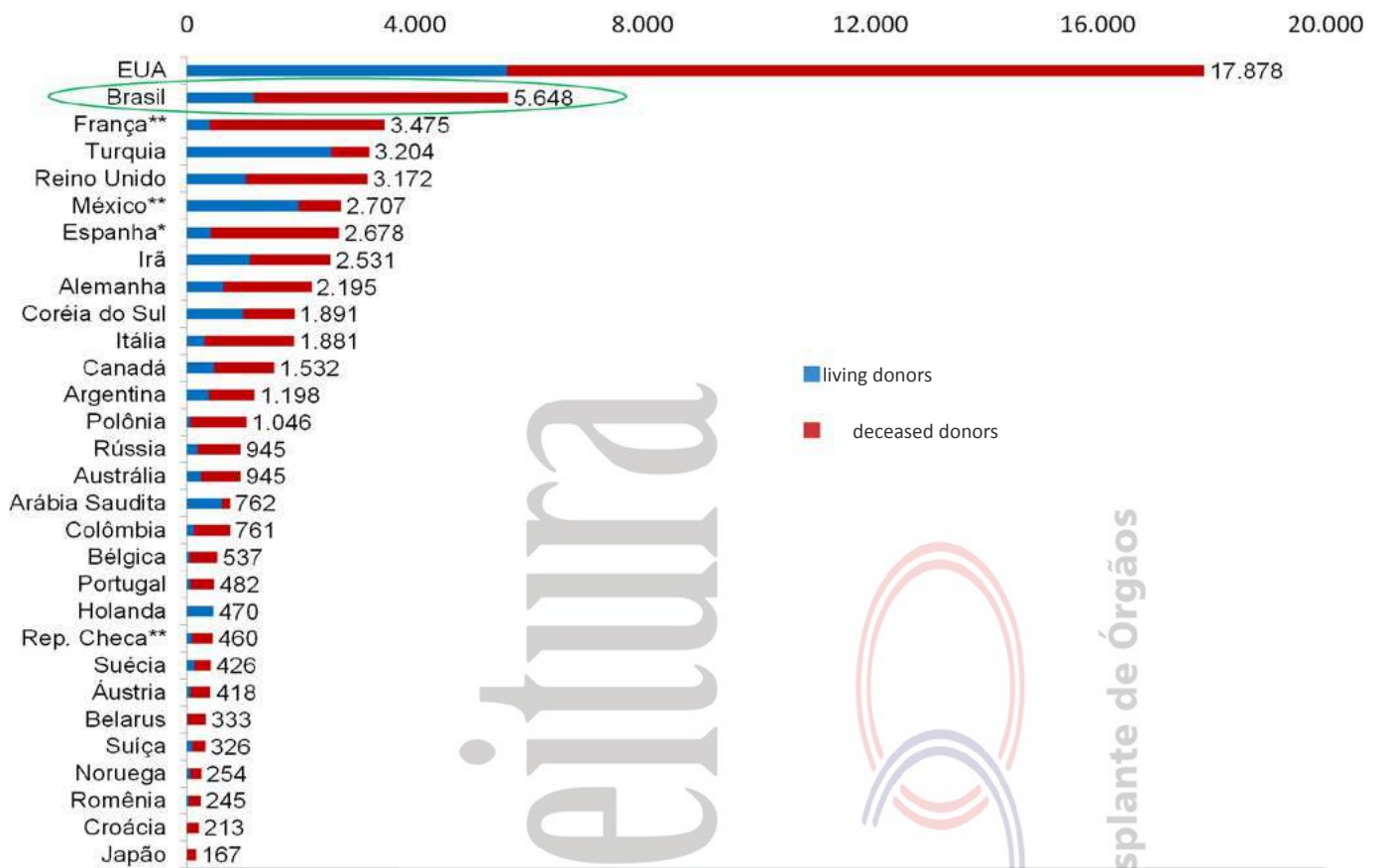
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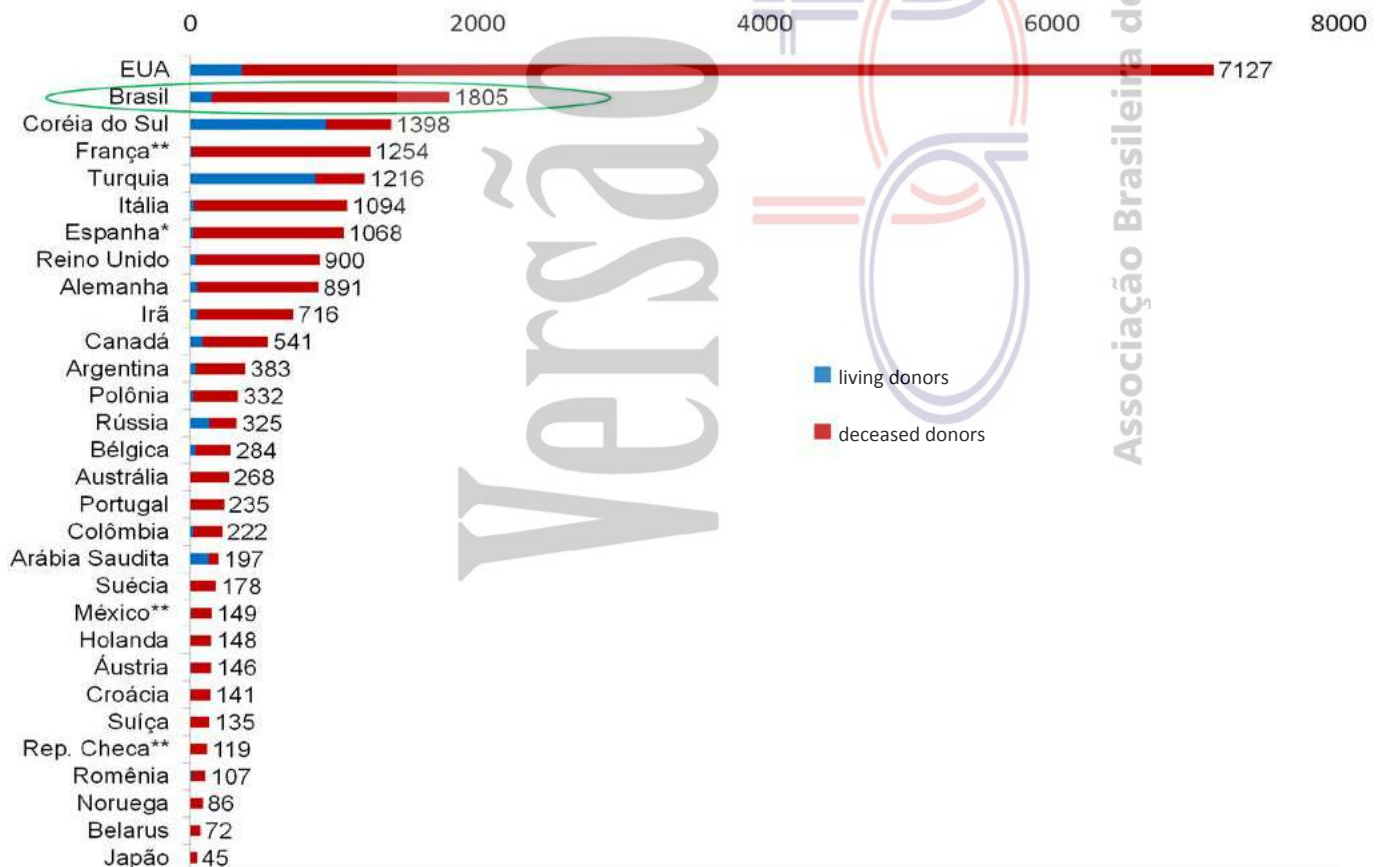
BRAZILIAN STANDING IN GLOBAL FIGURES

Sourcer: IRODAT 2015

Brazil is ranked second in absolute number of kidney transplants (from 30 countries) - Year 2016



Brazil is ranked second in absolute number of liver transplants (from 30 countries) - Year 2016

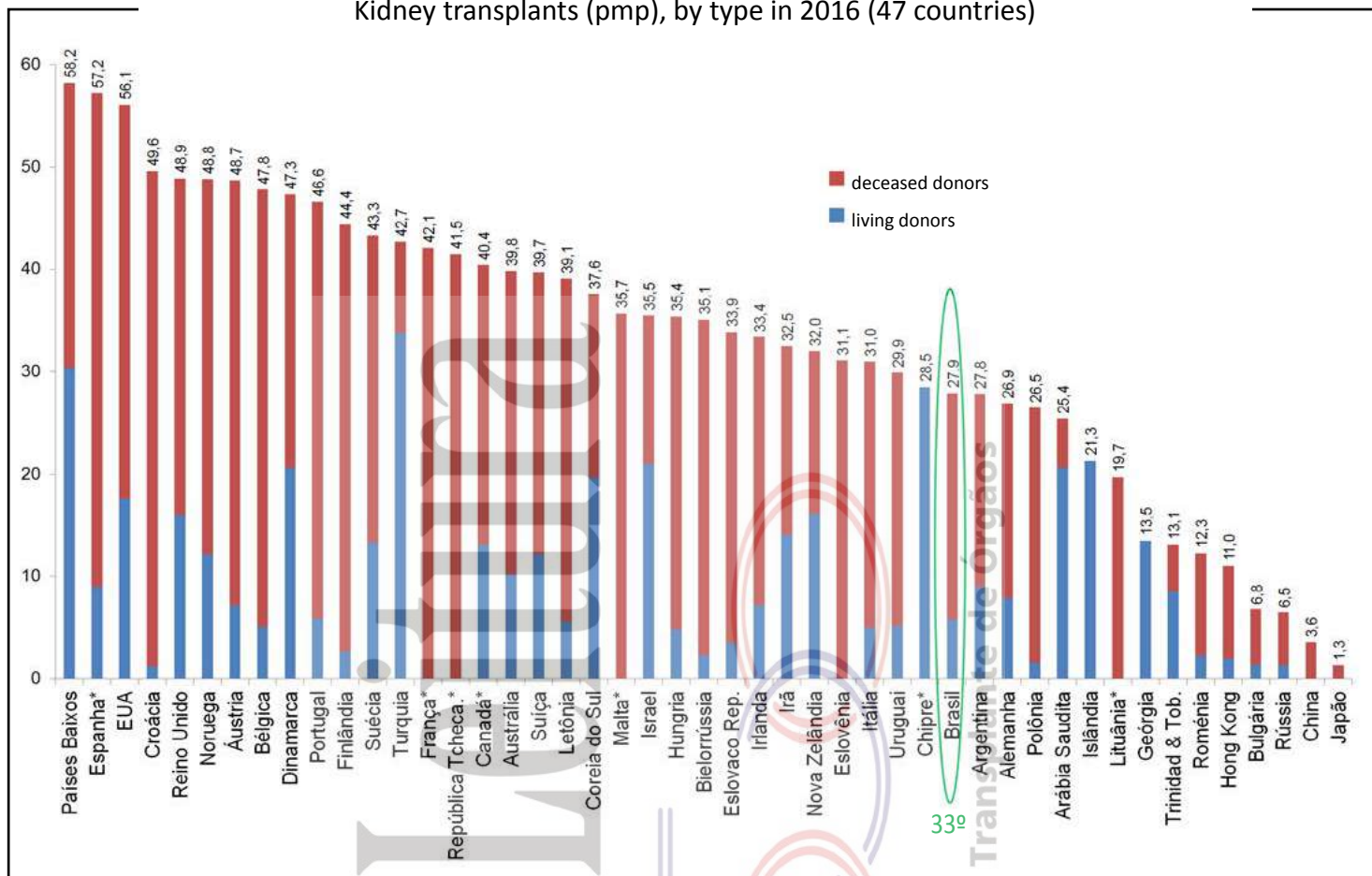


** - year 2013
* - year 2014

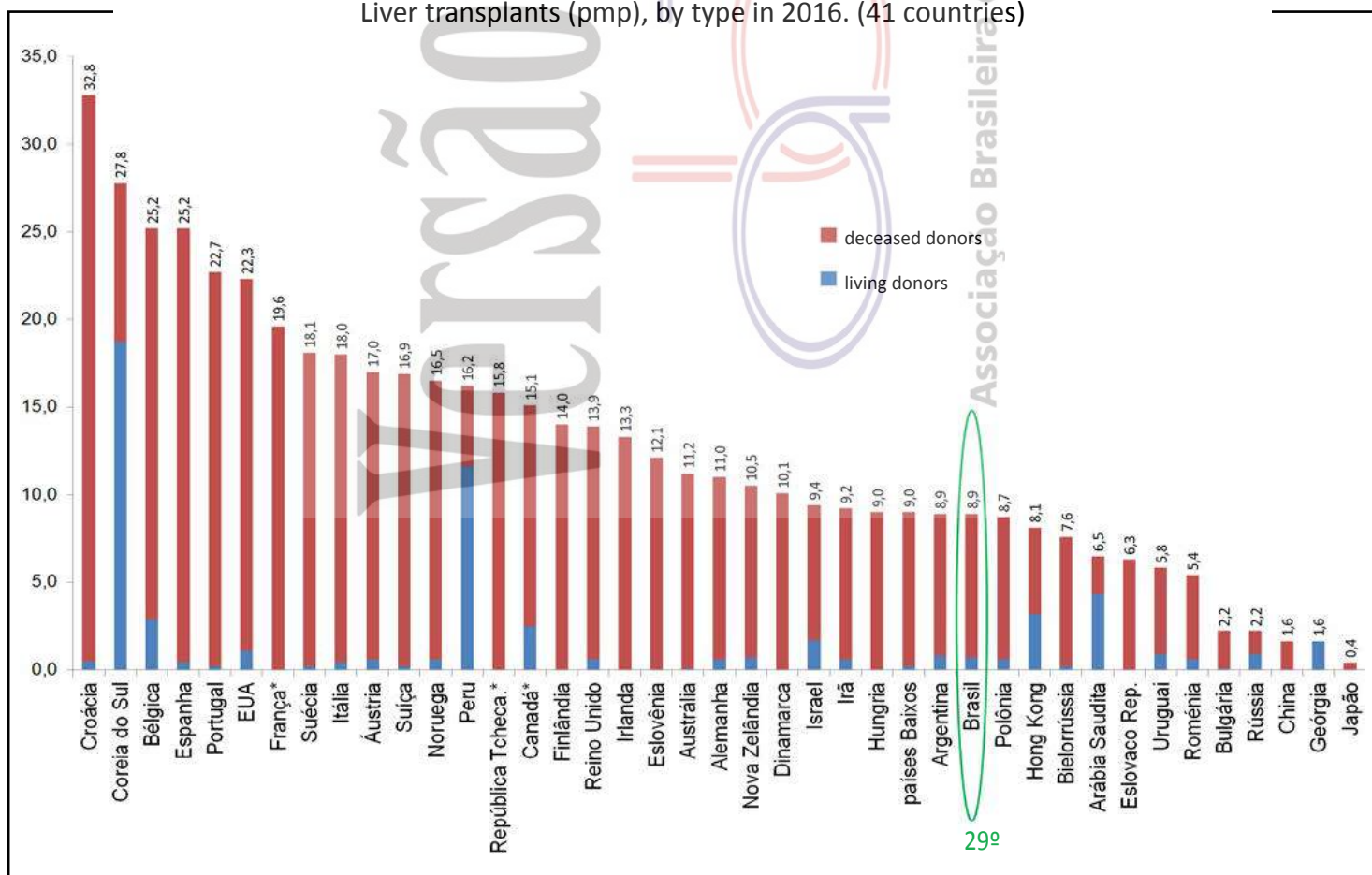
BRAZILIAN STANDING IN GLOBAL FIGURES

Sourcer: IRODAT 2015

Kidney transplants (pmp), by type in 2016 (47 countries)



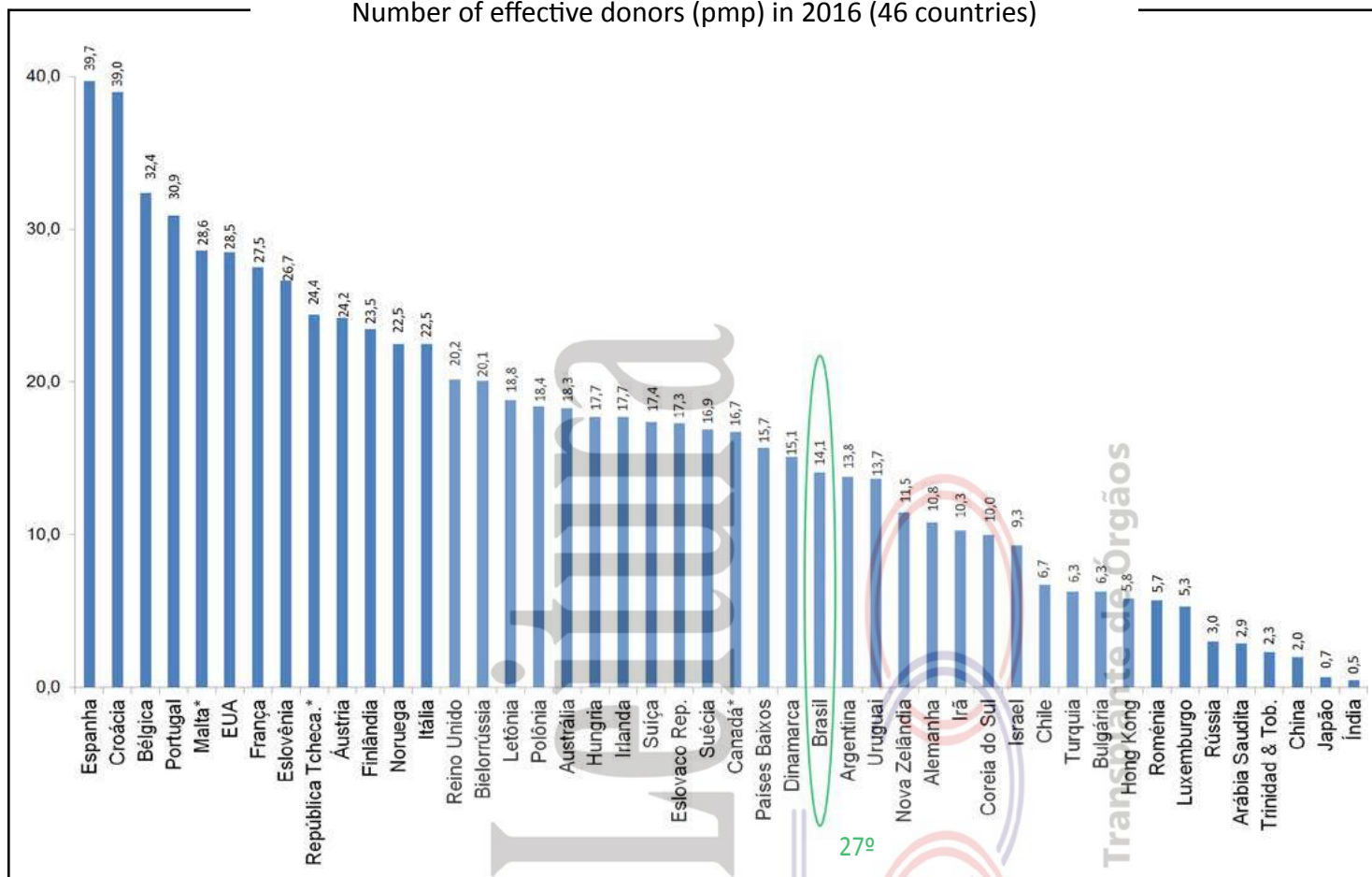
Liver transplants (pmp), by type in 2016. (41 countries)



