

# RBT

Brazilian Transplantation Registry  
Official report of Brazilian Organ Transplantation Society

XVII YEAR Nº 4



**Associação Brasileira de Transplante de Órgãos**

Organ procurement and transplantation 2011 data report

**JANUARY / DECEMBER - 2011**

# RBT

Brazilian Transplantation Registry

Official report of Brazilian Organ Transplantation Society



Associação Brasileira de Transplante de Órgãos

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# TRANSPLANTATIONS 2011

This issue of the Brazilian Transplantation Registry confirms the steady annual increase in the overall number of solid organ transplants observed since 2006. From 2001 to 2011 the accumulated increase reached 73%. This growth was predominantly observed in kidney (n=4939, 25.9 transplants p.m.p.) and liver (n=1496, 7.8 transplants p.m.p) and was primarily due to government funded investments in organ procurement, which has increased substantially during the last 5 years. This is confirmed by the progressive increase in the number of transplants with deceased donor organs, a trend that contrasts with the world scenario where strategies are under development to increase the number of transplants with living donors.

We thank and acknowledge all the transplant centers for their voluntary contribution to this registry reminding that updates have to be done according to the schedule shown in page 5.

Ten-year data for each organ (kidney, liver, heart, pancreas, lung, bone marrow and other tissues) are shown in absolute number, corrected by population and stratified by state, including cumulative patient and graft survivals.

At the end of this report you will find a list of transplant centers with their respective performances in each state. Finally, contact information of all transplant coordination units throughout the country is also provided. This report, which was released during the conference with the Ministry of Health in February 2<sup>nd</sup>, 2012, is available at the Brazilian Organ Transplantation Society website ([www.abto.org.br](http://www.abto.org.br)). During this conference the importance and relevance of the national program and measures to increase funding and reduce regional discrepancies in performance were discussed. It was recognized the need to adjust the current reimbursements for hospital readmissions to treat posttransplant complications.

Other items discussed in the conference:

1. While the national donation rate in Brazil reached 11 donors p.m.p., the state of Santa Catarina reached 25 effective donors p.m.p., which is the best result ever achieved by a Brazilian state. This result was a consequence of the involvement and the fomentation of local public sectors, including the state government, to reduce obstacles in the logistic process of organ donation. Besides, harmonious relationship between this multidisciplinary team and a high committed and motivated coordination, as exemplified by Dr. Joel de Andrade (Transplant Coordination of the state of Santa Catarina). Similar growth was also observed in the states of Paraíba and Rio Grande do Norte.

2. The profile of the deceased donor has been changing over the last 10 years. The mean age increased to over 40 years and the main cause of death is now cerebrovascular accident.

3. The number of kidney and liver transplants increased more than 5% compared to 2010 while the number of heart, pancreas and lung transplants remained stable. The geographic disparities are well exemplified by the kidney transplantation performance. While three states perform more than 40 transplants p.m.p. other 8 states perform less than 10 transplants p.m.p.

4. Tissue transplantation is also growing. More than 23,000 bone tissue transplants, provided by 5 banks in São Paulo, Paraná and Rio de Janeiro, were performed in 2011. Skin transplants were performed in 21 patients. Also, more than 14,000 corneal transplants were performed reducing drastically or even abolishing wait lists in some states, as recently reported in Rio Grande do Norte. Only state of Rondonia, Roraima, Amapá and Tocantins did not perform any corneal transplant in 2011.

The challenges ahead are enormous but our enthusiasm surpasses it!

Diretors and Advisory Council

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## Number of Solid Organ and Tissues Transplants during 2011

| <b>Organ</b>      |                     |                       |              |             |                              |
|-------------------|---------------------|-----------------------|--------------|-------------|------------------------------|
| <b>Organ</b>      | <b>Living Donor</b> | <b>Deceased Donor</b> | <b>Total</b> | <b>PMP</b>  | <b>Nº of transplant team</b> |
| heart             | 0                   | 160                   | 160          | 0.8         | 27                           |
| liver             | 104                 | 1,388                 | 1,492        | 7.8         | 57                           |
| intestine         | 0                   | 0                     | 0            | 0.0         | 0                            |
| Pancreas / Kidney | 0                   | 129                   | 129          | 0.7         | 26                           |
| pancreas alone    | 0                   | 52                    | 52           | 0.3         |                              |
| lung              | 1                   | 48                    | 49           | 0.3         | 6                            |
| kidney            | 1,643               | 3,314                 | 4,957        | 26.0        | 126                          |
| <b>Total</b>      | <b>1,748</b>        | <b>5,091</b>          | <b>6,839</b> | <b>----</b> | <b>242</b>                   |

| <b>Tissue</b> |               |            |                              |
|---------------|---------------|------------|------------------------------|
| <b>Tissue</b> | <b>Total</b>  | <b>PMP</b> | <b>Nº of transplant team</b> |
| cornea        | 14,696        | 77.0       | 186                          |
| bone          | 23,815        | 124.8      | 5 Bancos                     |
| skin          | 21            | 0.1        | 10                           |
| <b>total</b>  | <b>38,532</b> | <b>---</b> | <b>---</b>                   |

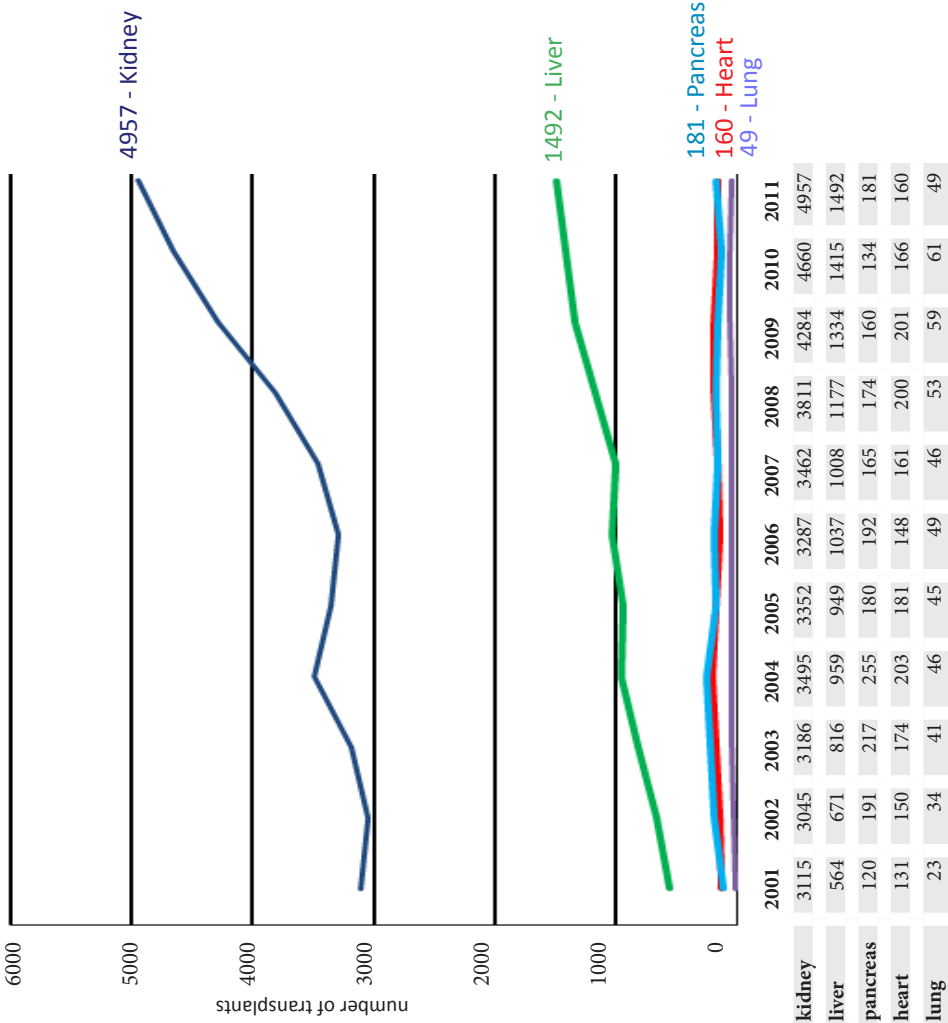
| <b>Bone Marrow</b> |                   |                   |              |            |                              |
|--------------------|-------------------|-------------------|--------------|------------|------------------------------|
| <b>Cells</b>       | <b>Autologous</b> | <b>Allogeneic</b> | <b>Total</b> | <b>PMP</b> | <b>Nº of transplant team</b> |
| Bone Marrow        | 1,029             | 708               | 1,737        | 9.1        | 46                           |

