

# **CHAPTER 13**

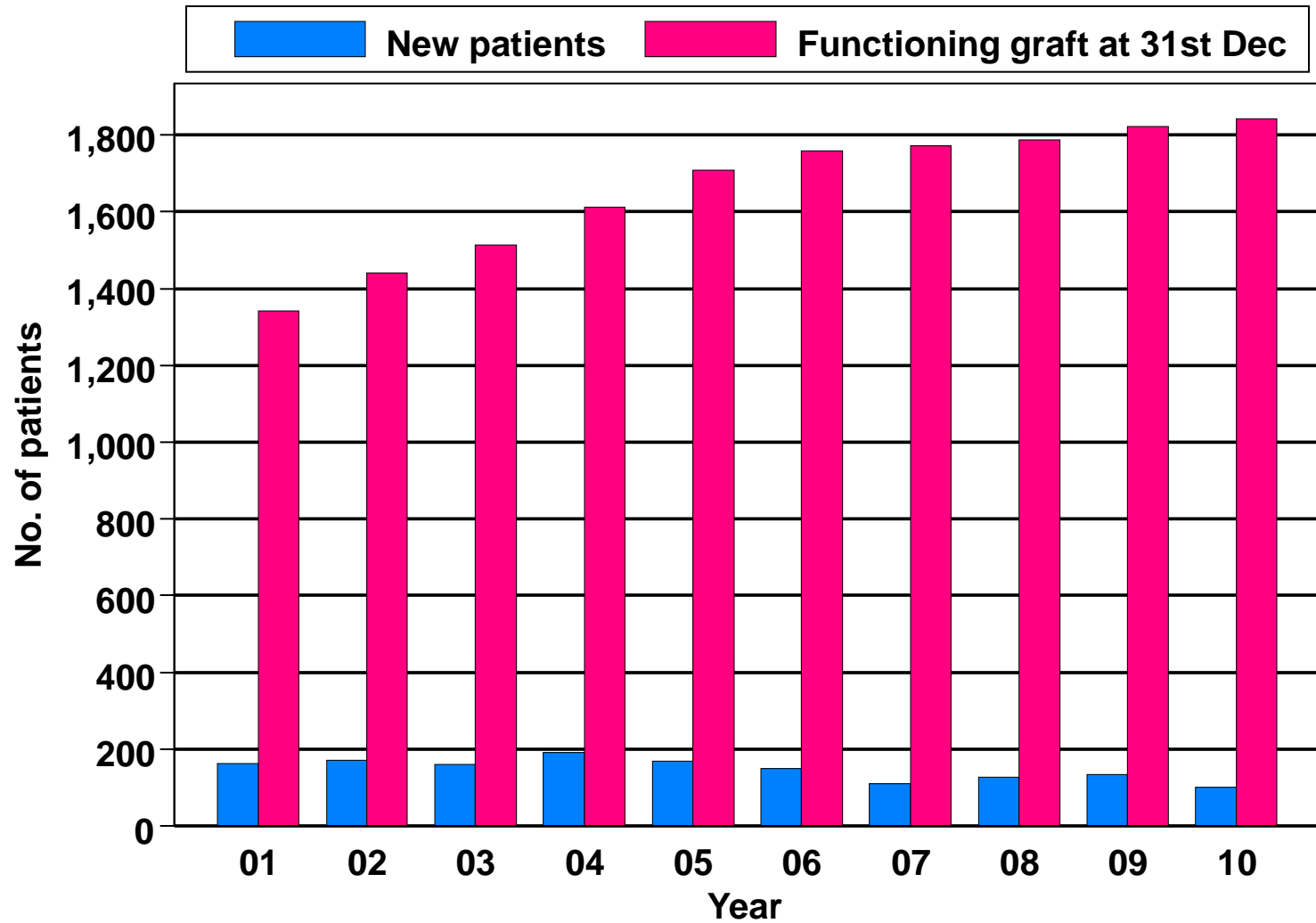
## **Renal Transplantation**

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**Table 13.1.1: Stock and Flow of Renal Transplantation, 2001-2010**

<b>Year</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>New transplant patients</b>	<b>163</b>	<b>172</b>	<b>160</b>	<b>192</b>	<b>170</b>	<b>149</b>	<b>111</b>	<b>128</b>	<b>135</b>	<b>102</b>
<b>Died</b>	<b>40</b>	<b>38</b>	<b>42</b>	<b>44</b>	<b>47</b>	<b>58</b>	<b>46</b>	<b>60</b>	<b>49</b>	<b>33</b>
<b>Graft failure</b>	<b>39</b>	<b>33</b>	<b>41</b>	<b>43</b>	<b>21</b>	<b>36</b>	<b>36</b>	<b>39</b>	<b>35</b>	<b>45</b>
<b>Lost to Follow up</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>4</b>	<b>16</b>	<b>14</b>	<b>16</b>	<b>4</b>
<b>Functioning graft at 31<sup>st</sup> December</b>	<b>1343</b>	<b>1440</b>	<b>1513</b>	<b>1612</b>	<b>1708</b>	<b>1759</b>	<b>1772</b>	<b>1787</b>	<b>1822</b>	<b>1841</b>

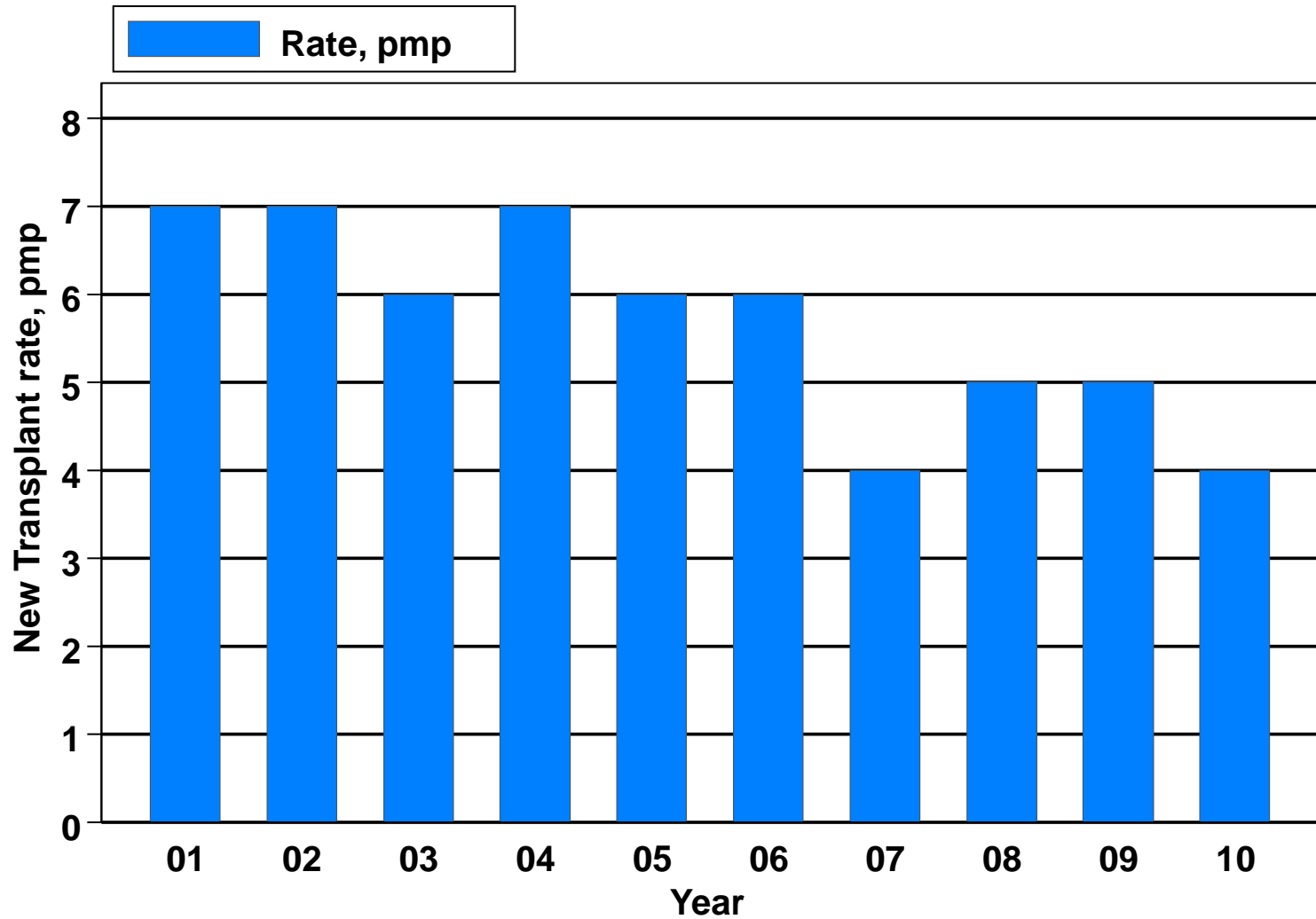
**Figure 13.1.1: Stock and Flow of Renal Transplantation, 2001-2010**



**Table 13.1.2: New transplant rate per million population (pmp), 2001-2010**

<b>Year</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>New transplant patients</b>	<b>163</b>	<b>172</b>	<b>160</b>	<b>192</b>	<b>170</b>	<b>149</b>	<b>111</b>	<b>128</b>	<b>135</b>	<b>102</b>
<b>New transplant rate, pmp</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>4</b>

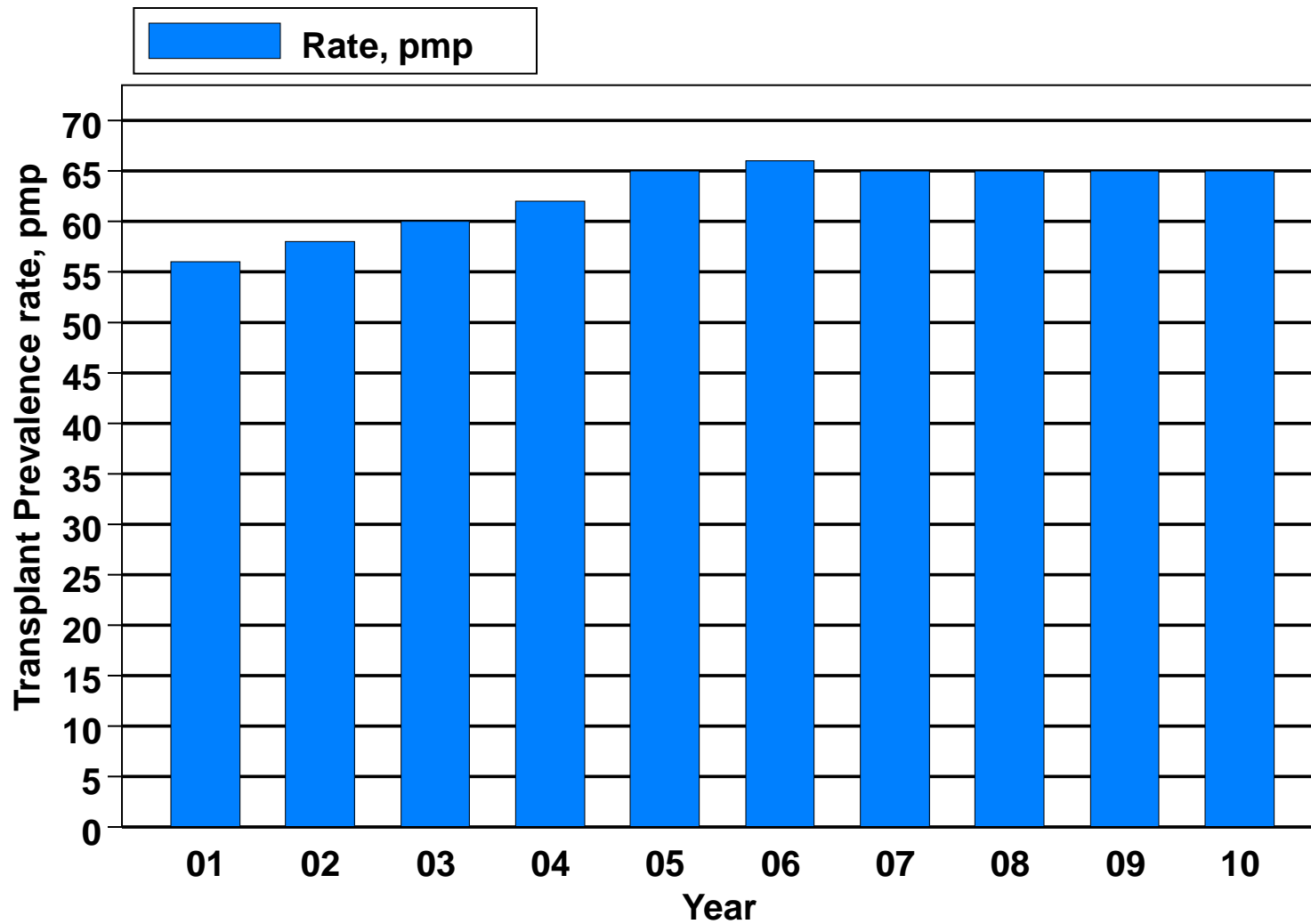
**Figure 13.1.2: New transplant rate, 2001-2010**



**Table 13.1.3: Transplant prevalence rate per million population (pmp),  
2001-2010**

<b>Year</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Functioning graft at 31<sup>st</sup> December</b>	<b>1343</b>	<b>1440</b>	<b>1513</b>	<b>1612</b>	<b>1708</b>	<b>1759</b>	<b>1772</b>	<b>1787</b>	<b>1822</b>	<b>1841</b>
<b>Transplant prevalence rate, pmp</b>	<b>56</b>	<b>58</b>	<b>60</b>	<b>62</b>	<b>65</b>	<b>66</b>	<b>65</b>	<b>65</b>	<b>65</b>	<b>65</b>

**Figure 13.1.3: Transplant prevalence rate, 2001-2010**



### Table 13.1.4: Place of transplantation, 2001-2010

Year	2001		2002		2003		2004		2005	
	n	%	n	%	n	%	n	%	n	%
HKL	33	20	30	17	26	16	20	10	31	18
UMMC	23	14	15	9	6	4	7	4	8	5
Selayang Hospital	11	7	11	6	11	7	11	6	5	3
Other local	4	3	1	1	1	1	2	1	4	2
China	83	51	103	60	111	69	139	72	110	65
India	8	5	12	7	4	3	11	6	7	4
Other overseas	1	1	0	0	1	1	2	1	4	2
Unknown	0	0	0	0	0	0	0	0	1	1
<b>Total</b>	<b>163</b>	<b>100</b>	<b>172</b>	<b>100</b>	<b>160</b>	<b>100</b>	<b>192</b>	<b>100</b>	<b>170</b>	<b>100</b>

Year	2006		2007		2008		2009		2010		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
HKL	35	24	36	32	32	25	36	27	25	25	304	21
UMMC	5	3	3	3	10	8	10	7	4	4	91	6
Selayang Hospital	9	6	14	13	10	8	19	14	18	18	119	8
Other local	2	1	4	4	8	6	10	7	8	8	44	3
China	87	58	45	41	63	49	58	43	35	34	834	56
India	7	5	3	3	3	2	1	1	1	1	57	4
Other overseas	4	3	5	5	2	2	1	1	3	3	23	2
Unknown	0	0	1	1	0	0	0	0	8	8	10	1
<b>TOTAL</b>	<b>149</b>	<b>100</b>	<b>111</b>	<b>100</b>	<b>128</b>	<b>100</b>	<b>135</b>	<b>100</b>	<b>102</b>	<b>100</b>	<b>1482</b>	<b>100</b>



**Table 13.2.1: Renal Transplant Recipients' Characteristics, 2001-2010**

<b>Year</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>New Transplant Patients</b>	<b>163</b>	<b>172</b>	<b>160</b>	<b>192</b>	<b>170</b>	<b>149</b>	<b>111</b>	<b>128</b>	<b>135</b>	<b>102</b>
<b>Age at transplant (years), Mean</b>	<b>41</b>	<b>40</b>	<b>41</b>	<b>42</b>	<b>38</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>38</b>	<b>40</b>
<b>Age at transplant (years), SD</b>	<b>13</b>	<b>12</b>	<b>13</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>15</b>	<b>14</b>	<b>14</b>
<b>% Male</b>	<b>63</b>	<b>58</b>	<b>66</b>	<b>63</b>	<b>69</b>	<b>66</b>	<b>64</b>	<b>59</b>	<b>64</b>	<b>63</b>
<b>% Diabetic (co-morbid/primary renal disease)</b>	<b>18</b>	<b>15</b>	<b>23</b>	<b>21</b>	<b>21</b>	<b>20</b>	<b>14</b>	<b>19</b>	<b>17</b>	<b>12</b>
<b>% HBsAg positive</b>	<b>5</b>	<b>7</b>	<b>8</b>	<b>5</b>	<b>4</b>	<b>7</b>	<b>7</b>	<b>3</b>	<b>2</b>	<b>2</b>
<b>% Anti-HCV positive</b>	<b>15</b>	<b>9</b>	<b>10</b>	<b>8</b>	<b>2</b>	<b>8</b>	<b>9</b>	<b>3</b>	<b>7</b>	<b>2</b>

**Table 13.2.2: Primary causes of end stage renal failure, 2001-2010**

Year	2001		2002		2003		2004		2005	
	n	%	n	%	n	%	n	%	n	%
New transplant patients	163	100	172	100	160	100	192	100	170	100
Glomerulonephritis	44	27	54	31	55	34	64	33	47	28
Diabetes Mellitus	23	14	16	9	27	17	32	17	31	18
Hypertension	17	10	24	14	26	16	52	27	42	25
Obstructive uropathy	3	2	2	1	3	2	4	2	3	2
ADPKD	1	1	3	2	5	3	5	3	3	2
Drugs/ toxic nephropathy	0	0	0	0	2	1	2	1	0	0
Hereditary nephritis	0	0	0	0	0	0	1	1	0	0
Unknown	61	37	71	41	57	36	82	43	57	34
Others	23	14	15	9	12	8	28	15	14	8

Year	2006		2007		2008		2009		2010	
	n	%	n	%	n	%	n	%	n	%
New transplant patients	149	100	111	100	128	100	135	100	102	100
Glomerulonephritis	53	36	31	28	33	26	40	30	38	37
Diabetes Mellitus	22	15	10	9	19	15	21	16	12	12
Hypertension	32	21	27	24	22	17	28	21	24	24
Obstructive uropathy	6	4	1	1	2	2	4	3	3	3
ADPKD	1	1	2	2	0	0	7	5	2	2
Drugs/ toxic nephropathy	1	1	0	0	2	2	0	0	0	0
Hereditary nephritis	0	0	0	0	0	0	0	0	1	1
Unknown	48	32	42	38	55	43	51	38	35	34
Others	16	11	14	13	12	9	3	2	6	6

**Table 13.3.1: Type of Renal Transplantation, 2001-2010**

Year	2001		2002		2003		2004		2005	
	n	%	n	%	n	%	n	%	n	%
Commercial cadaver	83	51	103	60	112	70	145	76	107	64
Commercial live donor	7	4	11	6	3	2	6	3	9	5
Live donor (genetically related)	31	19	32	19	24	15	21	11	36	22
Live donor (emotionally related)	5	3	4	2	6	4	2	1	4	2
Cadaver	37	23	22	13	15	9	17	9	10	6
<b>Total</b>	<b>163</b>	<b>100</b>	<b>172</b>	<b>100</b>	<b>160</b>	<b>100</b>	<b>191</b>	<b>100</b>	<b>166</b>	<b>100</b>

Year	2006		2007		2008		2009		2010	
	n	%	n	%	n	%	n	%	n	%
Commercial cadaver	85	58	45	41	60	48	33	26	8	10
Commercial live donor	8	5	4	4	2	2	20	16	20	24
Live donor (genetically related)	24	16	21	19	34	27	26	20	18	21
Live donor (emotionally related)	4	3	13	12	6	5	15	12	7	8
Cadaver	26	18	27	25	23	18	35	27	31	37
<b>Total</b>	<b>147</b>	<b>100</b>	<b>110</b>	<b>100</b>	<b>125</b>	<b>100</b>	<b>129</b>	<b>100</b>	<b>84</b>	<b>100</b>