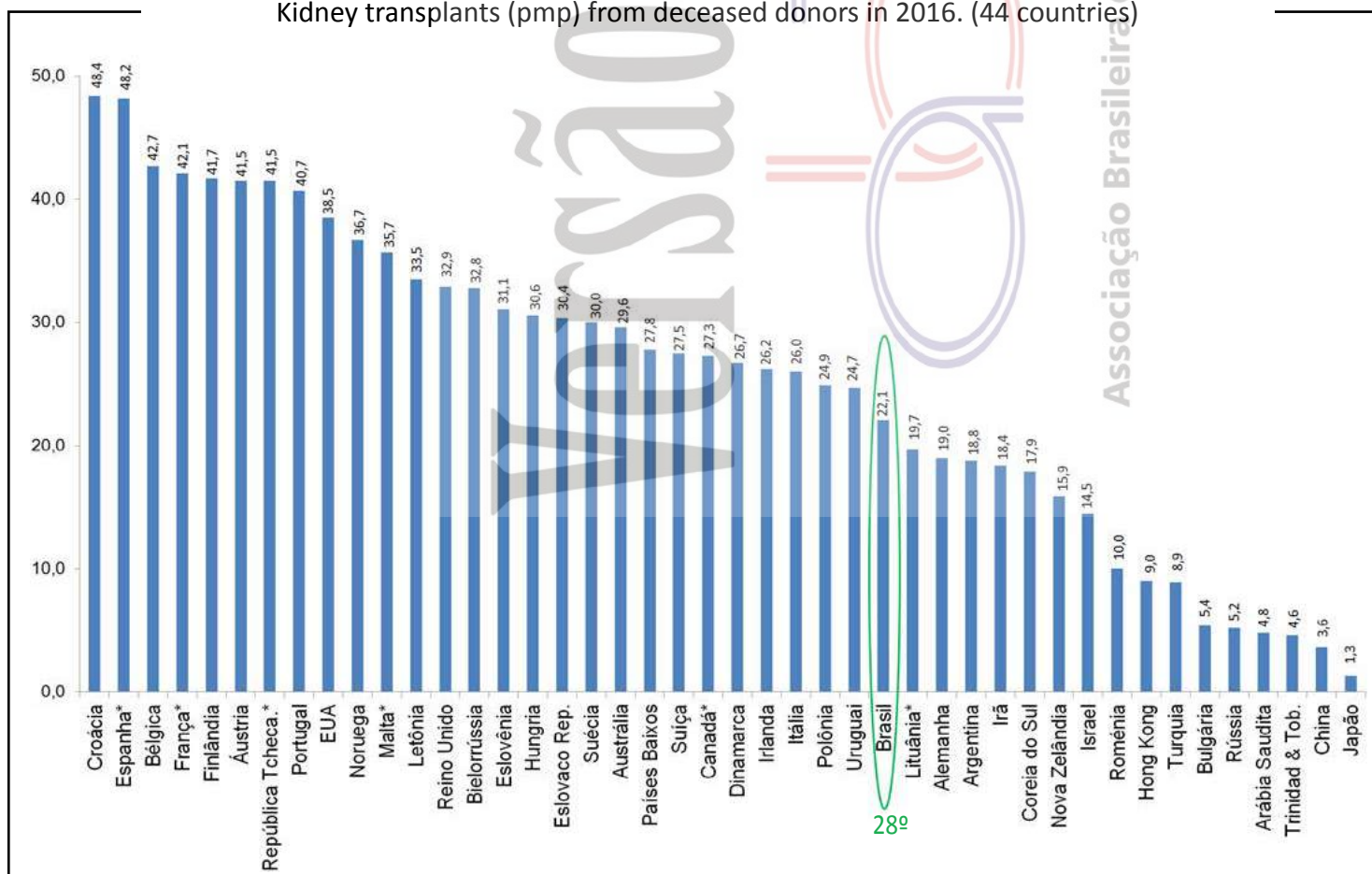
BRAZILIAN STANDING IN GLOBAL FIGURES

Sourcer: IRODAT 2015

Number of effective donors (pmp) in 2016 (46 countries)



Kidney transplants (pmp) from deceased donors in 2016. (44 countries)



BRAZILIAN DATA

Population	204,450,649	Estimated annual need and number of transplants				CORNEA	KIDNEY	LIVER	HEART	LUNG
		Estimated demand				18,401	12,267	5,111	1,636	1,636
		Transplants performed				14,534	5,492	1,880	357	92
Mortality per year	2009	2010	2011	2012	2013	2014	2015	2016		
All causes	1,103,088	1,136,947	1,170,498	1,181,166	1,220,678	1,227,039	Unavailable	Unavailable		
External causes	138,697	143,256	145,842	152,013	151,683	156,942	Unavailable	Unavailable		
Neurological causes	23,018	25,303	26,948	28,712	30,300	32,381	Unavailable	Unavailable		
Population (IBGE census)	183,987,291	190,755,799	190,755,799	190,755,799	190,755,799	190,755,799	190,755,799	202,768,562	204,450,649	

Hospital

Total number	6.749
State capitals	1.347
Country side	5.402
Nº de beds	477.227
Nº of ICU beds	41.068
Hospitals over 80 beds	1.781
Teaching hospitals	154
Medical schools	278
Neurosurgery services	445
Number of CIHDOTTS	673
Number of OPOs	57

Sourcer: <http://cnes.datasus.gov.br> 18/01/2017
<http://emec.mec.gov.br/>

Facts :

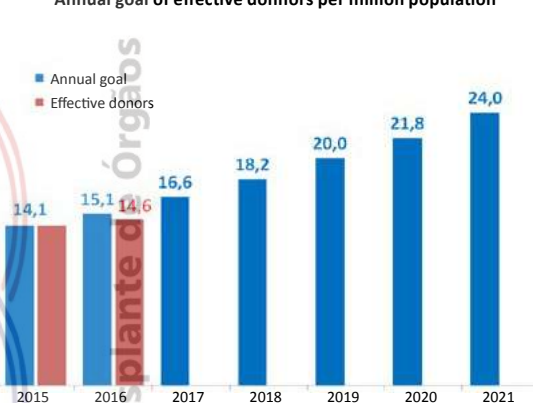
Positive:

- Well-established and consolidated transplant system.
- Program support by public governments.
- Better results being achieved overtime.

Negative:

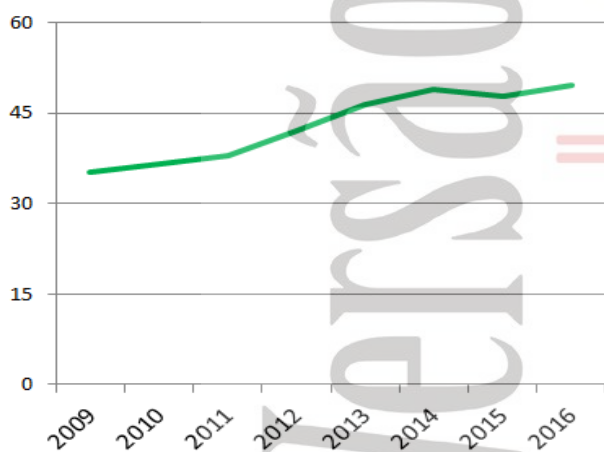
- Slow increase in donation
- Elevated frequency of non-consenting family.
- Brain death notification bellow expected.
- Important disparities between states.
- Financial constraints for some programs.

Annual goal of effective donnors per million population

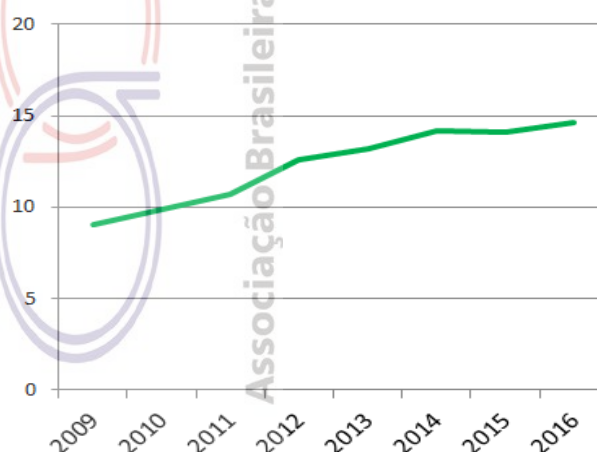


Organ Donation

Notified potential donors - pmp



Effective donors - pmp

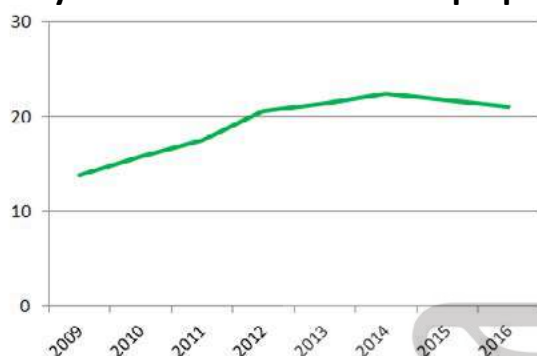


	2009	2010	2011	2012	2013	2014	2015	2016
Number of effective donors	1,658	1,898	2,048	2,406	2,526	2,713	2,854	2,981
Number of effective donors (pmp)	9.0	9.9	10.7	12.6	13.2	14.2	14.1	14.6
Potential donors	6,490	6,979	7,238	8,025	8,871	9,351	9,698	10,158
Number of potential donors (pmp)	35.3	36.6	37.9	42.1	46.5	49.0	47.8	49.7
Non consenting families	1,390	1,800	1,937	2,315	2,622	2,610	2,613	2,571
Refusal at interviews (%)	Unavailable	Unavailable	Unavailable	41%	47%	46%	44%	43%
Cardiopulmonary arrest	1,350	1,279	1,205	1,188	1,292	1,156	1,164	1,136
Contraindicação médica	1,101	991	832	836	1,150	1,349	1,416	1,594
Others	991	1,011	1,216	1,280	1,281	1,523	1,651	1,876

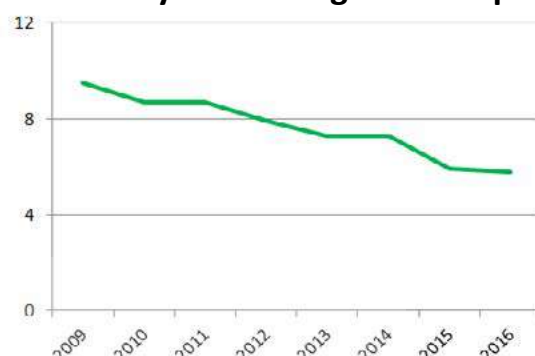
BRAZILIAN DATA

Organ Transplantation

Kidney from deceased donors - pmp



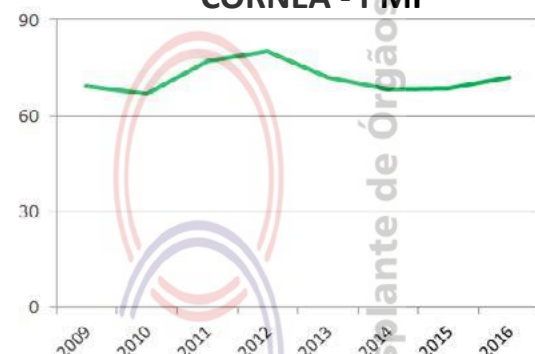
Kidney from living donors - pmp



LIVER - pmp



CORNEA - PMP



Number of teams performing transplantats during the year

	2009	2010	2011	2012	2013	2014	2015	2016
CORNEA	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
KIDNEY	140	140	126	124	129	135	131	129
LIVER	51	55	57	59	60	64	62	62
Pancreas	21	21	26	19	21	15	16	16
HEART	33	26	27	27	33	31	33	31
LUNG	5	4	6	6	7	6	6	6

Absolute number of transplants

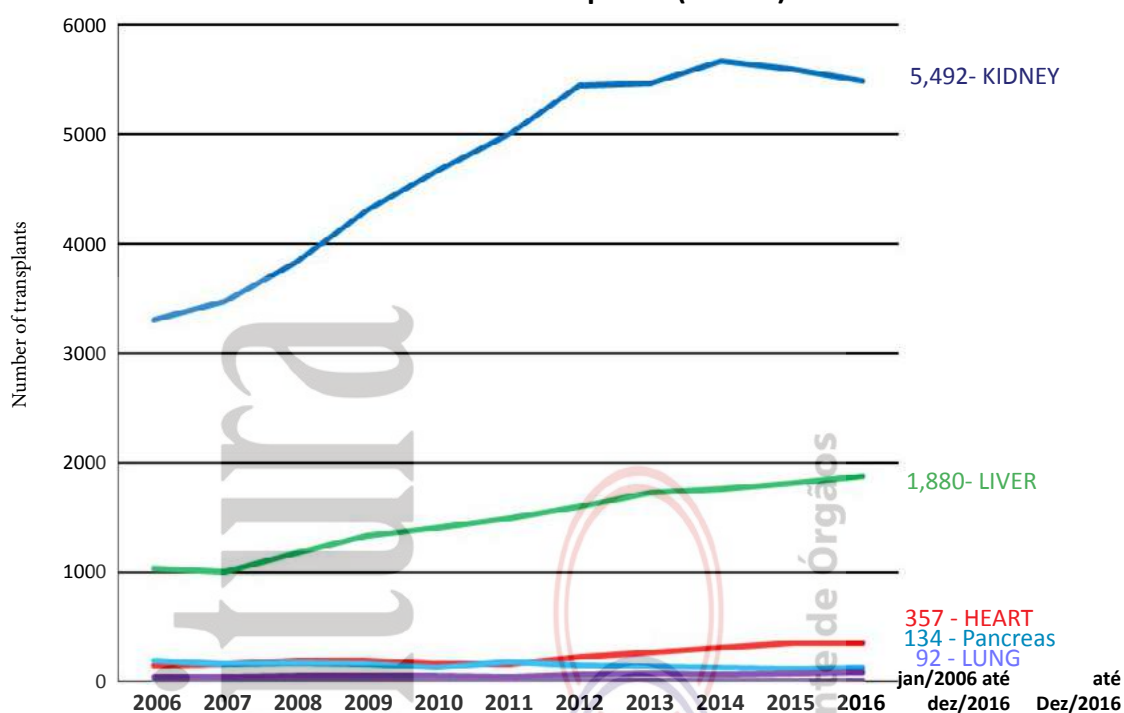
	2009	2010	2011	2012	2013	2014	2015	2016
CORNEA	12,724	12,778	14,726	15,280	13,744	13,036	13,861	14,534
KIDNEY	4,298	4,662	4,993	5,435	5,464	5,657	5,588	5,492
<i>living donors</i>	1,752	1,656	1,662	1,504	1,386	1,386	1,189	1,200
<i>deceased donors</i>	2,546	3,006	3,331	3,931	4,078	4,271	4,399	4,292
LIVER	1,334	1,413	1,496	1,601	1,722	1,757	1,809	1,880
Pancreas	160	133	181	153	143	128	120	134
HEART	201	166	160	228	271	311	353	357
LUNG	59	61	49	69	80	67	74	92

Number of transplants pmp

	2009	2010	2011	2012	2013	2014	2015	2016
CORNEA	69.2	67.0	77.2	80.1	72.1	68.3	68.4	71.1
KIDNEY	23.4	24.4	26.2	28.5	28.6	29.7	27.6	26.9
<i>living donors</i>	9.5	8.7	8.7	7.9	7.3	7.3	5.9	5.9
<i>deceased donors</i>	13.8	15.8	17.5	20.6	21.4	22.4	21.7	21.0
LIVER	7.3	7.4	7.8	8.4	9.0	9.2	8.9	9.2
Pancreas	0.9	0.7	0.9	0.8	0.7	0.7	0.6	0.7
HEART	1.1	0.9	0.8	1.2	1.4	1.6	1.7	1.7
LUNG	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4