## Schedule for data collection to the Brazilian Transplantation Registry during 2012

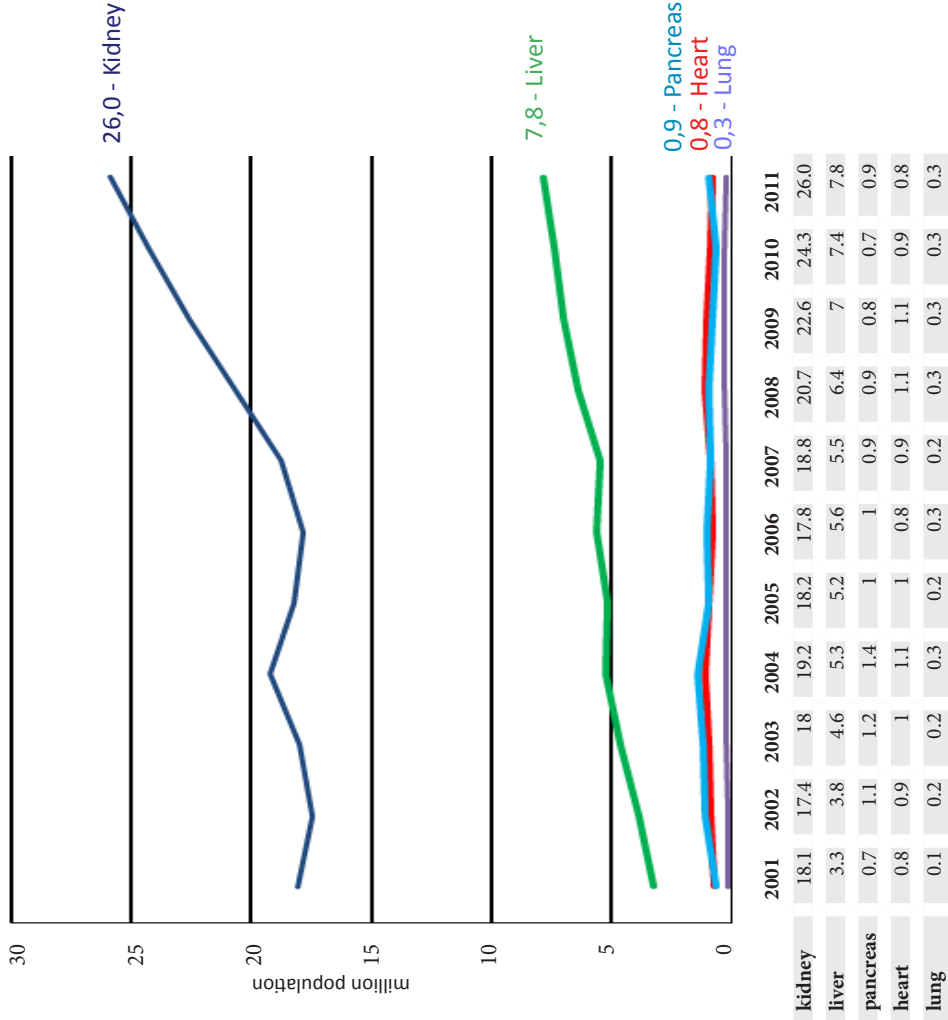
| <b>deadline</b>   | <b>Period</b>                         | <b>deadline</b> | <b>Period</b>                                |
|-------------------|---------------------------------------|-----------------|----------------------------------------------|
| 02/08/2012        | January                               | 5/9/12          | April                                        |
| 03/09/2012        | February                              | 6/8/12          | May                                          |
| 04/09/2012        | March                                 | 7/9/12          | June                                         |
| <b>27/04/2012</b> | <b>RBT 1st quarter 2012 (Digital)</b> | <b>7/27/12</b>  | <b>RBT 1st Semester 2012 (Digital)</b>       |
| <b>deadline</b>   | <b>Period</b>                         | <b>deadline</b> | <b>Period</b>                                |
| 8/8/12            | July                                  | 11/7/12         | October                                      |
| 9/10/12           | August                                | 12/10/12        | November                                     |
| 10/8/12           | September                             | 1/9/13          | December                                     |
| <b>10/26/12</b>   | <b>RBT 3rd quarter 2012 (Digital)</b> | <b>1/28/13</b>  | <b>RBT Annual 2012 (Digital and printed)</b> |

# Organ: Annual number of transplants in Brazil between 2001 and 2011

Absolute Numbers

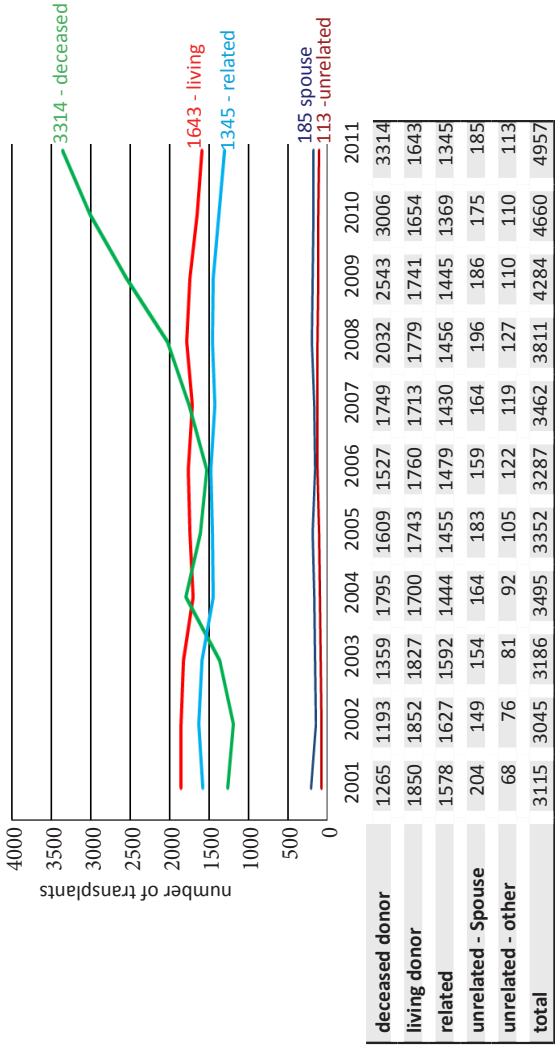


Number of transplants per million population

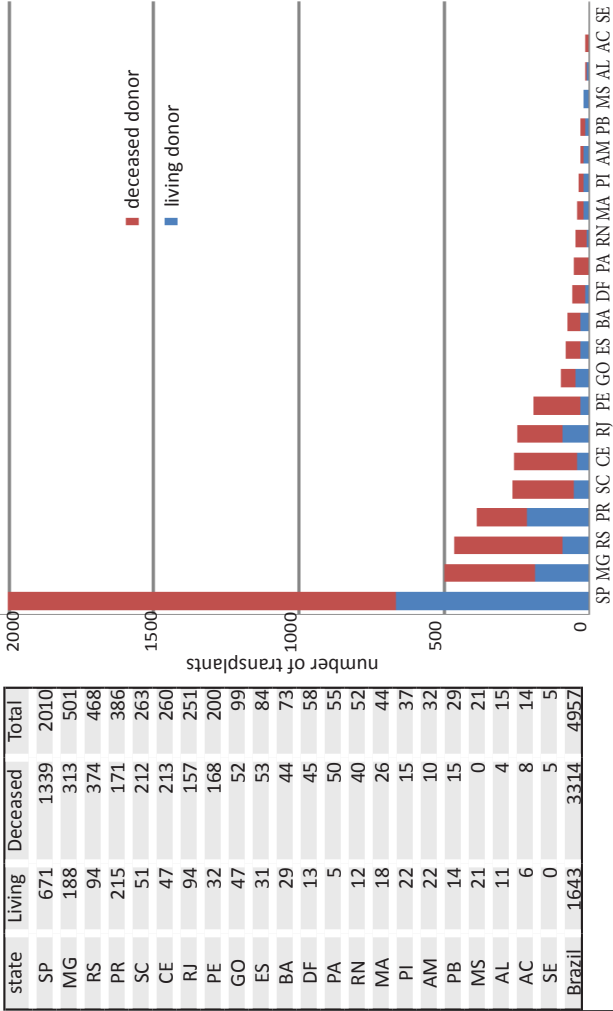


# Kidney: Annual number of transplants between 2001 and 2011

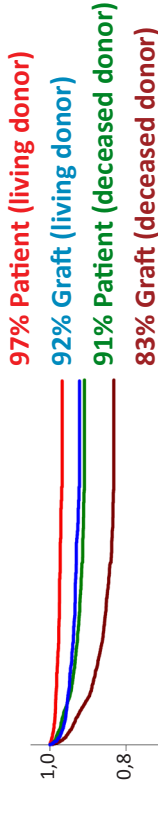
Annual Number of Transplants by donor type



Number of transplants by state during year 2011



Cumulative Survival: Registry started in 2010-01-01



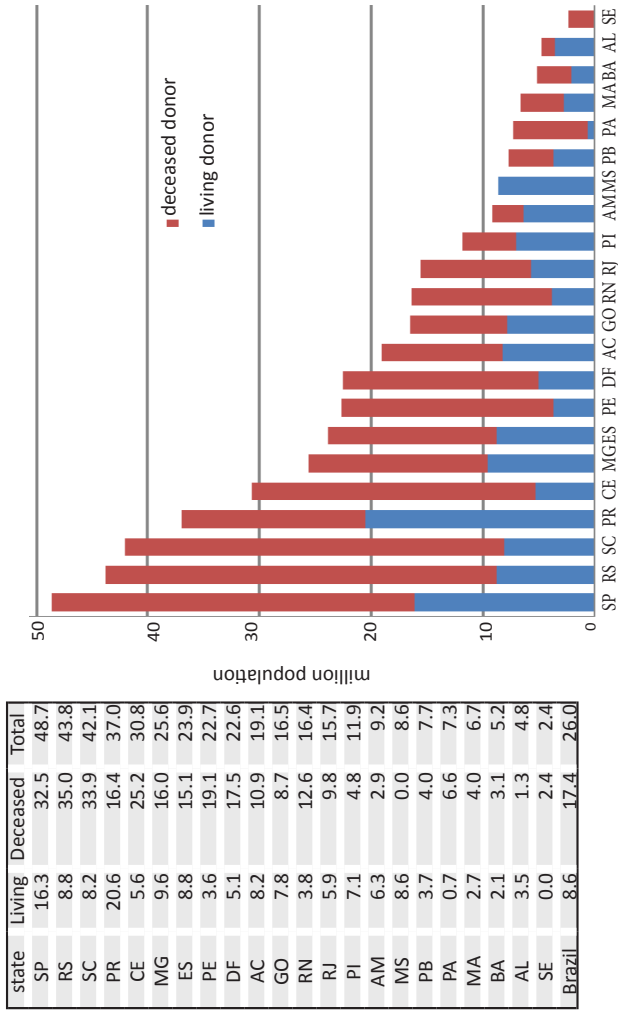
|                       | Actives | Reported 100% |
|-----------------------|---------|---------------|
| Nº of transplant Team | 147     | 82 (56%)      |
| Nº of Transplants     | 9617    | 7753 (81%)    |

Donors:  
2612 (34%) - living  
5141 (66%) - deceased

Cumulative survival include data from transplant teams that reported 100% of transplants during the period