# Table 13.3.2: Biochemical data, 2006-2010

Biochemical parameter	Summary	2006	2007	2008	2009	2010
Creatinine, umol/L	n	1592	1688	1698	1695	1792
	Mean	135.7	131.8	131.9	128.1	131.1
	SD	81.3	77.6	80.8	62.8	88.1
	Median	120	116	115	115	112
	Minimum	21.7	36	29	10.7	10.3
	Maximum	1152	1186	1181	657	1145
Hb, g/dL	n	1592	1688	1698	1695	1792
	Mean	12.7	12.8	12.8	12.6	12.6
	SD	1.9	1.9	1.9	1.8	1.9
	Median	12.8	12.8	12.8	12.8	12.8
	Minimum	3.3	4.4	6.2	5.3	1.8
	Maximum	19.8	18.7	18.6	18.5	18.5
Albumin, g/L	n	1592	1688	1698	1695	1792
	Mean	39.7	39.8	39.8	39.7	39.7
	SD	0.7	0.8	0.8	1.2	1.4
	Median	39.7	39.7	39.7	39.7	39.7
	Minimum	29	29	30	21	24
	Maximum	48	48	50	50	75
Calcium, mmol/L	n	1592	1688	1698	1695	1792
	Mean	2.3	2.3	2.3	2.3	2.3
	SD	0.2	0.2	0.2	0.2	0.2
	Median	2.3	2.3	2.3	2.3	2.3
	Minimum	1.1	1.4	1	1.1	1.1
	Maximum	3.1	3.2	3.5	3.3	3.2
Phosphate, mmol/L	n	1592	1688	1698	1695	1792
	Mean	1.1	1.1	1.1	1.1	1.1
	SD	0.2	0.3	0.3	0.2	0.3
	Median	1.1	1.1	1.1	1.1	1.1
	Minimum	0.5	0.5	0.5	0.5	0.5
	Maximum	3.5	3.9	3.2	2.8	3.1
Alkaline Phosphate (ALP), U/L	n	1592	1688	1698	1695	1792
	Mean	79.1	79.4	79	80	82.3
	SD	43.2	39.8	46.4	45.3	56.5
	Median	71	72.5	72	73	73
	Minimum	24	22	20	21	20
	Maximum	700	508	985	732	964

Biochemical parameter	Summary	2006	2007	2008	2009	2010
ALT, U/L	n	1592	1688	1698	1695	1792
	Mean	29.8	29.8	30.1	29.9	27
	SD	30.4	25.6	37.8	32.5	24.8
	Median	22	23	23	24	21
	Minimum	4	4	4	4	4
	Maximum	433	356	881	881	410
Total cholesterol, mmol/L	n	1592	1688	1698	1695	1792
	Mean	5.3	5.2	5.2	5.2	5.2
	SD	1	1	1	1.1	1.1
	Median	5.3	5.3	5.3	5.3	5.3
	Minimum	1.5	1.7	2	1.9	2
	Maximum	11.1	11.4	11.2	10.6	11.5
LDL cholesterol, mmol/L	n	1592	1688	1698	1695	1792
	Mean	3	2.9	2.9	2.8	2.9
	SD	0.8	0.8	0.8	1	0.9
	Median	2.9	2.9	2.9	2.9	2.9
	Minimum	1	1	0.9	0.9	0.9
	Maximum	11.1	8.9	7.7	10.8	10.4
HDL cholesterol, mmol/L	n	1592	1688	1698	1695	1792
	Mean	1.6	1.5	1.6	1.5	1.5
	SD	0.5	0.4	0.5	0.5	0.5
	Median	1.6	1.6	1.6	1.6	1.6
	Minimum	0.4	0.4	0.5	0.4	0.4
	Maximum	5.8	7.5	7.5	6.9	6.8
Systolic Blood Pressure, mmHg	n	1592	1688	1698	1695	1792
	Mean	130.7	131.6	129.4	130.1	129.8
	SD	15.9	15.7	15.3	14.7	14.8
	Median	130	130	130	130	130
	Minimum	66	80	80	65	70
	Maximum	210	210	245	210	192
Diastolic Blood Pressure, mmHg	n	1592	1688	1698	1695	1792
	Mean	78.9	78.8	77.5	78.2	77.5
	SD	9.8	9.4	9.2	8.7	9.4
	Median	80	80	78.8	79	78.8
	Minimum	30	20	20	40	10
	Maximum	120	116	133	120	124

## Table 13.3.3: Medication data, 2006-2010

Medication data	Single drug treatment										Combined drug treatment									
	2006		2007		2008		2009		2010		2006		2007		2008		2009		2010	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
All	1482	100	1666	100	1429	100	1747	100	1432	100	1482	100	1666	100	1429	100	1747	100	1432	100
<b>(i) Immunosuppressive drug(s) treatment</b>																				
Prednisolone	8	1	9	1	6	0	6	0	11	1	1444	97	1612	97	1385	97	1645	94	1356	95
Azathioprine	0	0	0	0	0	0	1	0	0	0	497	34	479	29	382	27	385	22	388	27
Cyclosporin A	5	0	8	0	2	0	15	1	5	0	1119	76	1191	71	983	69	1122	64	873	61
Tacrolimus (FK506)	0	0	4	0	3	0	14	1	2	0	254	17	349	21	345	24	475	27	434	30
Mycophenolate Mofetil (MMF)	0	0	1	0	2	0	0	0	1	0	708	48	908	55	776	54	1048	60	852	59
Rapamycin	0	0	0	0	1	0	0	0	0	0	7	0	33	2	30	2	32	2	20	1
Others	0	0	0	0	0	0	1	0	0	0	18	1	4	0	1	0	26	1	41	3
<b>(ii) Non-Immunosuppressive drug(s) treatment</b>																				
Beta blocker	77	5	90	5	88	6	118	7	130	9	597	40	735	44	615	43	681	39	540	38
Calcium channel blocker	199	13	184	11	138	10	161	9	185	13	787	53	905	54	687	48	736	42	573	40
ACE inhibitor	39	3	38	2	29	2	41	2	35	2	292	20	384	23	287	20	311	18	215	15
AIIRB	27	2	19	1	17	1	21	1	31	2	141	10	211	13	141	10	146	8	153	11
Anti-lipid	156	11	95	6	89	6	117	7	109	8	679	46	732	44	627	44	710	41	513	36
Other anti-hypertensive	11	1	6	0	25	2	26	1	21	1	159	11	140	8	191	13	167	10	142	10

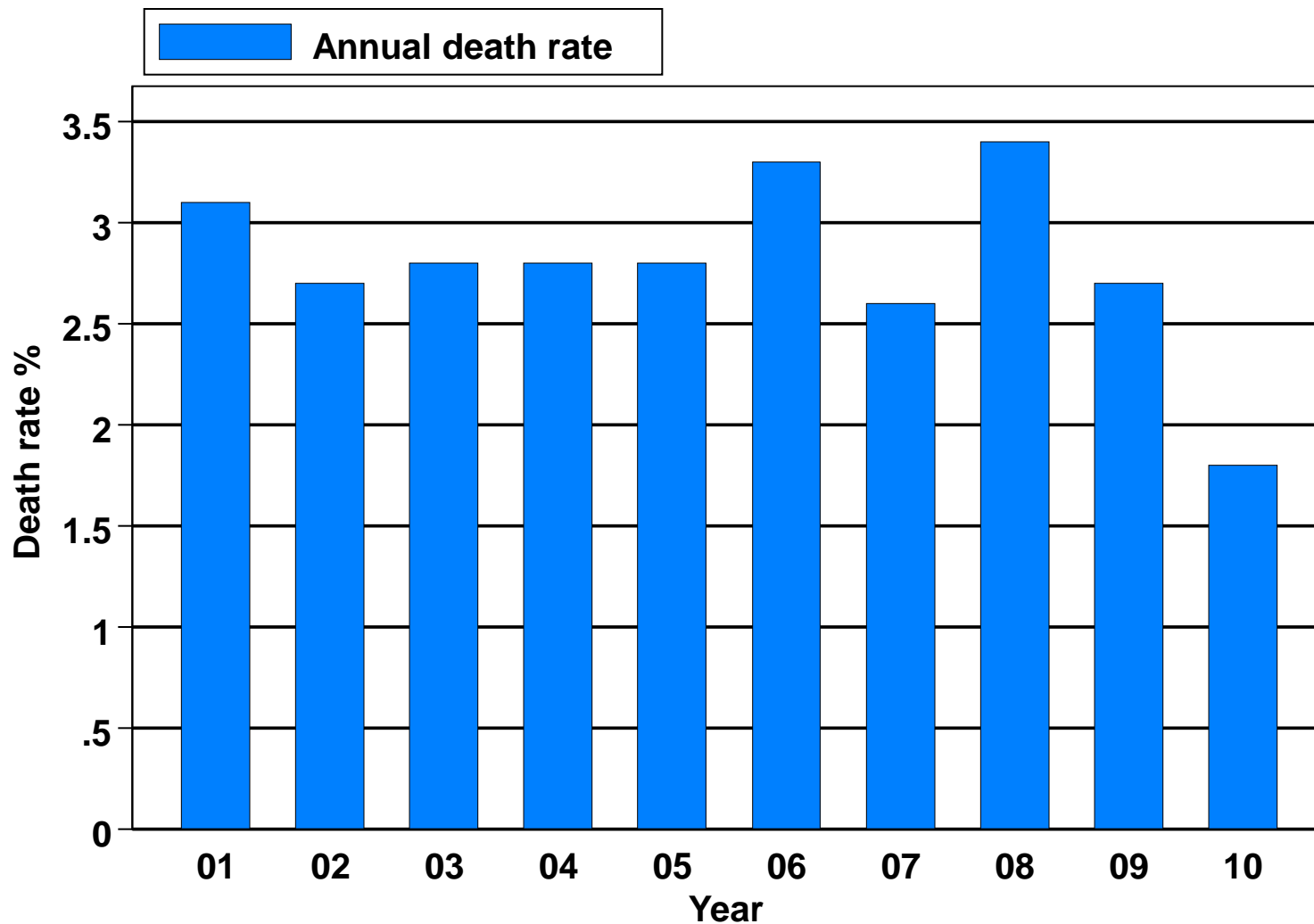
## Table 13.4.1: Post-transplant complications, 2006-2010

Medication data	Pre transplant									
	2006		2007		2008		2009		2010	
	n	%	n	%	n	%	n	%	n	%
All patients	1592	100	1688	100	1705	100	1710	100	1824	100
Diabetes (either as Primary Renal Disease or co-morbid)	218	14	232	14	233	14	211	12	239	13
Cancer	2	0	3	0	2	0	1	0	2	0
Cardiovascular disease + cerebrovascular disorder	73	5	72	4	67	4	51	3	60	3
Hypertension	1036	65	1063	63	1055	62	1028	60	1059	58
	Post transplant									
All patients	1592	100	1688	100	1705	100	1710	100	1824	100
Diabetes (either as Primary Renal Disease or co-morbid)	124	8	113	7	119	7	88	5	114	6
Cancer	20	1	21	1	24	1	16	1	19	1
Cardiovascular disease + cerebrovascular disorder	45	3	54	3	72	4	56	3	48	3
Hypertension	354	22	451	27	413	24	448	26	498	27

**Table 13.4.2: Transplant Patients Death Rate and Graft Loss, 2001-2010**

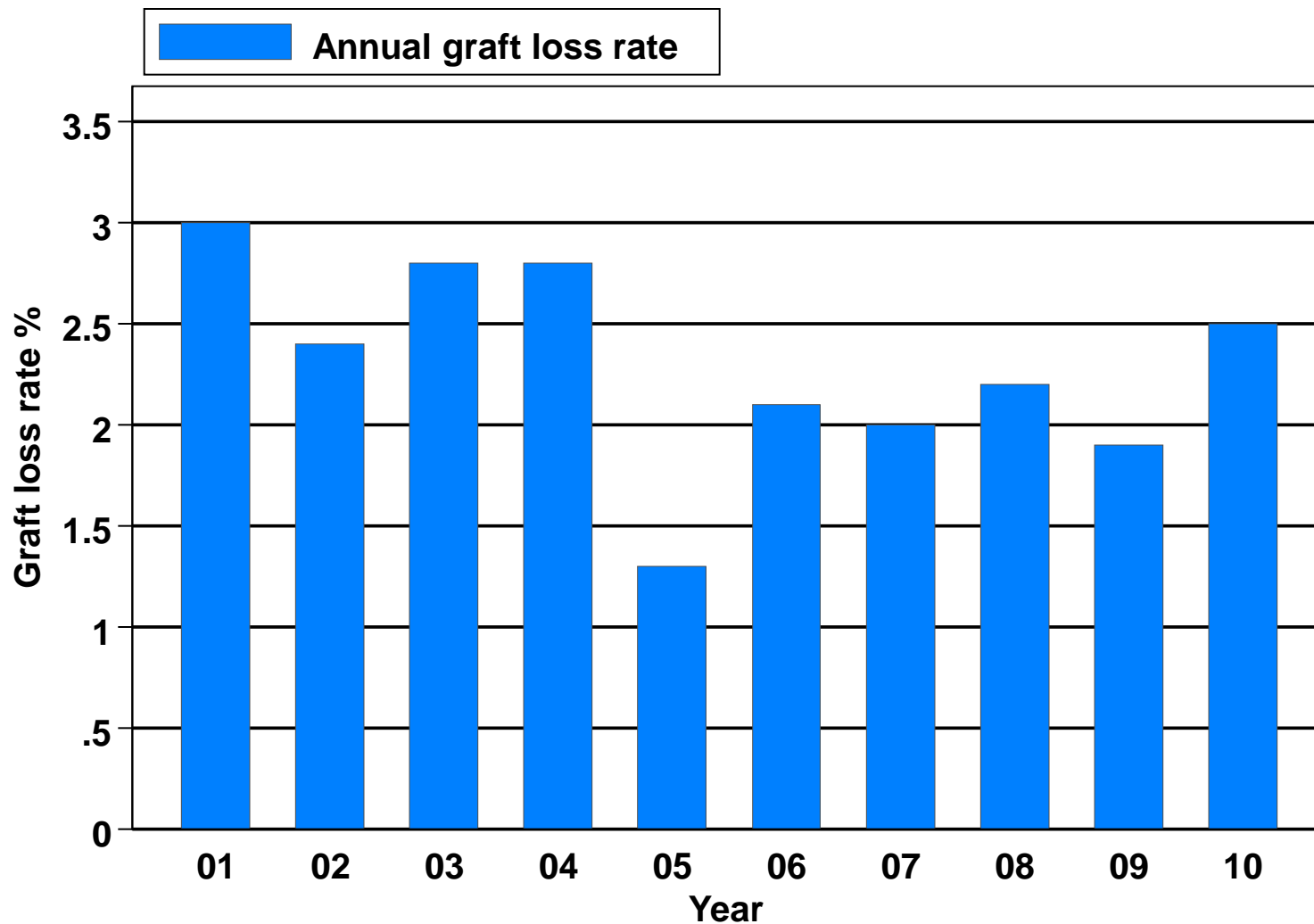
<b>Year</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Number at risk</b>	<b>1302</b>	<b>1392</b>	<b>1477</b>	<b>1563</b>	<b>1660</b>	<b>1734</b>	<b>1766</b>	<b>1780</b>	<b>1805</b>	<b>1832</b>
<b>Transplant death</b>	<b>40</b>	<b>38</b>	<b>42</b>	<b>44</b>	<b>47</b>	<b>58</b>	<b>46</b>	<b>60</b>	<b>49</b>	<b>33</b>
<b>Transplant death rate %</b>	<b>3.1</b>	<b>2.7</b>	<b>2.8</b>	<b>2.8</b>	<b>2.8</b>	<b>3.3</b>	<b>2.6</b>	<b>3.4</b>	<b>2.7</b>	<b>1.8</b>
<b>Graft loss</b>	<b>39</b>	<b>33</b>	<b>41</b>	<b>43</b>	<b>21</b>	<b>36</b>	<b>36</b>	<b>39</b>	<b>35</b>	<b>45</b>
<b>Graft loss rate %</b>	<b>3</b>	<b>2.4</b>	<b>2.8</b>	<b>2.8</b>	<b>1.3</b>	<b>2.1</b>	<b>2</b>	<b>2.2</b>	<b>1.9</b>	<b>2.5</b>
<b>Acute rejection</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>19</b>	<b>14</b>	<b>19</b>	<b>14</b>	<b>23</b>	<b>31</b>	<b>70</b>
<b>Acute rejection rate %</b>	<b>0</b>	<b>0</b>	<b>0.3</b>	<b>1.2</b>	<b>0.8</b>	<b>1.1</b>	<b>0.8</b>	<b>1.3</b>	<b>1.7</b>	<b>3.8</b>
<b>All losses</b>	<b>79</b>	<b>71</b>	<b>83</b>	<b>87</b>	<b>68</b>	<b>94</b>	<b>82</b>	<b>99</b>	<b>84</b>	<b>78</b>
<b>All losses rate %</b>	<b>6.1</b>	<b>5.1</b>	<b>5.6</b>	<b>5.6</b>	<b>4.1</b>	<b>5.4</b>	<b>4.6</b>	<b>5.6</b>	<b>4.7</b>	<b>4.3</b>

**Figure 13.4.2(a): Transplant Recipient Death Rate, 2001-2010**





**Figure 13.4.2(b): Transplant Recipient Graft Loss Rate, 2001-2010**



### Table 13.4.3: Causes of Death in Transplant Recipients, 2001-2010

Year	2001		2002		2003		2004		2005	
	n	%	n	%	n	%	n	%	n	%
Cardiovascular	7	15	6	15	14	30	6	13	5	10
Died at home	5	11	5	13	5	11	5	11	6	13
Infection	22	48	14	35	14	30	17	36	27	56
Graft failure	0	0	0	0	0	0	3	6	0	0
Cancer	6	13	5	13	7	15	8	17	5	10
Liver disease	2	4	5	13	3	6	4	9	3	6
Accidental death	1	2	1	3	1	2	0	0	1	2
Others	0	0	2	5	1	2	3	6	0	0
Unknown	3	7	2	5	2	4	1	2	1	2
<b>TOTAL</b>	<b>46</b>	<b>100</b>	<b>40</b>	<b>100</b>	<b>47</b>	<b>100</b>	<b>47</b>	<b>100</b>	<b>48</b>	<b>100</b>

Year	2006		2007		2008		2009		2010	
	n	%	n	%	n	%	n	%	n	%
Cardiovascular	13	21	9	18	11	17	12	22	7	18
Died at home	7	11	5	10	12	18	9	17	7	18
Infection	25	40	18	35	20	30	19	35	14	37
Graft failure	0	0	4	8	0	0	1	2	1	3
Cancer	5	8	6	12	12	18	7	13	3	8
Liver disease	5	8	0	0	0	0	2	4	1	3
Accidental death	1	2	0	0	0	0	0	0	0	0
Others	2	3	1	2	5	8	1	2	4	11
Unknown	5	8	8	16	6	9	3	6	1	3
<b>TOTAL</b>	<b>63</b>	<b>100</b>	<b>51</b>	<b>100</b>	<b>66</b>	<b>100</b>	<b>54</b>	<b>100</b>	<b>38</b>	<b>100</b>