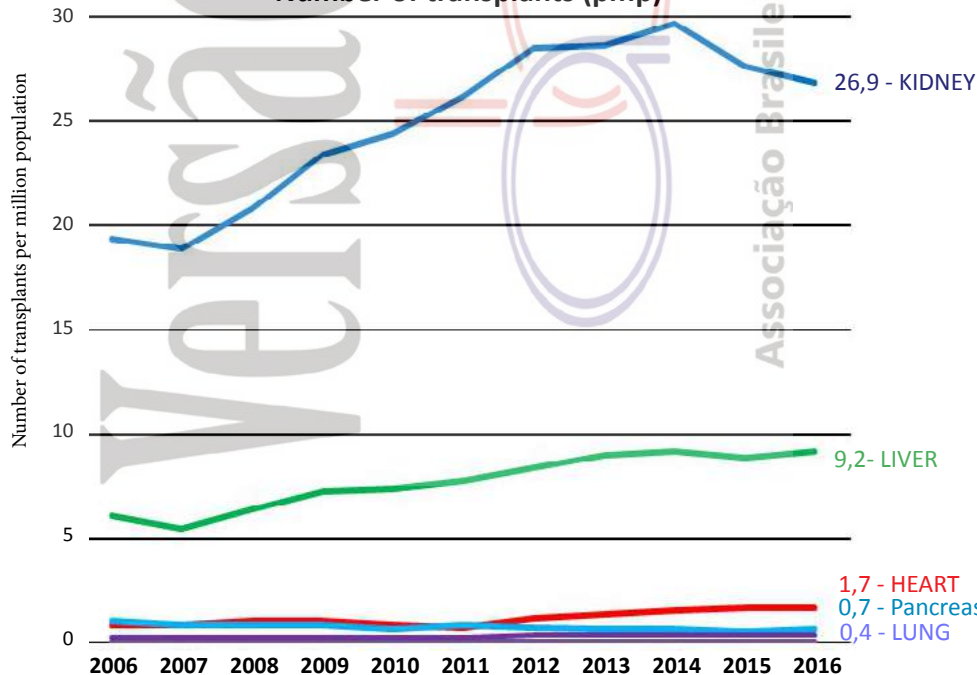
Annual number of transplants in Brazil between 2006 and 2016

Absolute number of transplants (annual)



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	até dez/2016	até Dez/2016
Heart	149	161	201	201	166	160	228	271	311	353	357	2,558	3,984
Liver	1,037	1,008	1,177	1,334	1,413	1,496	1,601	1,722	1,757	1,809	1,880	16,234	21,451
Intestine	1	0	0	0	0	0	0	0	0	1	0	2	5
Multivisceral	0	0	0	0	0	0	1	0	2	0	1	4	4
Pancreas	191	163	174	160	133	181	153	143	128	120	134	1,680	2,687
Lung	49	46	53	59	61	49	69	80	67	74	92	699	1,015
Kidney	3,299	3,475	3,823	4,298	4,662	4,993	5,435	5,464	5,657	5,590	5,492	52,188	80,894

Number of transplants (pmp)

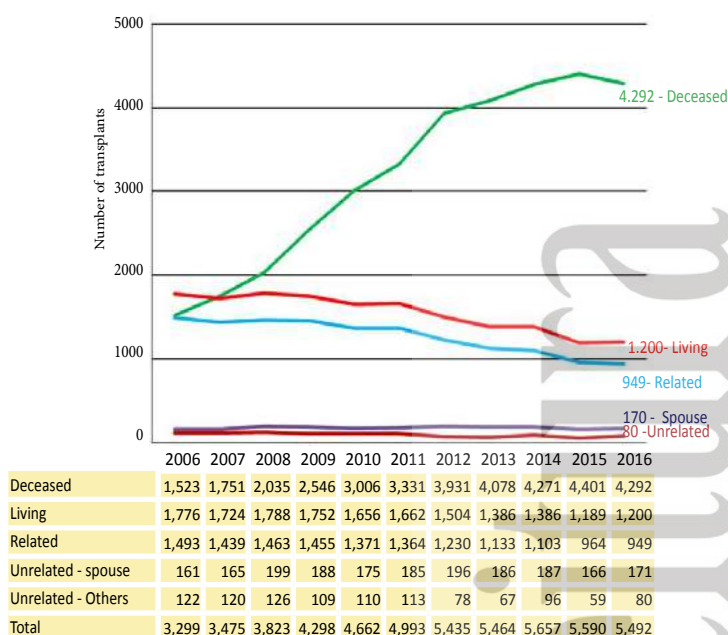


	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Heart	0.9	0.9	1.1	1.1	0.9	0.8	1.2	1.4	1.6	1.7	1.7
Liver	6.1	5.5	6.4	7.3	7.4	7.8	8.4	9.0	9.2	8.9	9.2
Intestine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Multivisceral	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pancreas	1.1	0.9	0.9	0.9	0.7	0.9	0.8	0.7	0.7	0.6	0.7
Lung	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Kidney	19.4	18.9	20.8	23.4	24.4	26.2	28.5	28.6	29.7	27.6	26.9

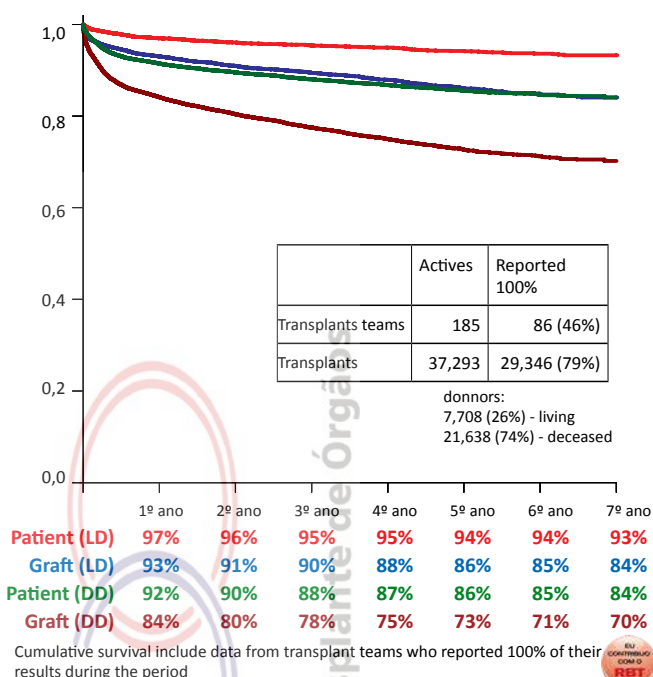
Annual number of transplants in Brazil between 2006 and 2016

KIDNEY (22 states, with 129 active teams)

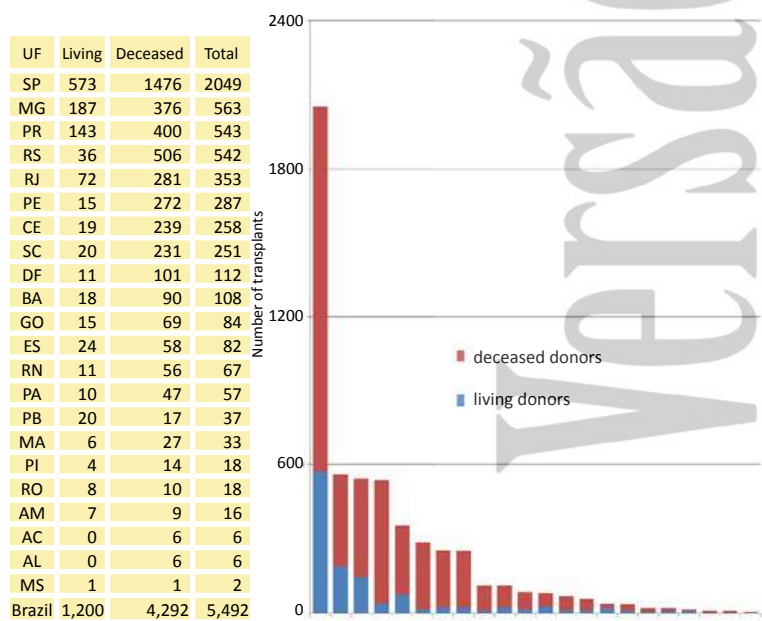
Annual number of transplants by donor type



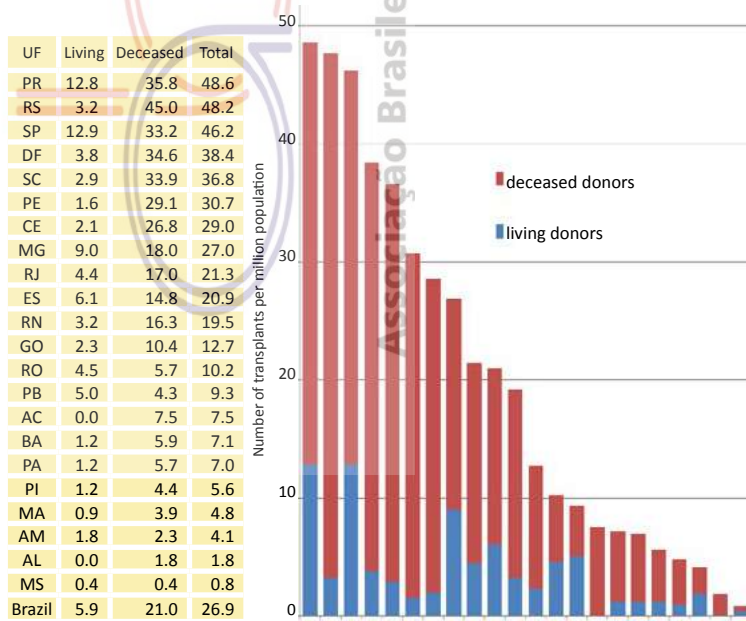
Survival Curves: Prospective started in 2010



Number of transplants by state during the year 2016



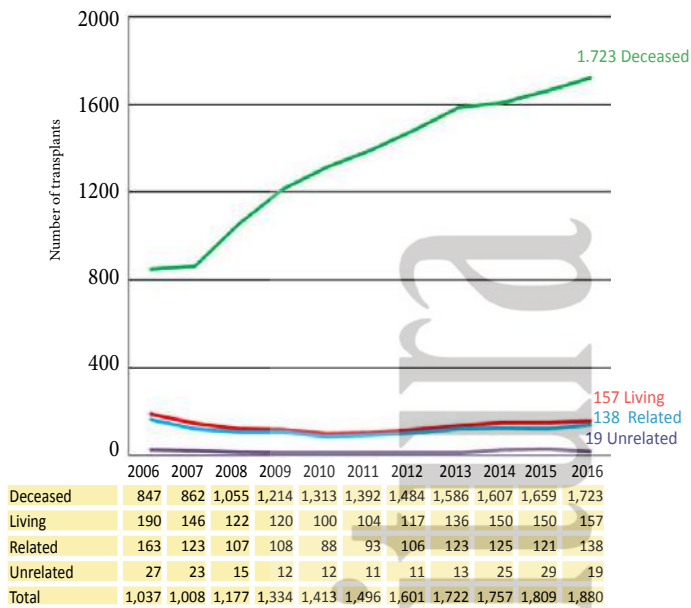
Number of transplants per million population by state during the year 2016



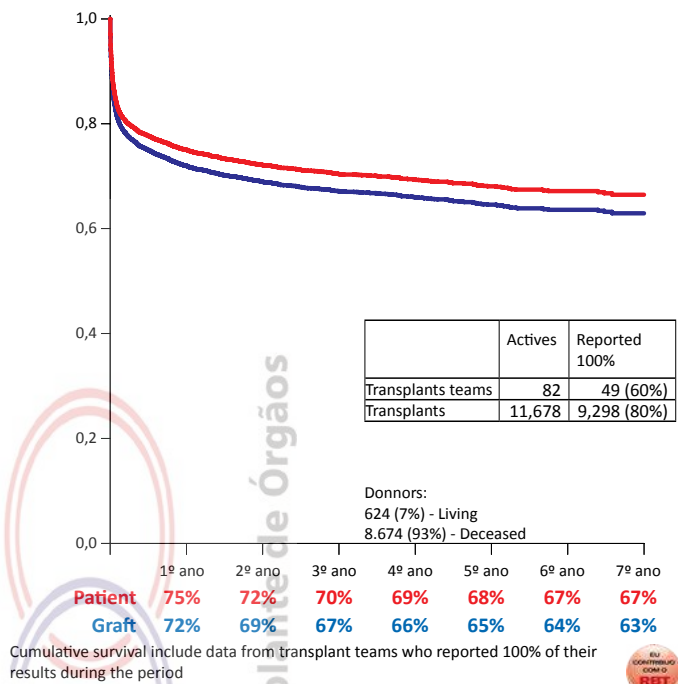
Annual number of transplants in Brazil between 2006 and 2016

LIVER - (in 13 states, with 62 active teams)

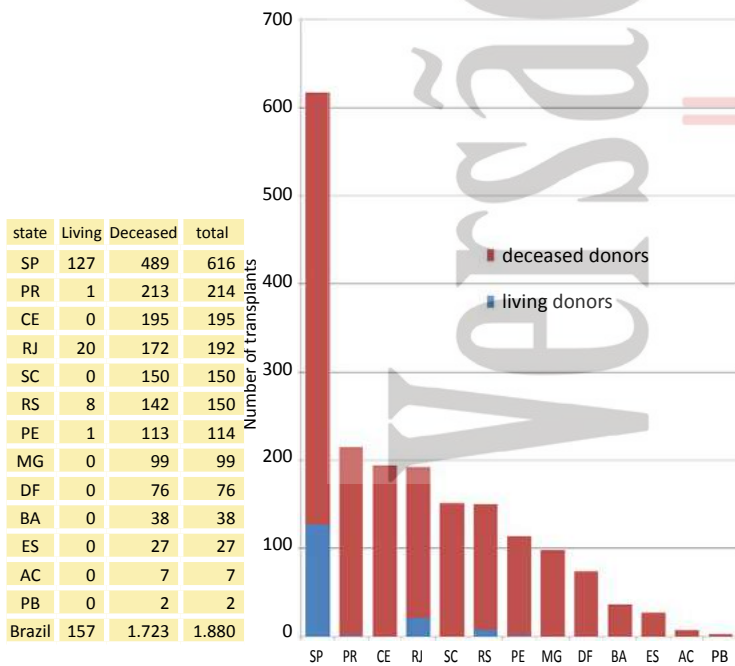
Annual number of transplants by donor type



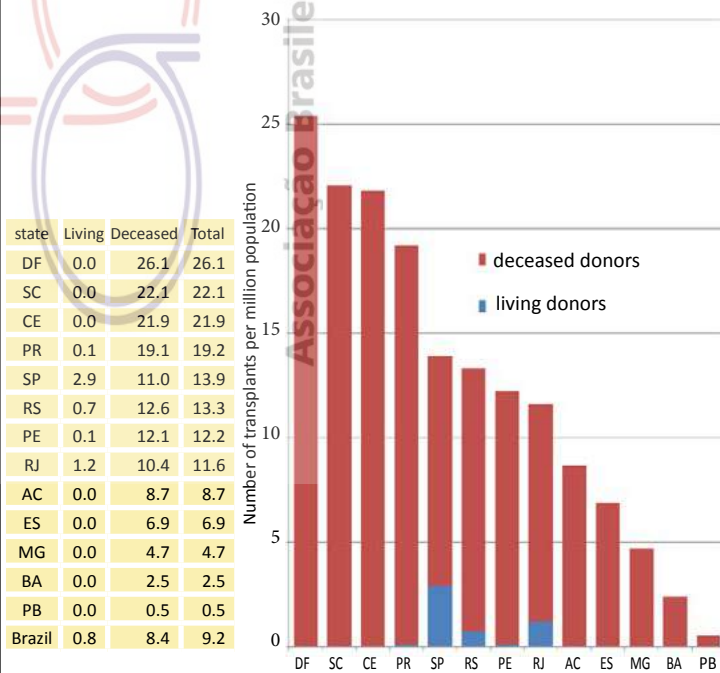
Survival Curves: Prospective started in 2010



Number of transplants by state during the year 2016

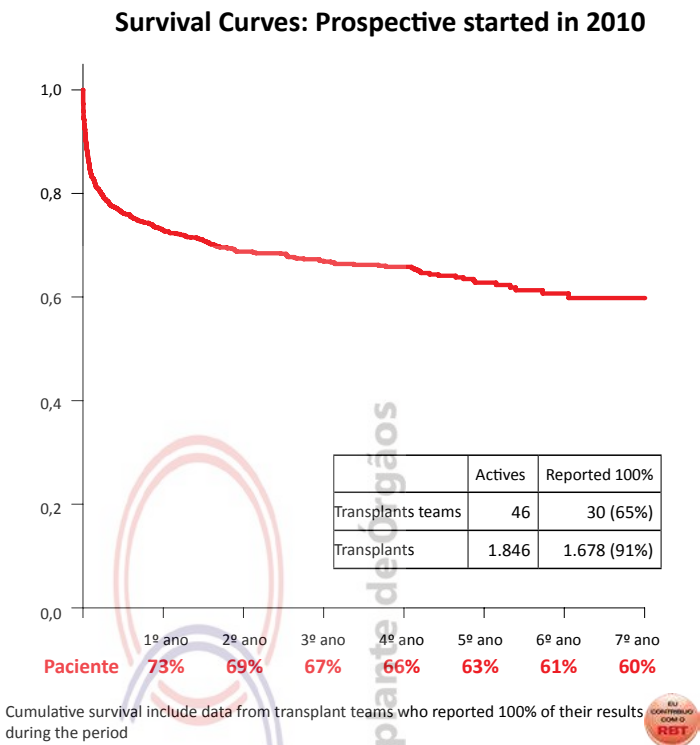
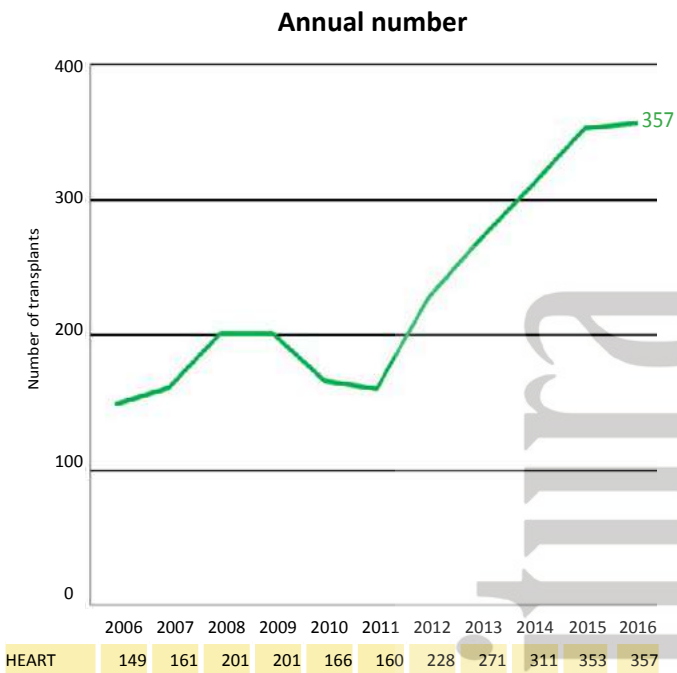