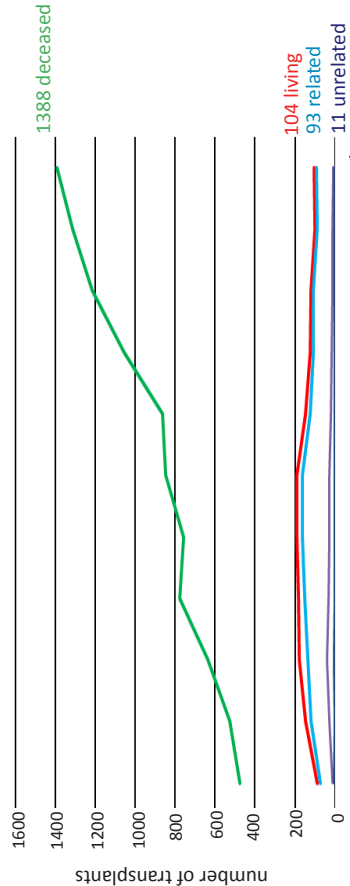


Number of transplants per million population by state during year 2011



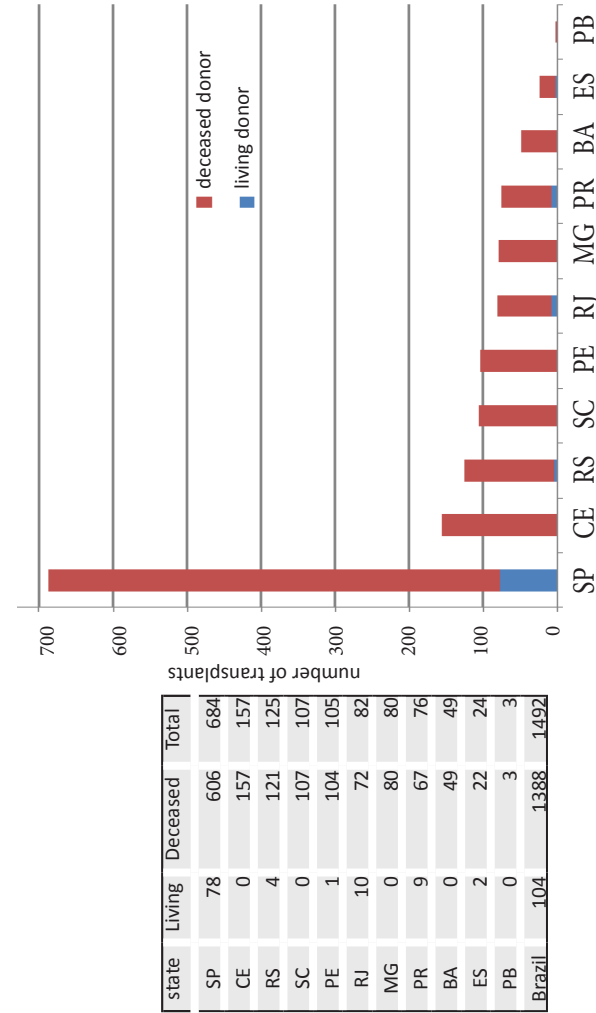
# Liver: Annual number of transplants between 2001 and 2011

Annual Number of Transplants by donor type

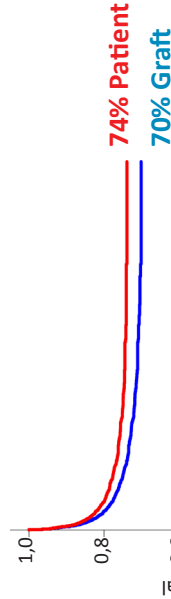


|                |     |     |     |     |     |      |      |      |      |      |      |
|----------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| deceased donor | 475 | 525 | 638 | 777 | 757 | 847  | 862  | 1055 | 1214 | 1315 | 1388 |
| living donor   | 89  | 146 | 178 | 182 | 192 | 190  | 146  | 122  | 120  | 100  | 104  |
| related        | 75  | 120 | 139 | 151 | 164 | 163  | 124  | 107  | 108  | 88   | 93   |
| unrelated      | 14  | 26  | 39  | 31  | 28  | 27   | 22   | 15   | 12   | 12   | 11   |
| Total          | 564 | 671 | 816 | 959 | 949 | 1037 | 1008 | 1177 | 1334 | 1415 | 1492 |

Number of transplants by state during year 2011



## Cumulative Survival: Registry started in 2010-01-01



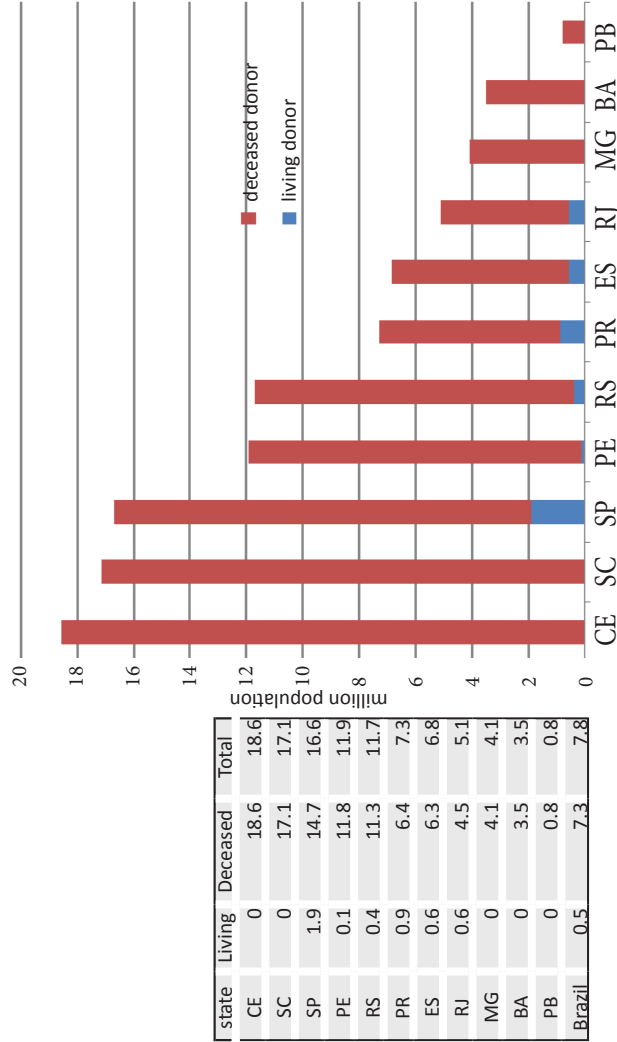
|                       |         |               |
|-----------------------|---------|---------------|
|                       | Actives | reported 100% |
| Nº of transplant team | 62      | 43 (69%)      |
| Nº of Transplants     | 2907    | 2569 (88%)    |

Donors:  
201 (8%) - living  
2368 (92%) - deceased

Cumulative survival include data from transplant teams that reported 100% of transplants during the period

