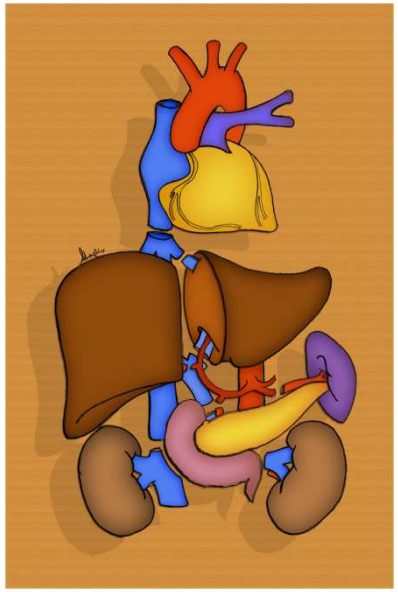
IL TRAPIANTO DI RENE DA VIVENTE



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Professor and Chairman

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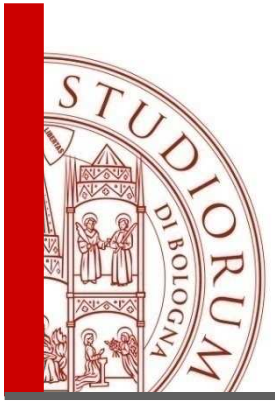
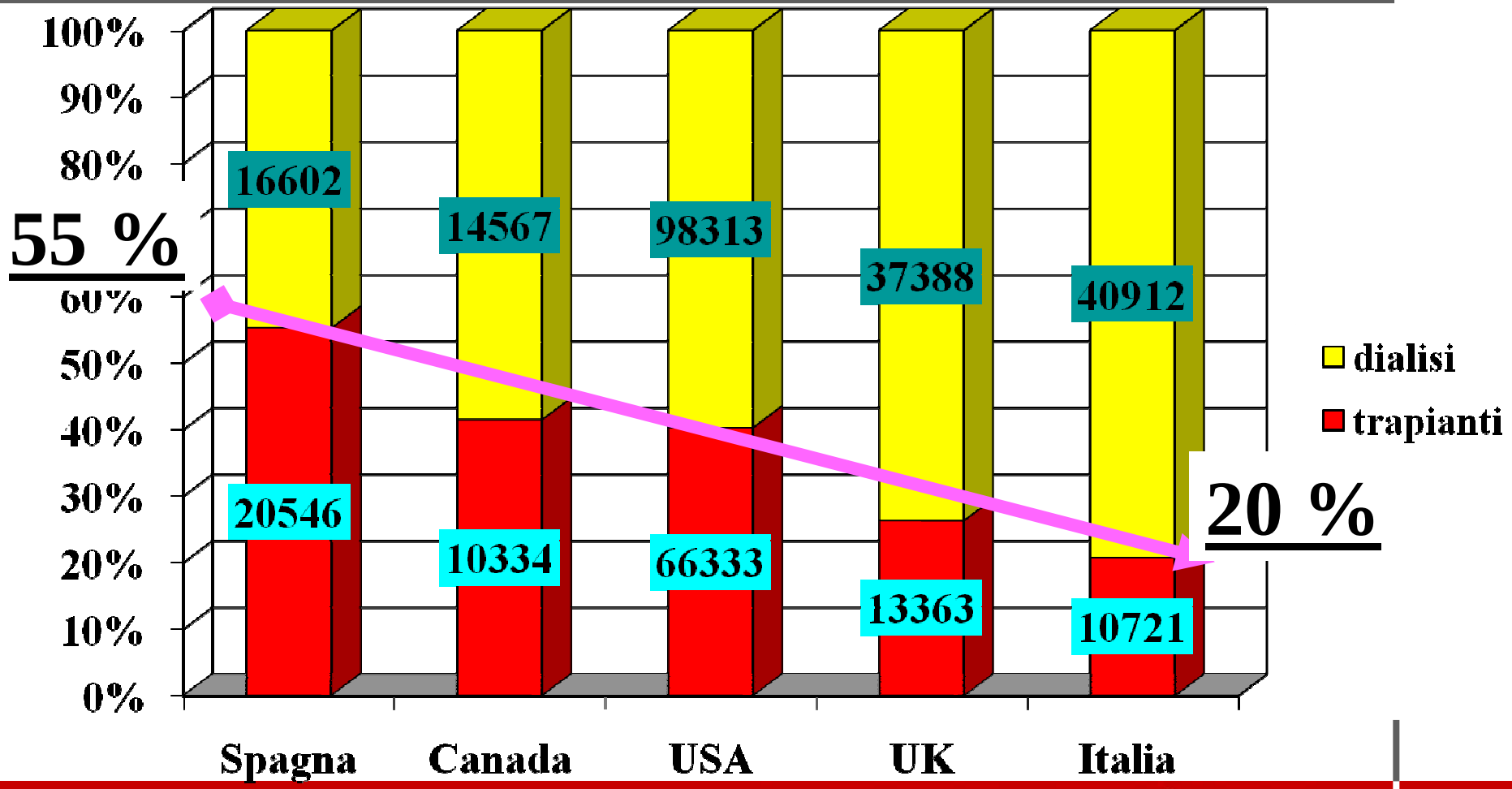
Policlinico Sant'Orsola Malpighi – University of Bologna
Bologna, Italy