Number of transplants per million population by state during the year 2016

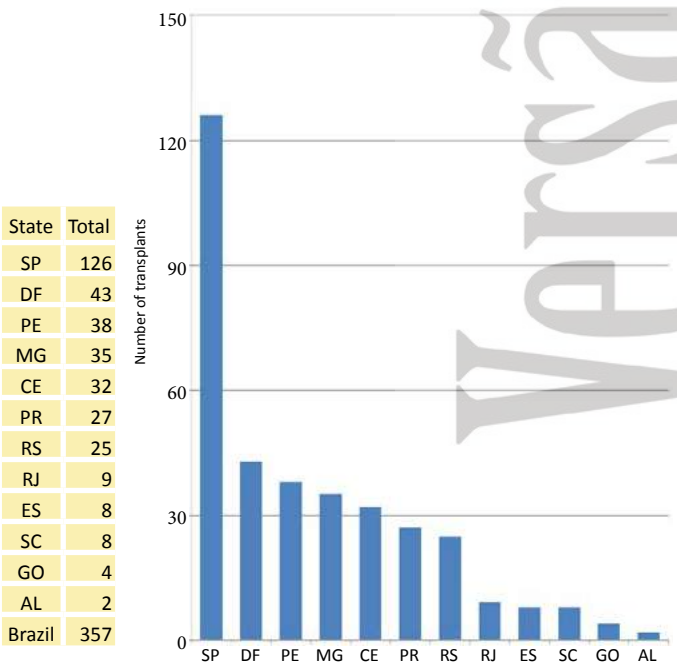


Annual number of transplants in Brazil between 2006 and 2016

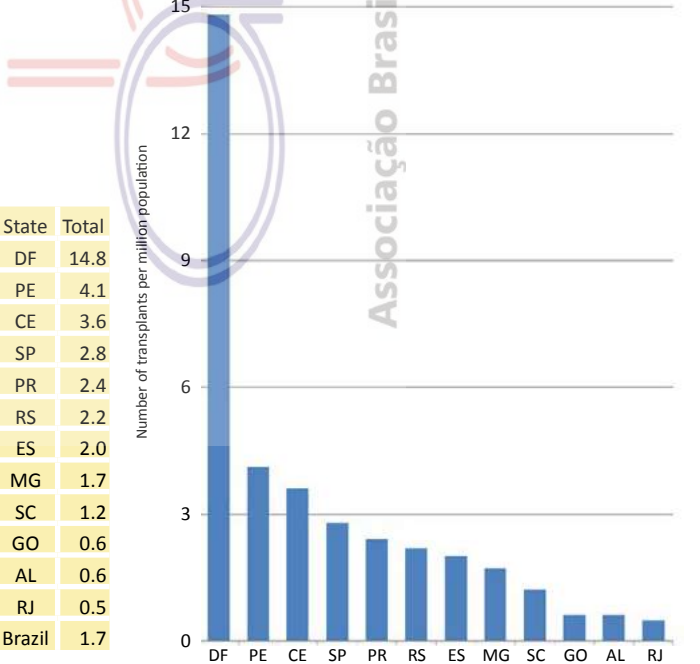
HEART - (in 12 states, with 31 active teams)



Number of transplants by state during the year 2016

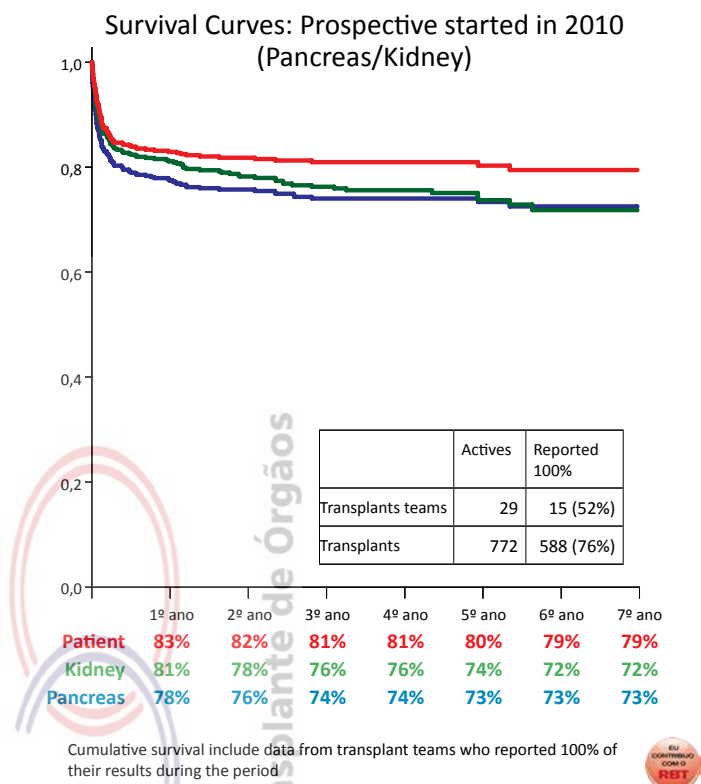
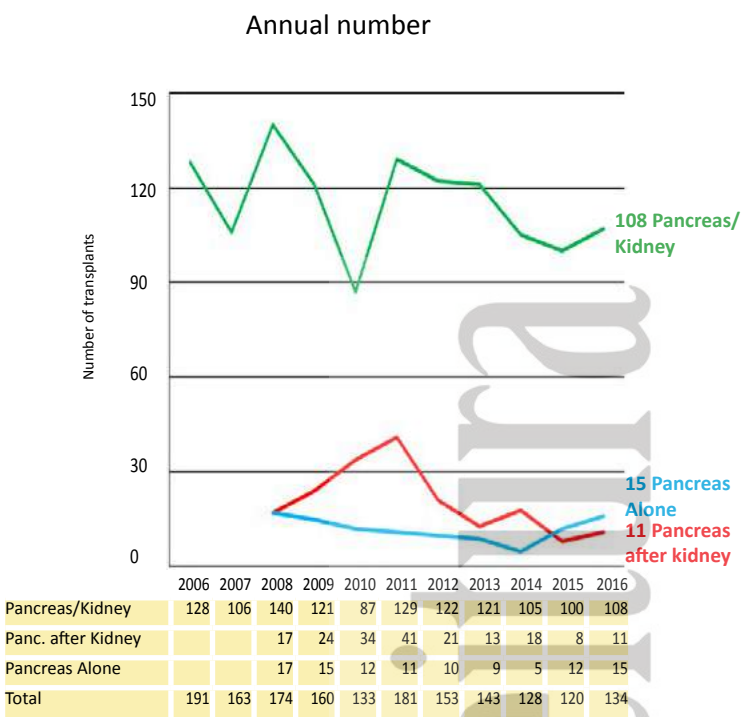


Number of transplants per million population by state during the year 2016

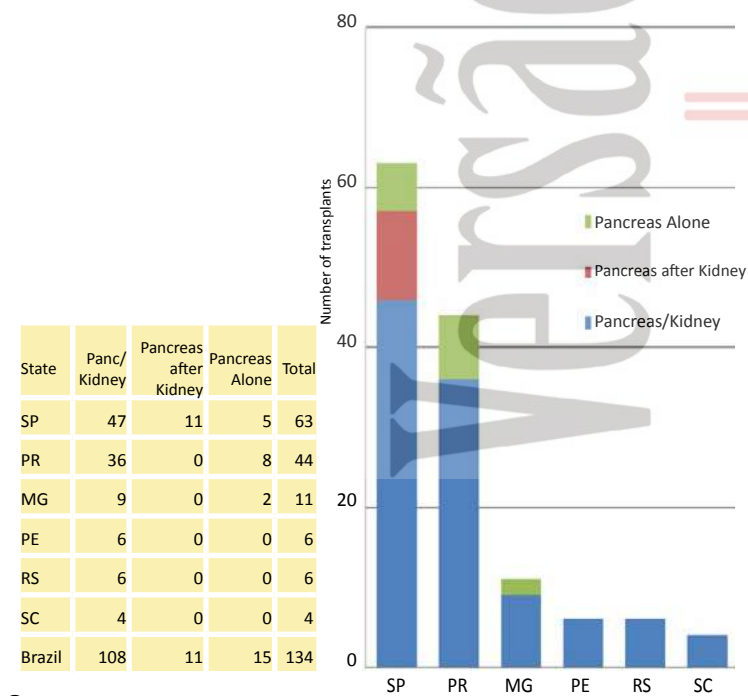


Annual number of transplants in Brazil between 2006 and 2016

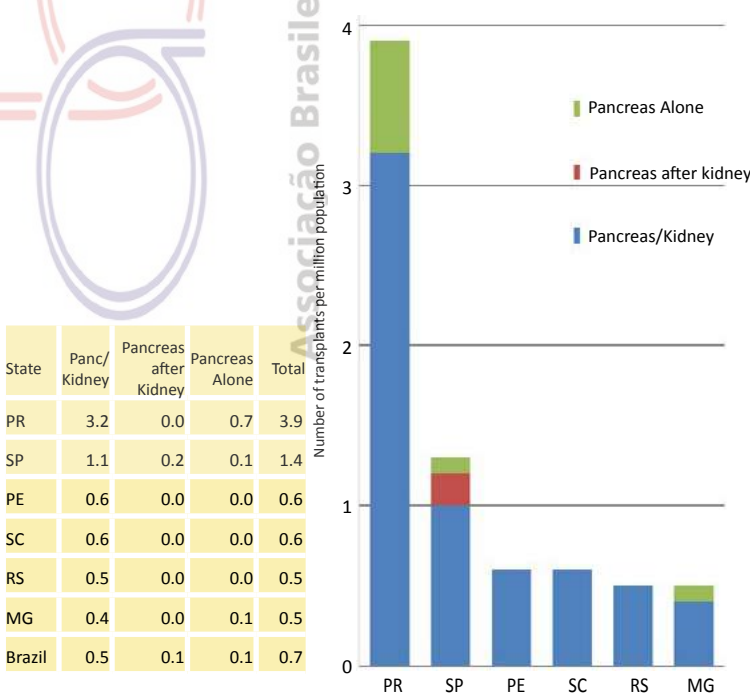
Pancreas - (in 6 states, with 16 active teams)



Number of transplants by state during the year 2016

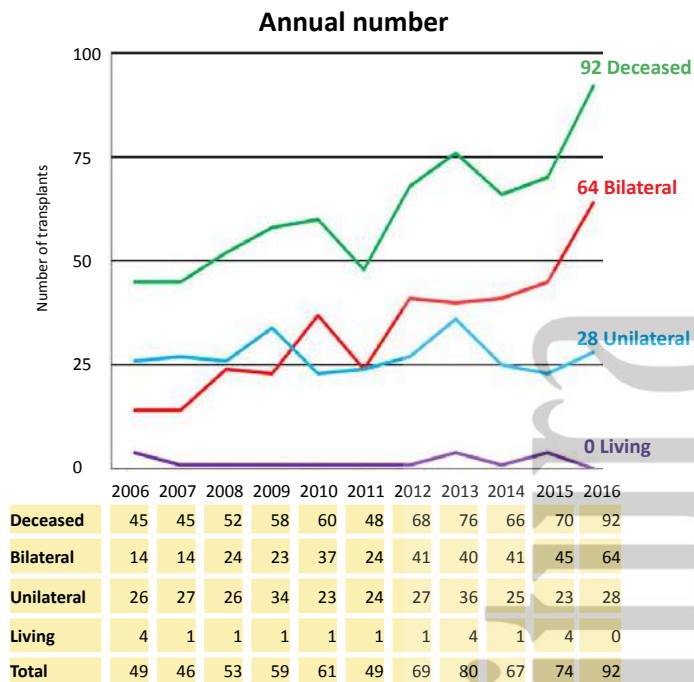


Number of transplants per million population by state during the year 2016

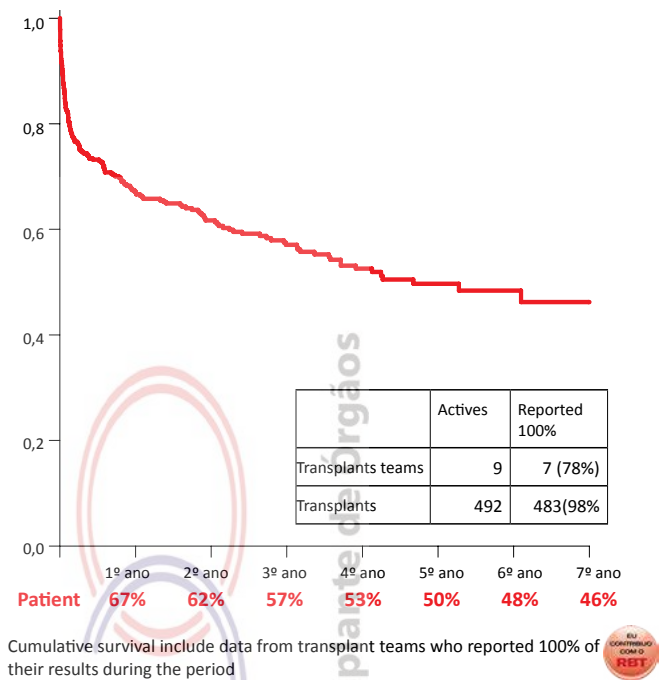


Annual number of transplants in Brazil between 2006 and 2016

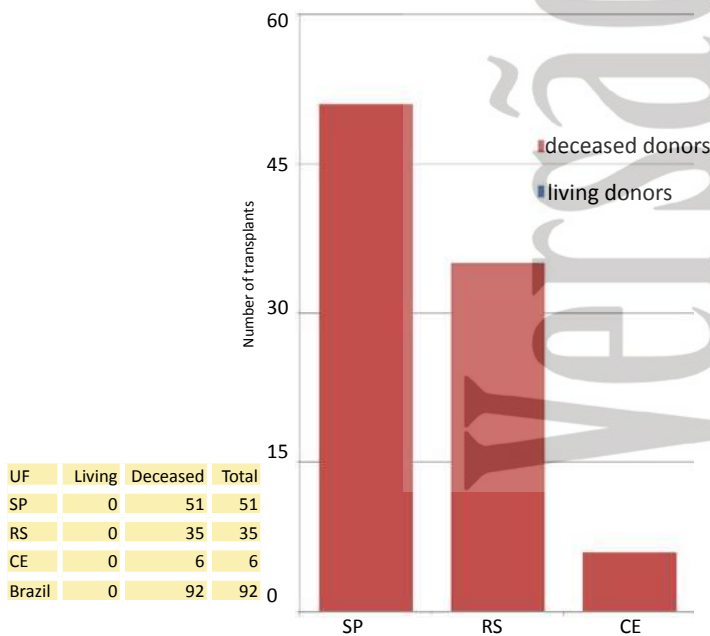
LUNG - (in 3 state, with 6 active teams)



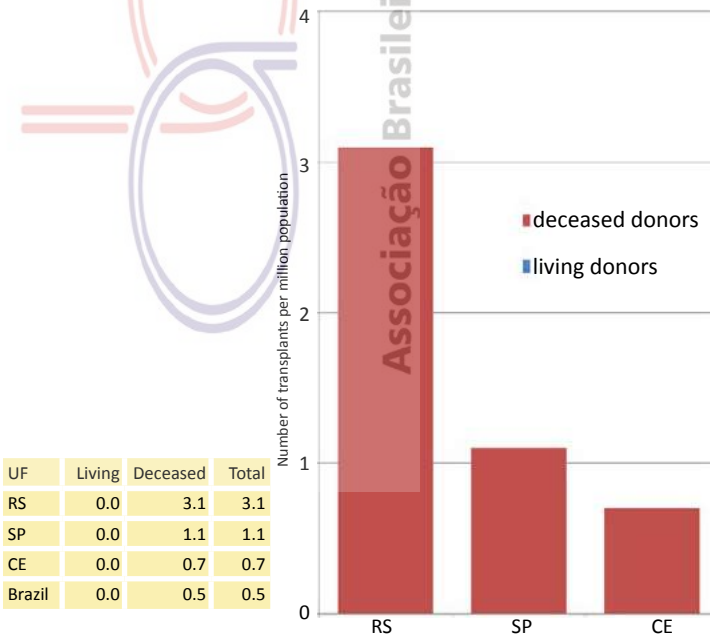
Survival Curves: Prospective started in 2010



Number of transplants of state, during year 2016



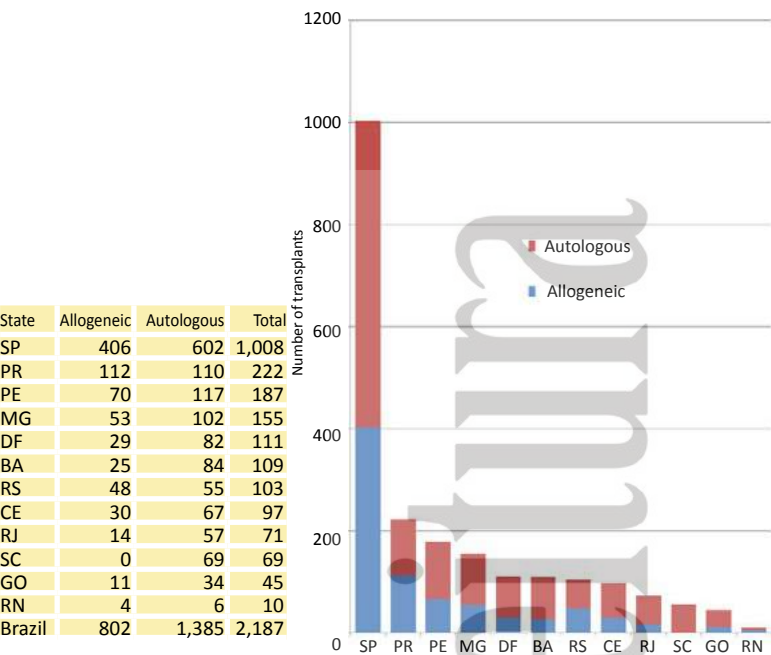
Number of transplants per million population by state during the year 2016