### Table 13.4.4: Causes of Graft Failure, 2001-2010

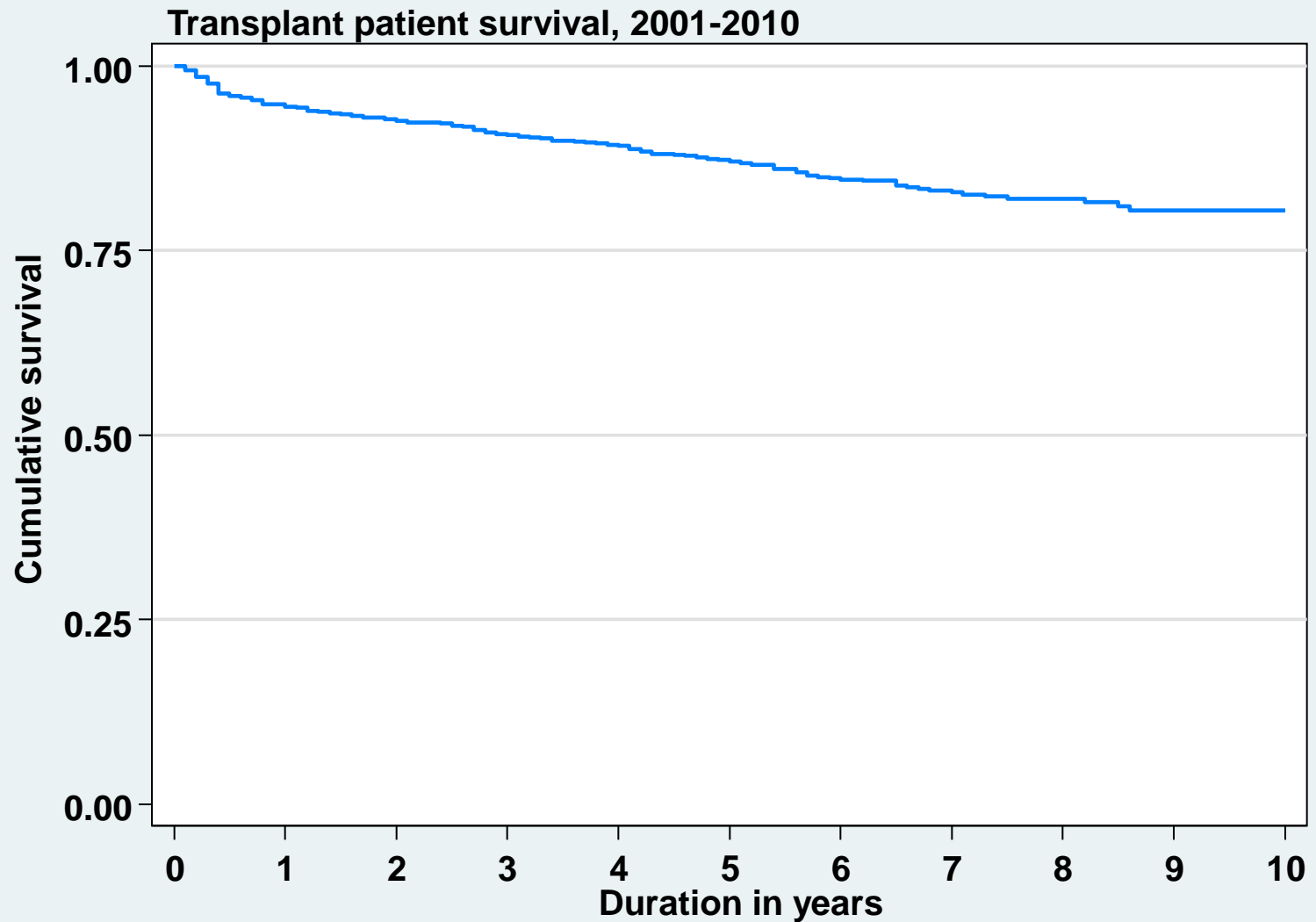
Year	2001		2002		2003		2004		2005	
	n	%	n	%	n	%	n	%	n	%
Rejection	24	60	19	54	20	47	29	67	15	68
Calcineurin toxicity	0	0	1	3	1	2	0	0	0	0
Other drug toxicity	0	0	0	0	0	0	0	0	0	0
Ureteric obstruction	0	0	0	0	0	0	0	0	0	0
Infection	2	5	0	0	2	5	1	2	1	5
Vascular causes	1	3	0	0	3	7	4	9	2	9
Recurrent/ de novo renal disease	2	5	2	6	2	5	1	2	0	0
Others	0	0	3	9	1	2	0	0	1	5
Unknown	11	28	10	29	14	33	8	19	3	14
<b>TOTAL</b>	<b>40</b>	<b>100</b>	<b>35</b>	<b>100</b>	<b>43</b>	<b>100</b>	<b>43</b>	<b>100</b>	<b>22</b>	<b>100</b>

Year	2006		2007		2008		2009		2010	
	n	%	n	%	n	%	n	%	n	%
Rejection	25	68	25	69	27	64	23	62	25	54
Calcineurin toxicity	0	0	0	0	0	0	1	3	1	2
Other drug toxicity	0	0	0	0	0	0	1	3	1	2
Ureteric obstruction	0	0	1	3	0	0	0	0	0	0
Infection	2	5	1	3	3	7	1	3	0	0
Vascular causes	4	11	1	3	3	7	1	3	3	7
Recurrent/ de novo renal disease	1	3	0	0	1	2	0	0	0	0
Others	2	5	3	8	2	5	0	0	4	9
Unknown	3	8	5	14	6	14	10	27	12	26
<b>TOTAL</b>	<b>37</b>	<b>100</b>	<b>36</b>	<b>100</b>	<b>42</b>	<b>100</b>	<b>37</b>	<b>100</b>	<b>46</b>	<b>100</b>

**Table 13.5.1(a): Patient survival, 2001-2010**

<b>Interval (years)</b>	<b>n</b>	<b>% Survival</b>	<b>SE</b>
<b>0</b>	<b>1482</b>	<b>100</b>	
<b>1</b>	<b>1263</b>	<b>94</b>	<b>1</b>
<b>2</b>	<b>1097</b>	<b>93</b>	<b>1</b>
<b>3</b>	<b>952</b>	<b>91</b>	<b>1</b>
<b>4</b>	<b>818</b>	<b>89</b>	<b>1</b>
<b>5</b>	<b>670</b>	<b>87</b>	<b>1</b>
<b>6</b>	<b>494</b>	<b>85</b>	<b>1</b>
<b>7</b>	<b>337</b>	<b>83</b>	<b>1</b>
<b>8</b>	<b>209</b>	<b>82</b>	<b>1</b>
<b>9</b>	<b>95</b>	<b>80</b>	<b>2</b>
<b>10</b>	<b>4</b>	<b>80</b>	<b>2</b>

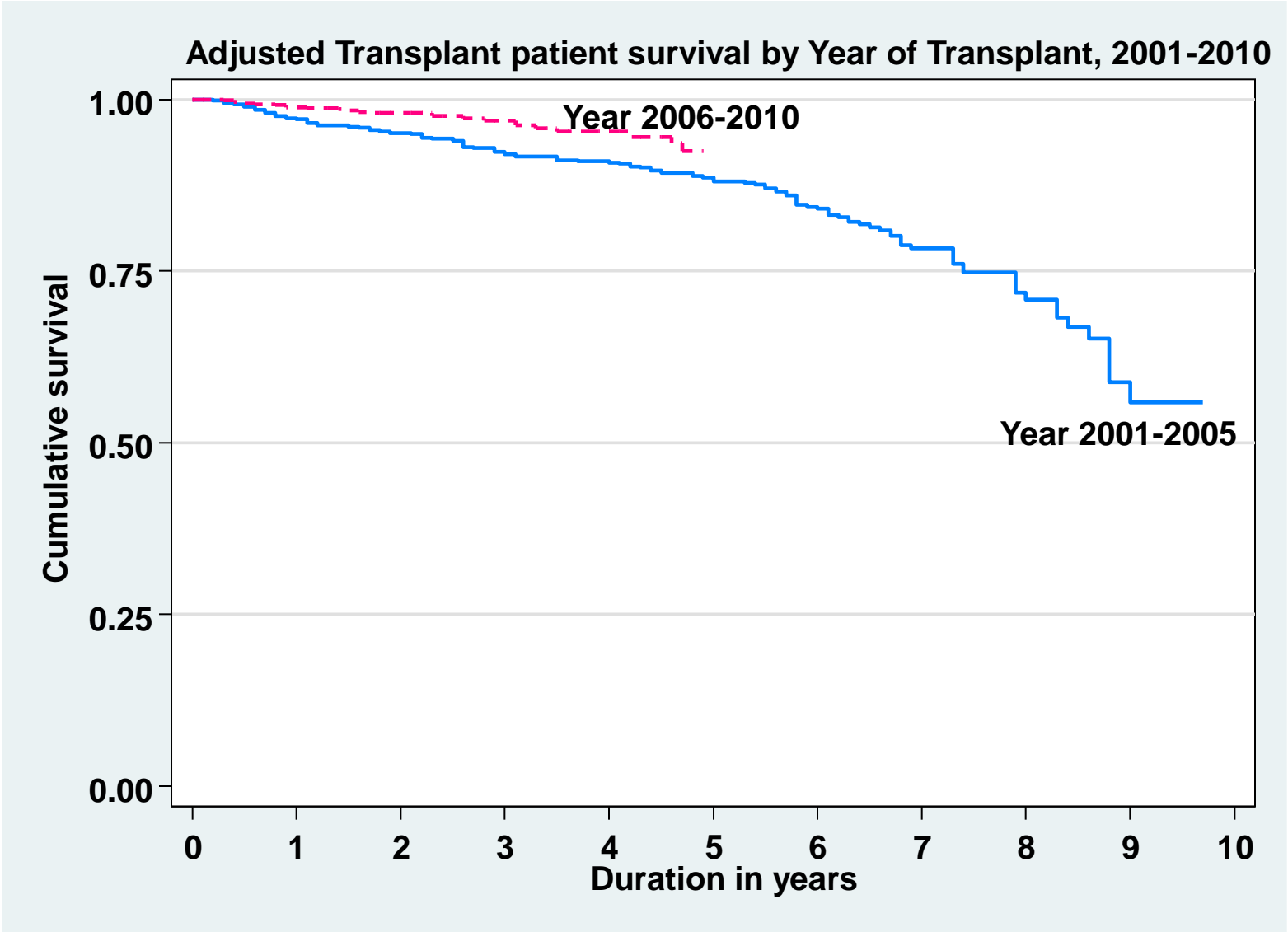
**Figure 13.5.1(a): Patient survival, 2001-2010**



# Table 13.5.1(b): Risk factors for transplant patient survival 2001-2010

Factors	n	Hazard Ratio	95% CI		P value
<b>Year of transplant</b>					
• 2001-2005 (ref*)	857	1.00			
• 2006-2010	625	1.46	(0.99;	2.17)	0.057
<b>Age at transplant</b>					
• <20	148	0.35	(0.15;	0.82)	0.016
• 20-39 (ref*)	554	1.00			
• 40-54	670	1.81	(1.25;	2.63)	0.002
• >=55	110	2.00	(1.18;	3.37)	0.010
<b>Gender:</b>					
• Male (ref*)	938	1.00			
• Female	544	0.97	(0.70;	1.34)	0.857
<b>Primary diagnosis:</b>					
• Unknown primary (ref*)	773	1.00			
• Diabetes mellitus	126	1.22	(0.77;	1.94)	0.394
• GN/SLE	352	0.84	(0.56;	1.26)	0.398
• Polycystic kidney	24	0.52	(0.13;	2.19)	0.377
• Obstructive nephropathy	42	1.80	(0.78;	4.11)	0.166
• Others	165	0.96	(0.60;	1.55)	0.882
<b>Type of transplant</b>					
• Commercial cadaver (ref*)	781	1.00			
• Commercial live donor	87	0.82	(0.40;	1.69)	0.591
• Living donor	342	0.67	(0.41;	1.10)	0.113
• Cadaver	243	2.62	(1.80;	3.81)	<0.001
<b>HbsAg</b>					
• Negative (ref*)	1,452	1.00			
• Positive	30	1.75	(0.90;	3.41)	0.098
<b>Anti-HCV</b>					
• Negative (ref*)	1,436	1.00			
• Positive	46	1.50	(0.88;	2.55)	0.140

**Figure 13.5.1(b): Adjusted Transplant Patient Survival related to Year of Transplant, 2001-2010**

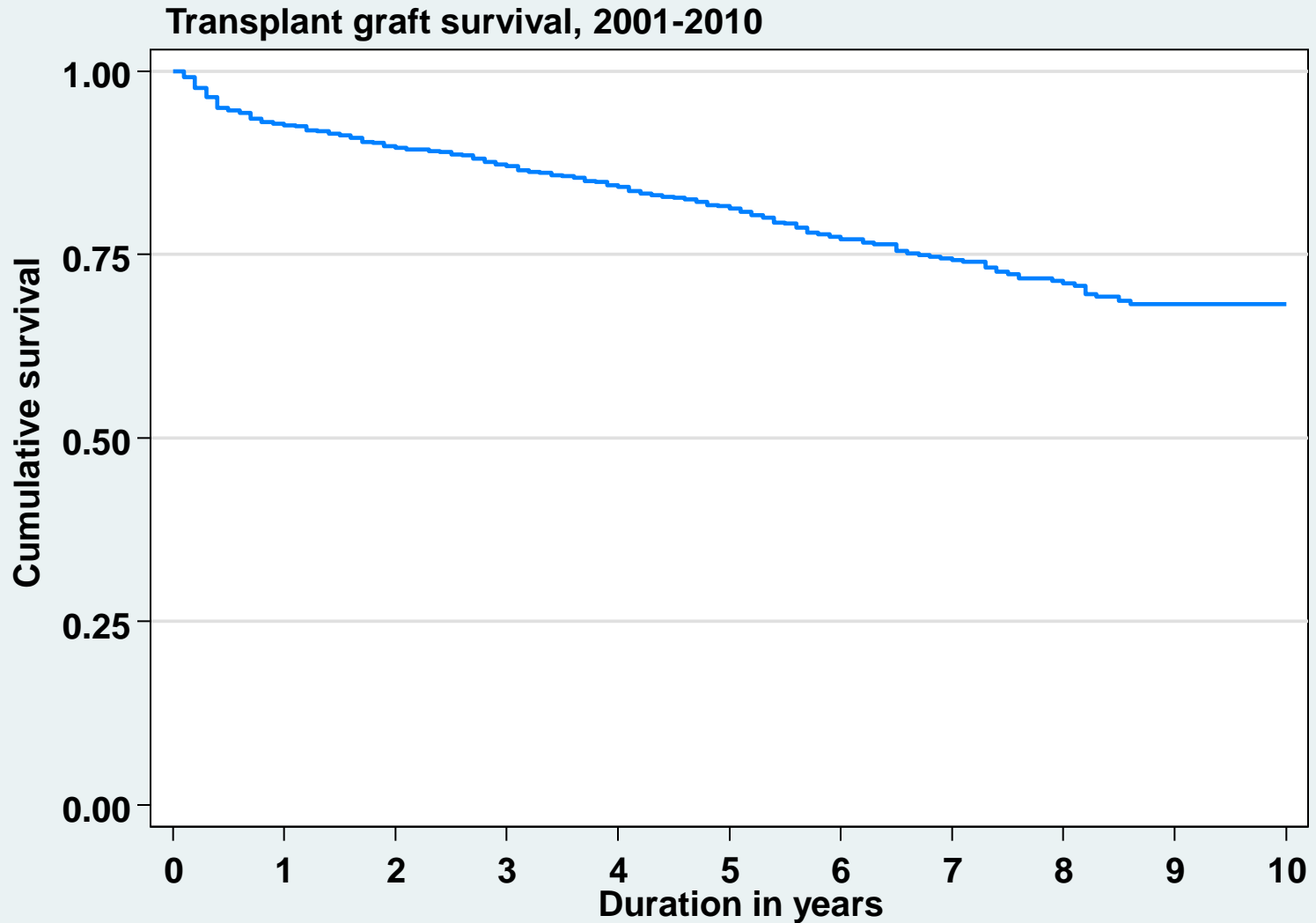


**Table 13.5.2 (a): Graft survival, 2001-2010**

<b>Interval (years)</b>	<b>n</b>	<b>% Survival</b>	<b>SE</b>
<b>0</b>	<b>1482</b>	<b>100</b>	<b>-</b>
<b>1</b>	<b>1263</b>	<b>92.61</b>	<b>0.69</b>
<b>2</b>	<b>1097</b>	<b>89.55</b>	<b>0.83</b>
<b>3</b>	<b>952</b>	<b>87.07</b>	<b>0.93</b>
<b>4</b>	<b>818</b>	<b>84.21</b>	<b>1.04</b>
<b>5</b>	<b>670</b>	<b>81.31</b>	<b>1.15</b>
<b>6</b>	<b>494</b>	<b>77.12</b>	<b>1.32</b>
<b>7</b>	<b>337</b>	<b>74.28</b>	<b>1.46</b>
<b>8</b>	<b>209</b>	<b>71.11</b>	<b>1.69</b>
<b>9</b>	<b>95</b>	<b>68.22</b>	<b>1.95</b>
<b>10</b>	<b>4</b>	<b>68.22</b>	<b>1.95</b>



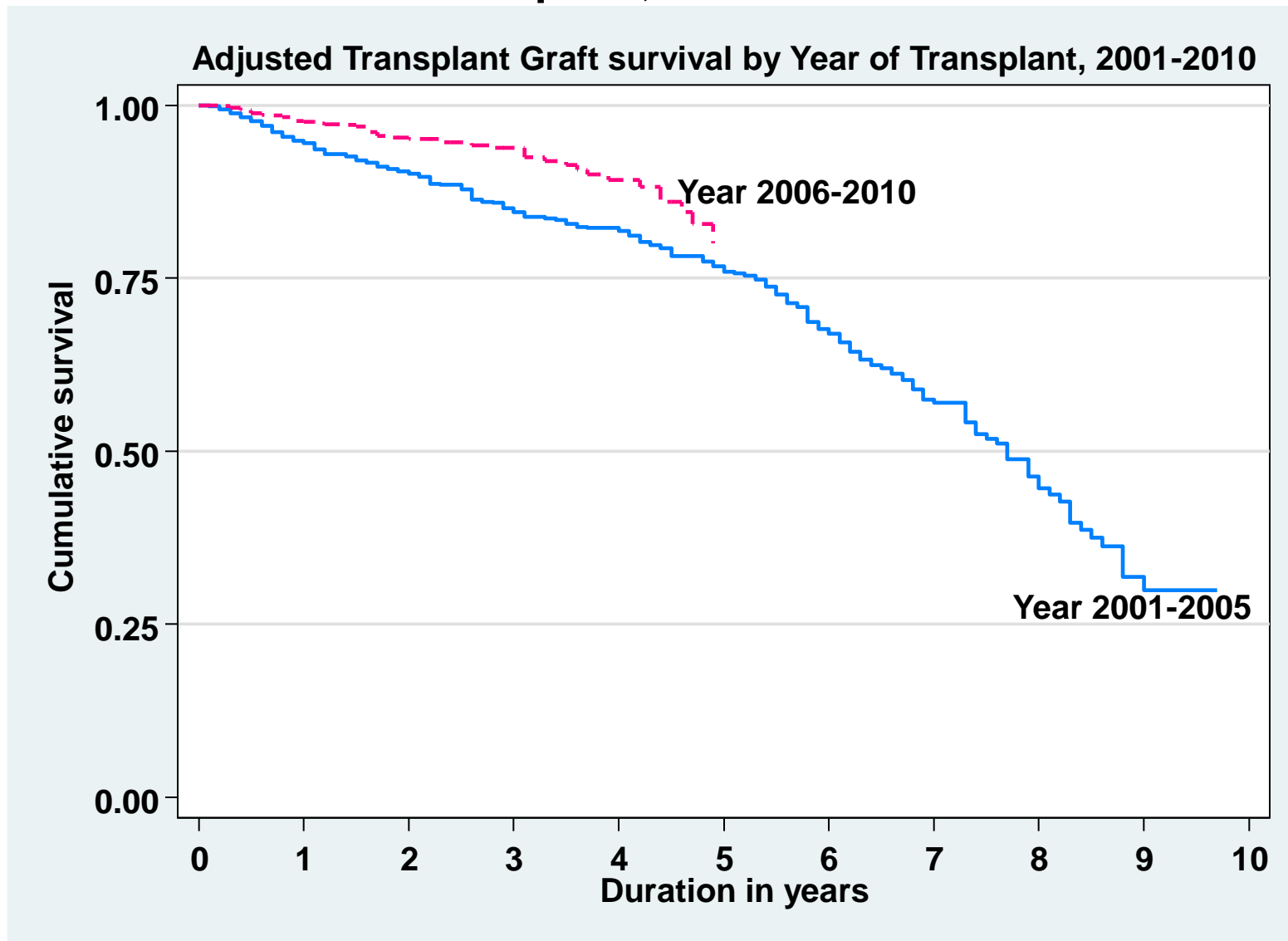
**Figure 13.5.2 (a): Graft survival, 2001-2010**



# Table 13.5.2(b): Risk factors for transplant graft survival 2001-2010

Factors	n	Hazard Ratio	95% CI		P value
<b>Year of transplant</b>					
• 2001-2005 (ref <sup>*</sup> )	857	1.00			
• 2006-2010	625	1.46	(0.99;	2.17)	0.06
<b>Age at transplant</b>					
• <20	148	0.35	(0.15;	0.82)	0.02
• 20-39 (ref <sup>*</sup> )	554	1.00			
• 40-54	670	1.81	(1.25;	2.63)	0.00
• >=55	110	2.00	(1.18;	3.37)	0.01
<b>Gender:</b>					
• Male (ref <sup>*</sup> )	938	1.00			
• Female	544	0.97	(0.70;	1.34)	0.86
<b>Primary diagnosis:</b>					
• Unknown primary (ref <sup>*</sup> )	773				
• Diabetes mellitus	126	1.22	(0.77;	1.94)	0.39
• GN/SLE	352	0.84	(0.56;	1.26)	0.40
• Polycystic kidney	24	0.52	(0.13;	2.19)	0.38
• Obstructive nephropathy	42	1.80	(0.78;	4.11)	0.17
• Others	165	0.96	(0.60;	1.55)	0.88
<b>Type of transplant</b>					
• Commercial cadaver (ref <sup>*</sup> )	781	1.00			
• Commercial live donor	87	0.82	(0.40;	1.69)	0.59
• Living donor	342	0.67	(0.41;	1.10)	0.11
• Cadaver	243	2.62	(1.80;	3.81)	0.00
<b>HbsAg</b>					
• Negative (ref <sup>*</sup> )	1,452	1.00			
• Positive	30	1.75	(0.90;	3.41)	0.10
<b>Anti-HCV</b>					
• Negative (ref <sup>*</sup> )	1,436	1.00			
• Positive	46	1.50	(0.88;	2.55)	0.14