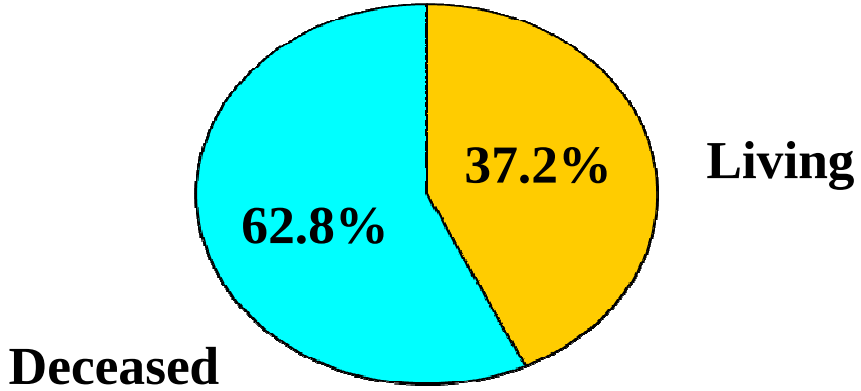


Rapporto dialisi-trapianti di rene



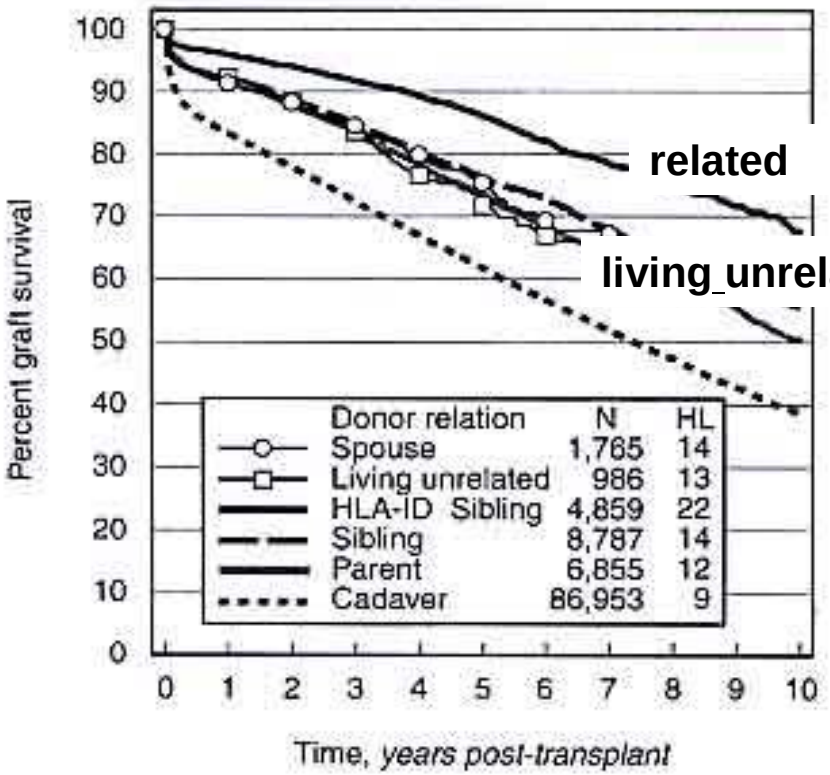
Kidney transplantation strategies

Living and Deceased Organ Donors in the USA 2008

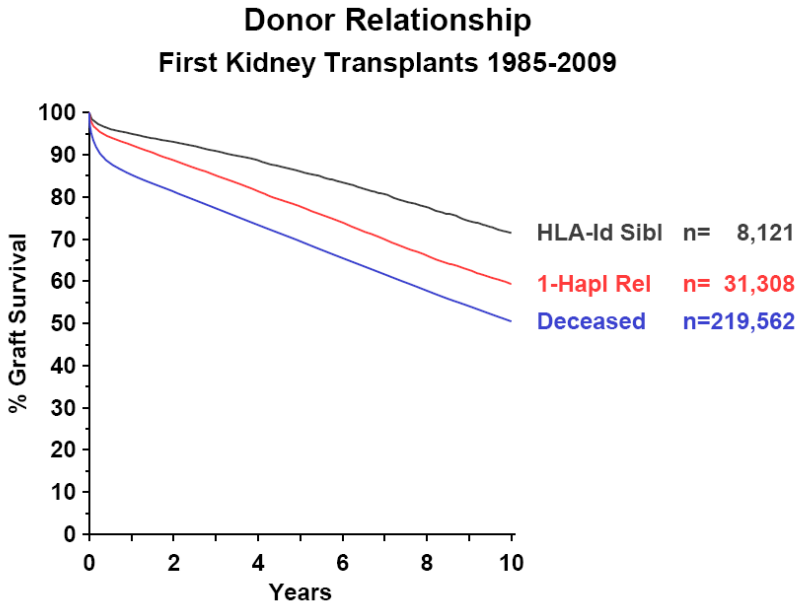