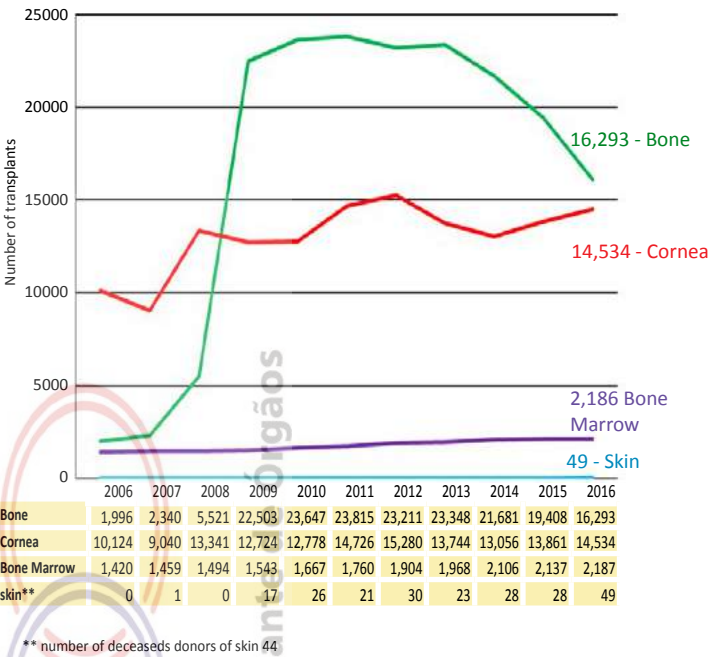
Annual number of transplants in Brazil between 2006 and 2016

Bone Marrow - (in 12 states, with 61 active teams)

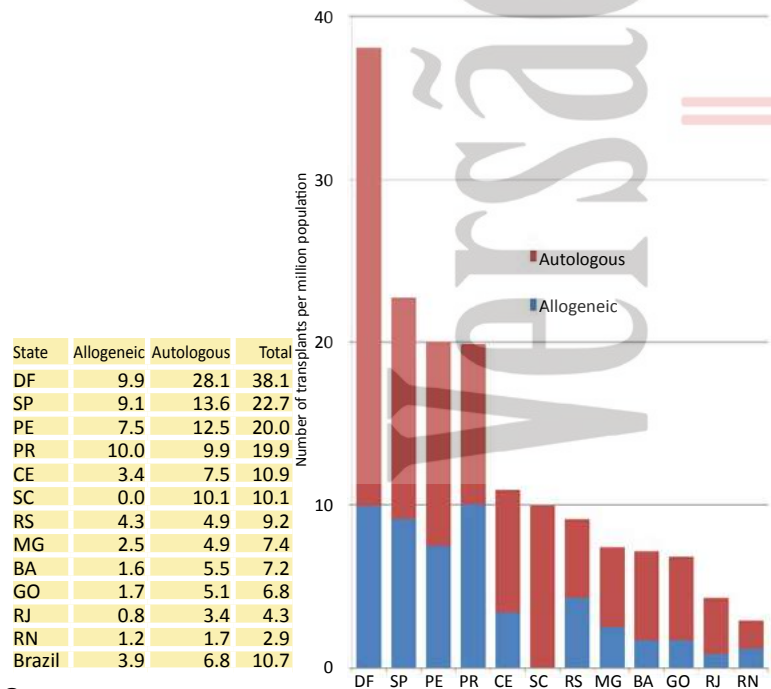
Number of bone marrow transplants by state during the year 2016



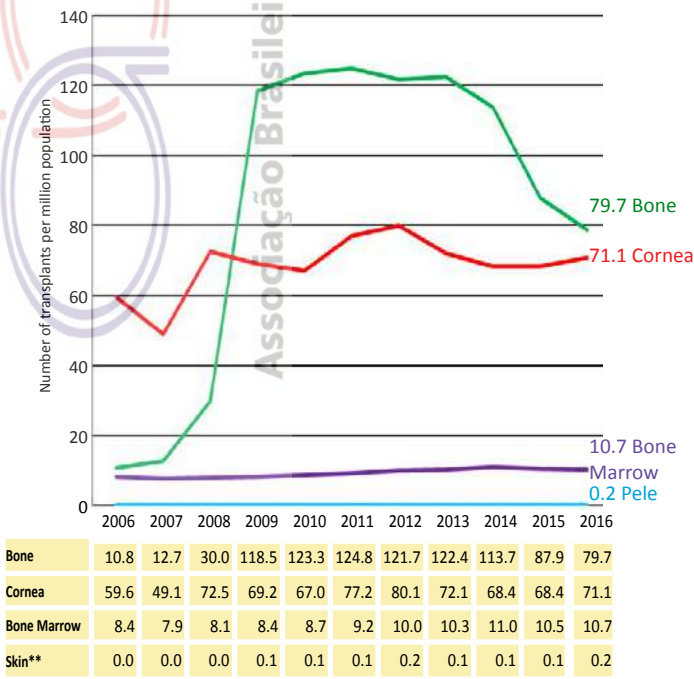
Annual number of tissue and Bone Marrow transplants



Number of bone marrow transplants per million population by state during the year 2016



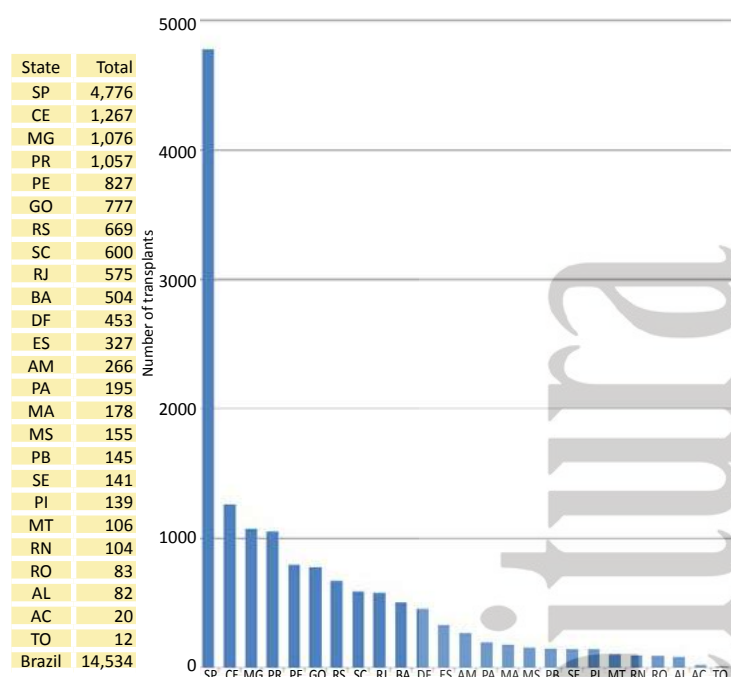
Tissue and bone marrow transplants per million population



Annual number of transplants in Brazil between 2006 and 2016

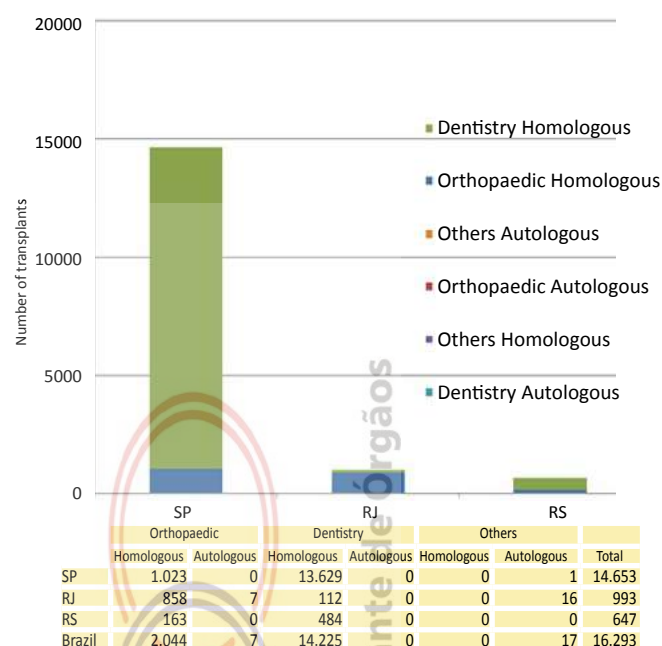
Cornea - (in 25 states)

Number of corneal transplants by state during the year 2016

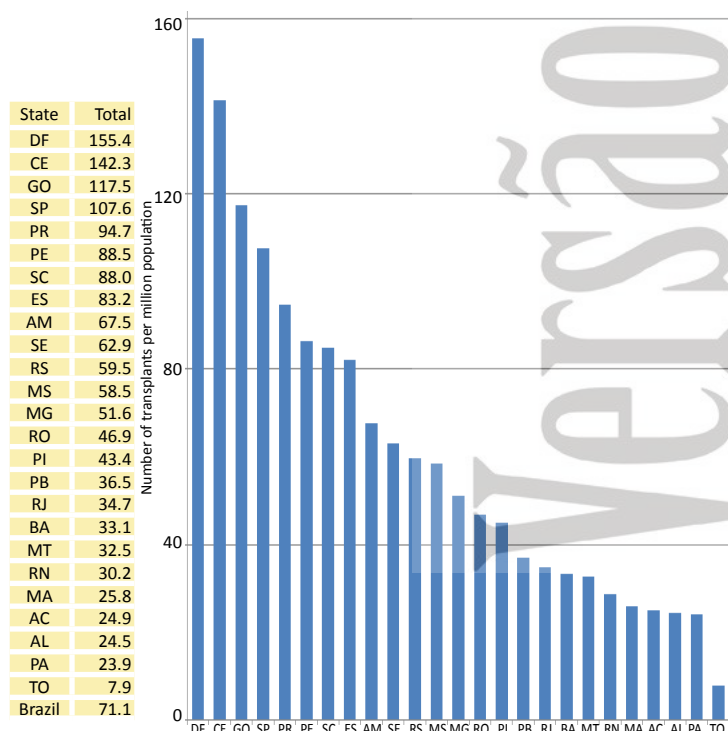


Bone - (in 3 states)

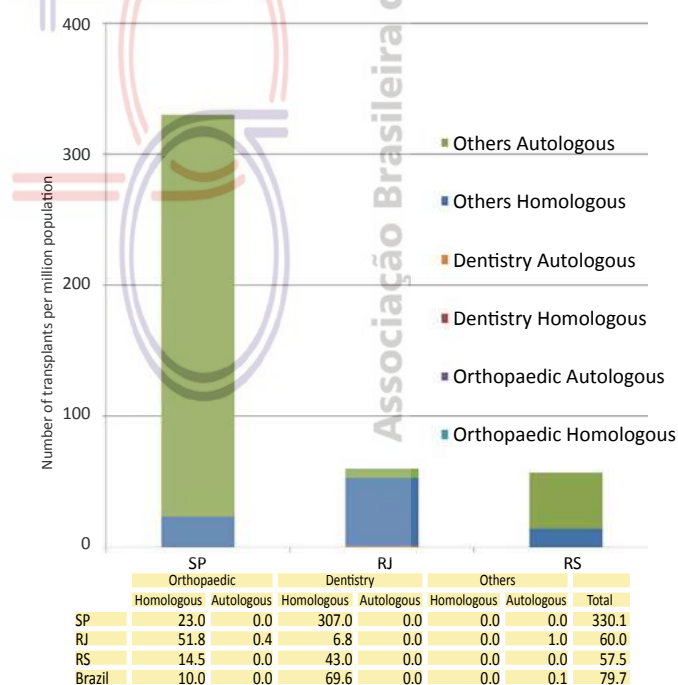
Bone transplants data available from five tissue banks in three states, during the year 2016



Number of corneal transplants per million population during the year 2016



Bone transplants per million population data available from five tissue banks in three states, during the year 2016



Pediatric Transplants in Brazil in 2016

Brazilian pediatric population is approximately 53 million according to IBGE institute. In 2016, 705 children entered the solid organ transplant waiting list, 527 (75%) received a transplant and 78 expired while waiting. In Brazil the number of pediatric solid organ transplants has remained stable, with some variation, in recent years. In 2014, it was 13.3% higher than in 2013. In 2015, it fell by 5% compared to 2014. In 2016, 310 pediatric kidney transplants (5.8 pmpp) were performed, a small decrease of 2% as compared to 2015. The majority of these transplants (285; 92%), were performed with deceased donor organs. We argue whether this is enough since 380 new patients with end stage renal disease were listed (7.2 pmpp) and among then 310 (81.5%) received a kidney graft, while 3% died whilst on the list. Nine Brazilian states that performed more than 10 transplants per year. The number of transplants increased by 50%, or more in Ceará, Bahia and the Federal District. Congratulations to those states! São Paulo, Rio Grande do Sul and Paraná kept their numbers stable while Minas Gerais, Rio de Janeiro and Pernambuco, dropped their number of kidney transplants. In Rio de Janeiro and Pernambuco, only 13 and 8 children entered the waiting list, respectively. The reasons for such must be clarified in order to assure that these children have appropriate access to treatment.

Pediatric liver transplants presented a minimal increment; 177 were performed in 2015 and 180 in 2016 (3.4 pmpp). Interestingly, in recent years, there has been a progressive increase in the number of transplants with living donors, in fact in the last four years have pediatric living donor liver transplants have outnumbered transplants with deceased donors, which

now correspond to 30% of the total.

Rates of heart (0.6 pmpp) and lung transplantation (0.1 pmpp) remained stable; however, the numbers are very small. In 2016, 69 children were placed on the waiting list, 32 (46%) were transplanted and, unfortunately, 19 (34%) died while waiting.

What stands out from the 2016 data as compared to previous years is that 74% of the children who are on the waiting list were transplanted.

Again, there is a need to work on facilitating access for children with vital organ failure to reach transplant centers and there still exists a need to promote education about organ donation in order to increase the numbers of transplants.

Let's remain optimistic for 2017, the year of the ABTO Congress, when we can raise awareness of the population and the health services, facilitating children's access to transplantation.

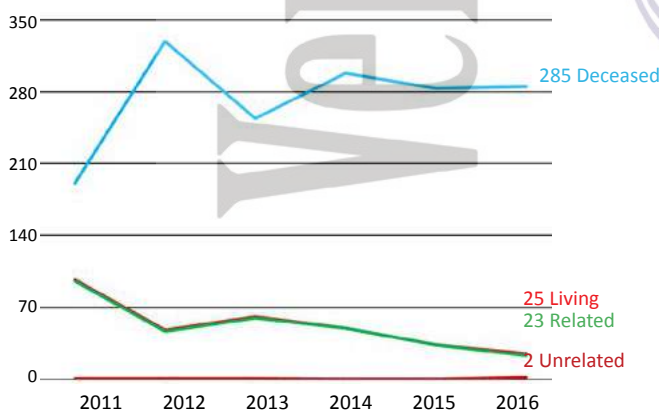
Clotilde Druck Garcia

Number of pediatric transplants, during 2016

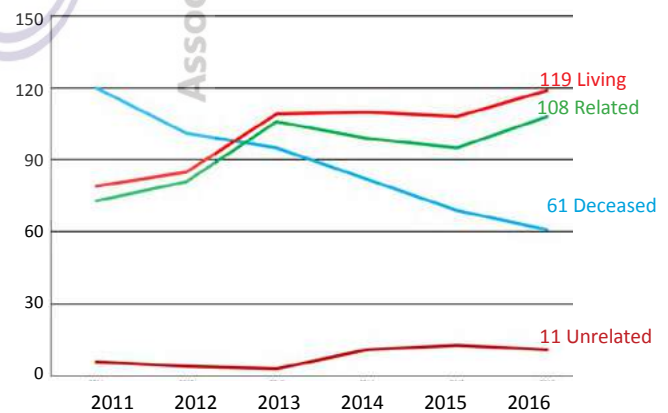
Organ	Living	Deceased	Total	PMPP*	Nº Teams
HEART	0	32	32	0,6	10
LIVER	119	61	180	3,4	22
LUNG	0	5	5	0,1	3
KIDNEY	25	285	310	5,8	45
Total	144	383	527		80

PMPP*- per million population pediatric

Annual number of pediatric kidney transplants



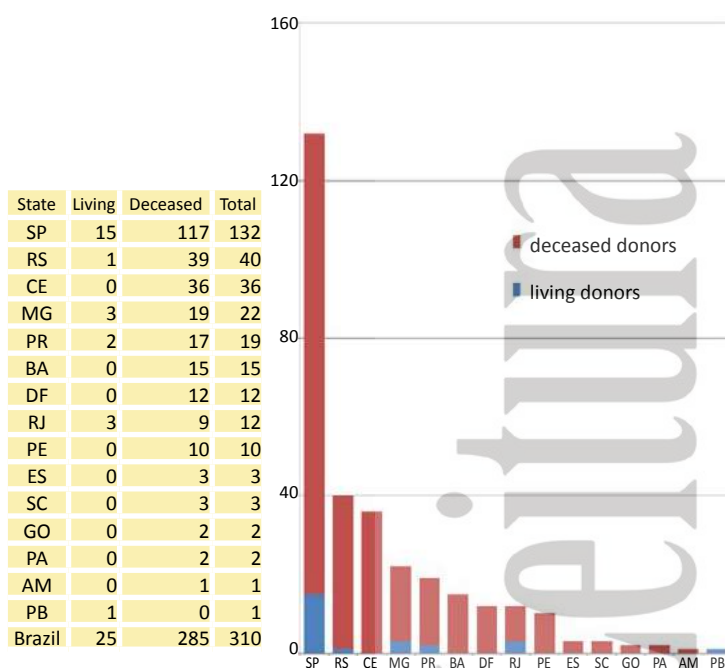
Annual number of pediatric Liver transplants