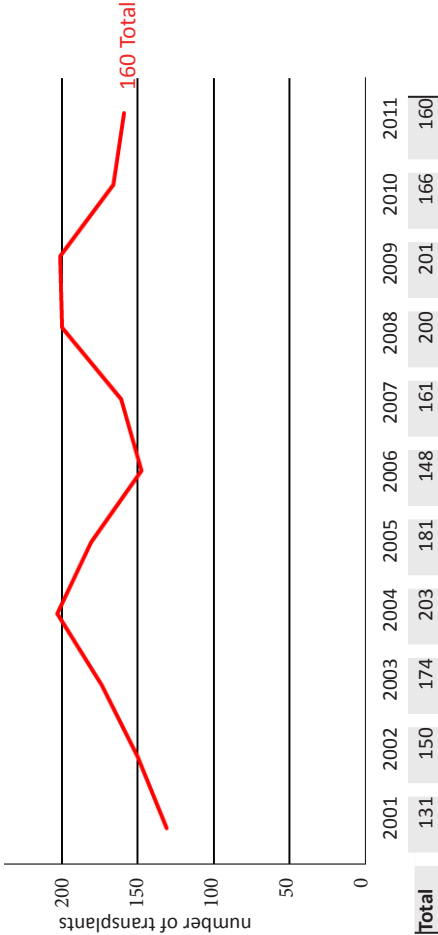


## Number of transplants per million population by state during year 2011

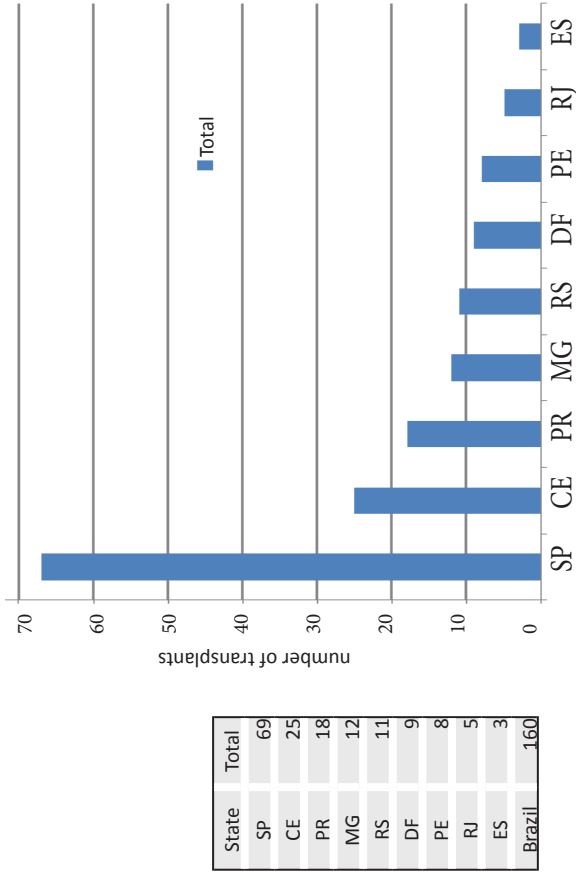


# Heart: Annual number of transplants between 2001 and 2011

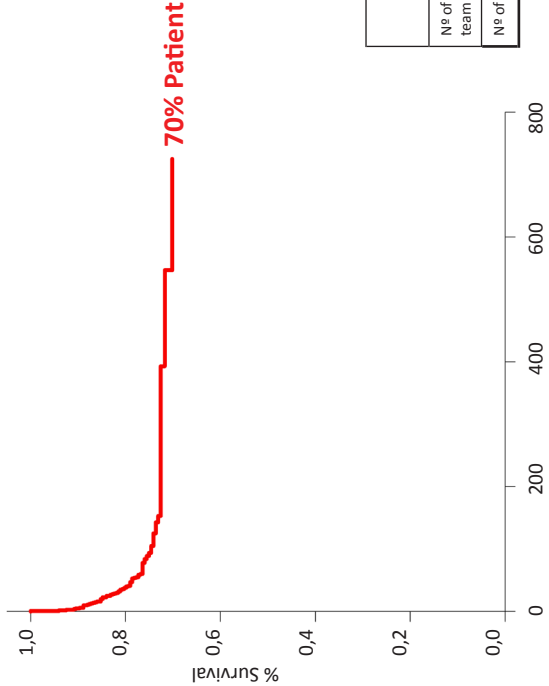
Annual Number of transplants



Number of transplants by state during year 2011



## Cumulative Survival: Registry started in 2010-01-01

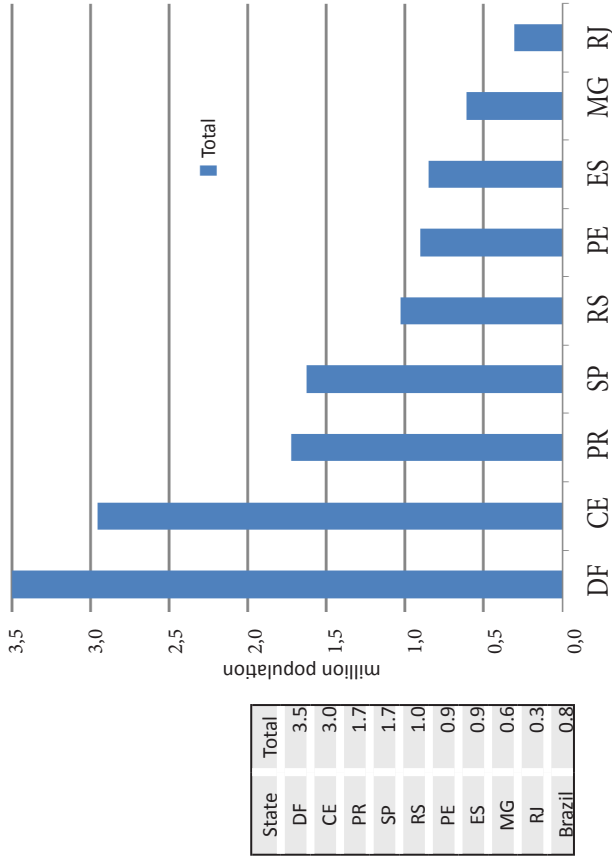


|                       | Active | Reported  |
|-----------------------|--------|-----------|
| Nº of transplant team | 30     | 17 (57%)  |
| Nº of Transplants     | 326    | 270 (83%) |

Cumulative survival include data from transplant teams that reported 100% of transplants during the period

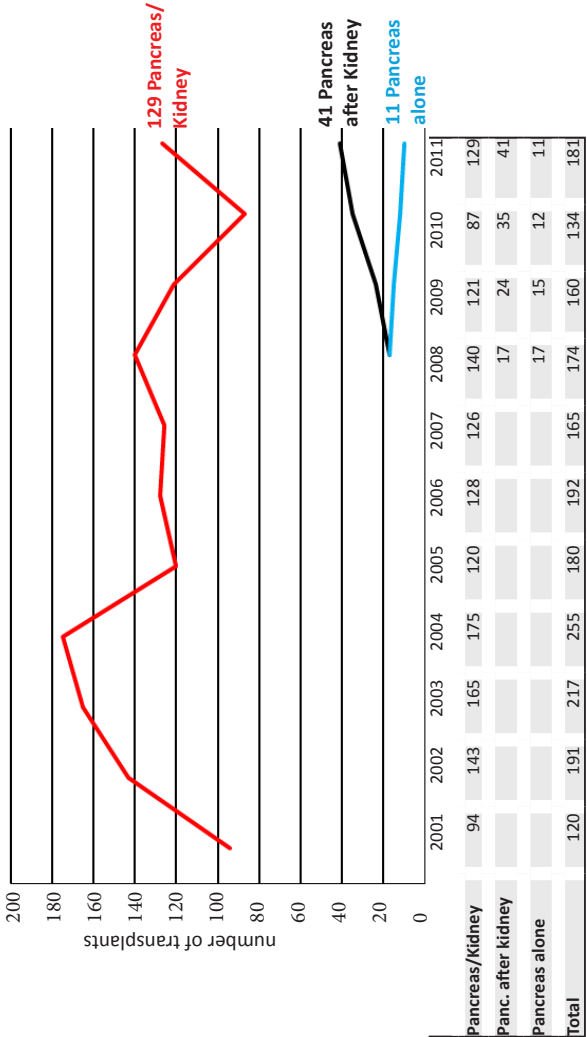


## Number of transplants per million population by state during year 2011



# Pancreas: Annual number of transplants between 2001 and 2011

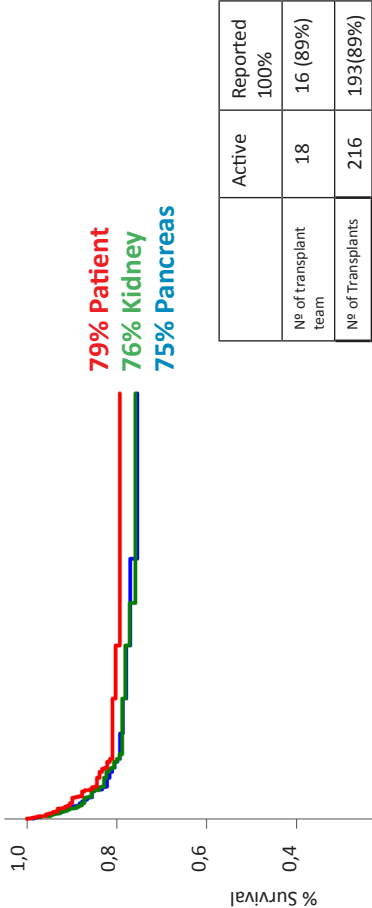
Annual Number of transplants



Miss information about 360 transplants between 2001 and 2007.

## Cumulative Survival: Registry started in 2010-01-01

### Pancreas/Kidney



Cumulative survival include data from transplant teams that reported 100% of transplants during the period

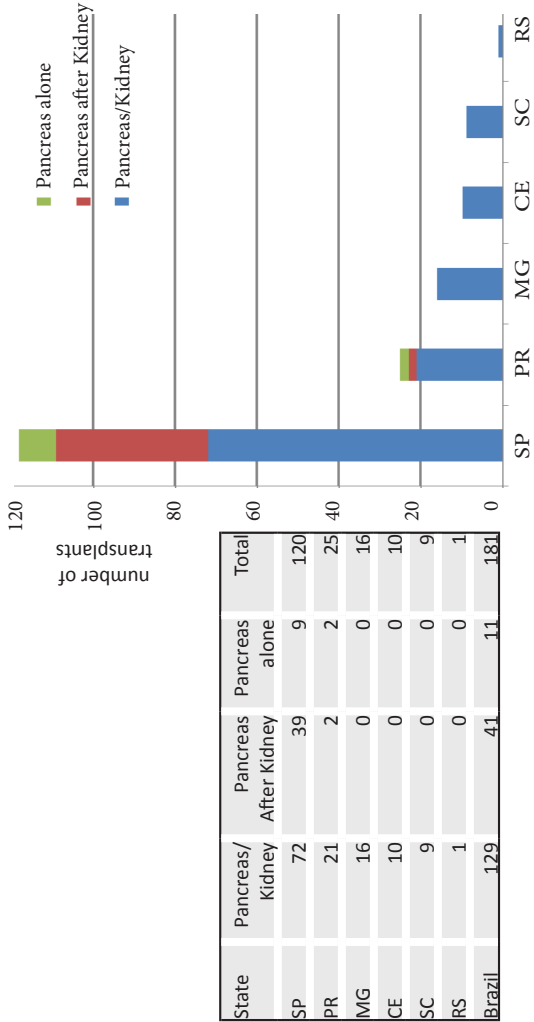
Isolated Pancreas: Patient Survival 85% Graft Survival 65% (23 transplants reported by 4 transplant teams)

Pâncreas após rim: Sobrevida Paciente 97% Sobrevida Enxerto 90% (74 transplants reported by 9 transplantteams)

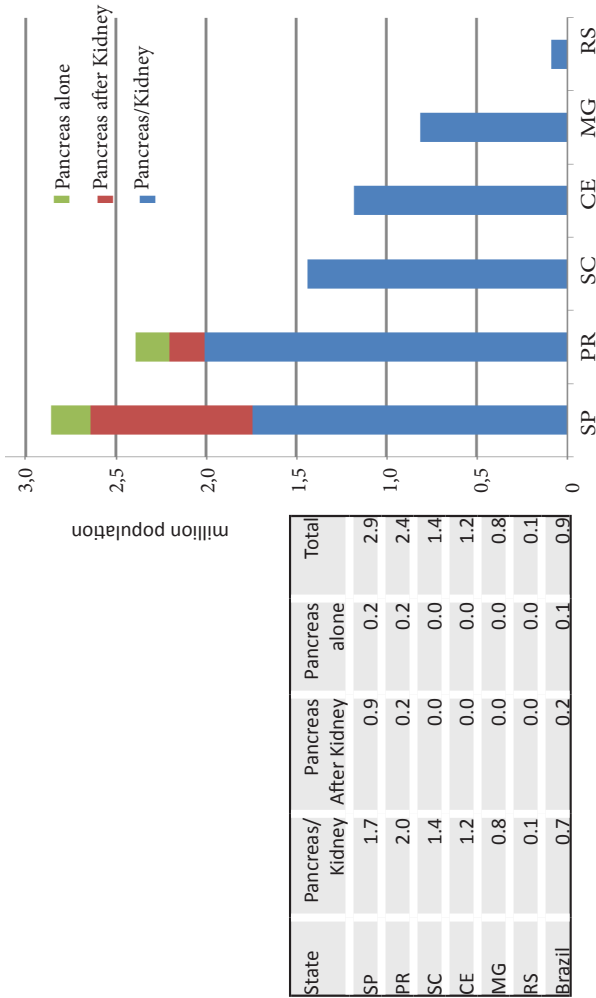
Corresponding Graphs are available at home-page [www.abto.org.br](http://www.abto.org.br)