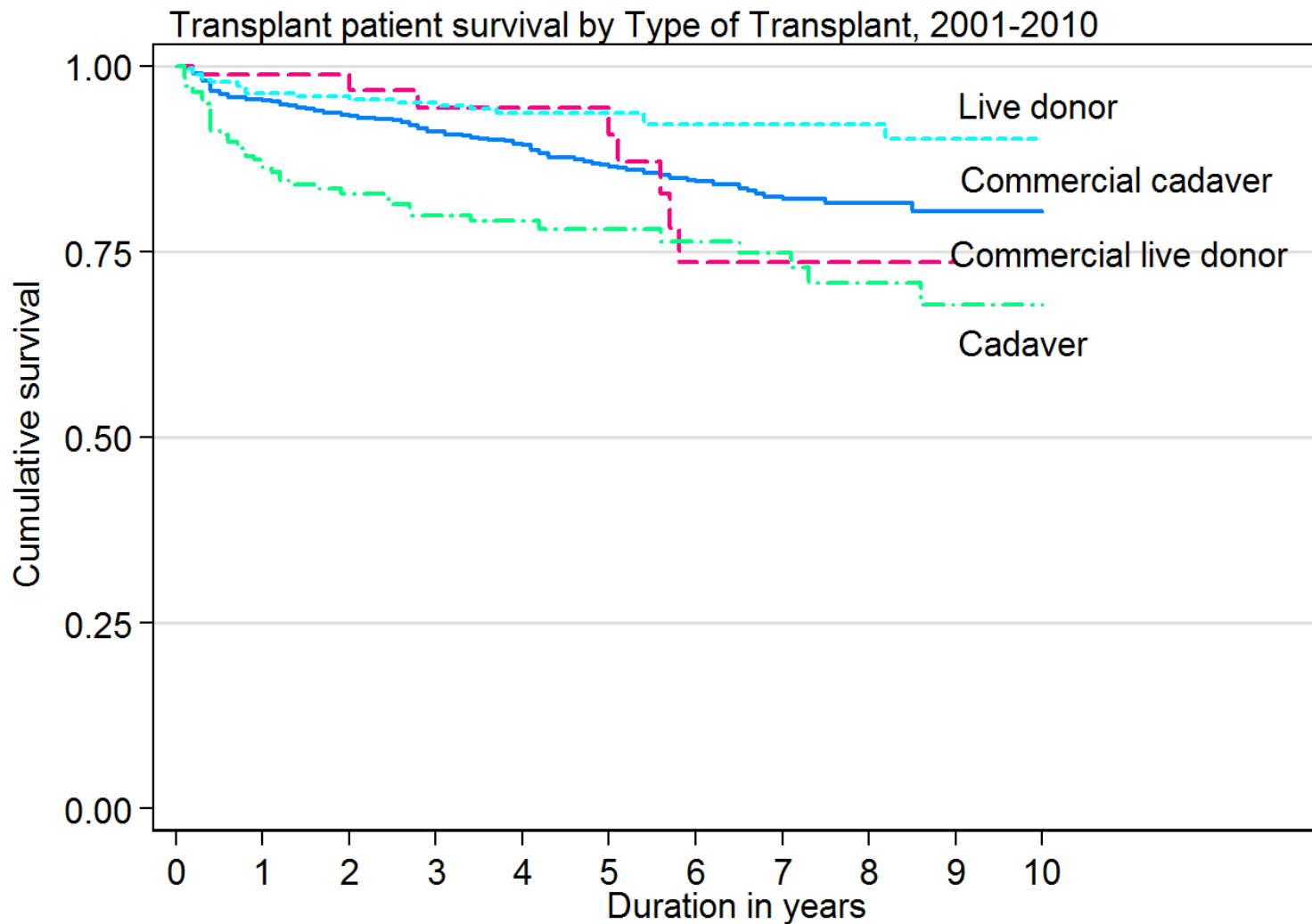
**Figure 13.5.2(b): Adjusted Transplant Graft Survival related to Year of Transplant, 2001-2010**



**Table 13.5.3: Unadjusted Patient survival by type of transplant, 2001-2010**

Type of Transplant	Commercial Cadaver			Commercial Live Donor			Live Donor			Cadaver		
	Interval (years)	n	% Survival	SE	n	% Survival	SE	n	% Survival	SE	n	% Survival
0	781	100	0	81	100	0	342	100	0	243	100	0
1	724	95	1	69	99	1	289	96	1	165	86	2
2	667	93	1	49	97	2	245	95	1	125	83	3
3	589	91	1	45	95	3	208	95	1	103	80	3
4	528	89	1	38	95	3	168	94	2	78	79	3
5	436	86	1	29	91	4	141	94	2	59	78	3
6	334	84	1	16	75	8	95	92	2	49	76	3
7	210	82	2	11	75	8	76	92	2	42	75	4
8	122	81	2	7	75	8	52	92	2	28	71	4
9	51	80	2	2	75	8	24	90	3	18	68	5
10	1	80	2	2	0	0	1	90	3	2	68	5

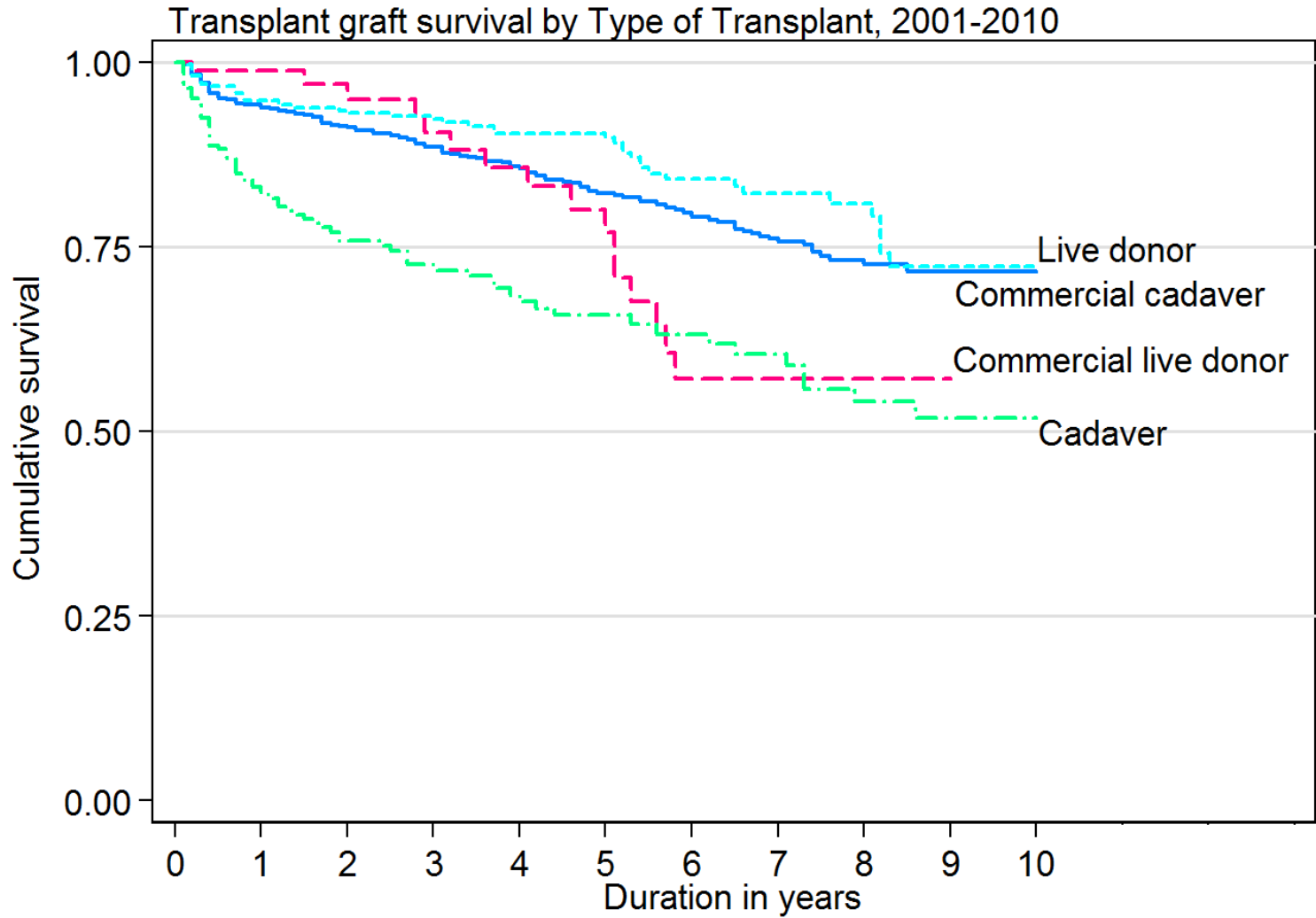
**Figure 13.5.3: Patient survival by type of transplant, 2001-2010**



**Table 13.5.4: Graft survival by type of transplant, 2001-2010**

Type of Transplant	Commercial Cadaver			Commercial Live Donor			Live Donor			Cadaver		
	Interval (years)	n	% Survival	SE	n	% Survival	SE	n	% Survival	SE	n	% Survival
0	781	100	0	87	100	0	342	100	0	243	100	0
1	724	94	1	66	99	1	297	95	1	165	82	3
2	667	91	1	46	95	3	252	93	1	125	76	3
3	589	89	1	42	91	4	215	92	2	103	72	3
4	528	86	1	35	86	5	174	90	2	78	68	4
5	436	82	1	26	77	7	145	90	2	59	66	4
6	334	79	2	16	57	9	95	84	3	49	63	4
7	210	76	2	11	57	9	76	82	3	42	61	4
8	122	73	2	7	57	9	52	81	3	28	54	5
9	51	72	2	2	57	9	24	72	5	18	52	5
10	1	72	2	2	0	0	1	72	5	2	52	5

**Figure 13.5.4: Graft survival by type of transplant, 2001-2010**

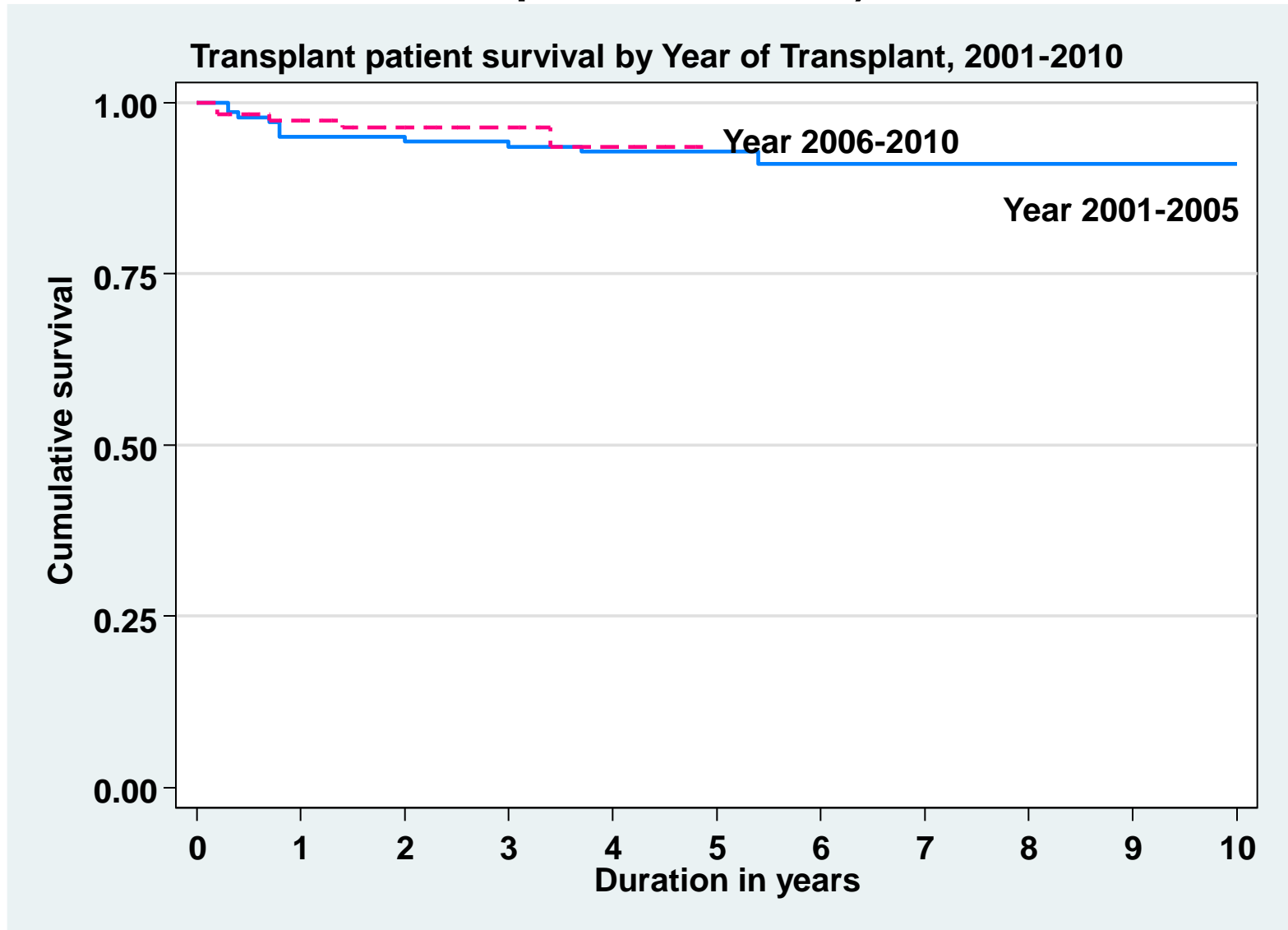


**Table 13.5.5: Patient survival by year of transplant (Living related transplant, 2001-2010)**

<b>Year of Transplant</b>	<b>2001-2005</b>			<b>2006-2010</b>		
<b>Interval (years)</b>	<b>n</b>	<b>% Survival</b>	<b>SE</b>	<b>n</b>	<b>% Survival</b>	<b>SE</b>
<b>0</b>	<b>144</b>	<b>100</b>	<b>-</b>	<b>123</b>	<b>100</b>	<b>-</b>
<b>1</b>	<b>136</b>	<b>95</b>	<b>2</b>	<b>102</b>	<b>97</b>	<b>1</b>
<b>2</b>	<b>131</b>	<b>94</b>	<b>2</b>	<b>73</b>	<b>96</b>	<b>2</b>
<b>3</b>	<b>129</b>	<b>94</b>	<b>2</b>	<b>45</b>	<b>96</b>	<b>2</b>
<b>4</b>	<b>127</b>	<b>93</b>	<b>2</b>	<b>26</b>	<b>94</b>	<b>3</b>
<b>5</b>	<b>124</b>	<b>93</b>	<b>2</b>	<b>2</b>	<b>94</b>	<b>3</b>
<b>6</b>	<b>82</b>	<b>91</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>7</b>	<b>64</b>	<b>91</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>8</b>	<b>45</b>	<b>91</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>9</b>	<b>21</b>	<b>91</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>10</b>	<b>1</b>	<b>91</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>



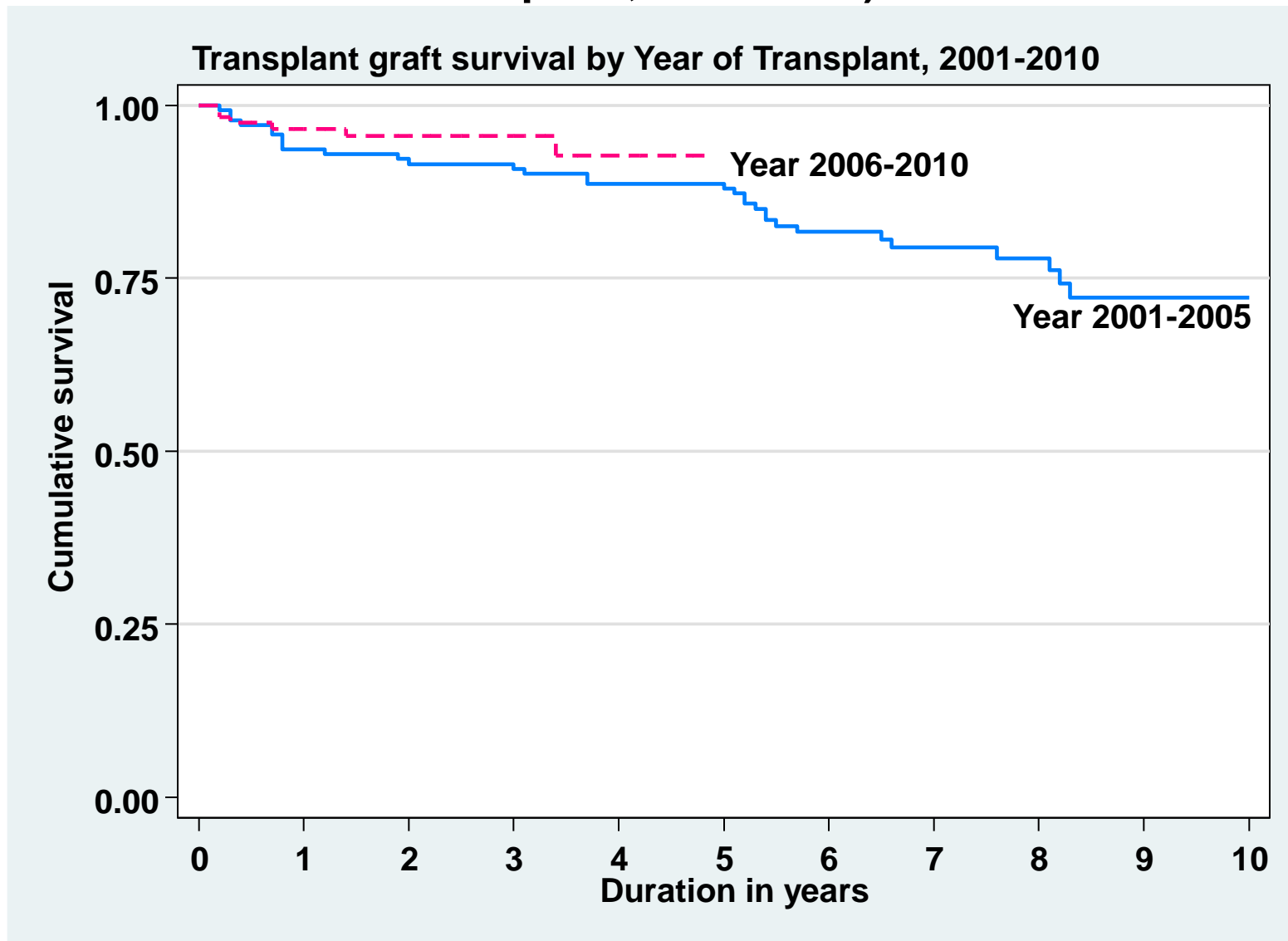
**Figure 13.5.5: Patient survival by year of transplant (Living related transplant, 2001-2010)**



**Table13.5.6: Graft survival by year of transplant (Living related transplant, 2001-2010)**

<b>Year of Transplant</b>	<b>2001-2005</b>			<b>2006-2010</b>		
<b>Interval (years)</b>	<b>n</b>	<b>% Survival</b>	<b>SE</b>	<b>n</b>	<b>% Survival</b>	<b>SE</b>
<b>0</b>	<b>144</b>	<b>100</b>	<b>-</b>	<b>123</b>	<b>100</b>	<b>-</b>
<b>1</b>	<b>136</b>	<b>94</b>	<b>2</b>	<b>102</b>	<b>97</b>	<b>2</b>
<b>2</b>	<b>131</b>	<b>92</b>	<b>2</b>	<b>73</b>	<b>96</b>	<b>2</b>
<b>3</b>	<b>129</b>	<b>91</b>	<b>2</b>	<b>45</b>	<b>96</b>	<b>2</b>
<b>4</b>	<b>127</b>	<b>89</b>	<b>3</b>	<b>26</b>	<b>93</b>	<b>3</b>
<b>5</b>	<b>124</b>	<b>88</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>6</b>	<b>82</b>	<b>82</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>7</b>	<b>64</b>	<b>79</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>8</b>	<b>45</b>	<b>78</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>9</b>	<b>21</b>	<b>72</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>10</b>	<b>1</b>	<b>72</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>-</b>