PEDIATRIC TRANSPLANTATION

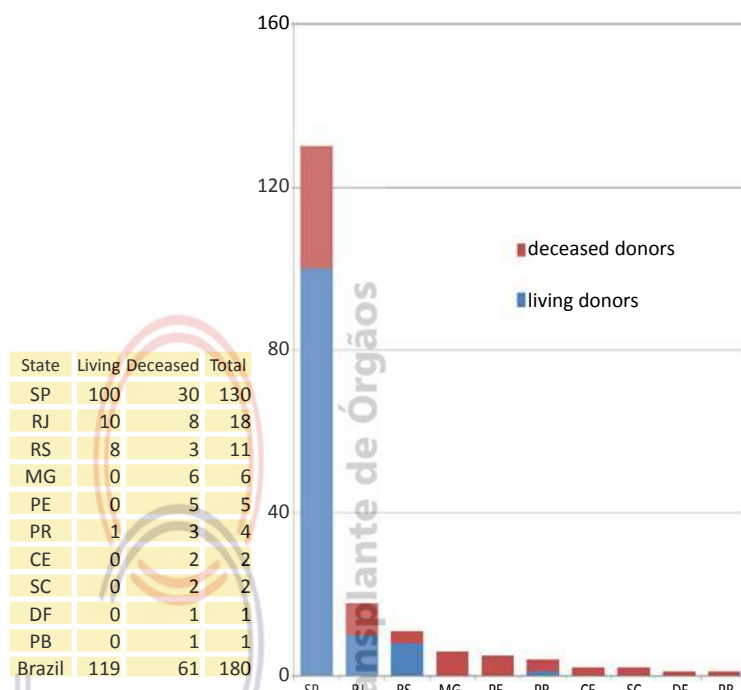
KIDNEY

Number of transplants per state during the year 2016

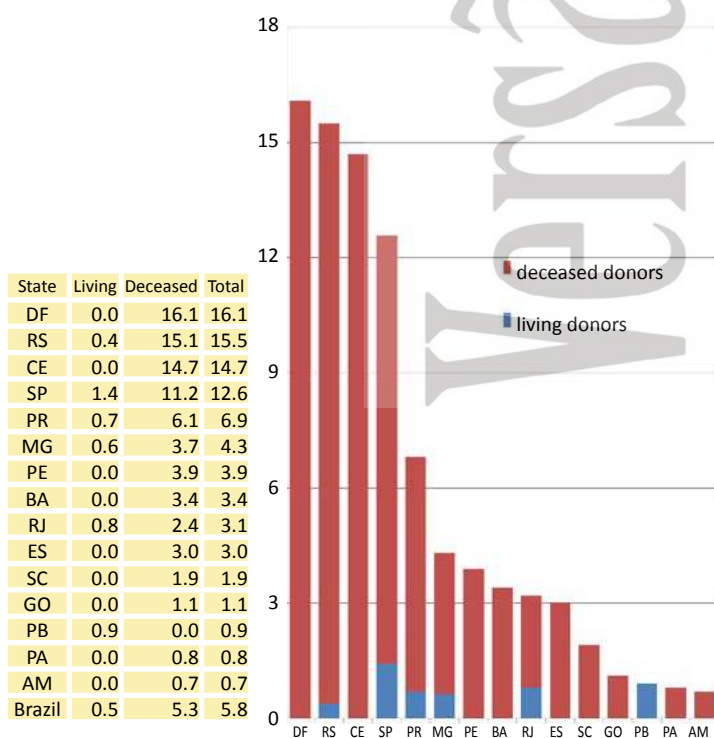


LIVER

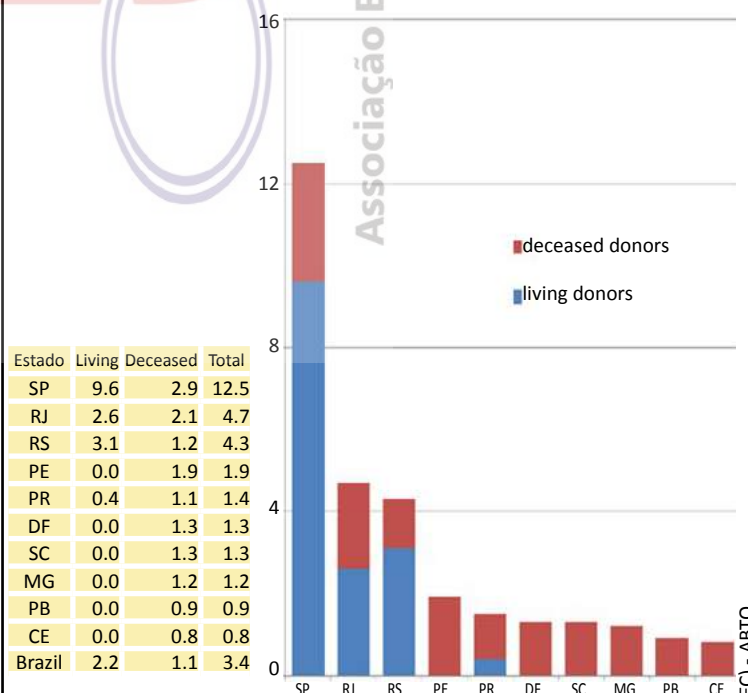
Number of transplants per state during the year 2016



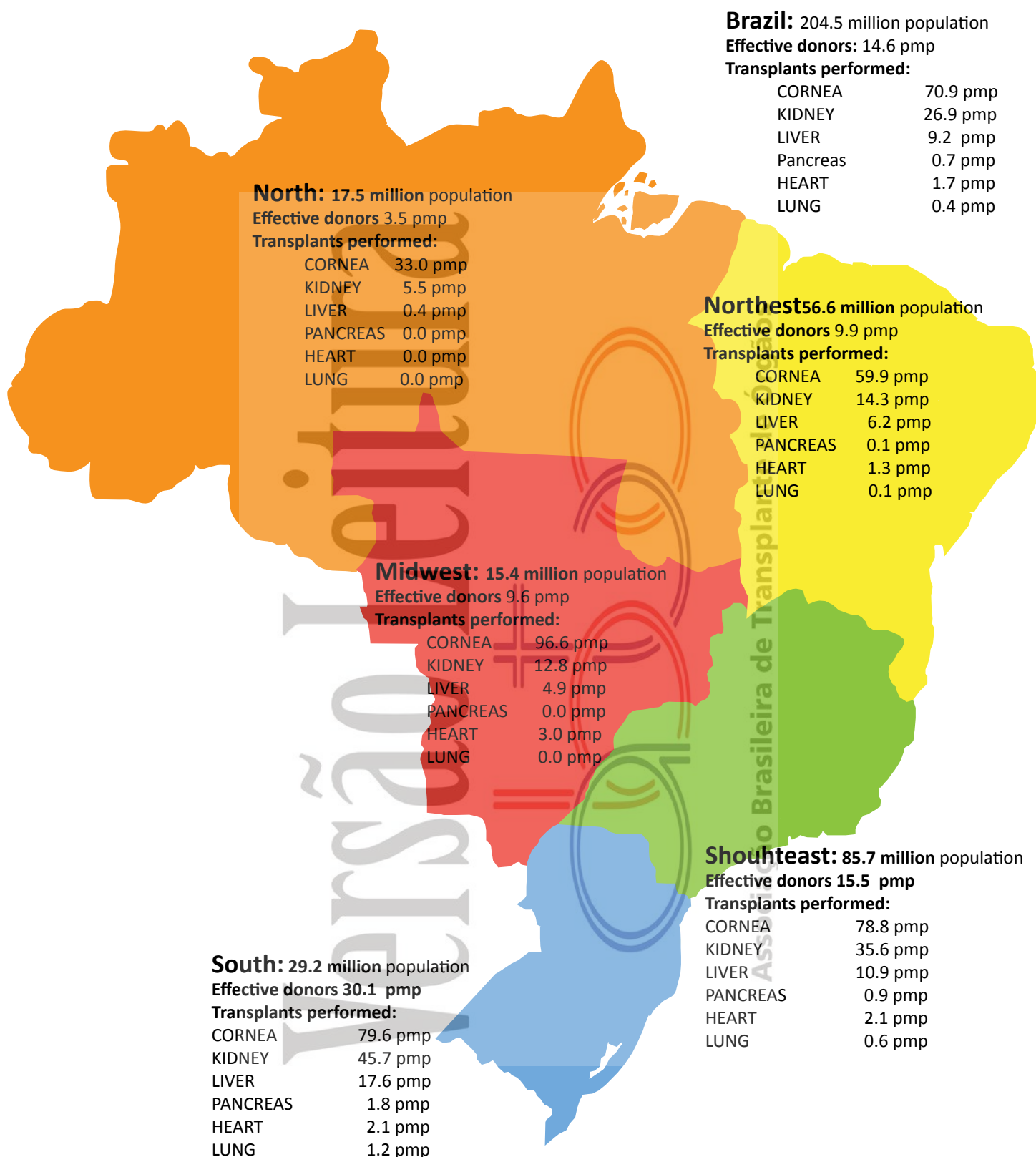
Transplants pmp per state in 2016



Transplants pmp per state in 2016



DATA FROM BRAZILIAN REGIONS

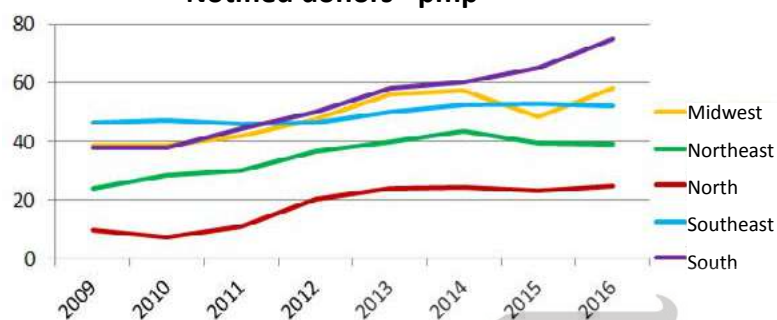


POPULATION	2009	2010	2011	2012	2013	2014	2015	2016
Midwest	13,222,854	14,058,094	14,058,094	14,058,094	14,058,094	14,058,094	15,219,608	15,442,232
Northeast	51,534,406	53,081,950	53,081,950	53,081,950	53,081,950	53,081,950	56,186,190	56,560,081
North	14,623,316	15,864,454	15,864,454	15,864,454	15,864,454	15,864,454	17,231,027	17,472,636
Southeast	77,873,120	80,364,410	80,364,410	80,364,410	80,364,410	80,364,410	85,115,623	85,745,520
South	26,733,595	27,386,891	27,386,891	27,386,891	27,386,891	27,386,891	29,016,114	29,230,180

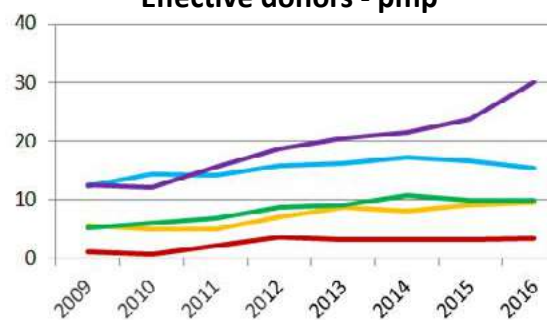
DATA FROM BRAZILIAN REGIONS

ORGAN DONATION

Notified donors - pmp



Effective donors - pmp



Number of potential donors by year

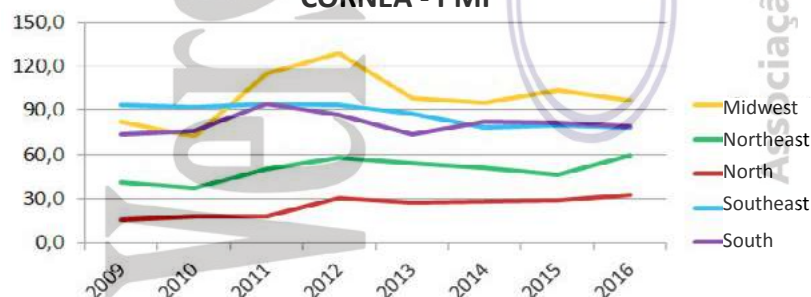
Absolute number	2009	2010	2011	2012	2013	2014	2015	2016
Midwest	508	544	589	671	789	807	734	897
Northeast	1,241	1,509	1,589	1,948	2,102	2,298	2,208	2,205
North	143	112	175	319	378	384	401	432
Southeast	3,593	3,781	3,673	3,718	4,010	4,219	4,474	4,433
South	1,005	1,033	1,212	1,369	1,592	1,643	1,881	2,190
Number pmp	2009	2010	2011	2012	2013	2014	2015	2016
Midwest	38.4	38.7	41.9	47.7	56.1	57.4	48.2	58.1
Northeast	24.1	28.4	29.9	36.7	39.6	43.3	39.3	39.0
North	9.8	7.1	11.0	20.1	23.8	24.2	23.3	24.7
Southeast	46.1	47.0	45.7	46.3	49.9	52.5	52.6	51.7
South	37.6	37.7	44.3	50.0	58.1	60.0	64.8	74.9

Number of effective donors por ano

Absolute number	2009	2010	2011	2012	2013	2014	2015	2016
Midwest	75	72	72	98	124	115	139	148
Northeast	269	321	367	466	489	569	555	561
North	16	11	37	58	53	53	57	62
Southeast	961	1,159	1,143	1,274	1,298	1,387	1,414	1,330
South	337	335	429	510	562	589	689	880
Number pmp	2009	2010	2011	2012	2013	2014	2015	2016
Midwest	5.7	5.1	5.1	7.0	8.8	8.2	9.1	9.6
Northeast	5.2	6.0	6.9	8.8	9.2	10.7	9.9	9.9
North	1.1	0.7	2.3	3.7	3.3	3.3	3.3	3.5
Southeast	12.3	14.4	14.2	15.9	16.2	17.3	16.6	15.5
South	12.6	12.2	15.7	18.6	20.5	21.5	23.7	30.1

Tissue Transplantation

CORNEA - PMP

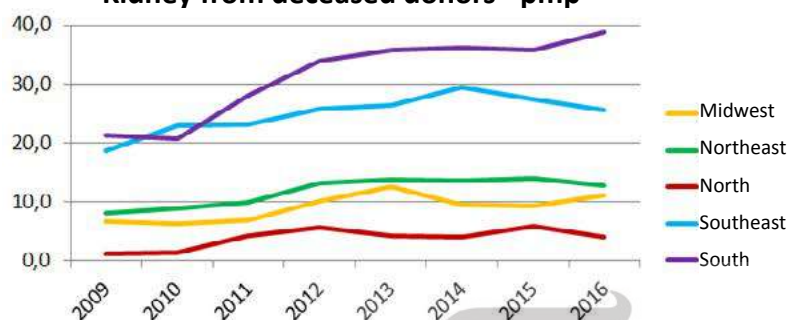


CORNEA	2009	2010	2011	2012	2013	2014	2015	2016
Absolute number	12,724	12,778	14,726	15,280	13,744	13,056	13,861	14,534
Midwest	1,091	1,018	1,620	1,811	1,377	1,341	1,579	1,491
Northeast	2,114	1,977	2,651	3,087	2,883	2,697	2,625	3,387
North	231	294	317	480	438	447	499	576
Southeast	7,320	7,398	7,557	7,534	7,022	6,321	6,784	6,754
South	1,968	2,091	2,581	2,368	2,024	2,250	2,374	2,326
Number pmp	69.2	67.0	77.2	80.1	72.1	68.4	68.4	71.1
Midwest	82.5	72.4	115.2	128.8	98.0	95.4	103.7	96.6
Northeast	41.0	37.2	49.9	58.2	54.3	50.8	46.7	59.9
North	15.8	18.5	20.0	30.3	27.6	28.2	29.0	33.0
Southeast	94.0	92.1	94.0	93.7	87.4	78.7	79.7	78.8
South	73.6	76.4	94.2	86.5	73.9	82.2	81.8	79.6

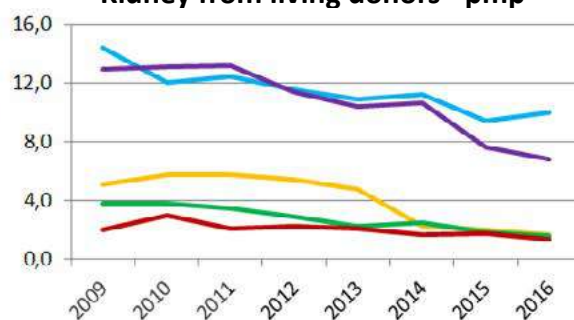
DATA FROM BRAZILIAN REGIONS

Organ Transplantation

Kidney from deceased donors - pmp

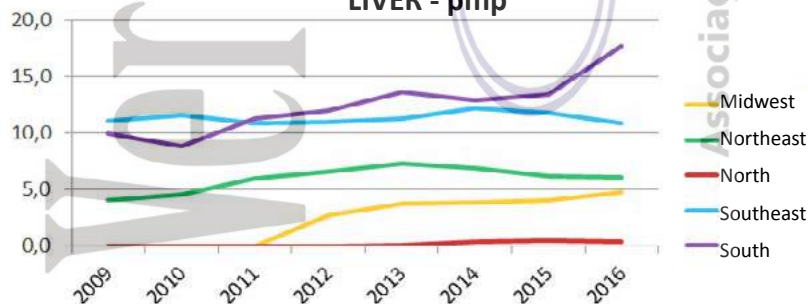


Kidney from living donors - pmp



kidney (living donors)		2009	2010	2011	2012	2013	2014	2015	2016
Absolute number		1,752	1,656	1,662	1,504	1,386	1,386	1,189	1,200
Midwest		67	81	81	76	68	33	31	27
Northeast		194	203	187	153	124	132	107	93
North		29	47	33	37	33	27	31	25
Southeast		1,118	967	1,000	926	876	904	800	856
South		344	358	361	312	285	290	220	199
Number pmp		9.5	8.7	8.7	7.9	7.3	7.3	5.9	5.9
Midwest		5.1	5.8	5.8	5.4	4.8	2.3	2.0	1.7
Northeast		3.8	3.8	3.5	2.9	2.3	2.5	1.9	1.6
North		2.0	3.0	2.1	2.3	2.1	1.7	1.8	1.4
Southeast		14.4	12.0	12.4	11.5	10.9	11.2	9.4	10.0
South		12.9	13.1	13.2	11.4	10.4	10.6	7.6	6.8
kidney(deceased donors)		2009	2010	2011	2012	2013	2014	2015	2016
Absolute number		2,546	3,006	3,331	3,931	4,078	4,271	4,401	4,292
Midwest		89	88	97	143	177	134	141	171
Northeast		417	479	532	698	731	715	793	721
North		18	24	68	91	69	64	100	72
Southeast		1,449	1,846	1,868	2,071	2,120	2,368	2,332	2,191
South		573	569	766	928	981	990	1,035	1,137
Number pmp		13.8	15.8	17.5	20.6	21.4	22.4	21.7	21.0
Midwest		6.7	6.3	6.9	10.2	12.6	9.5	9.3	11.1
Northeast		8.1	9.0	10.0	13.1	13.8	13.5	14.1	12.7
North		1.2	1.5	4.3	5.7	4.3	4.0	5.8	4.1
Southeast		18.6	23.0	23.2	25.8	26.4	29.5	27.4	25.6
South		21.4	20.8	28.0	33.9	35.8	36.1	35.7	38.9