Number of transplants by state during year 2011

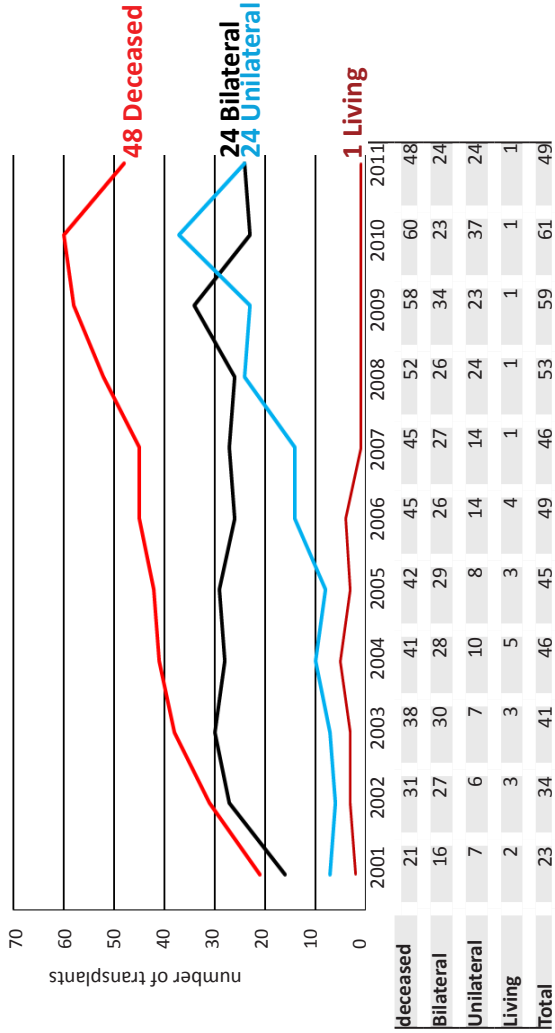


Transplants number per million population by state during year 2011

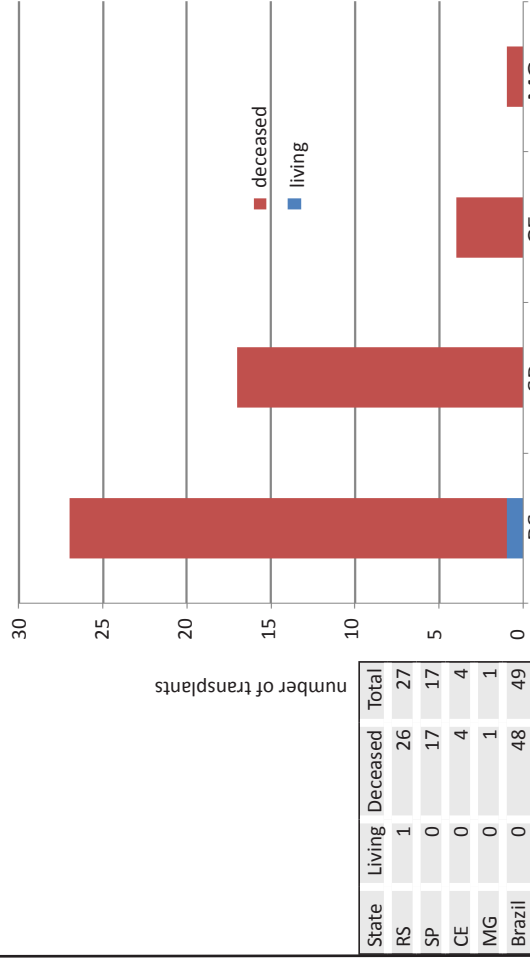


# Lung: Annual number of transplants between 2001 and 2011

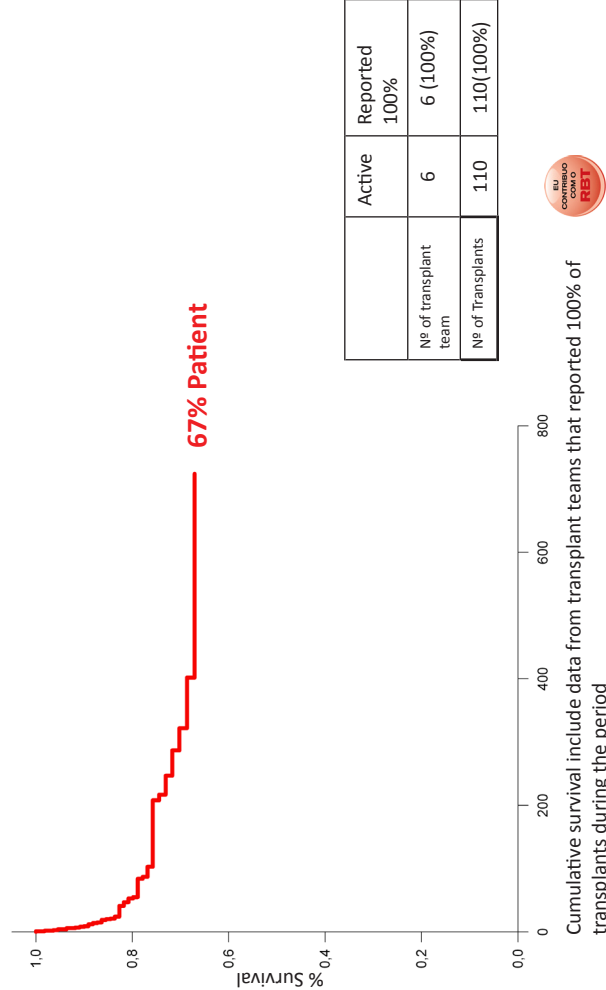
Annual Number of transplants



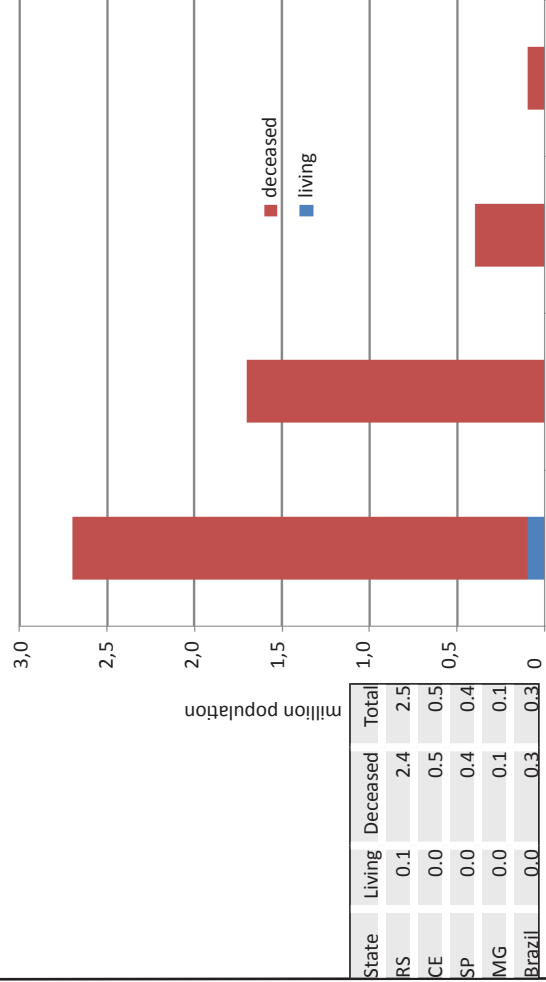
Number of transplants by state during year 2011



Cumulative Survival: Registry started in 2010-01-01

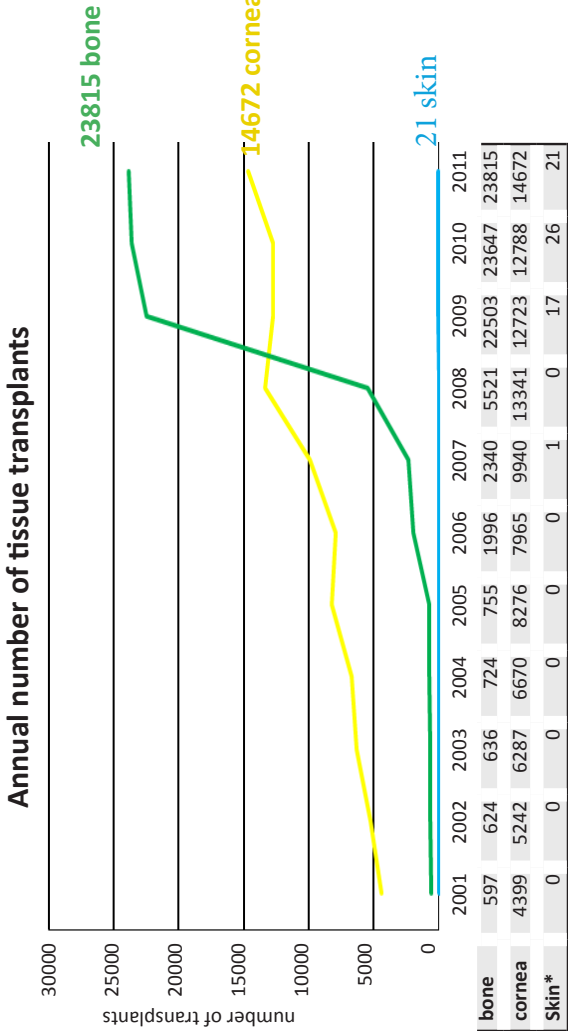
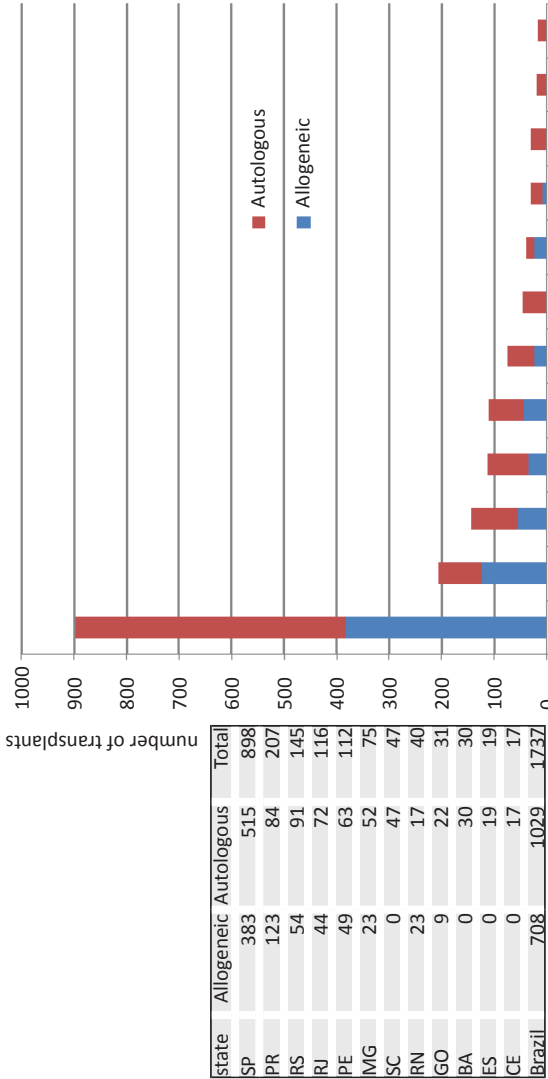