United Network for Organ Sharing 2008
(OPTN data)

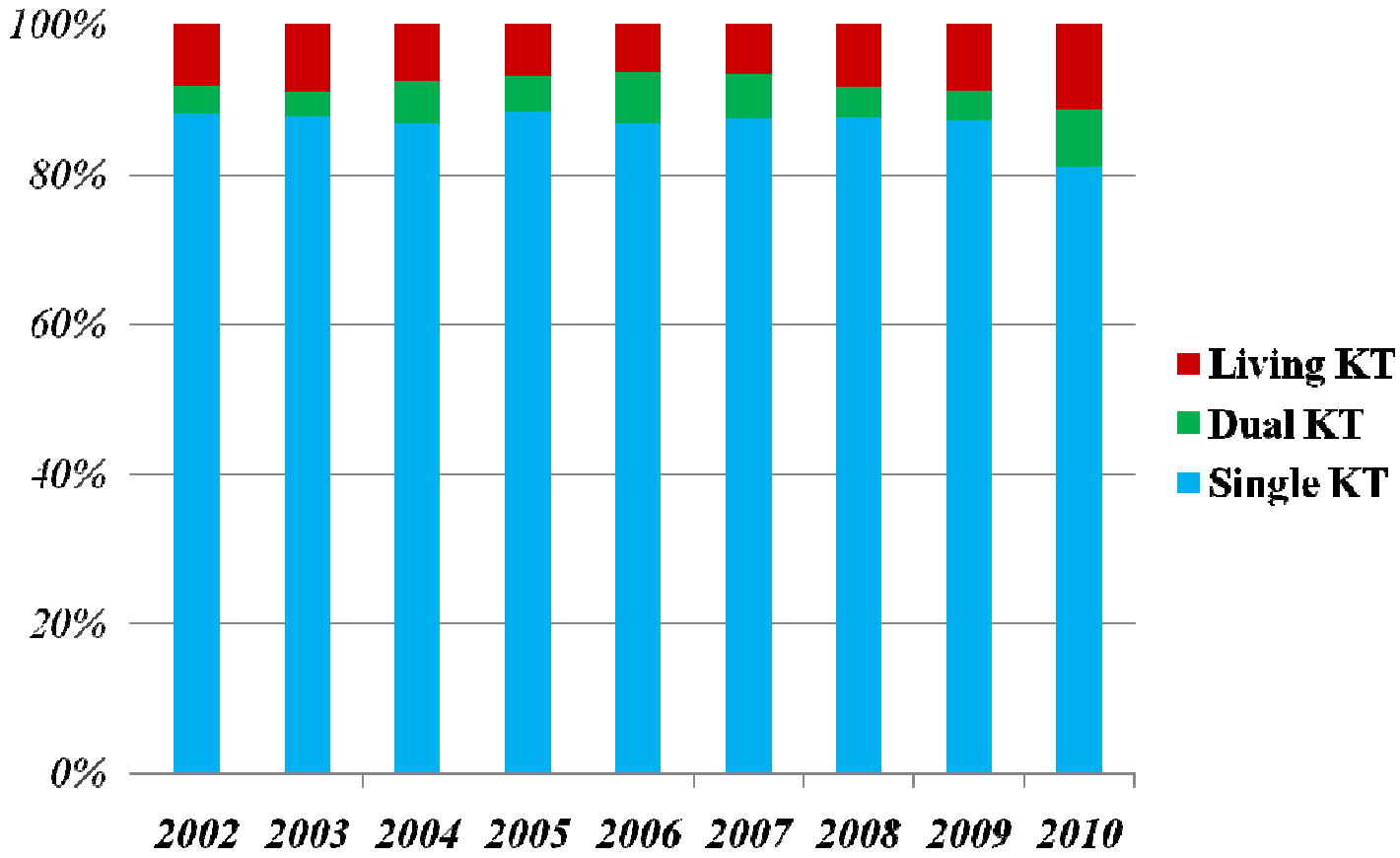
Living Kidney Donation - Graft Survival



Gjertson and Cecka, Kidney Int, 2006



Dual KT and living KT in Italy 2002-2010 (CNT data)