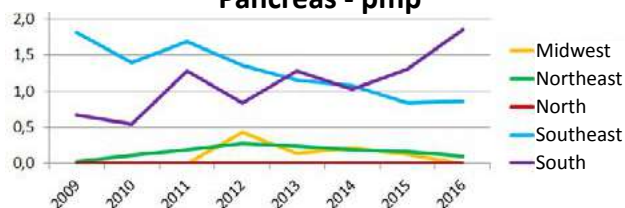
LIVER - pmp



LIVER		2009	2010	2011	2012	2013	2014	2015	2016
Absolute number		1,334	1,413	1,496	1,601	1,722	1,757	1,809	1,880
Midwest		0	0	0	39	53	54	62	76
Northeast		208	244	316	351	387	366	350	349
North		0	0	0	0	1	7	9	7
Southeast		859	926	872	882	909	976	1,000	934
South		267	243	308	329	372	354	388	514
Number pmp		7.3	7.4	7.8	8.4	9.0	9.2	8.9	9.2
Midwest		0.0	0.0	0.0	2.8	3.8	3.8	4.1	4.9
Northeast		4.0	4.6	6.0	6.6	7.3	6.9	6.2	6.2
North		0.0	0.0	0.0	0.0	0.1	0.4	0.5	0.4
Southeast		11.0	11.5	10.9	11.0	11.3	12.1	11.7	10.9
South		10.0	8.9	11.2	12.0	13.6	12.9	13.4	17.6

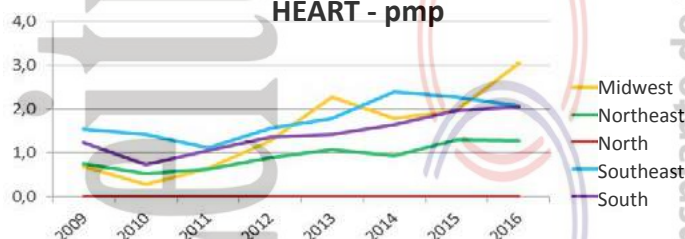
DATA FROM BRAZILIAN REGIONS

Pancreas - pmp



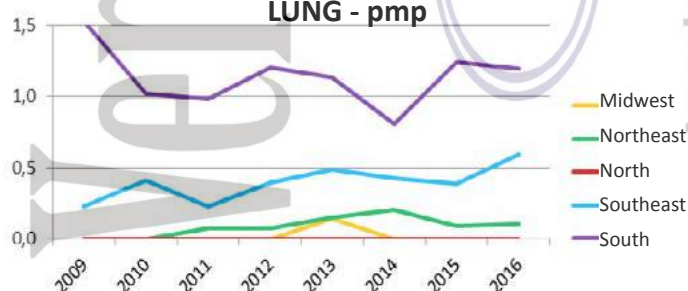
Pancreas	2009	2010	2011	2012	2013	2014	2015	2016
Absolute number	160	133	181	153	143	128	120	134
Midwest	0	0	0	6	2	3	2	0
Northeast	1	6	10	15	13	10	9	6
North	0	0	0	0	0	0	0	0
Southeast	141	112	136	109	93	87	71	74
South	18	15	35	23	35	28	38	54
Number pmp	0.9	0.7	0.9	0.8	0.7	0.7	0.6	0.7
Midwest	0.0	0.0	0.0	0.4	0.1	0.2	0.1	0.0
Northeast	0.0	0.1	0.2	0.3	0.2	0.2	0.2	0.1
North	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Southeast	1.8	1.4	1.7	1.4	1.2	1.1	0.8	0.9
South	0.7	0.5	1.3	0.8	1.3	1.0	1.3	1.8

HEART - pmp



HEART	2009	2010	2011	2012	2013	2014	2015	2016
Absolute number	201	166	160	228	271	311	353	357
Midwest	9	4	9	18	32	25	30	47
Northeast	39	28	33	47	57	49	73	72
North	0	0	0	0	0	0	0	0
Southeast	120	114	89	126	143	192	193	178
South	33	20	29	37	39	45	57	60
Number pmp	1.1	0.9	0.8	1.2	1.4	1.6	1.7	1.7
Midwest	0.7	0.3	0.6	1.3	2.3	1.8	2.0	3.0
Northeast	0.8	0.5	0.6	0.9	1.1	0.9	1.3	1.3
North	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Southeast	1.5	1.4	1.1	1.6	1.8	2.4	2.3	2.1
South	1.2	0.7	1.1	1.4	1.4	1.6	2.0	2.1

LUNG - pmp



LUNG	2009	2010	2011	2012	2013	2014	2015	2016
Absolute number	59	61	49	69	80	67	74	92
Midwest	0	0	0	0	2	0	0	0
Northeast	0	0	4	4	8	11	5	6
North	0	0	0	0	0	0	0	0
Southeast	18	33	18	32	39	34	33	51
South	41	28	27	33	31	22	36	35
Number pmp	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Midwest	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Northeast	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1
North	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Southeast	0.2	0.4	0.2	0.4	0.5	0.4	0.4	0.6
South	1.5	1.0	1.0	1.2	1.1	0.8	1.2	1.2

WAITING LIST

Patients active on the waiting list (December 2016)

STATE	KIDNEY	LIVER	HEART	LUNG	Pancreas	PANCREAS KIDNEY	CORNEA	TOTAL
Total - Brazil	21.264	1.331	282	172	31	539	10.923	34.542
Acre	15	6	0	0	0	0	6	27
Alagoas	162	0	1	0	0	0	162	325
Amazonas	4	0	0	0	0	0	58	62
Bahia	778	22	0	0	0	0	1.101	1.901
Ceará	487	133	13	4	1	9	33	680
Distrito Federal	215	10	5	0	0	0	61	291
Espírito Santo	862	50	7	0	0	0	70	989
Goiás	260	0	3	0	0	1	513	777
Maranhão	165	0	0	0	0	0	760	925
Mato Grosso	0	0	0	0	0	0	226	226
Mato Grosso do Sul	21	0	0	0	0	0	70	91
Minas Gerais	2.297	47	27	0	1	52	687	3.111
Pará	109	0	0	0	0	0	1.086	1.195
Paraíba	169	4	0	0	0	0	316	489
Paraná	2.228	170	50	0	6	28	52	2.534
Pernambuco	566	45	11	0	0	2	73	697
Piauí	243	0	0	0	0	0	386	629
Rio de Janeiro	927	72	11	0	0	0	1.310	2.320
Rio Grande do Norte	109	0	0	0	0	0	148	257
Rio Grande do Sul	857	152	20	74	4	19	23	1.149
Rondonia	57	0	0	0	0	0	117	174
Santa Catarina	294	18	1	0	0	12	37	362
São Paulo	10.439	602	132	94	19	416	3.427	15.129
Sergipe	0	0	1	0	0	0	199	200
Tocantins	0	0	0	0	0	0	2	2

Pediatric patients active on the waiting list (December 2016)

Estado	KIDNEY	LIVER	HEART	LUNG	Pancreas	PANCREAS KIDNEY	CORNEA	TOTAL
Total - Brazil	340	53	37	12	0	0	474	916
Acre	0	0	0	0	0	0	0	0
Alagoas	0	0	0	0	0	0	0	0
Amazonas	0	0	0	0	0	0	4	4
Bahia	12	0	0	0	0	0	10	22
Ceará	3	0	5	0	0	0	0	8
Distrito Federal	1	0	0	0	0	0	7	8
Espírito Santo	10	0	0	0	0	0	1	11
Goiás	0	0	0	0	0	0	34	34
Maranhão	4	0	0	0	0	0	0	4
Mato Grosso	0	0	0	0	0	0	19	19
Mato Grosso do Sul	1	0	0	0	0	0	5	6
Minas Gerais	18	0	0	0	0	0	47	65
Pará	12	0	0	0	0	0	69	81
Paraíba	0	0	0	0	0	0	7	7
Paraná	17	0	0	0	0	0	1	18
Pernambuco	1	0	2	0	0	0	6	9
Piauí	0	0	0	0	0	0	26	26
Rio de Janeiro	11	15	0	0	0	0	70	96
Rio Grande do Norte	0	0	0	0	0	0	6	6
Rio Grande do Sul	21	1	7	3	0	0	1	33
Rondonia	0	0	0	0	0	0	0	0
Santa Catarina	2	0	0	0	0	0	1	3
São Paulo	227	37	23	9	0	0	147	443
Sergipe	0	0	0	0	0	0	13	13
Tocantins	0	0	0	0	0	0	0	0

WAITING LIST

Number of patients and mortality by State

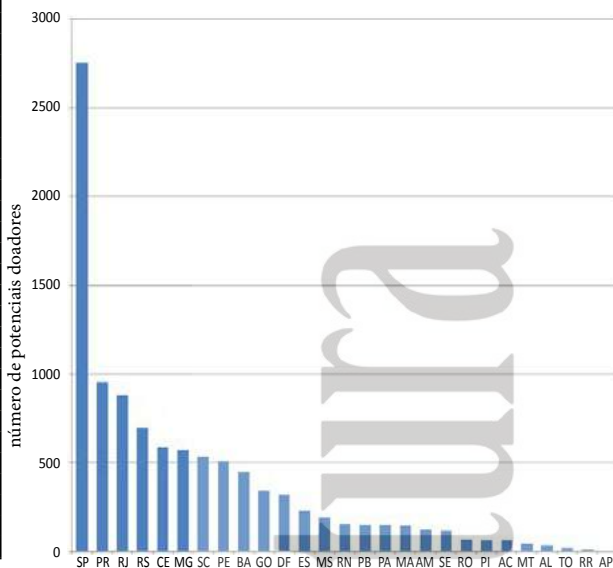
		KIDNEY		LIVER		HEART		LUNG		Pancreas		Pancreas/ Kidney		CORNEA		TOTAL	
		Total	Pediatrics	Total	Pediatrics	Total	Pediatrics	Total	Pediatrics	Total	Pediatrics	Total	Pediatrics	Total	Pediatrics	Total	Pediatrics
Total - Brazil	Entering	13,094	392	3,733	247	631	69	127	10	28	0	251	0	21,192	913	39,056	1,631
	Mortality	1,003	16	723	43	145	19	43	3	1	0	33	0	65	1	2,013	82
Acre	Entering	25	0	20	0	0	0	0	0	0	0	0	0	12	0	57	0
	Mortality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alagoas	Entering	291	0	0	0	0	0	0	0	0	0	0	0	145	0	436	0
	Mortality	28	0	0	0	2	0	0	0	0	0	0	0	0	0	30	0
Amazonas	Entering	33	3	0	0	0	0	0	0	0	0	0	0	170	15	203	18
	Mortality	7	1	0	0	0	0	0	0	0	0	0	0	1	0	8	1
Bahia	Entering	775	25	122	0	0	0	1	0	0	0	0	0	1,185	4	2,083	29
	Mortality	74	2	25	0	0	0	0	0	0	0	0	0	12	0	111	2
Ceará	Entering	374	32	367	3	46	12	10	0	1	0	6	0	1,400	32	2,204	79
	Mortality	9	0	53	1	8	3	3	0	0	0	1	0	1	0	75	4
Distrito Federal	Entering	189	2	95	0	54	2	0	0	0	0	0	0	503	13	841	17
	Mortality	4	0	12	0	16	2	0	0	0	0	0	0	0	0	32	2
Espírito Santo	Entering	758	0	149	1	24	0	0	0	0	0	0	0	902	0	1,833	1
	Mortality	161	0	24	1	16	0	0	0	0	0	0	0	0	0	201	1
Goiás	Entering	88	0	0	0	8	0	0	0	0	0	0	0	1,051	72	1,147	72
	Mortality	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Maranhão	Entering	107	4	0	0	0	0	0	0	0	0	0	0	295	23	402	27
	Mortality	1	0	0	0	0	0	0	0	0	0	0	0	6	0	7	0
Mato Grosso	Entering	0	0	0	0	0	0	0	0	0	0	0	0	167	8	167	8
	Mortality	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Mato Grosso do Sul	Entering	6	0	0	0	0	0	0	0	0	0	0	0	190	10	196	10
	Mortality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minas Gerais	Entering	787	32	125	6	41	0	0	0	2	0	23	0	1,820	117	2,798	155
	Mortality	173	1	29	0	14	0	3	0	0	0	3	0	7	0	229	1
Pará	Entering	119	3	0	0	0	0	0	0	0	0	0	0	154	9	273	12
	Mortality	6	0	0	0	0	0	0	0	0	0	0	0	3	0	9	0
Paraíba	Entering	193	4	5	2	0	0	0	0	0	0	0	0	359	13	557	19
	Mortality	21	3	1	0	0	0	0	0	0	0	0	0	0	0	22	3
Paraná	Entering	2,114	21	907	4	142	12	0	0	12	0	107	0	3,289	128	6,571	165
	Mortality	28	0	109	3	37	5	0	0	0	0	7	0	0	0	181	8
Pernambuco	Entering	1,105	13	285	4	57	5	0	0	0	0	9	0	1,095	60	2,551	82
	Mortality	49	1	33	1	6	2	0	0	0	0	1	0	12	0	101	4
Piauí	Entering	64	0	0	0	0	0	0	0	0	0	0	0	230	17	294	17
	Mortality	20	0	0	0	0	0	0	0	0	0	0	0	6	0	26	0
Rio de Janeiro	Entering	592	8	274	15	18	0	0	0	0	0	0	0	1,027	11	1,911	34
	Mortality	3	0	52	1	6	0	0	0	0	0	0	0	15	0	76	1
Rio Grande do Norte	Entering	116	0	0	0	0	0	0	0	0	0	0	0	70	5	186	5
	Mortality	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Rio Grande do Sul	Entering	615	46	155	12	32	5	63	0	2	0	11	0	546	28	1,424	91
	Mortality	58	1	68	0	10	2	25	2	0	0	4	0	0	0	165	5
Rondônia	Entering	10	0	0	0	0	0	0	0	0	0	0	0	70	0	80	0
	Mortality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Santa Catarina	Entering	161	5	112	2	3	0	0	0	0	0	4	0	307	18	587	25
	Mortality	4	0	6	0	0	0	0	0	0	0	2	0	0	0	12	0
São Paulo	Entering	4,572	194	1,117	198	205	33	53	10	11	0	91	0	5,982	328	12,031	763
	Mortality	356	7	311	36	30	5	12	1	1	0	15	0	0	0	725	49
Sergipe	Entering	0	0	0	0	1	0	0	0	0	0	0	0	210	2	211	2
	Mortality	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Tocantins	Entering	0	0	0	0	0	0	0	0	0	0	0	0	13	0	13	0
	Mortality	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DATA FROM BRAZILIAN STATES

ORGAN DONATION x TRANSPLANTS DURING YEAR 2016

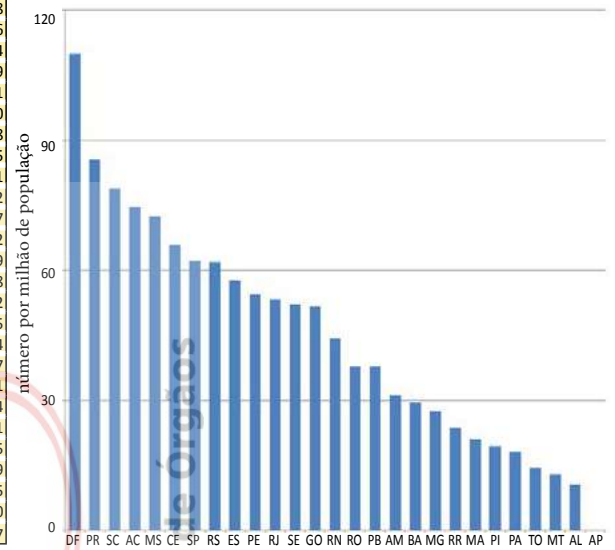
State	Total
SP	2,757
PR	956
RJ	878
RS	697
CE	587
MG	571
SC	537
PE	509
BA	448
GO	342
DF	321
ES	227
MS	192
RN	152
PB	150
PA	148
MA	146
AM	123
SE	117
RO	67
PI	62
AC	60
MT	42
AL	35
TO	22
RR	12
AP	0
Brazil	10,158

Number of notifications of potential donors, by state



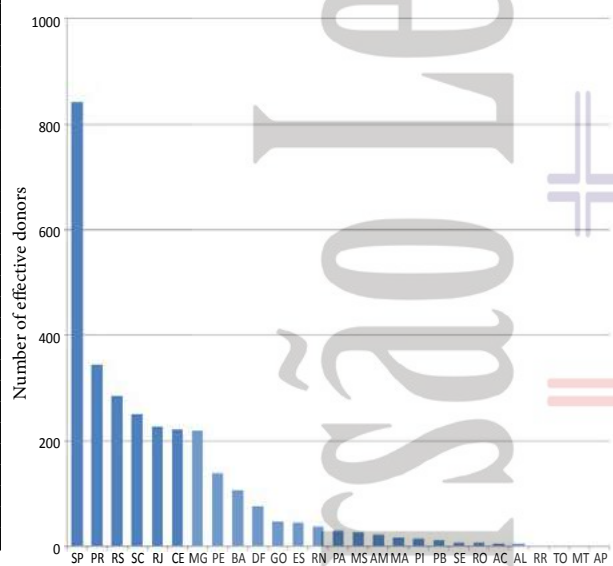
State	Total
DF	110.1
PR	85.6
SC	78.8
AC	74.6
MS	72.4
CE	65.9
SP	62.1
RS	62.0
ES	57.8
PE	54.5
RJ	53.1
SE	52.2
GO	51.7
RN	44.2
RO	37.9
PB	37.8
AM	31.2
BA	29.5
MG	27.4
RR	23.7
MA	21.1
PI	19.4
PA	18.1
TO	14.5
MT	12.9
AL	10.5
AP	0.0
Brazil	49.7