Number of transplants per million population by state during year 2011

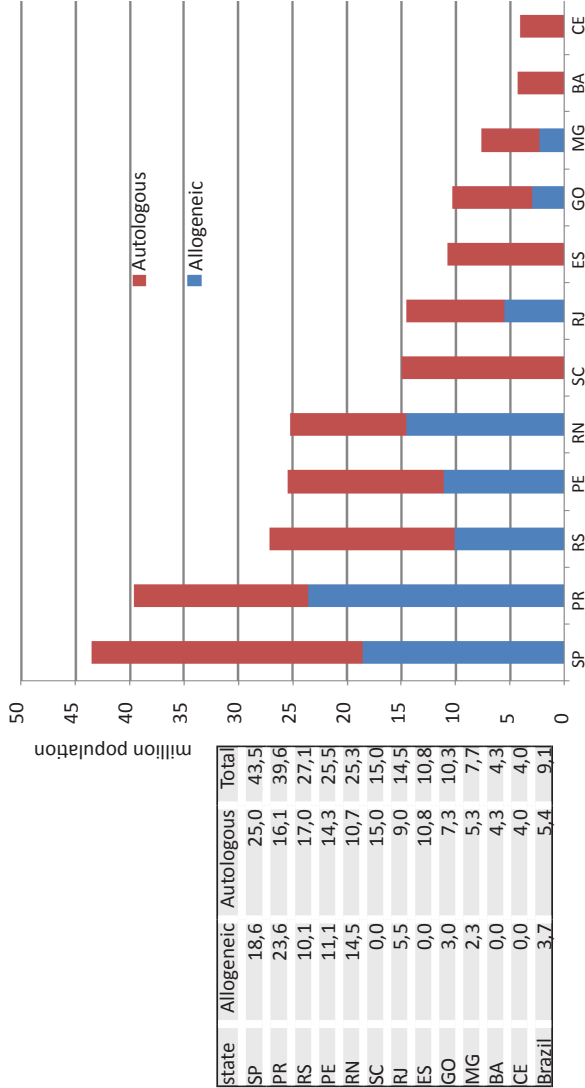


# Bone Marrow and Tissue: Annual number of transplants between 2001 and 2011

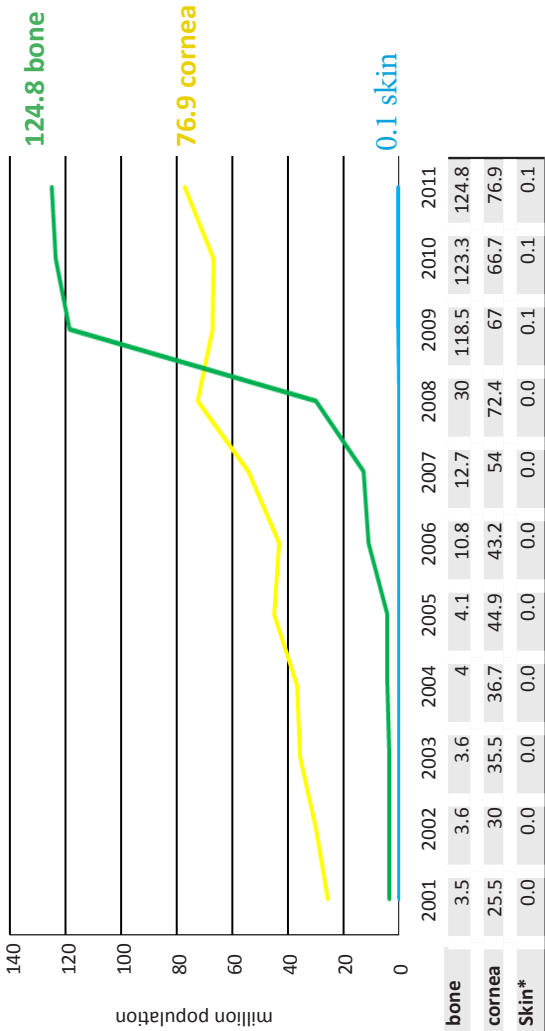
Number of Bone Marrow transplants by state during the year 2011



Number of Bone Marrow Transplants per million population by state during year 2011