Extended criteria donor to extend the pool

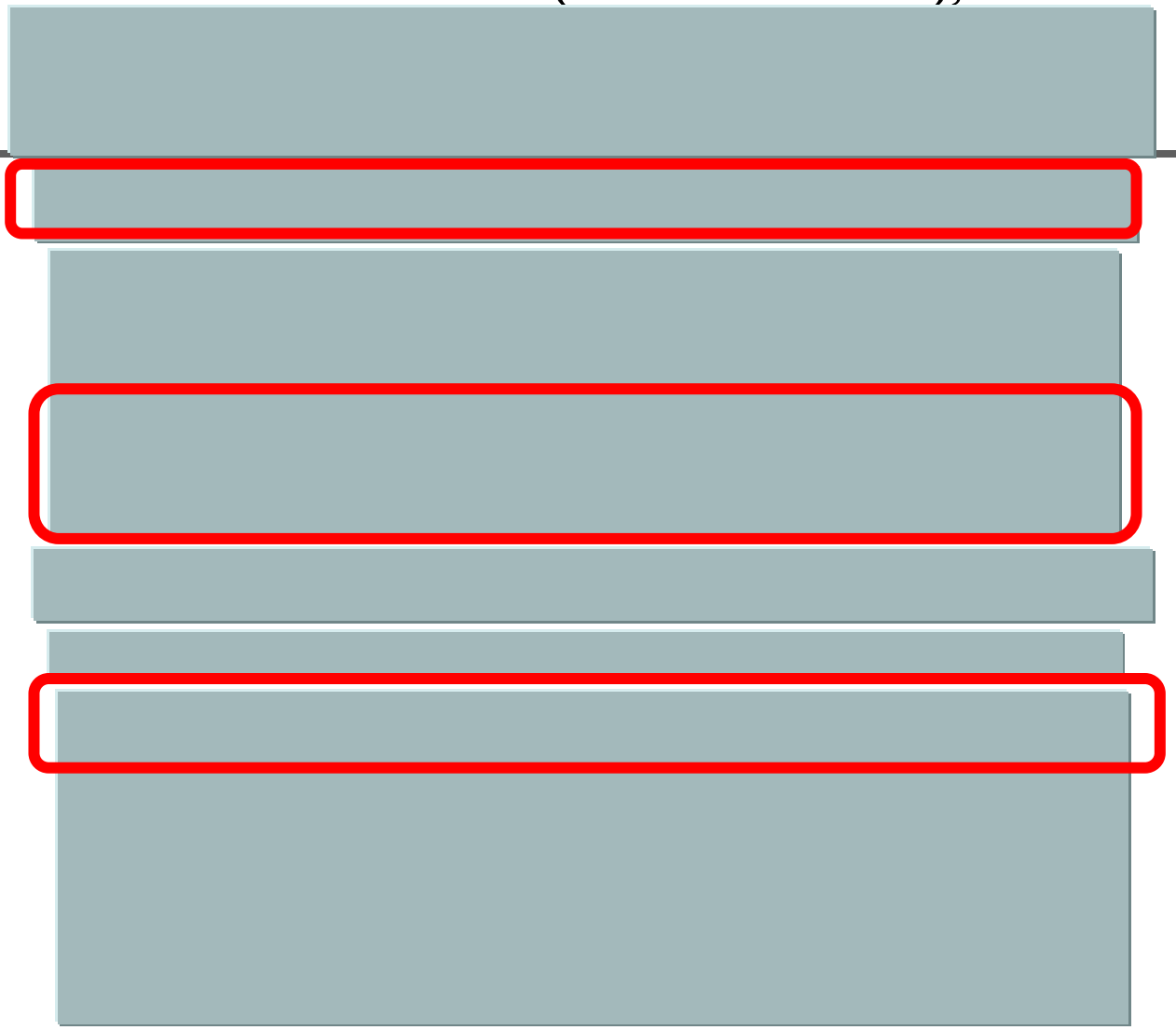
Dual KT outcome with biopsy selection

	Median Cold-ischemia time
SKT >60ys with Bx	18 h
DHT >60ys with Bx	18 h
SKT≤ 60ys no Bx	15 h
SKT>60ys no Bx	16 h

Surgical complication: 12-14%; vascular 6-12%

Machine perfusion study:
28% ECD; CIT 15 hs; 6% anomaly anatomy

Machine perfusion study:
23-26% serious; 5-8% re-operation for bleeding or vascular;
4% ureteral stenosis (minor? fistula?), 4-6% seroma



Dual KT: Emilia Romagna experience 2001-2007

Dual KT: Emilia Romagna experience 2001-2007

Previous data: 12-15% urologic complication; 11-16% early re-op.; 9-11% late re.op.; tot re-op. 20-27%