Number of notifications of potential donors, per million population, by state



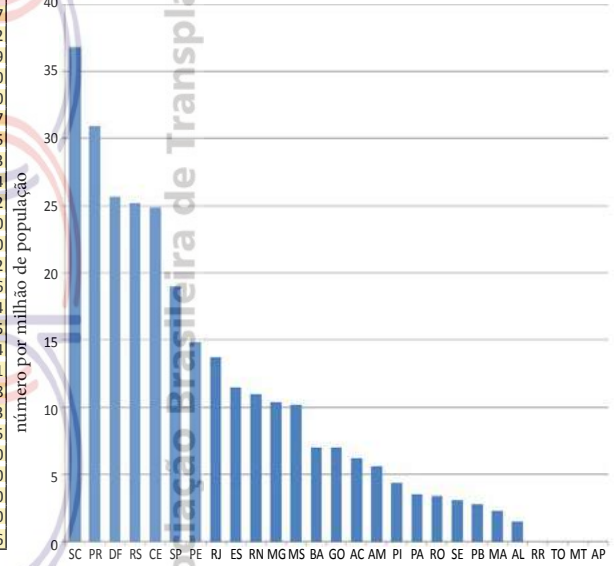
State	Total
SP	842
PR	345
RS	284
SC	251
RJ	226
CE	222
MG	217
PE	140
BA	107
DF	75
GO	46
ES	45
RN	39
PA	29
MS	27
AM	22
MA	16
PI	14
PB	11
SE	7
RO	6
AC	5
AL	5
RR	0
TO	0
MT	0
AP	0
Brazil	2,981

Number of effective donors by state



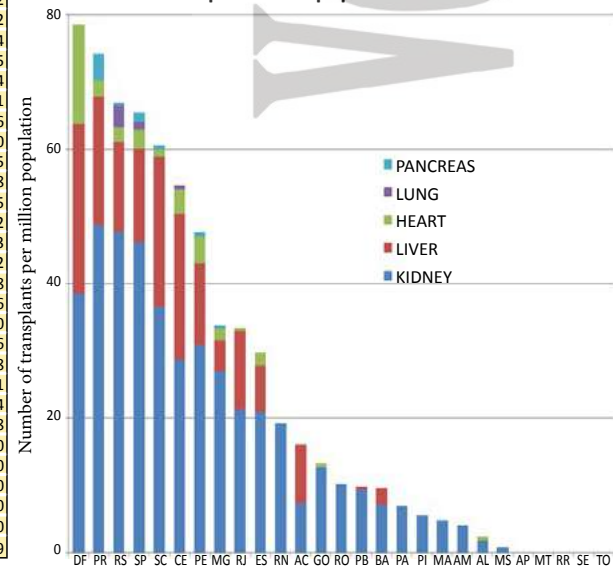
State	Total
SC	36.8
PR	30.9
DF	25.7
RS	25.2
CE	24.9
SP	19.0
PE	15.0
RJ	13.7
ES	11.5
RN	11.3
MG	10.4
MS	10.2
BA	7.0
GO	7.0
AC	6.2
AM	5.6
PI	4.4
PA	3.5
RO	3.4
SE	3.1
PB	2.8
MA	2.3
AL	1.5
RR	0.0
TO	0.0
MT	0.0
AP	0.0
Brazil	14.6

Number of effective donors, per million population



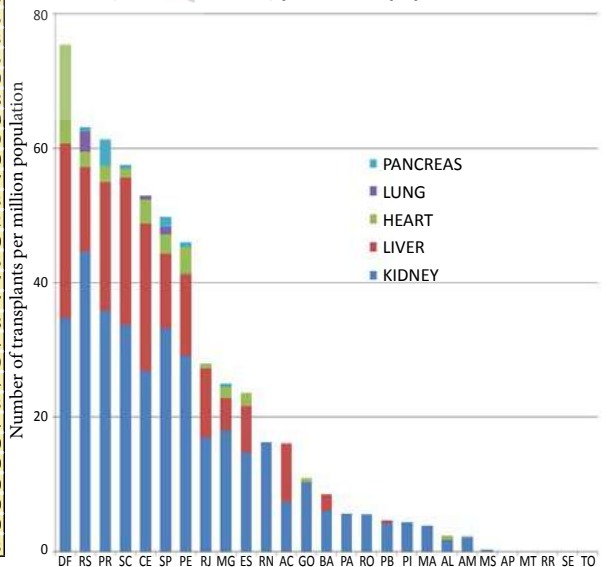
State	Total
DF	79.2
PR	74.2
RS	67.4
SP	65.5
SC	60.4
CE	55.1
PE	47.6
MG	34.0
RJ	33.5
ES	29.8
RN	19.5
AC	16.2
GO	13.3
RO	10.2
PB	9.8
BA	9.6
PA	7.0
PI	5.6
MA	4.8
AM	4.1
AL	2.4
MS	0.8
AP	0.0
MT	0.0
RR	0.0
SE	0.0
TO	0.0
Brazil	38.9

Acumulative number of organ solid transplants per million population



State	Total
DF	75.5
RS	63.5
PR	61.3
SC	57.5
CE	53.0
SP	49.8
PE	46.0
RJ	27.9
MG	25.0
ES	23.7
RN	16.3
AC	16.2
GO	11.0
BA	8.5
PA	5.7
RO	5.7
PB	4.8
PI	4.4
MA	3.9
AL	2.4
AM	2.3
MS	0.4
AP	0.0
MT	0.0
RR	0.0
SE	0.0
TO	0.0
Brazil	32.3

Acumulative number of organ solid transplants (deceased donor) per million population



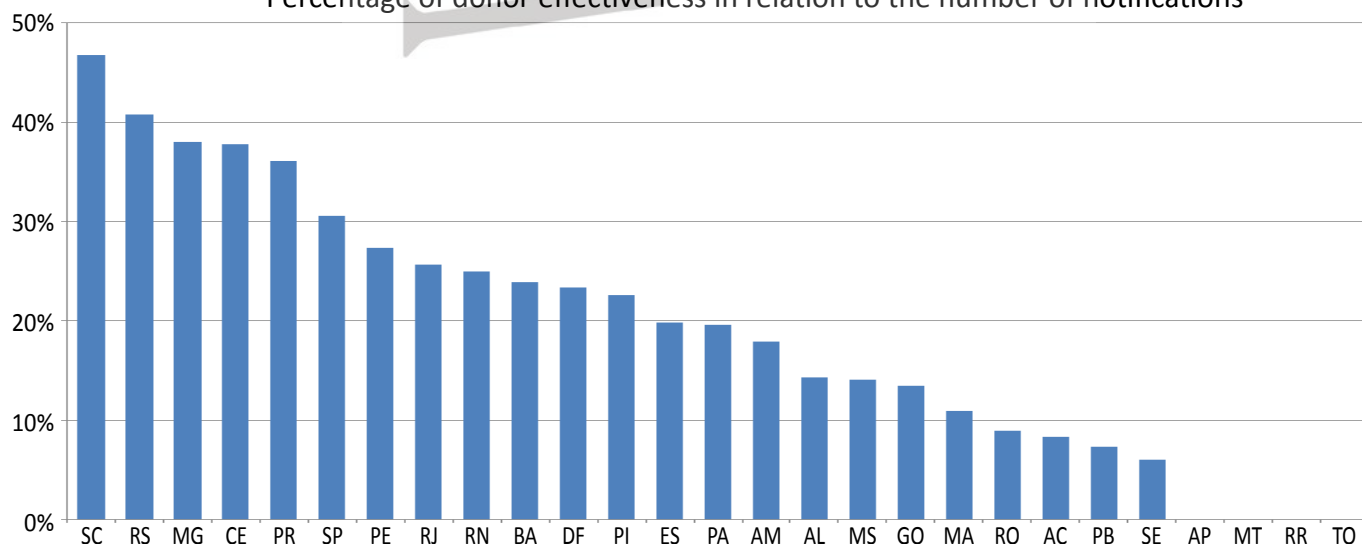
DATA FROM BRAZILIAN STATES

Notifications of potential donors, effective donors and donors whose organs were transplanted by state during the year 2016

State	Notifications (potential donors)		Refused Donors		Eligible donors		Effective donors		Donors with organs transplanted		Multiple organ donors	
	number	pmp/year	number	%	number	pmp/year	number	pmp/year	number	pmp/year	number	%
Total - Brazil	10,158	49.7	7,177	(71%)	5,402	33.8	2,981	14.6	2,699	13.2	1,805	(67%)
Acre	60	74.6	55	(92%)	45	56.0	5	6.2	5	6.2	5	(100%)
Alagoas	35	10.5	30	(86%)	24	7.2	5	1.5	5	1.5	2	(40%)
Amapá	0	0.0	0	(0%)	0	0.0	0	0.0	0	0.0	0	(0%)
Amazonas	123	31.2	101	(82%)	64	16.3	22	5.6	22	5.6	1	(5%)
Bahia	448	29.5	341	(76%)	300	19.7	107	7.0	85	5.6	60	(71%)
Ceará	587	65.9	365	(62%)	469	52.7	222	24.9	206	23.1	139	(67%)
Distrito Federal	321	110.1	246	(77%)	254	87.1	75	25.7	67	23.0	45	(67%)
Espírito Santo	227	57.8	182	(80%)	157	39.9	45	11.5	41	10.4	28	(68%)
Goiás	342	51.7	296	(87%)	214	32.4	46	7.0	42	6.4	18	(43%)
Maranhão	146	21.1	130	(89%)	85	12.3	16	2.3	10	1.4	2	(20%)
Mato Grosso	42	12.9	42	(100%)	10	3.1	0	0.0	0	0.0	0	(0%)
Mato Grosso do Sul	192	72.4	165	(86%)	152	57.3	27	10.2	25	9.4	12	(48%)
Minas Gerais	571	27.4	354	(62%)	343	16.4	217	10.4	211	10.1	197	(93%)
Pará	148	18.1	119	(80%)	103	12.6	29	3.5	25	3.1	17	(68%)
Paraíba	150	37.8	139	(93%)	57	14.4	11	2.8	10	2.5	7	(70%)
Paraná	956	85.6	611	(64%)	666	59.7	345	30.9	302	27.1	212	(70%)
Pernambuco	509	54.5	369	(72%)	438	46.9	140	15.0	128	13.7	101	(79%)
Piauí	62	19.4	48	(77%)	40	12.5	14	4.4	11	3.4	7	(64%)
Rio de Janeiro	878	53.1	652	(74%)	770	46.5	226	13.7	177	10.7	133	(75%)
Rio Grande do Norte	152	44.2	113	(74%)	136	39.5	39	11.3	37	10.7	28	(76%)
Rio Grande do Sul	697	62.0	413	(59%)	594	52.8	284	25.2	224	19.9	154	(69%)
Rondonia	67	37.9	61	(91%)	33	18.7	6	3.4	4	2.3	0	(0%)
Roraima	12	23.7	12	(100%)	0	0.0	0	0.0	0	0.0	0	(0%)
Santa Catarina	537	78.8	286	(53%)	384	56.3	251	36.8	215	31.5	183	(85%)
São Paulo	2757	62.1	1915	(69%)			842	19.0	841	18.9	450	(54%)
Sergipe	117	52.2	110	(94%)	54	24.1	7	3.1	6	2.7	4	(67%)
Tocantins	22	14.5	22	(100%)	10	6.6	0	0.0	0	0.0	0	(0%)

O número por milhão de população dos doadores elegíveis nacionais (33,8*), foi calculado sem a população de São Paulo que não enviou os dados.

Percentage of donor effectiveness in relation to the number of notifications



DATA FROM BRAZILIAN STATES

Reasons for non-fulfillment of organ donation by notified potential donors during the year 2016

STATE	Potential Donors number	Family Interview			Exclusion Reasons					
		Performed	nonconsent	%	Medical Reasons		Cardiopulmonary arrest		Others	
		number			number	%	number	%	number	%
Brazil	10,158	5,939	2,571	(43%)	1,594	(16%)	1,136	(11%)	1,876	(18%)
Acre	60	27	22	(81%)	24	(40%)	0	(0%)	9	(15%)
Alagoas	35	17	12	(71%)	0	(0%)	4	(11%)	14	(40%)
Amapá	0	0	0	(0%)	0	(0%)	0	(0%)	0	(0%)
Amazonas	123	45	20	(44%)	18	(15%)	2	(2%)	61	(50%)
Bahia	448	297	185	(62%)	61	(14%)	16	(4%)	79	(18%)
Ceará	587	375	149	(40%)	118	(20%)	69	(12%)	29	(5%)
Distrito Federal	321	159	58	(36%)	165	(51%)	9	(3%)	14	(4%)
Espírito Santo	227	115	63	(55%)	42	(19%)	11	(5%)	66	(29%)
Goiás	342	180	119	(66%)	66	(19%)	5	(1%)	106	(31%)
Maranhão	146	51	32	(63%)	32	(22%)	1	(1%)	65	(45%)
Mato Grosso	42	1	0	(0%)	2	(5%)	6	(14%)	34	(81%)
Mato Grosso do Sul	192	90	57	(63%)	56	(29%)	40	(21%)	12	(6%)
Minas Gerais	571	306	139	(45%)	25	(4%)	43	(8%)	147	(26%)
Pará	148	87	49	(56%)	25	(17%)	24	(16%)	21	(14%)
Paraíba	150	39	21	(54%)	18	(12%)	1	(1%)	99	(66%)
Paraná	956	561	187	(33%)	258	(27%)	96	(10%)	70	(7%)
Pernambuco	509	271	131	(48%)	162	(32%)	6	(1%)	70	(14%)
Piauí	62	41	23	(56%)	21	(34%)	2	(3%)	2	(3%)
Rio de Janeiro	878	428	198	(46%)	216	(25%)	170	(19%)	68	(8%)
Rio G. do Norte	152	101	53	(52%)	22	(14%)	10	(7%)	28	(18%)
Rio G. do Sul	697	521	211	(40%)	85	(12%)	108	(15%)	9	(1%)
Rondonia	67	29	22	(76%)	0	(0%)	0	(0%)	39	(58%)
Roraima	12	0	0	(0%)	0	(0%)	0	(0%)	12	(100%)
Santa Catarina	537	380	139	(37%)	70	(13%)	46	(9%)	31	(6%)
São Paulo	2757	1780	656	(37%)	84	(3%)	466	(17%)	709	(26%)
Sergipe	117	34	22	(65%)	23	(20%)	1	(1%)	64	(55%)
Tocantins	22	4	3	(75%)	1	(5%)	0	(0%)	18	(82%)

DATA FROM BRAZILIAN STATES

Profile: age, gender, cause of death and blood group of the organ donors

State	Gender		Causes of death			Age								Blood group			
	Male	Fem	BT*	CVA**	Others	≤5	6-10	11-17	18-34	35-49	50-64	≥65	A	AB	B	O	
Brazil	1717	1221	1037	1494	407	51	39	137	718	738	924	331	1076	85	303	1474	
Percent	58%	42%	35%	51%	14%	2%	1%	5%	24%	25%	31%	11%	37%	3%	10%	50%	
Acre	4	1	2	3	0	0	0	0	2	2	1	0	3	0	0	2	
Alagoas	2	3	2	2	1	1	0	1	1	2	0	0	4	0	0	1	
Amapa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Amazonas	9	13	10	9	3	0	2	3	8	3	6	0	6	0	1	15	
Bahia	64	43	30	58	19	2	3	5	30	31	28	8	29	3	15	60	
Ceará	142	80	109	103	10	6	4	20	59	54	54	25	77	4	19	122	
Distrito Federal	48	27	30	35	10	1	1	8	26	27	11	1	21	2	10	42	
Espírito Santo	23	22	16	18	11	1	1	4	7	14	18	0	20	1	6	18	
Goiás	31	15	19	19	8	1	0	1	17	10	13	4	18	0	3	25	
Maranhão	10	6	6	6	4	0	0	1	4	5	6	0	4	1	0	11	
Mato Grosso	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mato Grosso do Sul	17	10	8	0	19	0	0	1	8	5	11	2	10	0	4	13	
Minas Gerais	101	116	85	113	19	8	3	5	59	58	75	9	86	7	15	109	
Pará	25	4	23	1	5	1	1	3	14	6	3	1	8	0	1	20	
Paraíba	7	4	6	2	3	0	1	1	2	3	4	0	5	0	2	4	
Paraná *	184	118	90	113	99	7	1	10	50	69	98	67	114	8	35	145	
Pernambuco	91	49	61	62	17	3	3	10	46	44	30	4	55	4	20	61	
Piauí	10	4	6	7	1	1	0	0	5	3	5	0	6	0	2	6	
Rio de Janeiro	137	89	77	114	35	3	1	11	53	44	73	41	84	9	22	111	
Rio Grande do Norte	25	14	14	18	7	1	2	1	15	5	10	5	17	0	8	14	
Rio Grande do Sul	165	119	89	165	30	1	5	9	68	46	103	52	117	16	16	135	
Rondonia	5	1	3	2	1	1	0	0	3	0	2	0	2	0	1	3	
Roraima	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Santa Catarina	155	96	89	139	23	4	5	11	48	63	82	38	98	5	29	119	
São Paulo	457	385	257	504	81	9	6	32	190	240	291	74	286	25	94	437	
Sergipe	5	2	5	1	1	0	0	0	3	4	0	0	6	0	0	1	
Tocantins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

BT* Brain Trauma

**CVA - Cerebro vascular accident

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