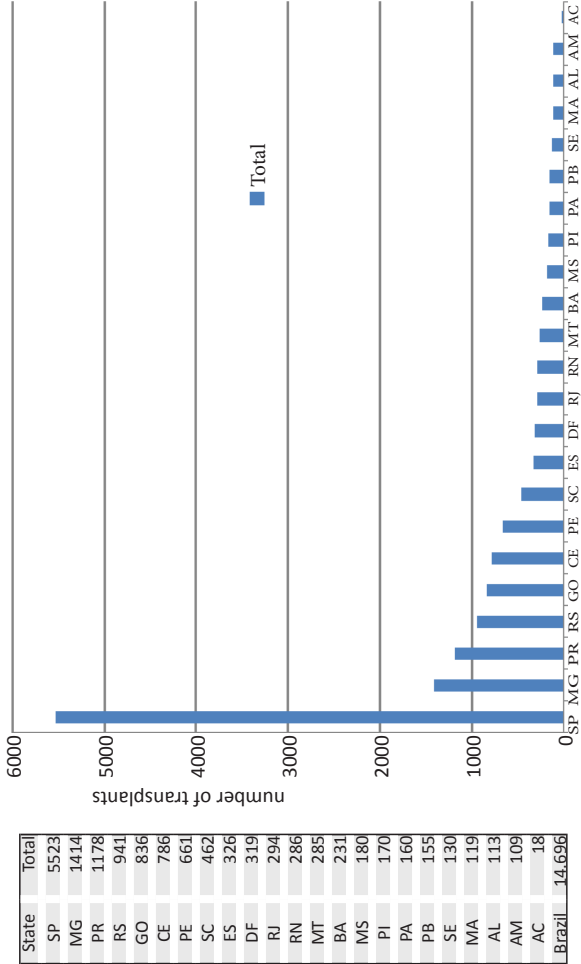


Tissue transplants per million of population

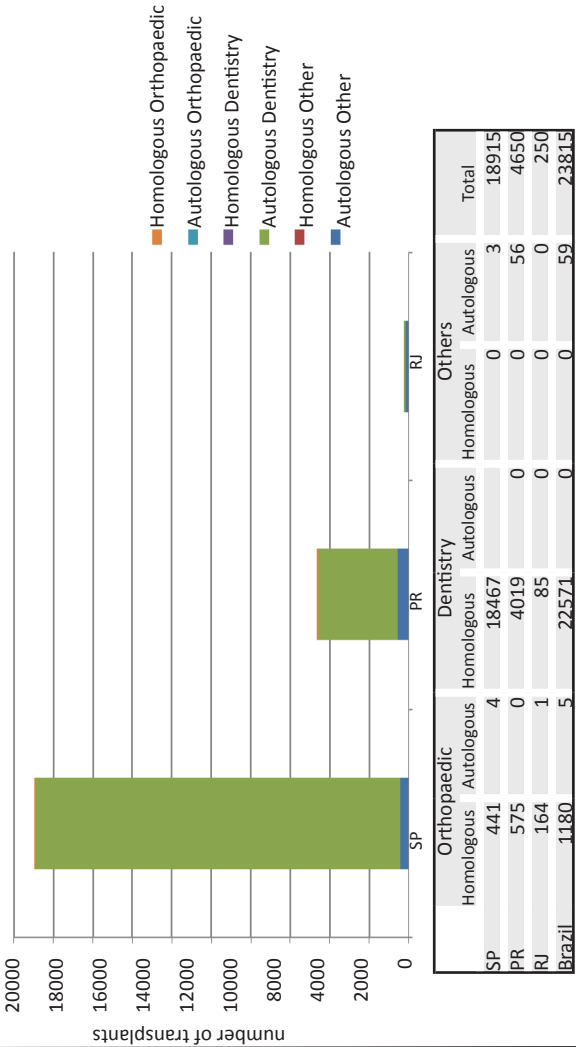


# Tissue: Annual number of transplants

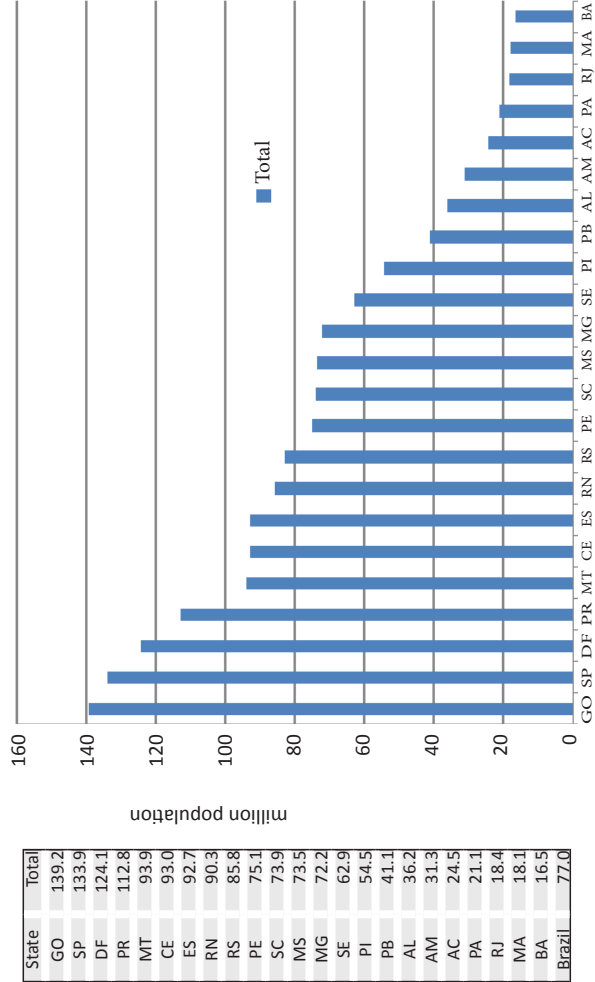
Number of corneal transplants by state during the year 2011



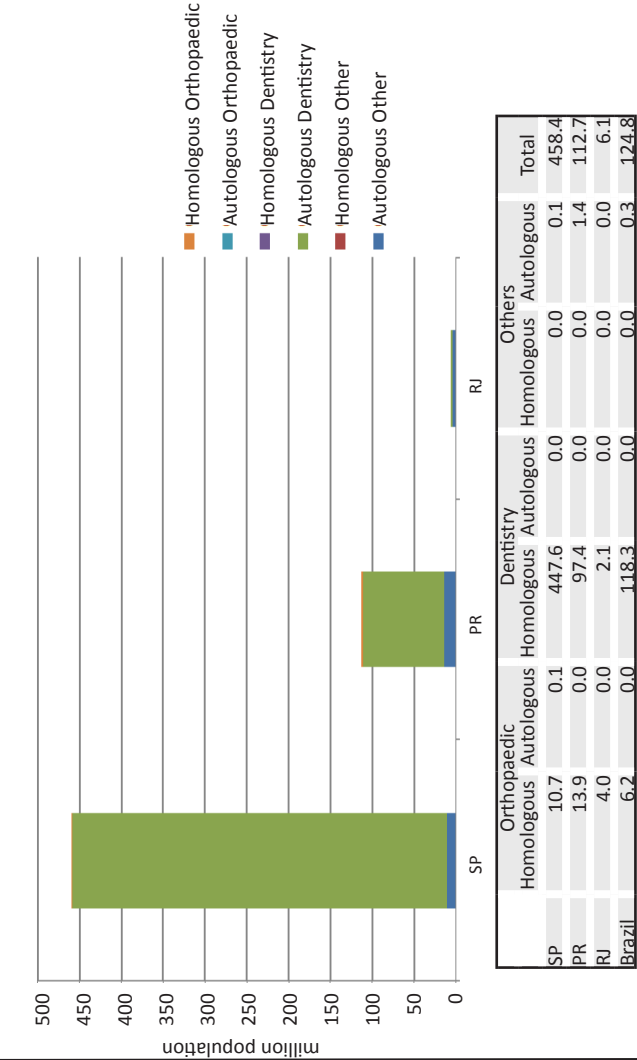
Number of bone transplants data available from five tissue bank in three states, during the year 2011



Number of corneal transplants per million of population during the year 2011



Bone Transplants per million of population data available from five tissue bank in three states, during the year 2011



## Number of Notifications of potential donors, effective donors and donors whose organs were transplanted by State during the year 2011

| State               | Notifications<br>(potential donors)<br>Nº pmp/year | Effective donors<br>Nº pmp/year | Donors whose organs<br>were transplanted<br>Nº pmp/year | Multiple Organ<br>Donors<br>Nº | %     | Refused Donor<br>Nº | %     |     |       |    |
|---------------------|----------------------------------------------------|---------------------------------|---------------------------------------------------------|--------------------------------|-------|---------------------|-------|-----|-------|----|
| Total - Brazil      | 7.238                                              | 37,9                            | 2.048                                                   | 10,7                           | 2.019 | 10,6                | 1.466 | 73  | 5.190 | 72 |
| Acre (AC)           | 11                                                 | 15,0                            | 4                                                       | 5,4                            | 4     | 5,4                 | 2     | 50  | 7     | 0  |
| Alagoas (AL)        | 12                                                 | 3,8                             | 3                                                       | 1,0                            | 3     | 1,0                 | 2     | 67  | 9     | 75 |
| Amazonas (AM)       | 21                                                 | 6,0                             | 5                                                       | 1,4                            | 5     | 1,4                 | 1     | 20  | 16    | 76 |
| Bahia (BA)          | 374                                                | 26,7                            | 69                                                      | 4,9                            | 69    | 4,9                 | 68    | 99  | 305   | 82 |
| Ceará (CE)          | 373                                                | 44,1                            | 148                                                     | 17,5                           | 140   | 16,6                | 124   | 89  | 225   | 60 |
| Distr.Federal (DF)  | 207                                                | 80,5                            | 29                                                      | 11,3                           | 28    | 10,9                | 19    | 68  | 178   | 86 |
| Espírito Santo (ES) | 153                                                | 43,5                            | 36                                                      | 10,2                           | 36    | 10,2                | 34    | 94  | 117   | 76 |
| Goiás (GO)          | 201                                                | 33,5                            | 26                                                      | 4,3                            | 25    | 4,2                 | 9     | 36  | 175   | 87 |
| Maranhão (MA)       | 92                                                 | 14,0                            | 4                                                       | 0,6                            | 4     | 0,6                 | 0     | 0   | 88    | 96 |
| Mato Grosso (MT)    | 66                                                 | 21,7                            | 6                                                       | 2,0                            | 6     | 2,0                 | 4     | 67  | 60    | 91 |
| M.Grosso Sul (MS)   | 115                                                | 47,0                            | 11                                                      | 4,5                            | 11    | 4,5                 | 7     | 64  | 104   | 90 |
| Minas Gerais (MG)   | 469                                                | 23,9                            | 193                                                     | 9,8                            | 193   | 9,8                 | 108   | 56  | 276   | 59 |
| Pará (PA)           | 117                                                | 15,4                            | 26                                                      | 3,4                            | 26    | 3,4                 | 15    | 58  | 91    | 78 |
| Paraíba (PB)        | 119                                                | 31,6                            | 9                                                       | 2,4                            | 9     | 2,4                 | 6     | 67  | 110   | 92 |
| Paraná(PR)          | 401                                                | 38,4                            | 112                                                     | 10,7                           | 112   | 10,7                | 106   | 95  | 289   | 72 |
| Pernambuco (PE)     | 359                                                | 40,8                            | 70                                                      | 8,0                            | 67    | 7,6                 | 50    | 75  | 289   | 81 |
| Piauí(PI)           | 73                                                 | 23,4                            | 7                                                       | 2,2                            | 7     | 2,2                 | 7     | 100 | 66    | 90 |
| Rio de Janeiro (RJ) | 556                                                | 34,8                            | 121                                                     | 7,6                            | 112   | 7,0                 | 61    | 55  | 435   | 78 |
| Rio G.do Norte (RN) | 143                                                | 45,1                            | 53                                                      | 16,7                           | 52    | 16,4                | 47    | 90  | 90    | 63 |
| Rio G.do Sul (RS)   | 427                                                | 38,9                            | 158                                                     | 14,4                           | 154   | 14,0                | 115   | 75  | 269   | 63 |
| Rondonia (RO)       | 26                                                 | 16,6                            | 2                                                       | 1,3                            | 2     | 1,3                 | 2     | 0   | 24    | 92 |
| Sta.Catarina (SC)   | 384                                                | 61,5                            | 159                                                     | 25,4                           | 157   | 25,1                | 118   | 75  | 225   | 59 |
| São Paulo (SP)      | 2.495                                              | 60,5                            | 793                                                     | 19,2                           | 793   | 19,2                | 560   | 71  | 1.702 | 68 |
| Sergipe (SE)        | 44                                                 | 21,3                            | 4                                                       | 1,9                            | 4     | 1,9                 | 1     | 0   | 40    | 91 |