Transplant centers with low performance assessments are stimulated to be more conservative

Transplant centers with low performance assessments are stimulated to be more conservative

Strategy to reduce complications (prof. Pinna)

Short ureter (<10cm) anastomosis with bladder (standard)

Vein 6-0 prolene; Artery 7-0 prolene

Kidney biopsy at the harvesting to reduce ischemia time

Cryopreservation graft for short living vein or artery

New/old retractor to better view (standard for high BMI, Dr. Ravaioli)

Doppler at the end of procedure (standard, dr. Ravaioli)

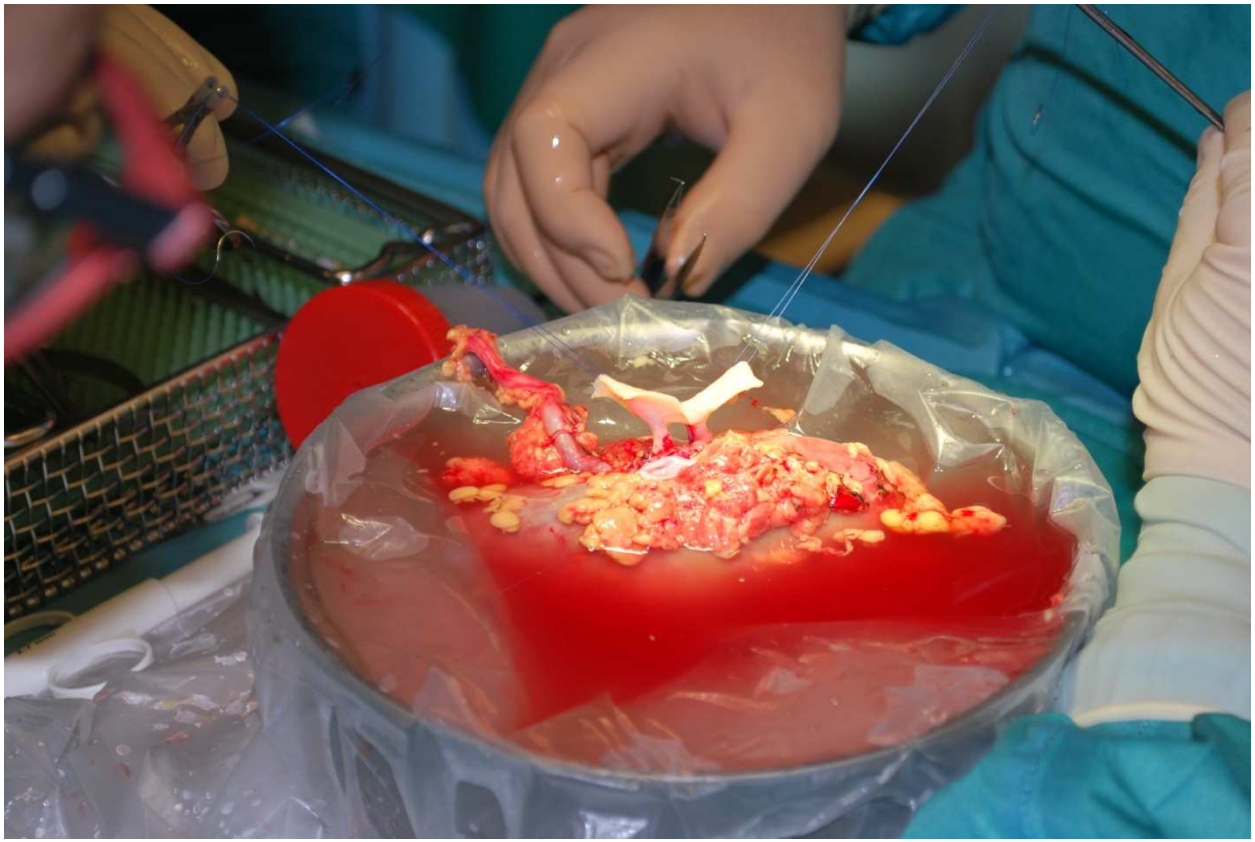
Trapianto tecnica

Trapianto tecnica

Trapianto tecnica

Trapianto tecnica

Trapianto tecnica

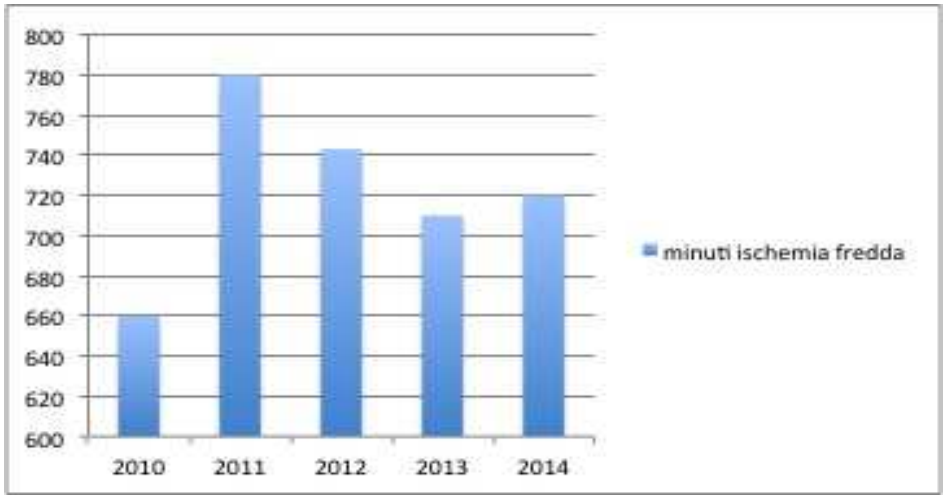


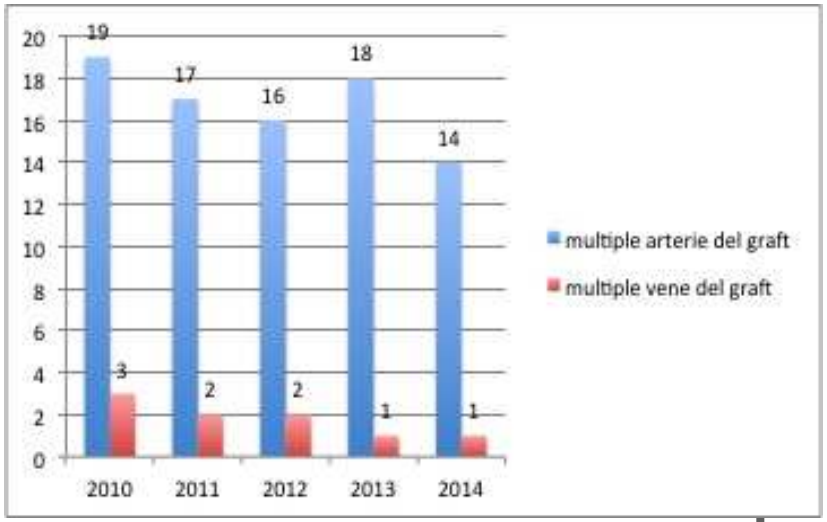
Trapianto tecnica