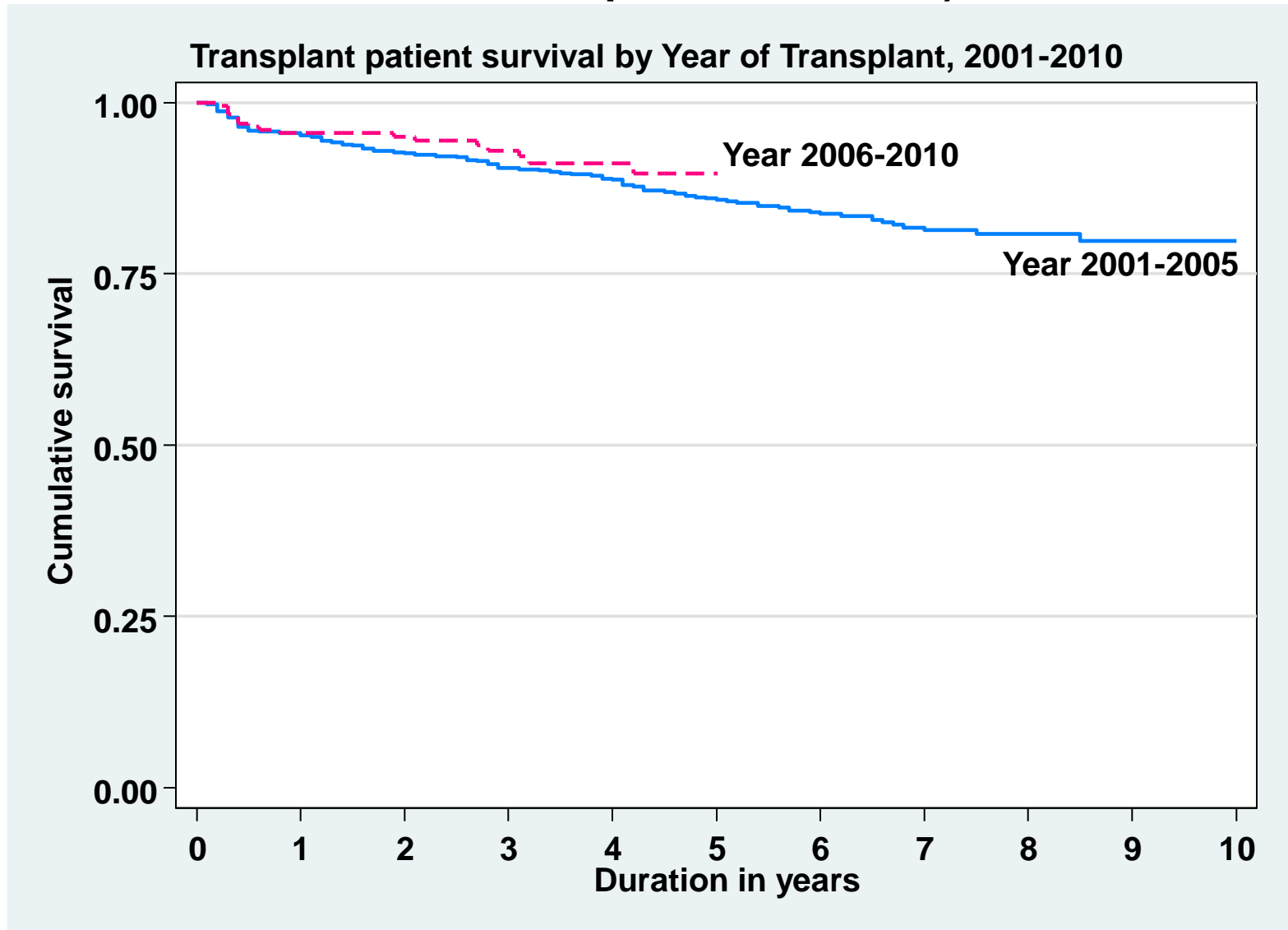
**Figure 13.5.6: Graft survival by year of transplant (Living related transplant, 2001-2010)**



**Table 13.5.7: Patient survival by year of transplant (Commercial cadaver transplant, 2001-2010)**

<b>Year of Transplant</b>	<b>2001-2005</b>			<b>2006-2010</b>		
<b>Interval (years)</b>	<b>n</b>	<b>% Survival</b>	<b>SE</b>	<b>n</b>	<b>% Survival</b>	<b>SE</b>
<b>0</b>	<b>550</b>	<b>100</b>	<b>-</b>	<b>231</b>	<b>100</b>	<b>-</b>
<b>1</b>	<b>512</b>	<b>95</b>	<b>1</b>	<b>212</b>	<b>96</b>	<b>1</b>
<b>2</b>	<b>491</b>	<b>93</b>	<b>1</b>	<b>176</b>	<b>95</b>	<b>1</b>
<b>3</b>	<b>476</b>	<b>90</b>	<b>1</b>	<b>116</b>	<b>93</b>	<b>2</b>
<b>4</b>	<b>455</b>	<b>89</b>	<b>1</b>	<b>73</b>	<b>91</b>	<b>2</b>
<b>5</b>	<b>434</b>	<b>86</b>	<b>2</b>	<b>2</b>	<b>90</b>	<b>3</b>
<b>6</b>	<b>334</b>	<b>84</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>7</b>	<b>210</b>	<b>81</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>8</b>	<b>122</b>	<b>81</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>9</b>	<b>51</b>	<b>80</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>10</b>	<b>1</b>	<b>80</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>

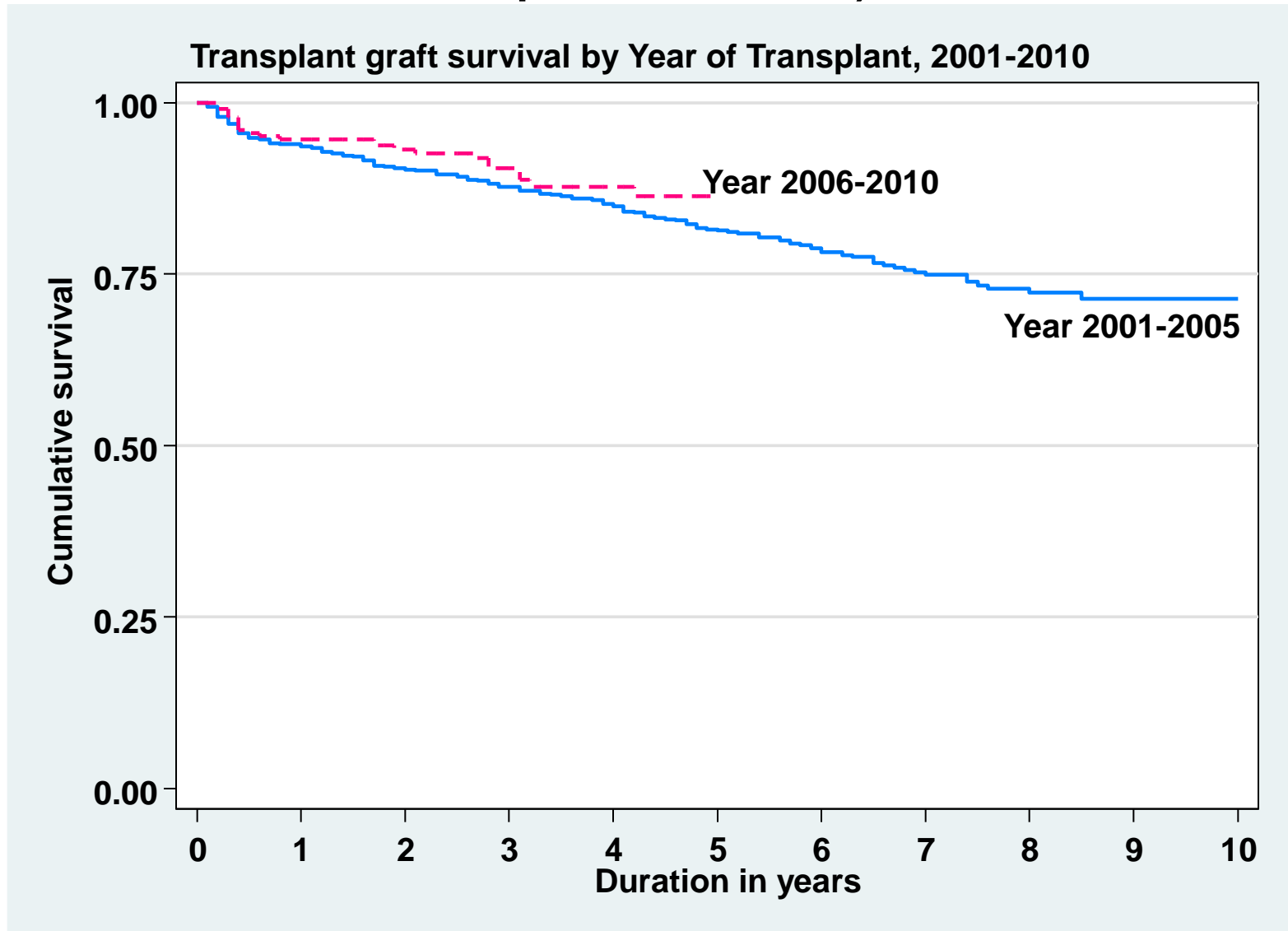
**Figure 13.5.7: Patient survival by year of transplant (Commercial cadaver transplant, 2001-2010)**



**Table 13.5.8: Graft survival by year of transplant (Commercial cadaver transplant, 2001-2010)**

<b>Year of Transplant</b>	<b>2001-2005</b>			<b>2006-2010</b>		
<b>Interval (years)</b>	<b>n</b>	<b>% Survival</b>	<b>SE</b>	<b>n</b>	<b>% Survival</b>	<b>SE</b>
<b>0</b>	<b>550</b>	<b>100</b>	<b>-</b>	<b>231</b>	<b>100</b>	<b>-</b>
<b>1</b>	<b>512</b>	<b>94</b>	<b>1</b>	<b>212</b>	<b>95</b>	<b>1</b>
<b>2</b>	<b>491</b>	<b>90</b>	<b>1</b>	<b>176</b>	<b>93</b>	<b>2</b>
<b>3</b>	<b>476</b>	<b>88</b>	<b>1</b>	<b>116</b>	<b>90</b>	<b>2</b>
<b>4</b>	<b>455</b>	<b>85</b>	<b>2</b>	<b>73</b>	<b>88</b>	<b>3</b>
<b>5</b>	<b>434</b>	<b>81</b>	<b>2</b>	<b>2</b>	<b>86</b>	<b>3</b>
<b>6</b>	<b>334</b>	<b>78</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>7</b>	<b>210</b>	<b>75</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>8</b>	<b>122</b>	<b>72</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>9</b>	<b>51</b>	<b>71</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>10</b>	<b>1</b>	<b>71</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>

**Figure 13.5.8: Graft survival by year of transplant (Commercial cadaver transplant, 2001-2010)**

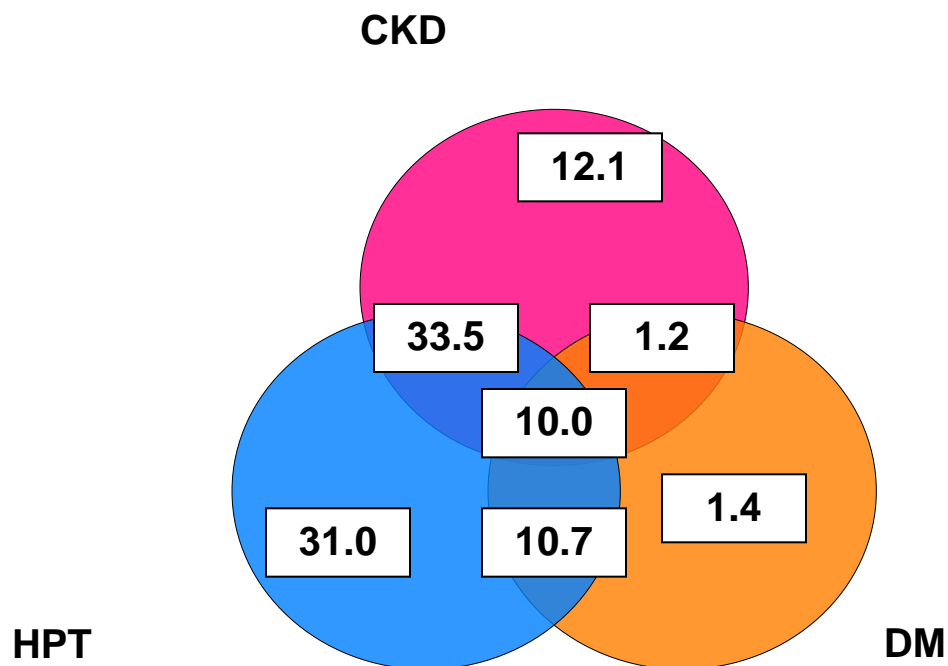


**Table 13.6.1: Risk factors for IHD in renal transplant recipients at year 2006-2010**

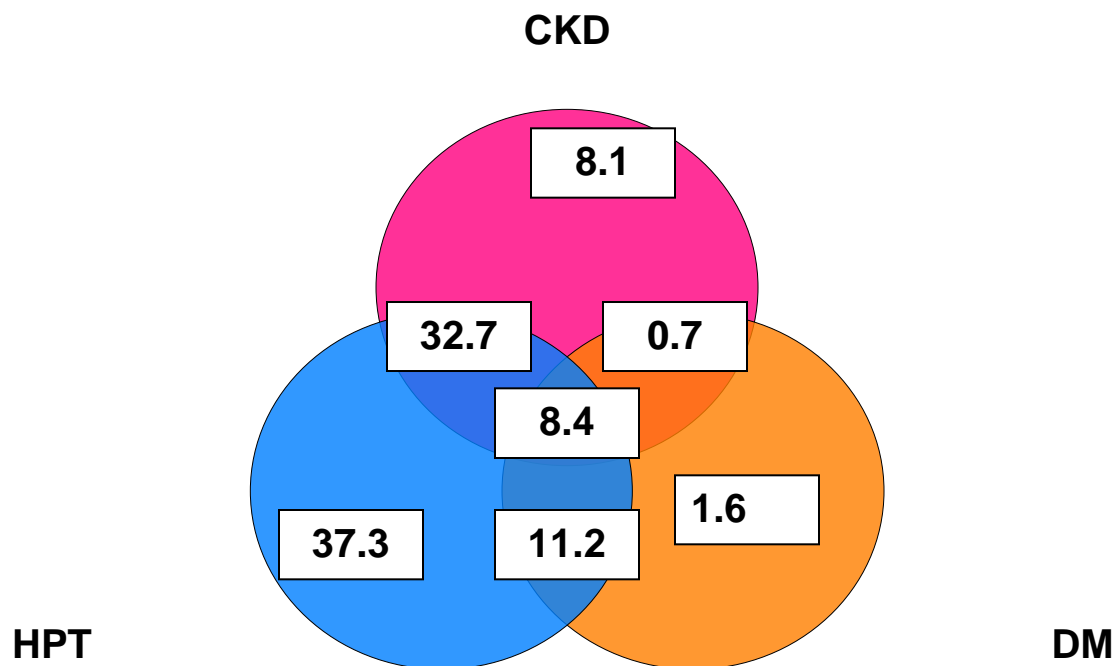
	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Diabetes</b>	<b>21 (1.4)</b>	<b>25 (1.6)</b>	<b>18 (1.1)</b>	<b>28 (1.8)</b>	<b>33 (2.0)</b>
<b>Hypertension**</b>	<b>454 (31.0)</b>	<b>588 (37.3)</b>	<b>664 (41.8)</b>	<b>646 (41.1)</b>	<b>627 (38.3)</b>
<b>CKD</b>	<b>177 (12.1)</b>	<b>127 (8.1)</b>	<b>117 (7.4)</b>	<b>156 (9.9)</b>	<b>163 (9.9)</b>
<b>Diabetes + Hypertension**</b>	<b>156 (10.7)</b>	<b>177 (11.2)</b>	<b>203 (12.8)</b>	<b>163 (10.4)</b>	<b>187 (11.4)</b>
<b>Diabetes + CKD</b>	<b>18 (1.2)</b>	<b>11 (0.7)</b>	<b>22 (1.4)</b>	<b>18 (1.1)</b>	<b>22 (1.3)</b>
<b>CKD + Hypertension**</b>	<b>490 (33.5)</b>	<b>517 (32.8)</b>	<b>457 (28.7)</b>	<b>474 (30.2)</b>	<b>501 (30.6)</b>
<b>Diabetes + CKD + Hypertension**</b>	<b>147 (10.0)</b>	<b>132 (8.4)</b>	<b>109 (6.9)</b>	<b>86 (5.5)</b>	<b>106 (6.5)</b>



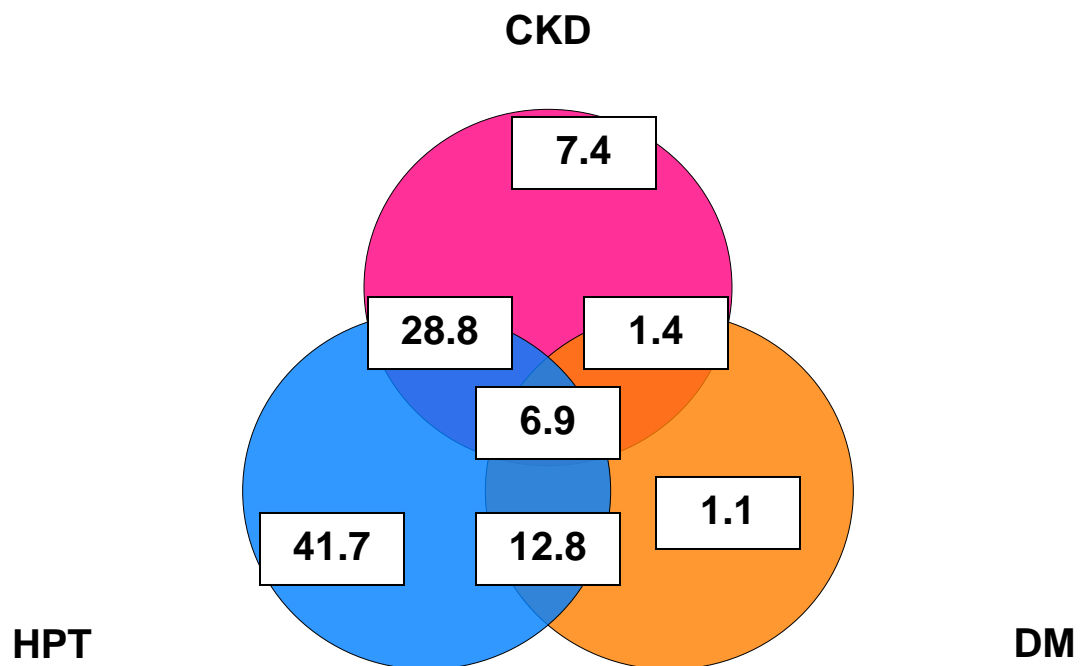
**Figure 13.6.1(a): Venn Diagram for Pre and Post Transplant Complications (in %) at year 2006**



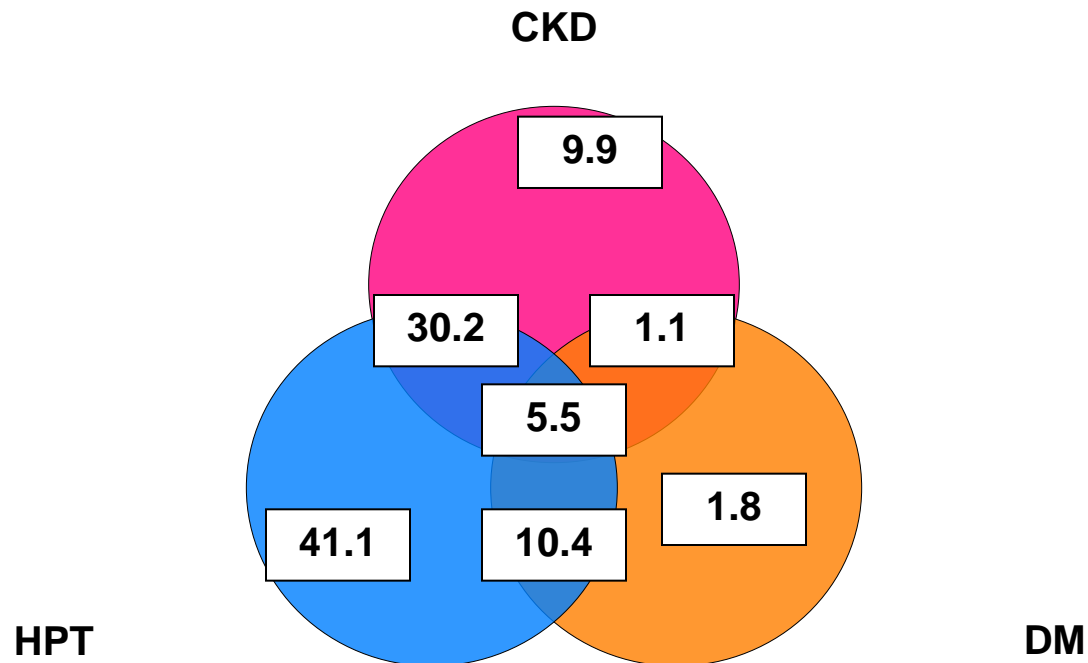
**Figure 13.6.1(b): Venn Diagram for Pre and Post Transplant Complications (in %) at year 2007**