# Causes of non-fulfillment of organ donation of notified potential donors during the year 2011

| State                 | Potential Donors | Family Interview |              | M.C.       |           | C.A.         |           | B.D.N.C.   |          | I.I.      |          | others     |           |
|-----------------------|------------------|------------------|--------------|------------|-----------|--------------|-----------|------------|----------|-----------|----------|------------|-----------|
|                       | Nº               | accomplished     | nonconsent   | Nº         | %         | Nº           | %         | Nº         | %        | Nº        | %        | Nº         | %         |
| <b>Total - Brazil</b> | <b>7.238</b>     | <b>1.915</b>     | <b>1.937</b> | <b>832</b> | <b>11</b> | <b>1.205</b> | <b>17</b> | <b>464</b> | <b>6</b> | <b>34</b> | <b>0</b> | <b>718</b> | <b>10</b> |
| Acre (AC)             | 11               | 7                | 3            | 43         | 1         | 0            | 0         | 3          | 0        | 0         | 0        | 0          | 0         |
| Alagoas (AL)          | 12               | X                | 0            |            | 1         | 8            | 0         | 5          | 42       | 1         | 8        | 2          | 17        |
| Amazonas (AM)         | 21               | 16               | 9            | 56         | 2         | 10           | 2         | 3          | 14       | 0         | 0        | 0          | 0         |
| Bahia (BA)            | 374              | 205              | 132          | 64         | 32        | 9            | 8         | 2          | 129      | 34        | 1        | 0          | 3         |
| Ceará (CE)            | 373              | 257              | 102          | 40         | 31        | 8            | 87        | 23         | 4        | 1         | 0        | 1          | 0         |
| Distr.Federal (DF)    | 207              | X                | 29           |            | 90        | 44           | 9         | 4          | 42       | 20        | 0        | 8          | 4         |
| Espírito Santo (ES)   | 153              | 99               | 47           | 48         | 20        | 13           | 14        | 9          | 27       | 18        | 5        | 3          | 4         |
| Goiás (GO)            | 201              | 66               | 41           | 62         | 30        | 15           | 97        | 48         | 0        | 0         | 4        | 2          | 3         |
| Maranhão (MA)         | 92               | 38               | 33           | 87         | 13        | 14           | 2         | 2          | 38       | 41        | 0        | 0          | 2         |
| Mato Grosso (MT)      | 66               | 44               | 11           | 25         | 6         | 9            | 37        | 56         | 3        | 5         | 0        | 0          | 3         |
| M.Grosso Sul (MS)     | 115              | X                | 19           |            | 66        | 57           | 14        | 12         | 3        | 3         | 0        | 0          | 2         |
| Minas Gerais (MG)     | 469              | X                | 89           |            | 75        | 16           | 73        | 16         | 20       | 4         | 0        | 0          | 19        |
| Pará (PA)             | 117              | X                | 51           |            | 20        | 17           | 15        | 13         | 2        | 2         | 0        | 0          | 3         |
| Paraíba (PB)          | 119              | 52               | 25           | 48         | 31        | 26           | 16        | 13         | 32       | 27        | 1        | 1          | 5         |
| Paraná (PR)           | 401              | 268              | 122          | 46         | 52        | 13           | 59        | 15         | 0        | 0         | 22       | 5          | 34        |
| Pernambuco (PE)       | 359              | 160              | 86           | 54         | 61        | 17           | 29        | 8          | 101      | 28        | 0        | 0          | 12        |
| Piauí (PI)            | 73               | X                | 13           |            | 25        | 34           | 17        | 23         | 0        | 0         | 0        | 0          | 11        |
| Rio de Janeiro (RJ)   | 556              | 275              | 153          | 56         | 72        | 13           | 174       | 31         | 27       | 5         | 0        | 0          | 9         |
| Rio G.do Norte (RN)   | 143              | 133              | 53           | 40         | 7         | 5            | 20        | 14         | 5        | 3         | 0        | 0          | 5         |
| Rio G.do Sul (RS)     | 427              | X                | 133          |            | 36        | 8            | 94        | 22         | 2        | 1         | 0        | 0          | 4         |
| Rondonia (RO)         | 26               | 7                | 3            | 43         | 0         | 0            | 2         | 8          | 10       | 39        | 0        | 0          | 9         |
| Sta.Catarina (SC)     | 384              | 264              | 94           | 36         | 74        | 19           | 53        | 14         | 1        | 0         | 0        | 0          | 3         |
| São Paulo (SP)        | 2.495            | X                | 674          |            | 80        | 3            | 374       | 15         | 0        | 0         | 0        | 0          | 574       |
| Sergipe (SE)          | 44               | 24               | 15           | 63         | 7         | 16           | 9         | 20         | 7        | 16        | 0        | 0          | 2         |

M.C - Medical Contraindication;

C.A - Cardiopulmonary Arrest;

B.D.N.C - Brain Death Not Confirmed;

I.I - Inadequate infrastructure

X - no Information

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

| State                 | Gender      |            | Cause of death |            |            | Age       |           |            |            |            |            | Blood group |           |            |            |
|-----------------------|-------------|------------|----------------|------------|------------|-----------|-----------|------------|------------|------------|------------|-------------|-----------|------------|------------|
|                       | Masc        | Fem        | CET            | CVA        | Outros     | 0-5       | 6-11      | 12-17      | 18-40      | 41-60      | +60        | A           | AB        | B          | O          |
| <b>TOTAL - Brazil</b> | <b>1261</b> | <b>839</b> | <b>846</b>     | <b>944</b> | <b>265</b> | <b>40</b> | <b>39</b> | <b>117</b> | <b>769</b> | <b>870</b> | <b>265</b> | <b>676</b>  | <b>78</b> | <b>215</b> | <b>923</b> |
| <b>Percentual</b>     | <b>60%</b>  | <b>40%</b> | <b>41%</b>     | <b>46%</b> | <b>13%</b> | <b>2%</b> | <b>2%</b> | <b>6%</b>  | <b>37%</b> | <b>41%</b> | <b>13%</b> | <b>36%</b>  | <b>4%</b> | <b>11%</b> | <b>49%</b> |
| Acre                  | 2           | 2          | 2              | 1          | 1          | 0         | 0         | 1          | 3          | 0          | 0          | 0           | 1         | 0          | 3          |
| Alagoas               | 1           | 2          | 1              | 2          | 0          | 2         | 0         | 0          | 0          | 0          | 1          | 2           | 0         | 1          | 0          |
| Amazonas              | 4           | 1          | 3              | 2          | 0          | 0         | 0         | 1          | 4          | 0          | 0          | 3           | 0         | 0          | 2          |
| Bahia                 | 47          | 22         | 33             | 28         | 8          | 0         | 0         | 3          | 30         | 30         | 6          | 21          | 1         | 6          | 41         |
| Ceará                 | 96          | 52         | 77             | 68         | 3          | 0         | 2         | 12         | 66         | 45         | 23         | 55          | 5         | 17         | 71         |
| Distr. Federal        | 16          | 13         | 12             | 7          | 10         | 1         | 3         | 5          | 14         | 4          | 2          | 11          | 1         | 5          | 12         |
| Espírito Santo        | 22          | 15         | 14             | 13         | 10         | 3         | 3         | 4          | 9          | 14         | 4          | 13          | 0         | 0          | 22         |
| Goiás ***             | 18          | 7          | 14             | 11         | 0          | 0         | 1         | 4          | 11         | 9          | 0          | 5           | 0         | 3          | 17         |
| Maranhão              | 3           | 1          | 2              | 2          | 0          | 0         | 0         | 0          | 1          | 2          | 1          | 2           | 0         | 0          | 2          |
| Mato Grosso           | 3           | 3          | 5              | 1          | 0          | 1         | 1         | 2          | 1          | 0          | 1          | 2           | 1         | 0          | 3          |
| M Grosso Sul          | 6           | 5          | 6              | 5          | 0          | 0         | 0         | 0          | 4          | 7          | 0          | 6           | 0         | 2          | 3          |
| Minas Gerais          | 98          | 95         | 80             | 89         | 24         | 2         | 2         | 5          | 80         | 87         | 17         | 63          | 10        | 22         | 98         |
| Pará                  | 20          | 6          | 15             | 10         | 1          | 0         | 1         | 4          | 11         | 10         | 0          | 6           | 1         | 2          | 17         |
| Paraíba               | 7           | 2          | 6              | 2          | 1          | 0         | 0         | 2          | 4          | 2          | 1          | 3           | 0         | 0          | 6          |
| Paraná                | 76          | 36         | 65             | 26         | 21         | 0         | 0         | 6          | 54         | 46         | 6          | 43          | 7         | 10         | 52         |
| Pernambuco            | 45          | 25         | 29             | 24         | 17         | 2         | 2         | 4          | 33         | 25         | 4          | 26          | 5         | 9          | 30         |
| Piauí                 | 4           | 3          | 5              | 2          | 0          | 0         | 1         | 0          | 4          | 2          | 0          | 2           | 0         | 0          | 5          |
| Rio de Janeiro        | 71          | 50         | 36             | 47         | 38         | 2         | 0         | 4          | 35         | 67         | 13         | 43          | 2         | 20         | 56         |
| Rio G do Norte        | 32          | 21         | 19             | 28         | 6          | 1         | 0         | 0          | 19         | 22         | 11         | 12          | 2         | 12         | 27         |
| Rondonia              | 1           | 1          | 1              | 1          | 0          | 0         | 0         | 0          | 1          | 1          | 0          | 0           | 0         | 0          | 2          |
| Rio G do Sul**        | 91          | 67         | 38             | 61         | 14         | 4         | 3         | 7          | 45         | 78         | 21         | 75          | 3         | 12         | 68         |
| Santa Catarina        | 105         | 54         | 70             | 78         | 11         | 6         | 2         | 6          | 59         | 72         | 14         | 70          | 9         | 9          | 71         |
| São Paulo *           | 490         | 355        | 311            | 435        | 99         | 16        | 18        | 46         | 279        | 346        | 140        | 212         | 30        | 85         | 312        |
| Sergipe               | 3           | 1          | 2              | 1          | 1          | 0         | 0         | 1          | 2          | 1          | 0          | 1           | 0         | 0          | 3          |

\* Did not send the information about the blood group of the 1st quarter  
\*\* Did not send the complete information of the kind of death of the third quarter  
\*\*\* Sent the profile only with transplanted organ donor(s)  
Note Sao Paulo accounts for 52 donors sent from other states in the donor profile

CET - Cranioencephalic trauma  
CVA - Cerebrovascular accident

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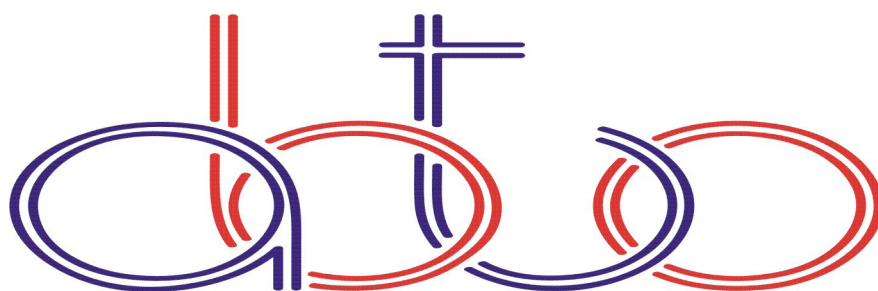
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