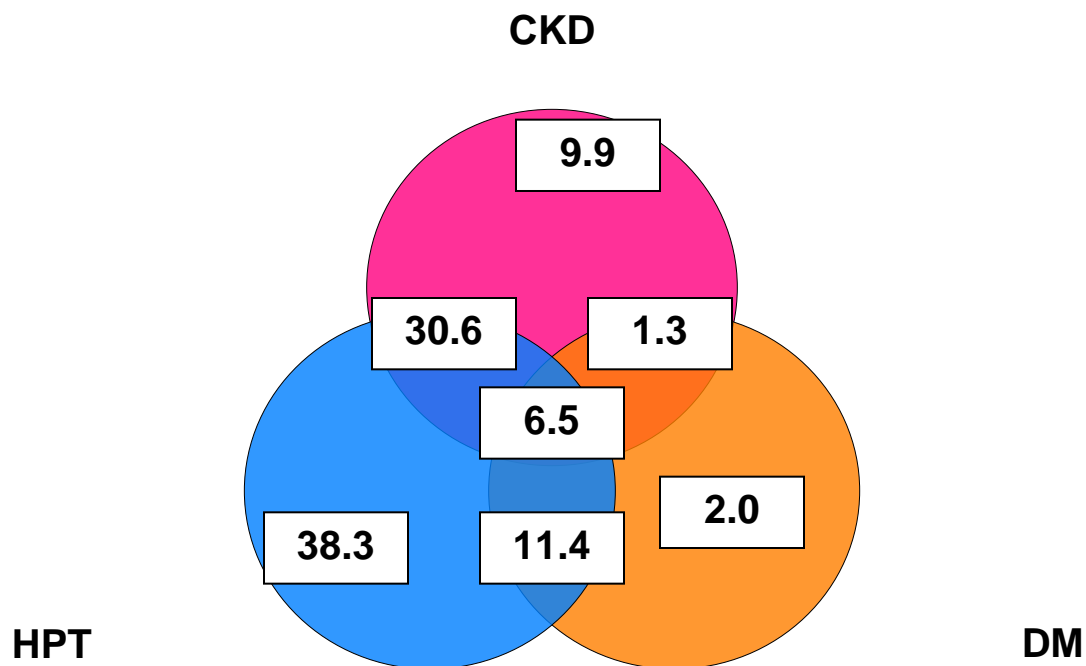
**Figure 13.6.1(c): Venn Diagram for Pre and Post Transplant Complications (in %) at year 2008**



**Figure 13.6.1(d): Venn Diagram for Pre and Post Transplant Complications (in %) at year 2009**



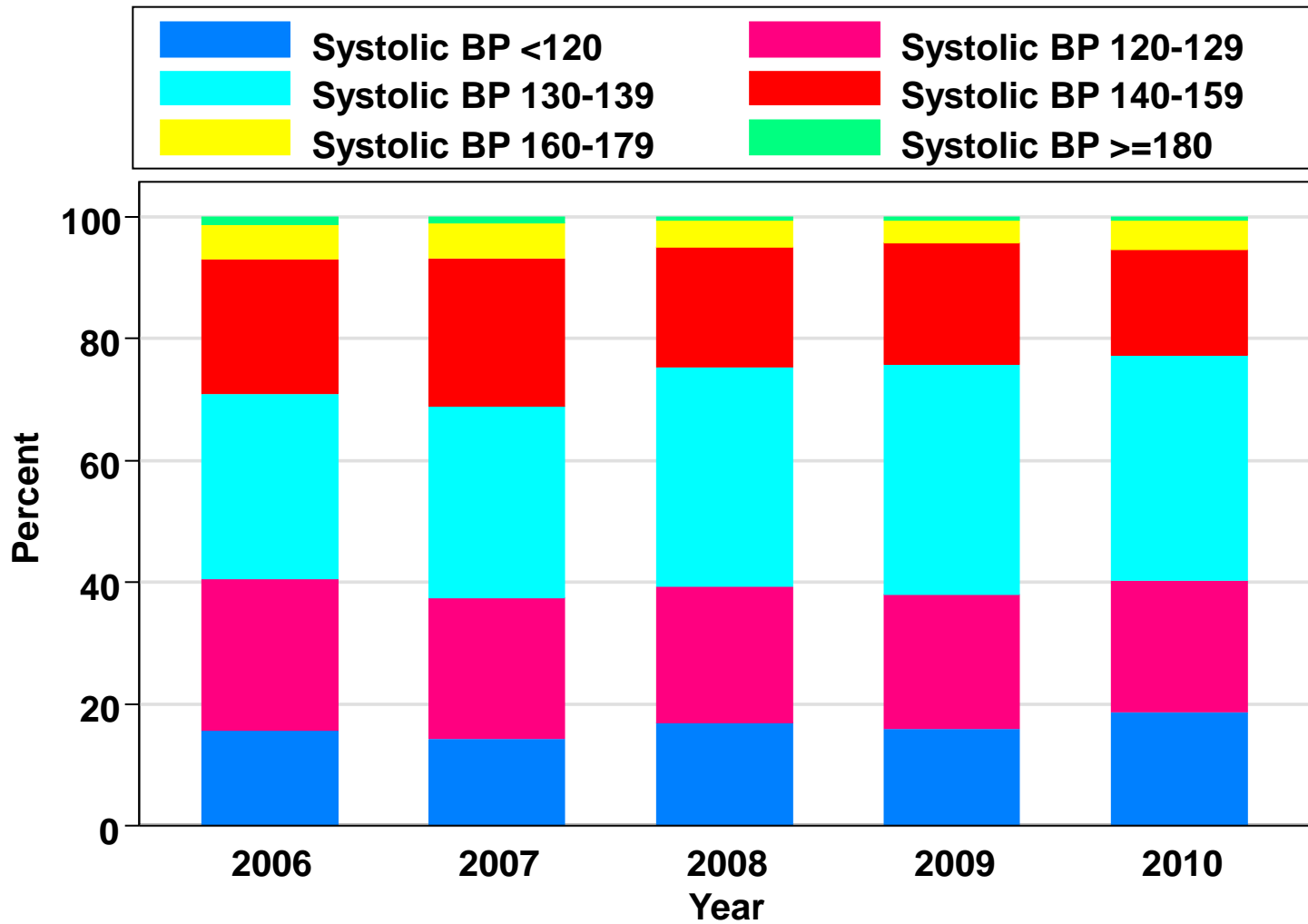
**Figure 13.6.1(e): Venn Diagram for Pre and Post Transplant Complications (in %) at year 2010**



**Table 13.6.2(a): Systolic BP, 2006-2010**

<b>Systolic BP (mmHg)</b>	<b>2006</b>		<b>2007</b>		<b>2008</b>		<b>2009</b>		<b>2010</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
<b>&lt;120</b>	<b>249</b>	<b>15.64</b>	<b>240</b>	<b>14.22</b>	<b>289</b>	<b>17.02</b>	<b>269</b>	<b>15.87</b>	<b>331</b>	<b>18.47</b>
<b>120-129</b>	<b>395</b>	<b>24.81</b>	<b>392</b>	<b>23.22</b>	<b>377</b>	<b>22.20</b>	<b>376</b>	<b>22.18</b>	<b>390</b>	<b>21.76</b>
<b>130-139</b>	<b>483</b>	<b>30.34</b>	<b>531</b>	<b>31.46</b>	<b>612</b>	<b>36.04</b>	<b>638</b>	<b>37.64</b>	<b>661</b>	<b>36.89</b>
<b>140-159</b>	<b>353</b>	<b>22.17</b>	<b>409</b>	<b>24.23</b>	<b>335</b>	<b>19.73</b>	<b>340</b>	<b>20.06</b>	<b>314</b>	<b>17.52</b>
<b>160-179</b>	<b>93</b>	<b>5.84</b>	<b>99</b>	<b>5.86</b>	<b>75</b>	<b>4.42</b>	<b>62</b>	<b>3.66</b>	<b>86</b>	<b>4.80</b>
<b>&gt;=180</b>	<b>19</b>	<b>1.19</b>	<b>17</b>	<b>1.01</b>	<b>10</b>	<b>0.59</b>	<b>10</b>	<b>0.59</b>	<b>10</b>	<b>0.56</b>

**Figure 13.6.2(a): Systolic BP, 2006-2010**

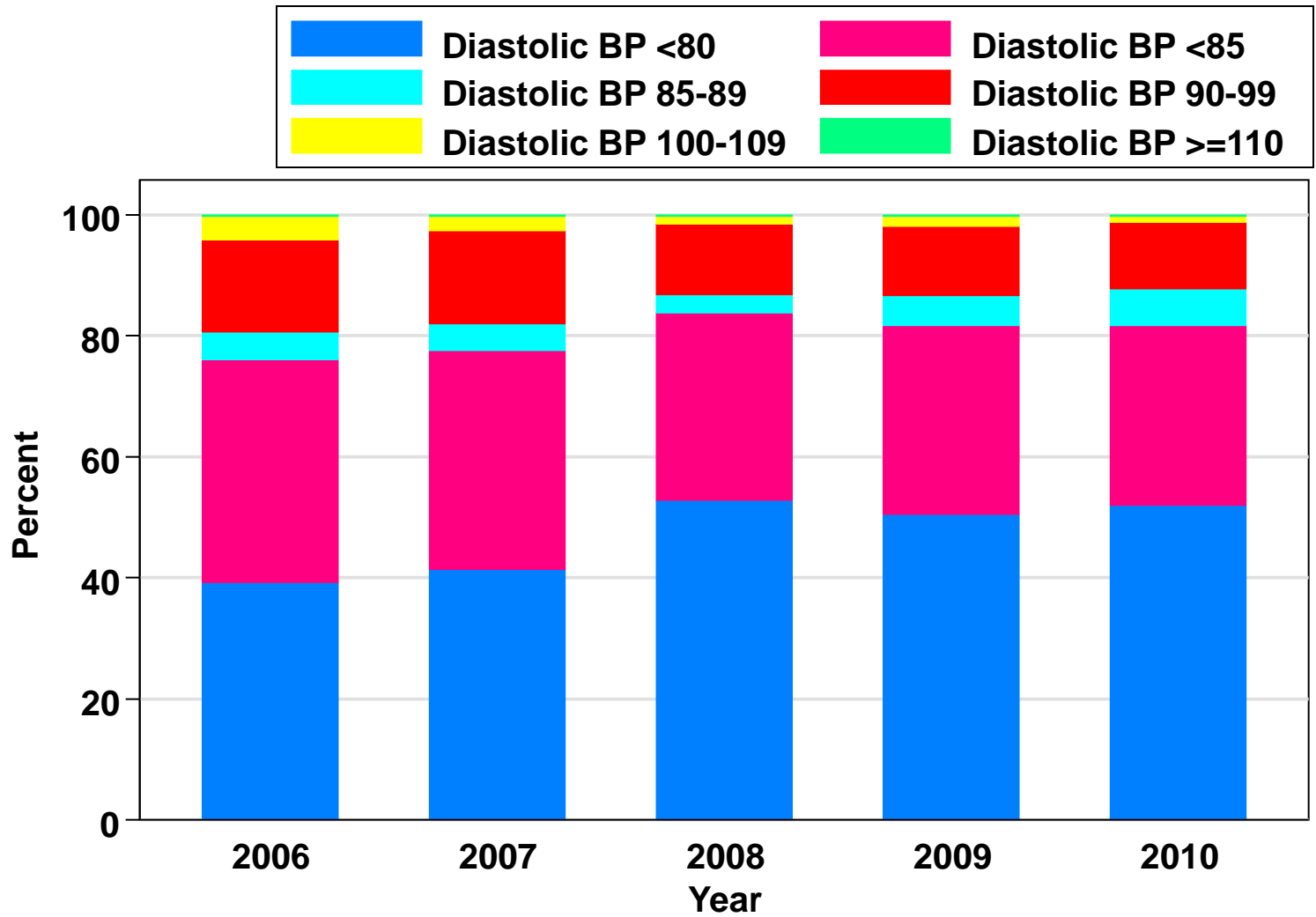


**Table 13.6.2(b): Diastolic BP, 2006-2010**

Diastolic BP (mmHg)	2006		2007		2008		2009		2010	
	n	%	n	%	n	%	n	%	n	%
<80	624	39.20	699	41.41	898	52.89	856	50.50	932	52.01
80-84	586	36.81	610	36.14	525	30.92	528	31.15	533	29.74
85-89	73	4.59	74	4.38	50	2.94	84	4.96	108	6.03
90-99	244	15.33	261	15.46	198	11.66	195	11.50	196	10.94
100-109	61	3.83	39	2.31	22	1.30	27	1.59	19	1.06
>=110	4	0.25	5	0.30	5	0.29	5	0.29	4	0.22



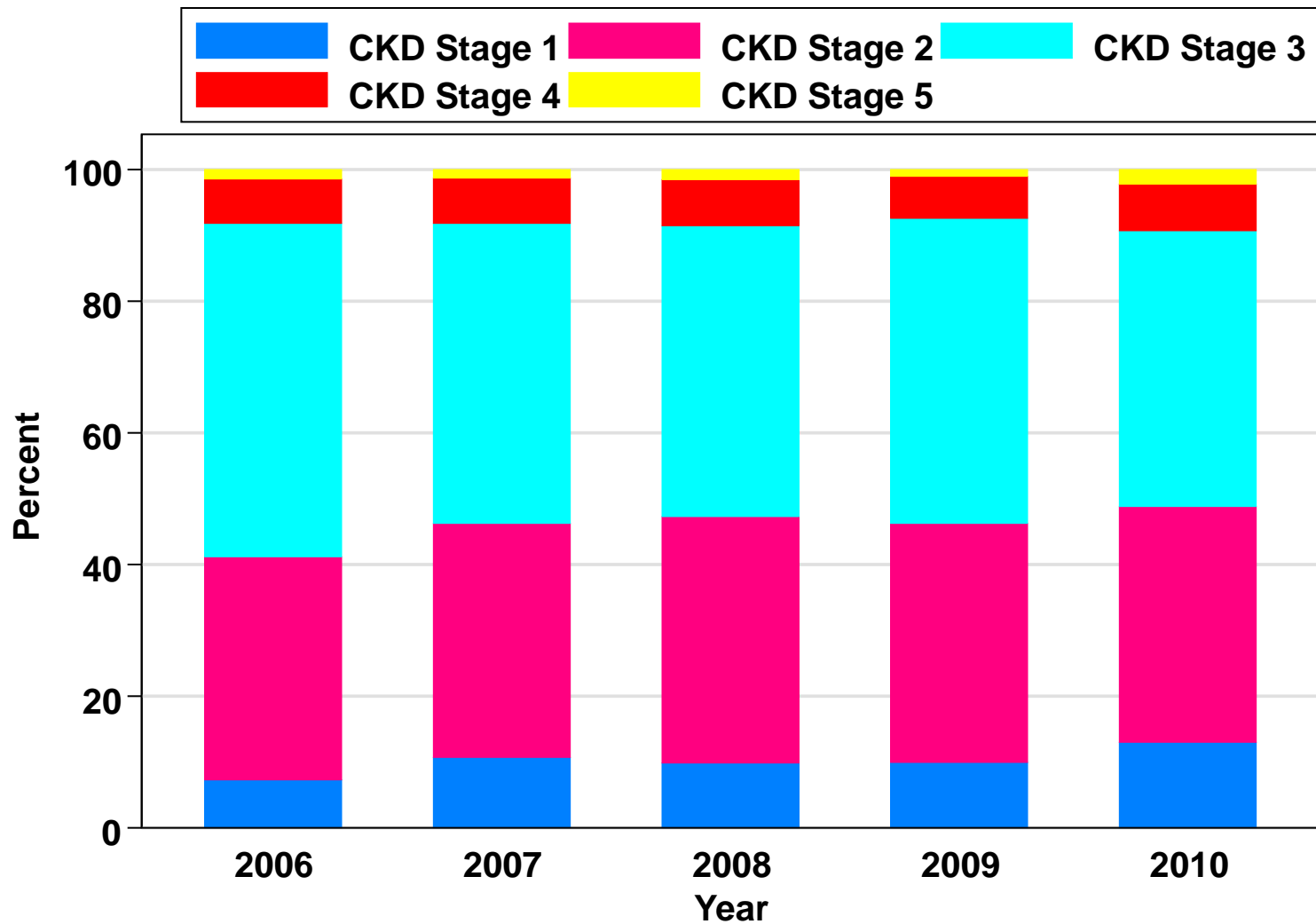
**Figure 13.6.2(b): Diastolic BP, 2006-2010**



**Table 13.6.3: CKD stages, 2006-2010**

<b>Year</b>	<b>2006</b>		<b>2007</b>		<b>2008</b>		<b>2009</b>		<b>2010</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
<b>Stage 1</b>	<b>116</b>	<b>7.33</b>	<b>180</b>	<b>10.78</b>	<b>164</b>	<b>9.80</b>	<b>165</b>	<b>9.92</b>	<b>231</b>	<b>13.08</b>
<b>Stage 2</b>	<b>535</b>	<b>33.80</b>	<b>592</b>	<b>35.45</b>	<b>628</b>	<b>37.51</b>	<b>604</b>	<b>36.30</b>	<b>630</b>	<b>35.67</b>
<b>Stage 3</b>	<b>803</b>	<b>50.73</b>	<b>762</b>	<b>45.63</b>	<b>738</b>	<b>44.09</b>	<b>771</b>	<b>46.33</b>	<b>740</b>	<b>41.90</b>
<b>Stage 4</b>	<b>107</b>	<b>6.76</b>	<b>113</b>	<b>6.77</b>	<b>118</b>	<b>7.05</b>	<b>106</b>	<b>6.37</b>	<b>126</b>	<b>7.13</b>
<b>Stage 5</b>	<b>22</b>	<b>1.39</b>	<b>23</b>	<b>1.38</b>	<b>26</b>	<b>1.55</b>	<b>18</b>	<b>1.08</b>	<b>39</b>	<b>2.21</b>

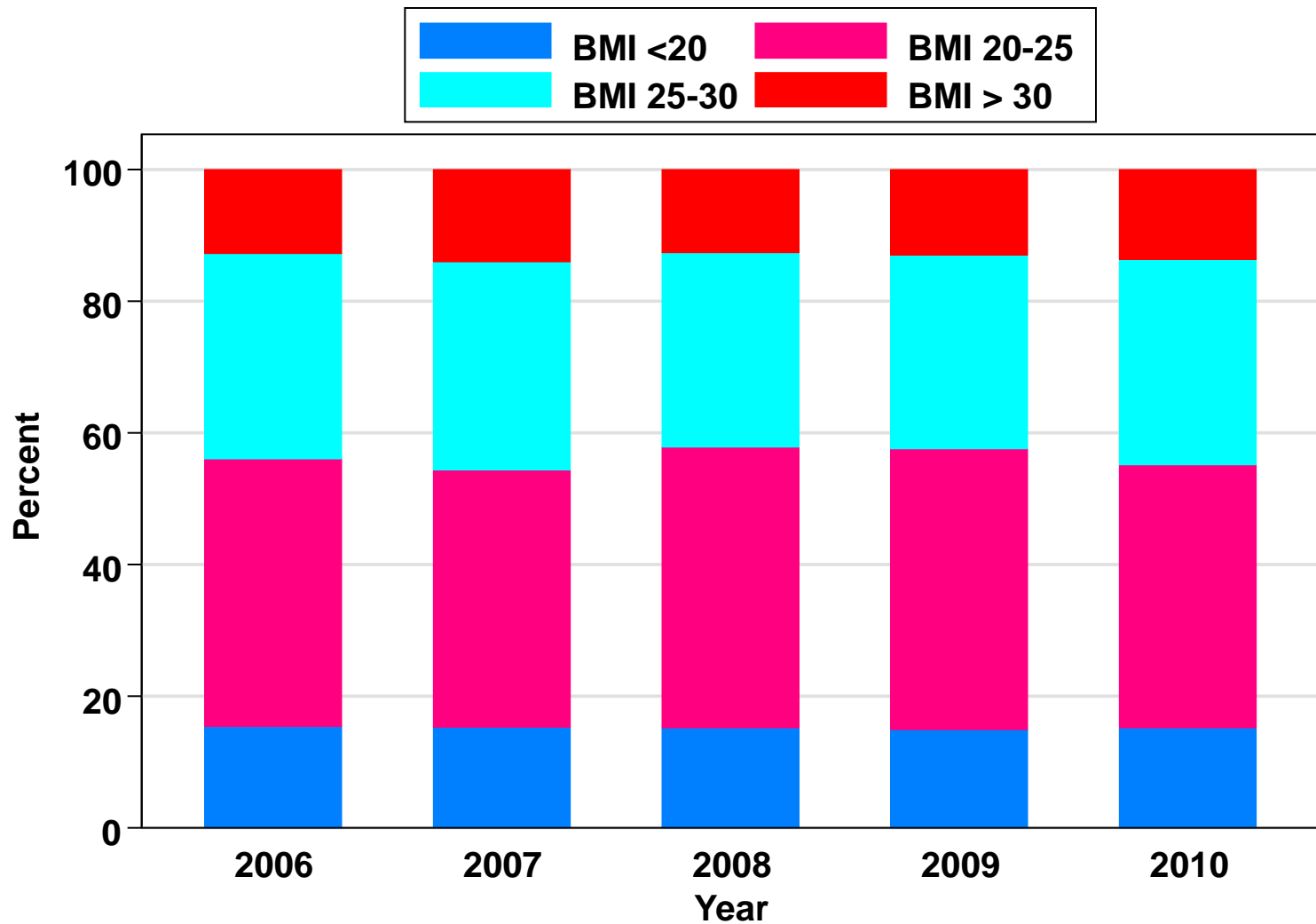
# Figure 13.6.3: CKD stages by year



**Table 13.6.4: BMI, 2006-2010**

<b>Year</b>	<b>2006</b>		<b>2007</b>		<b>2008</b>		<b>2009</b>		<b>2010</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
<b>&lt;20</b>	<b>246</b>	<b>15.45</b>	<b>259</b>	<b>15.34</b>	<b>257</b>	<b>15.14</b>	<b>253</b>	<b>14.93</b>	<b>273</b>	<b>15.23</b>
<b>20-25</b>	<b>647</b>	<b>40.64</b>	<b>660</b>	<b>39.10</b>	<b>725</b>	<b>42.70</b>	<b>723</b>	<b>42.65</b>	<b>715</b>	<b>39.90</b>
<b>25-30</b>	<b>496</b>	<b>31.16</b>	<b>531</b>	<b>31.46</b>	<b>501</b>	<b>29.51</b>	<b>499</b>	<b>29.44</b>	<b>558</b>	<b>31.14</b>
<b>&gt; 30</b>	<b>203</b>	<b>12.75</b>	<b>238</b>	<b>14.10</b>	<b>215</b>	<b>12.66</b>	<b>220</b>	<b>12.98</b>	<b>246</b>	<b>13.73</b>

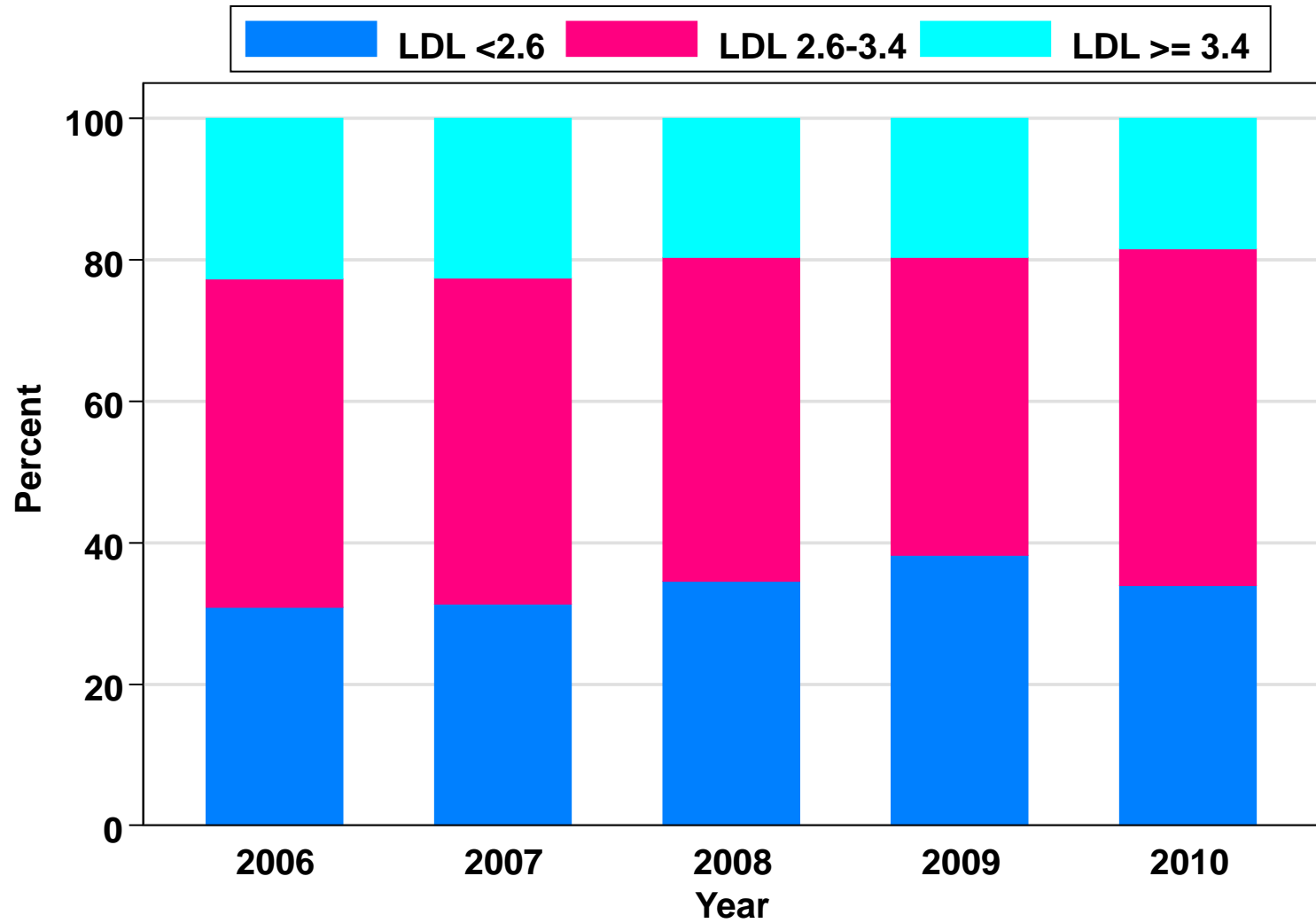
**Figure 13.6.4: BMI, 2006-2010**



**Table 13.6.5(a): LDL, 2006-2010**

Year	2006		2007		2008		2009		2010	
	n	%	n	%	n	%	n	%	n	%
< 2.6	492	30.90	528	31.28	586	34.51	648	38.23	608	33.93
2.6-3.4	738	46.36	779	46.15	779	45.88	715	42.18	854	47.66
>= 3.4	362	22.74	381	22.57	333	19.61	332	19.59	330	18.42

**Figure 13.6.5(a): LDL, 2006-2010**

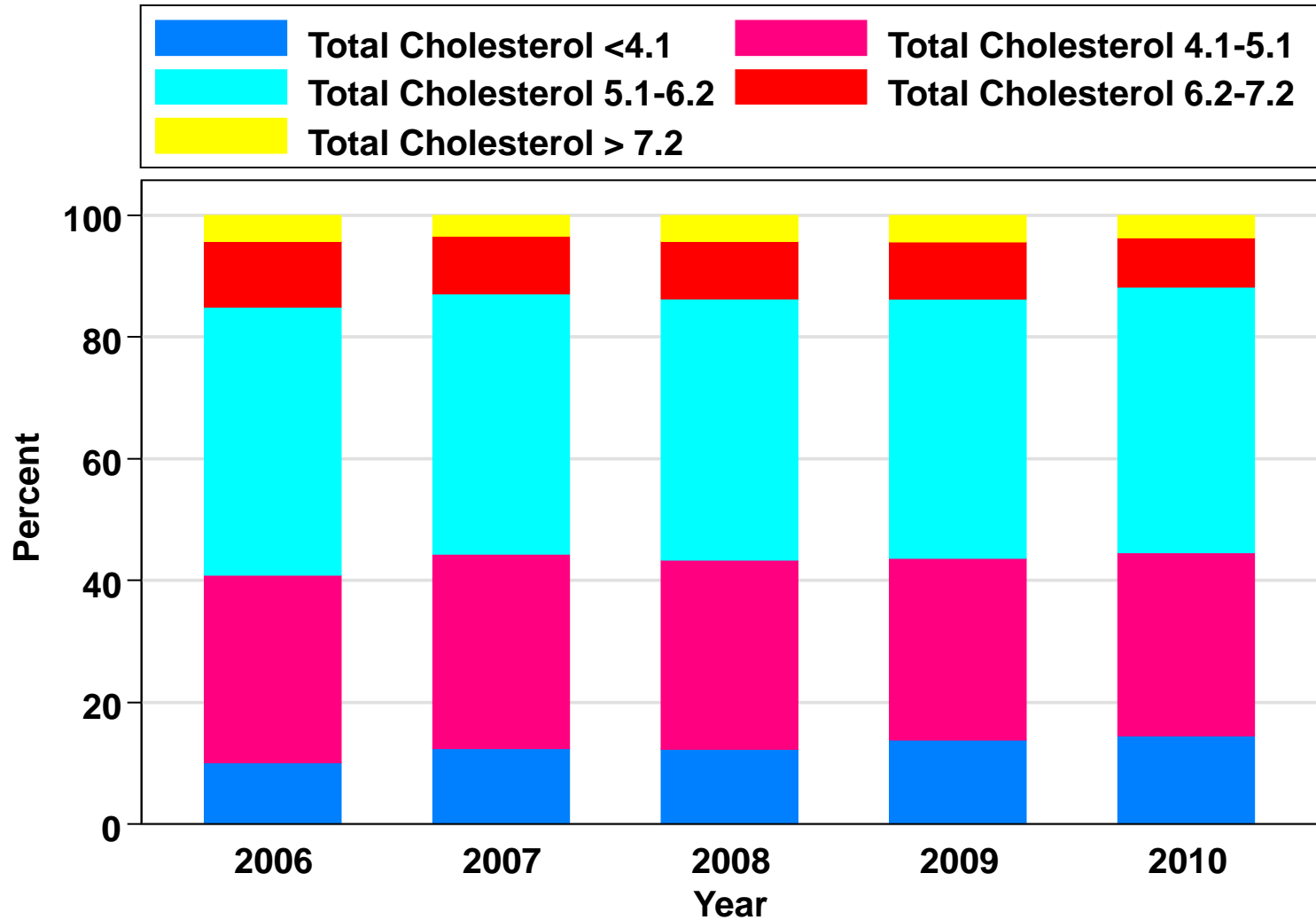


**Table 13.6.5(b): Total Cholesterol, 2006-2010**

Year	2006		2007		2008		2009		2010	
	n	%	n	%	n	%	n	%	n	%
<4.1	160	10.05	210	12.44	208	12.25	233	13.75	259	14.45
4.1-5.1	490	30.78	539	31.93	529	31.15	507	29.91	539	30.08
5.1-6.2	700	43.97	721	42.71	728	42.87	721	42.54	783	43.69
6.2- 7.2	173	10.87	159	9.42	160	9.42	159	9.38	144	8.04
> 7.2	69	4.33	59	3.50	73	4.30	75	4.42	67	3.74



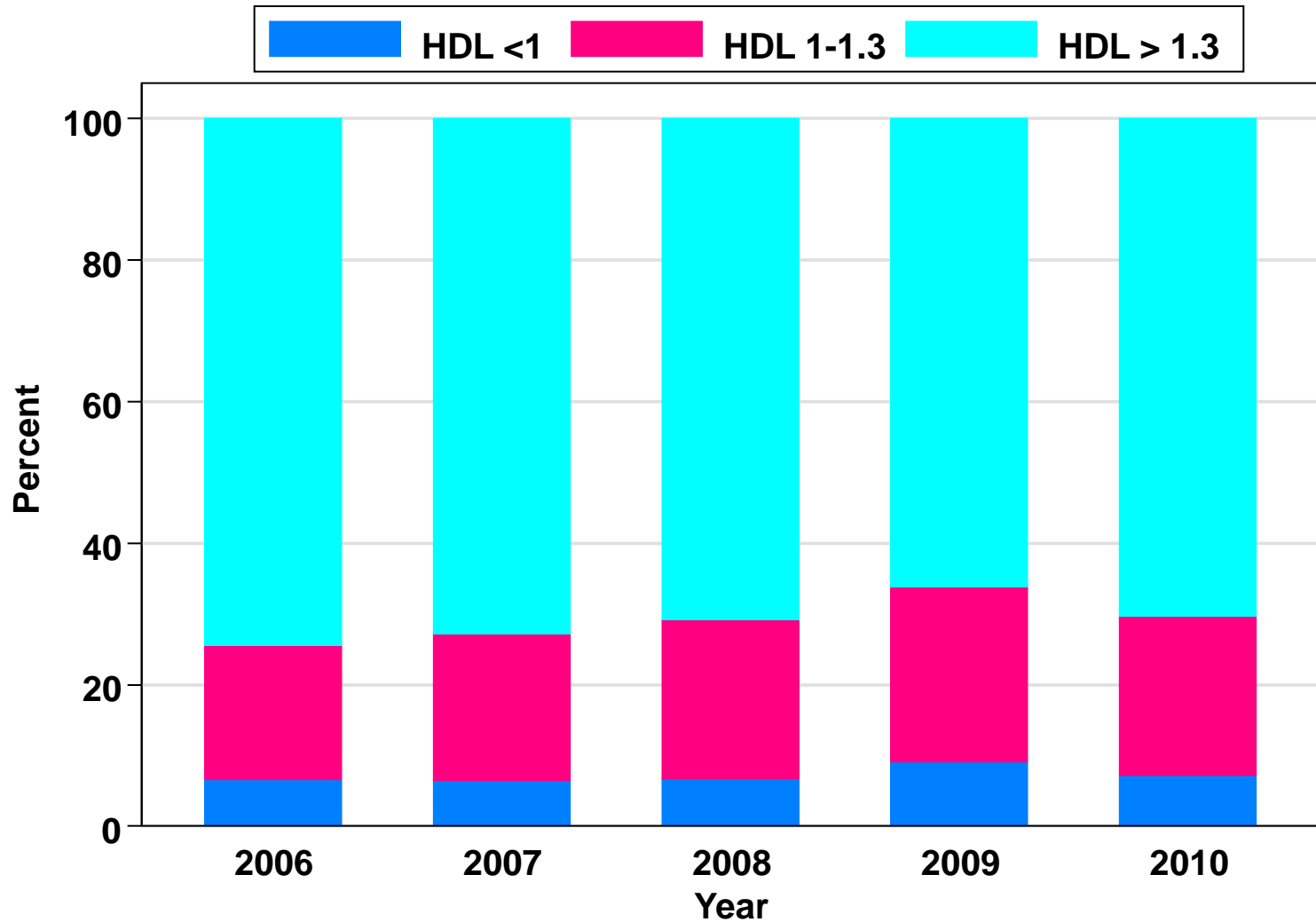
**Figure 13.6.5(b): Total Cholesterol, 2006-2010**



**Table 13.6.5(c): HDL, 2006-2010**

<b>Year</b>	<b>2006</b>		<b>2007</b>		<b>2008</b>		<b>2009</b>		<b>2010</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
<b>&lt;1</b>	<b>104</b>	<b>6.53</b>	<b>108</b>	<b>6.40</b>	<b>114</b>	<b>6.71</b>	<b>153</b>	<b>9.03</b>	<b>129</b>	<b>7.20</b>
<b>1-1.3</b>	<b>302</b>	<b>18.97</b>	<b>350</b>	<b>20.73</b>	<b>382</b>	<b>22.50</b>	<b>421</b>	<b>24.84</b>	<b>402</b>	<b>22.43</b>
<b>&gt;1.3</b>	<b>1186</b>	<b>74.50</b>	<b>1230</b>	<b>72.87</b>	<b>1202</b>	<b>70.79</b>	<b>1121</b>	<b>66.14</b>	<b>1261</b>	<b>70.37</b>

**Figure 13.6.5(c): HDL, 2006-2010**



**Table 13.6.6(a): Treatment for hypertension, 2006-2010**

<b>Year</b>	<b>n</b>	<b>% on anti-hypertensives</b>	<b>% on 1 anti-hypertensive drug</b>	<b>% on 2 anti-hypertensives</b>	<b>% on 3 anti-hypertensives</b>
<b>2006</b>	<b>1592</b>	<b>86</b>	<b>34</b>	<b>26</b>	<b>17</b>
<b>2007</b>	<b>1688</b>	<b>85</b>	<b>25</b>	<b>31</b>	<b>21</b>
<b>2008</b>	<b>1698</b>	<b>78</b>	<b>25</b>	<b>28</b>	<b>19</b>
<b>2009</b>	<b>1695</b>	<b>81</b>	<b>29</b>	<b>29</b>	<b>17</b>
<b>2010</b>	<b>1792</b>	<b>82</b>	<b>34</b>	<b>27</b>	<b>15</b>

**Table 13.6.6(b): Distribution of Systolic BP without anti-hypertensives, 2006-2010**

<b>Year</b>	<b>n</b>	<b>Mean</b>	<b>SD</b>	<b>Median</b>	<b>LQ</b>	<b>UQ</b>	<b>% Patients <math>\geq</math> 160mmHg</b>
<b>2006</b>	<b>189</b>	<b>123.8</b>	<b>14.4</b>	<b>120</b>	<b>117</b>	<b>130</b>	<b>4</b>
<b>2007</b>	<b>196</b>	<b>125.2</b>	<b>16.5</b>	<b>120</b>	<b>113</b>	<b>134</b>	<b>4</b>
<b>2008</b>	<b>178</b>	<b>123.7</b>	<b>15.5</b>	<b>120</b>	<b>110</b>	<b>130</b>	<b>3</b>
<b>2009</b>	<b>230</b>	<b>123.9</b>	<b>15.3</b>	<b>120</b>	<b>111</b>	<b>130</b>	<b>3</b>
<b>2010</b>	<b>270</b>	<b>128.7</b>	<b>42.5</b>	<b>123</b>	<b>117</b>	<b>136</b>	<b>4</b>

**Table 13.6.6(c): Distribution of Diastolic BP without anti-hypertensives, 2006-2010**

<b>Year</b>	<b>n</b>	<b>Mean</b>	<b>SD</b>	<b>Median</b>	<b>LQ</b>	<b>UQ</b>	<b>% patients <math>\geq</math> 90mmHg</b>
<b>2006</b>	<b>189</b>	<b>76.4</b>	<b>10.3</b>	<b>80</b>	<b>70</b>	<b>80</b>	<b>11</b>
<b>2007</b>	<b>196</b>	<b>76.6</b>	<b>10</b>	<b>80</b>	<b>70</b>	<b>80</b>	<b>12</b>
<b>2008</b>	<b>177</b>	<b>75.1</b>	<b>10</b>	<b>80</b>	<b>70</b>	<b>80</b>	<b>10</b>
<b>2009</b>	<b>230</b>	<b>77.4</b>	<b>9.1</b>	<b>80</b>	<b>70</b>	<b>80</b>	<b>12</b>
<b>2010</b>	<b>269</b>	<b>76.9</b>	<b>10.5</b>	<b>80</b>	<b>70</b>	<b>82</b>	<b>16</b>

**Table 13.6.6(d): Distribution of Systolic BP on anti-hypertensives, 2006-2010**

<b>Year</b>	<b>n</b>	<b>Mean</b>	<b>SD</b>	<b>Median</b>	<b>LQ</b>	<b>UQ</b>	<b>% Patients <math>\geq</math> 160mmHg</b>
<b>2006</b>	<b>1334</b>	<b>131.7</b>	<b>16.3</b>	<b>130</b>	<b>120</b>	<b>140</b>	<b>8</b>
<b>2007</b>	<b>1389</b>	<b>132.6</b>	<b>16</b>	<b>130</b>	<b>120</b>	<b>140</b>	<b>8</b>
<b>2008</b>	<b>1269</b>	<b>129.9</b>	<b>16.6</b>	<b>130</b>	<b>120</b>	<b>140</b>	<b>6</b>
<b>2009</b>	<b>1222</b>	<b>131</b>	<b>15.9</b>	<b>130</b>	<b>120</b>	<b>140</b>	<b>5</b>
<b>2010</b>	<b>1317</b>	<b>130.2</b>	<b>16.2</b>	<b>130</b>	<b>120</b>	<b>140</b>	<b>6</b>

**Table 13.6.6(e): Distribution of Diastolic BP on anti-hypertensives,  
2006-2010**

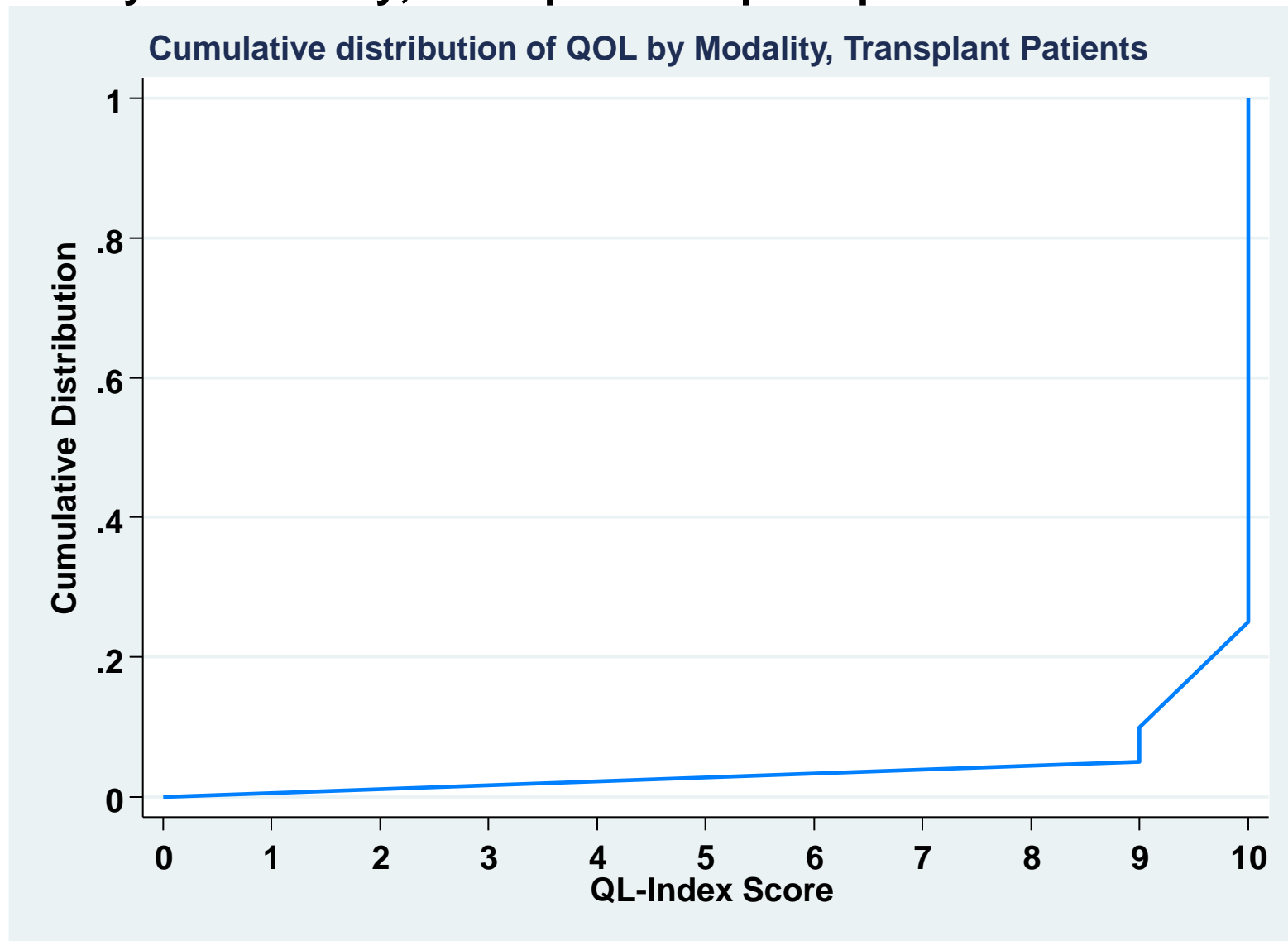
<b>Year</b>	<b>n</b>	<b>Mean</b>	<b>SD</b>	<b>Median</b>	<b>LQ</b>	<b>UQ</b>	<b>% Patients <math>\geq</math> 90 mmHg</b>
<b>2006</b>	<b>1334</b>	<b>79.2</b>	<b>9.9</b>	<b>80</b>	<b>70</b>	<b>86</b>	<b>22</b>
<b>2007</b>	<b>1388</b>	<b>79.1</b>	<b>9.6</b>	<b>80</b>	<b>70</b>	<b>85</b>	<b>20</b>
<b>2008</b>	<b>1255</b>	<b>77.6</b>	<b>10</b>	<b>80</b>	<b>70</b>	<b>80</b>	<b>16</b>
<b>2009</b>	<b>1220</b>	<b>78.3</b>	<b>9.5</b>	<b>80</b>	<b>70</b>	<b>82</b>	<b>16</b>
<b>2010</b>	<b>1313</b>	<b>77.9</b>	<b>21.5</b>	<b>80</b>	<b>70</b>	<b>82</b>	<b>13</b>



**Table 13.7.1: Cumulative distribution of QoL-Index score in relation to Dialysis Modality, Transplant recipient patients 2001-2010**

<b>Dialysis modality</b>	<b>QoL score</b>
<b>Number of patients</b>	<b>1249</b>
<b>Centile</b>	
<b>0</b>	<b>0</b>
<b>0.05</b>	<b>9</b>
<b>0.1</b>	<b>9</b>
<b>0.25 (LQ)</b>	<b>10</b>
<b>0.5 (median)</b>	<b>10</b>
<b>0.75 (UQ)</b>	<b>10</b>
<b>0.9</b>	<b>10</b>
<b>0.95</b>	<b>10</b>
<b>1</b>	<b>10</b>

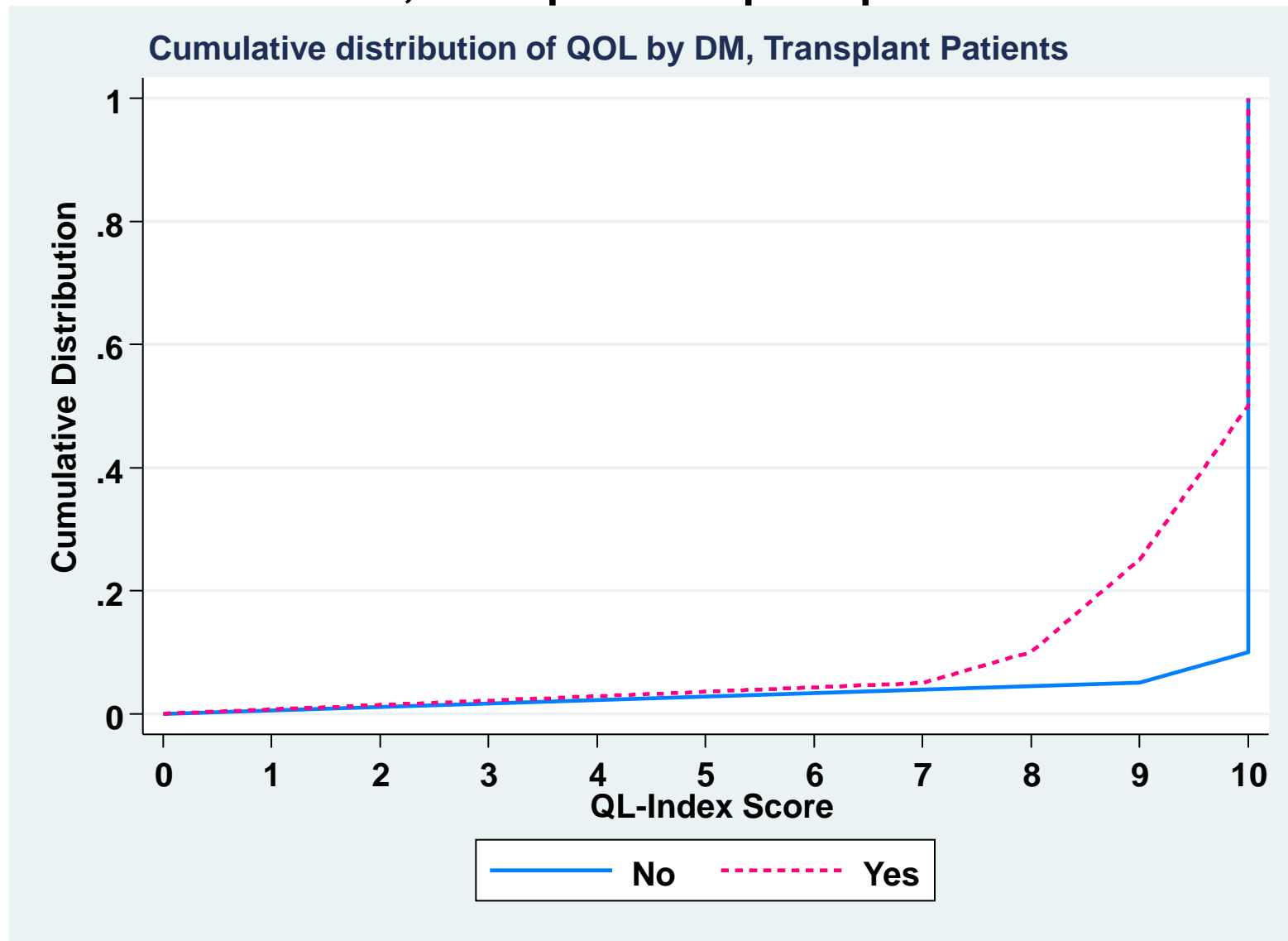
**Figure 13.7.1: Cumulative distribution of QoL-Index score in relation to Dialysis Modality, Transplant recipient patients 2001-2010**



**Table 13.7.2: Cumulative distribution of QoL-Index score in relation to Diabetes mellitus, Transplant recipient patients 2001-2010**

<b>Diabetes mellitus</b>	<b>No</b>	<b>Yes</b>
<b>Number of patients</b>	<b>1194</b>	<b>55</b>
<b>Centile</b>		
<b>0</b>	<b>0</b>	<b>0</b>
<b>0.05</b>	<b>9</b>	<b>7</b>
<b>0.1</b>	<b>10</b>	<b>8</b>
<b>0.25 (LQ)</b>	<b>10</b>	<b>9</b>
<b>0.5 (median)</b>	<b>10</b>	<b>10</b>
<b>0.75 (UQ)</b>	<b>10</b>	<b>10</b>
<b>0.9</b>	<b>10</b>	<b>10</b>
<b>0.95</b>	<b>10</b>	<b>10</b>
<b>1</b>	<b>10</b>	<b>10</b>

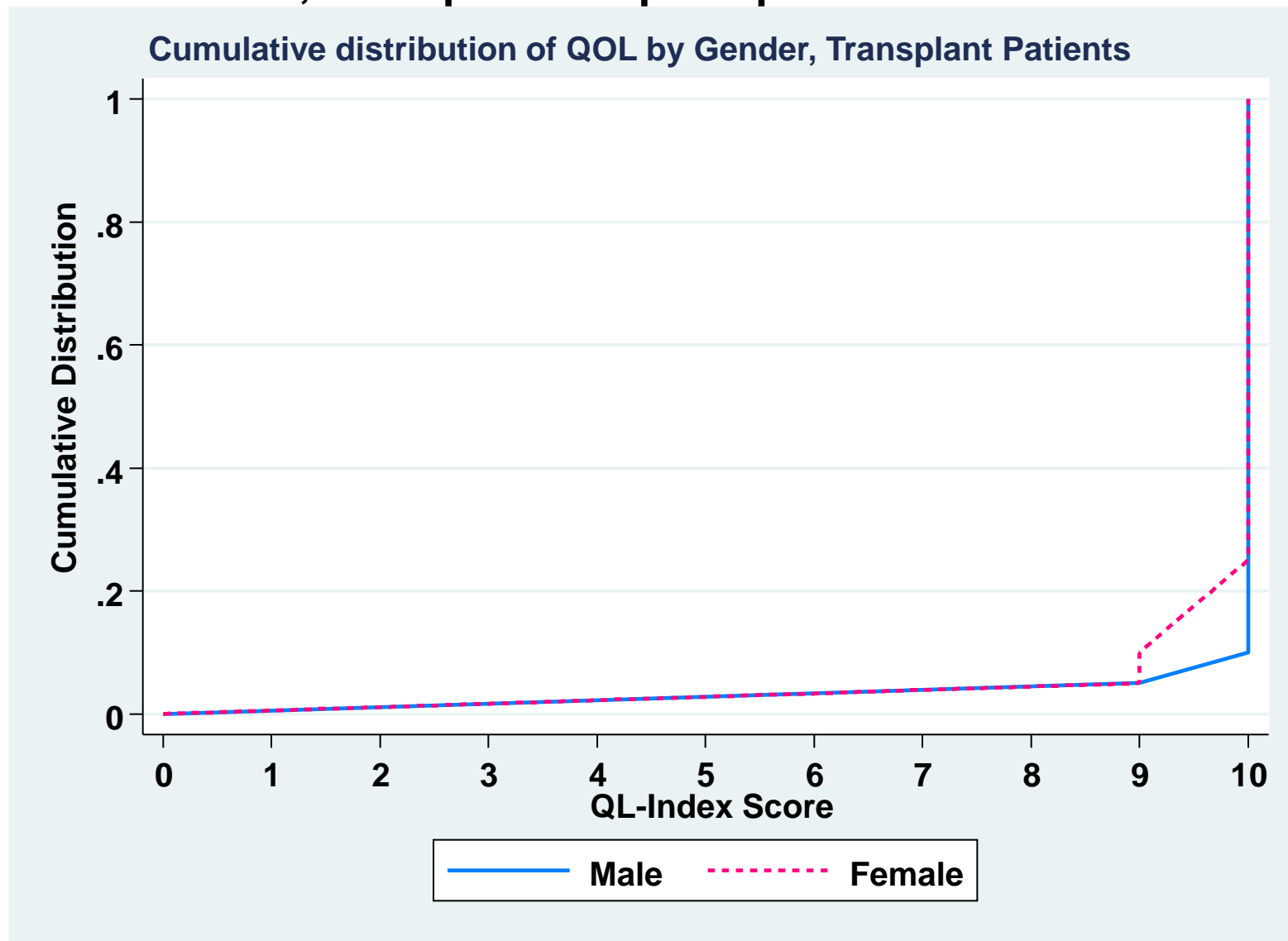
**Figure 13.7.2: Cumulative distribution of QoL-Index score in relation to Diabetes mellitus, Transplant recipient patients 2001-2010**



**Table 13.7.3: Cumulative distribution of QoL-Index score in relation to Gender, Transplant recipient patients 2001-2010**

<b>Gender</b>	<b>Male</b>	<b>Female</b>
<b>Number of patients</b>	<b>783</b>	<b>466</b>
<b>Centile</b>		
<b>0</b>	<b>0</b>	<b>0</b>
<b>0.05</b>	<b>9</b>	<b>9</b>
<b>0.1</b>	<b>10</b>	<b>9</b>
<b>0.25 (LQ)</b>	<b>10</b>	<b>10</b>
<b>0.5 (median)</b>	<b>10</b>	<b>10</b>
<b>0.75 (UQ)</b>	<b>10</b>	<b>10</b>
<b>0.9</b>	<b>10</b>	<b>10</b>
<b>0.95</b>	<b>10</b>	<b>10</b>
<b>1</b>	<b>10</b>	<b>10</b>

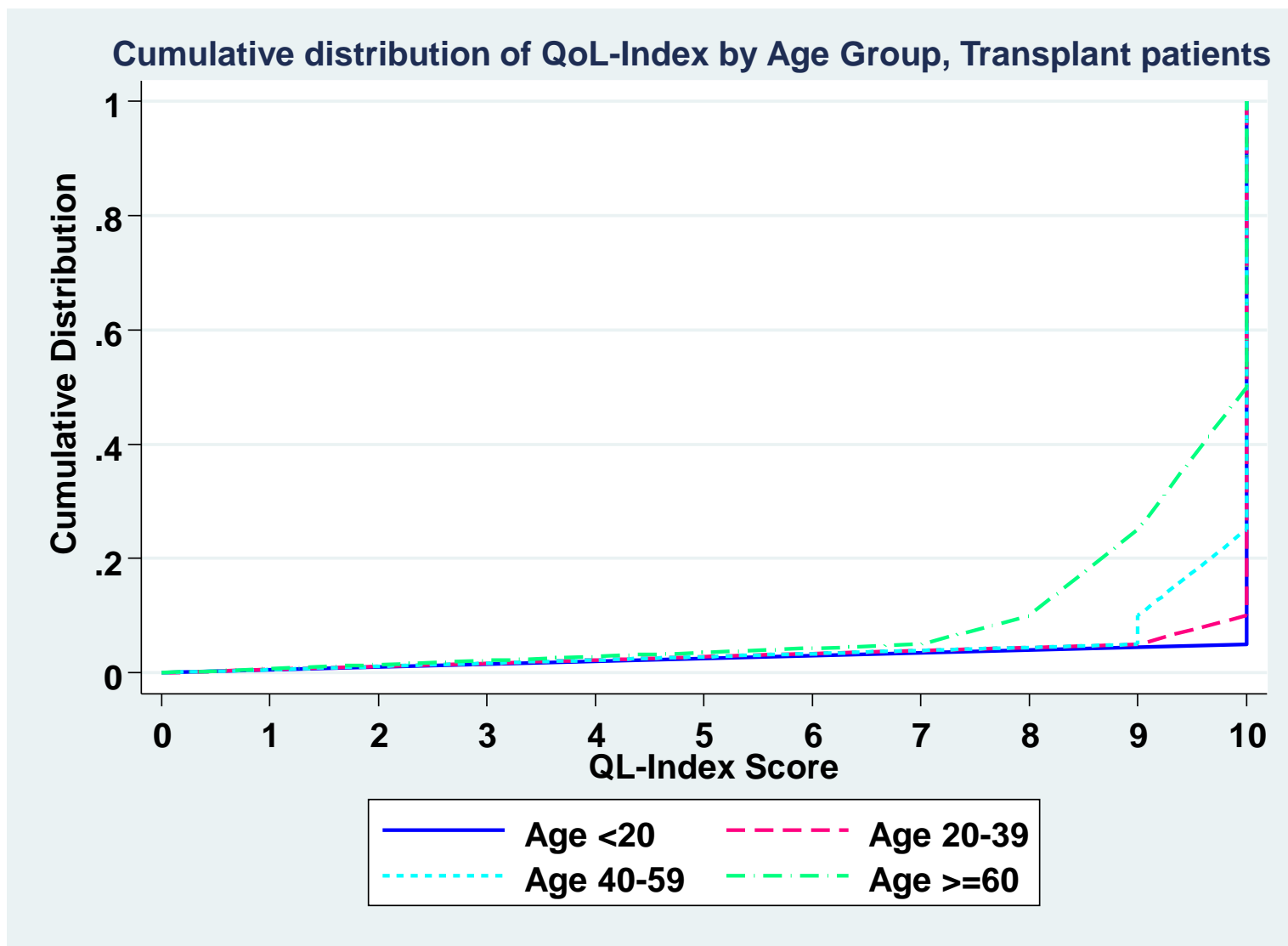
**Figure 13.7.3: Cumulative distribution of QoL-Index score in relation to Gender, Transplant recipient patients 2001-2010**



**Table 13.7.4: Cumulative distribution of QoL-Index score in relation to Age, Transplant recipient patients 2001-2010**

<b>Age group (years)</b>	<b>&lt;20</b>	<b>20-39</b>	<b>40-59</b>	<b>&gt;=60</b>
<b>Number of patients</b>	<b>132</b>	<b>480</b>	<b>549</b>	<b>88</b>
<b>Centile</b>				
<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>0.05</b>	<b>10</b>	<b>9</b>	<b>9</b>	<b>7</b>
<b>0.1</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>8</b>
<b>0.25 (LQ)</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>9</b>
<b>0.5 (median)</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>0.75 (UQ)</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>0.9</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>0.95</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>1</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>

**Figure 13.7.4: Cumulative distribution of QoL-Index score in relation to Age, Transplant recipient patients 2001-2010**





**Table 13.7.5: Cumulative distribution of QoL-Index score in relation to Year of entry, Transplant recipient patients 2001-2010**

<b>Year of Entry</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Number of patients</b>	<b>127</b>	<b>145</b>	<b>136</b>	<b>168</b>	<b>154</b>	<b>137</b>	<b>95</b>	<b>106</b>	<b>112</b>	<b>69</b>
<b>Centile</b>										
<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>0.05</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>8</b>	<b>9</b>	<b>7</b>
<b>0.1</b>	<b>9</b>	<b>10</b>	<b>9</b>	<b>9</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>9</b>	<b>10</b>	<b>9</b>
<b>0.25 (LQ)</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>0.5 (median)</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>0.75 (UQ)</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>0.9</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>0.95</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>1</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>

**Figure 13.7.5: Cumulative distribution of QoL-Index score in relation to Year of entry, Transplant recipient patients 2001-2010**