Trapianto tecnica

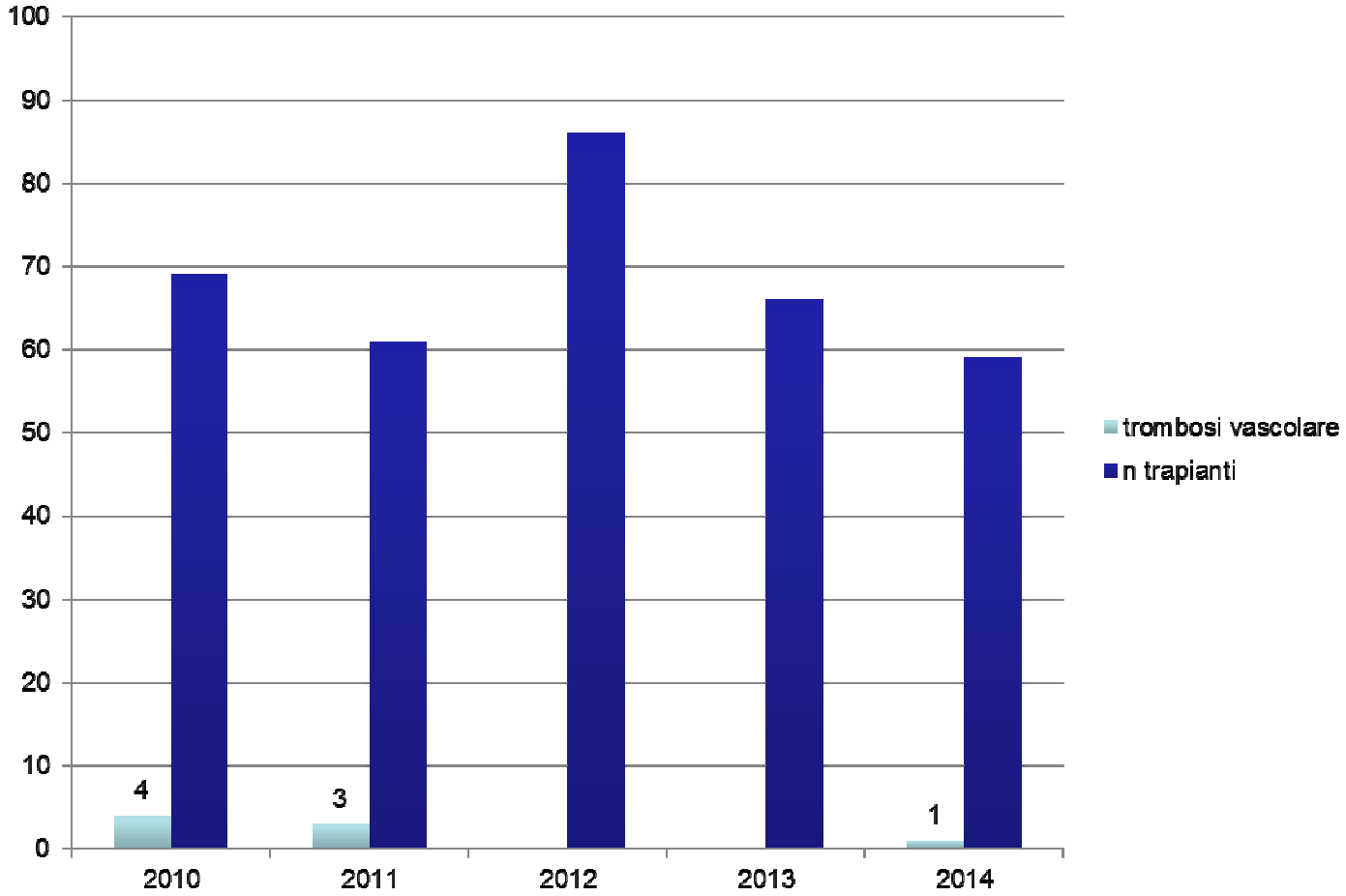
Trapianto tecnica

Operative data:
Ischemia time 12-13 hr; 25-32% vascular anomaly

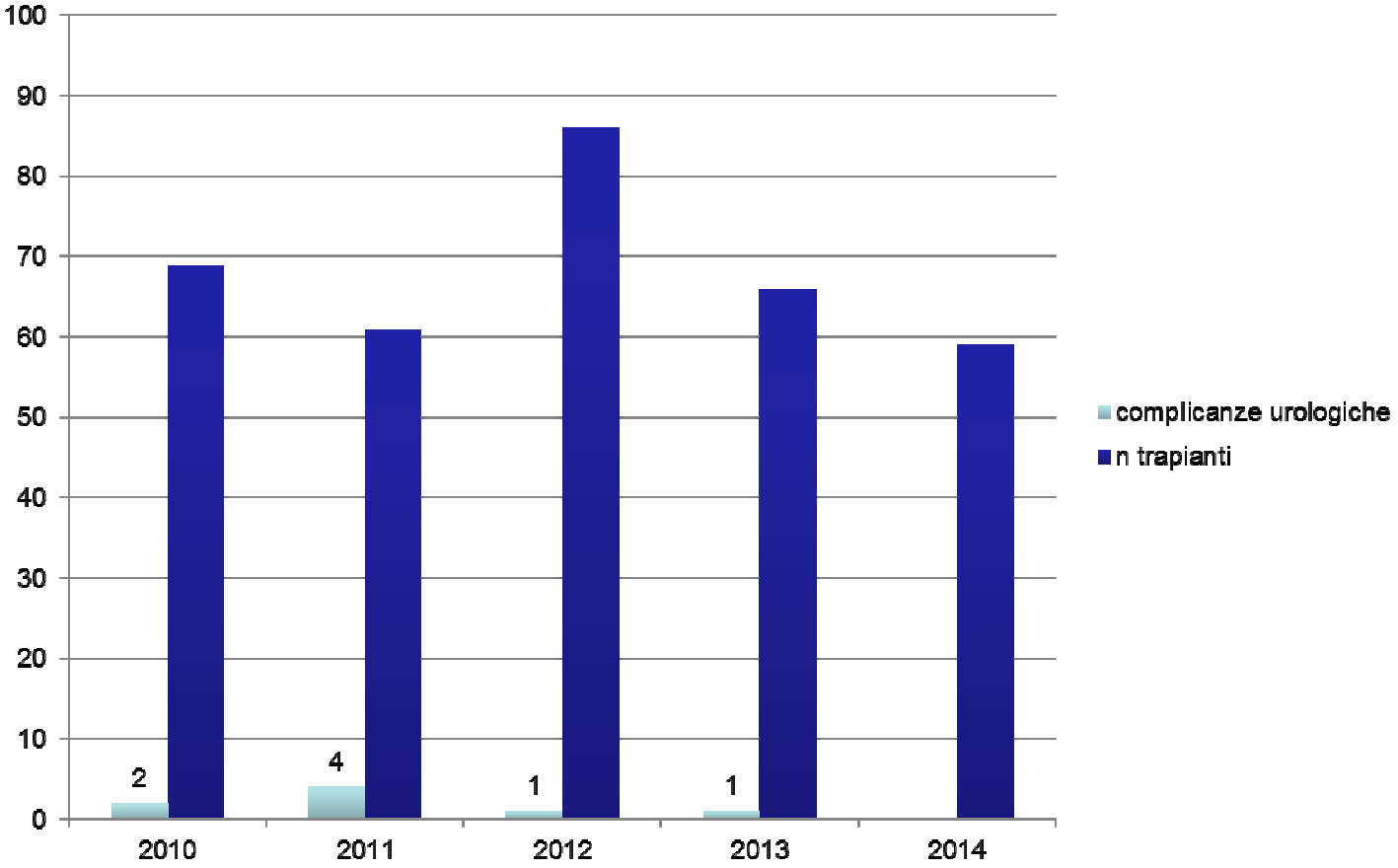




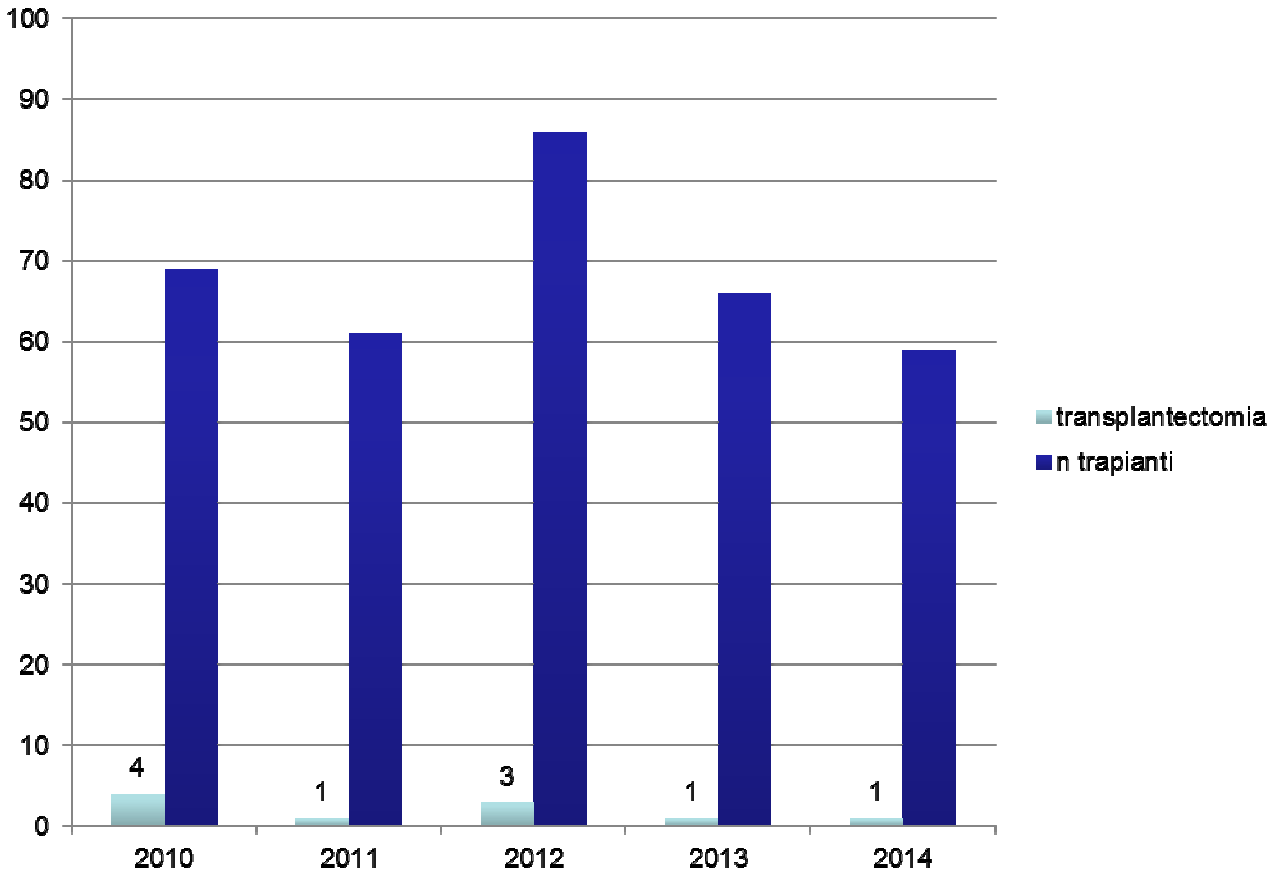
Post-op. data:
2-6% vascular complication



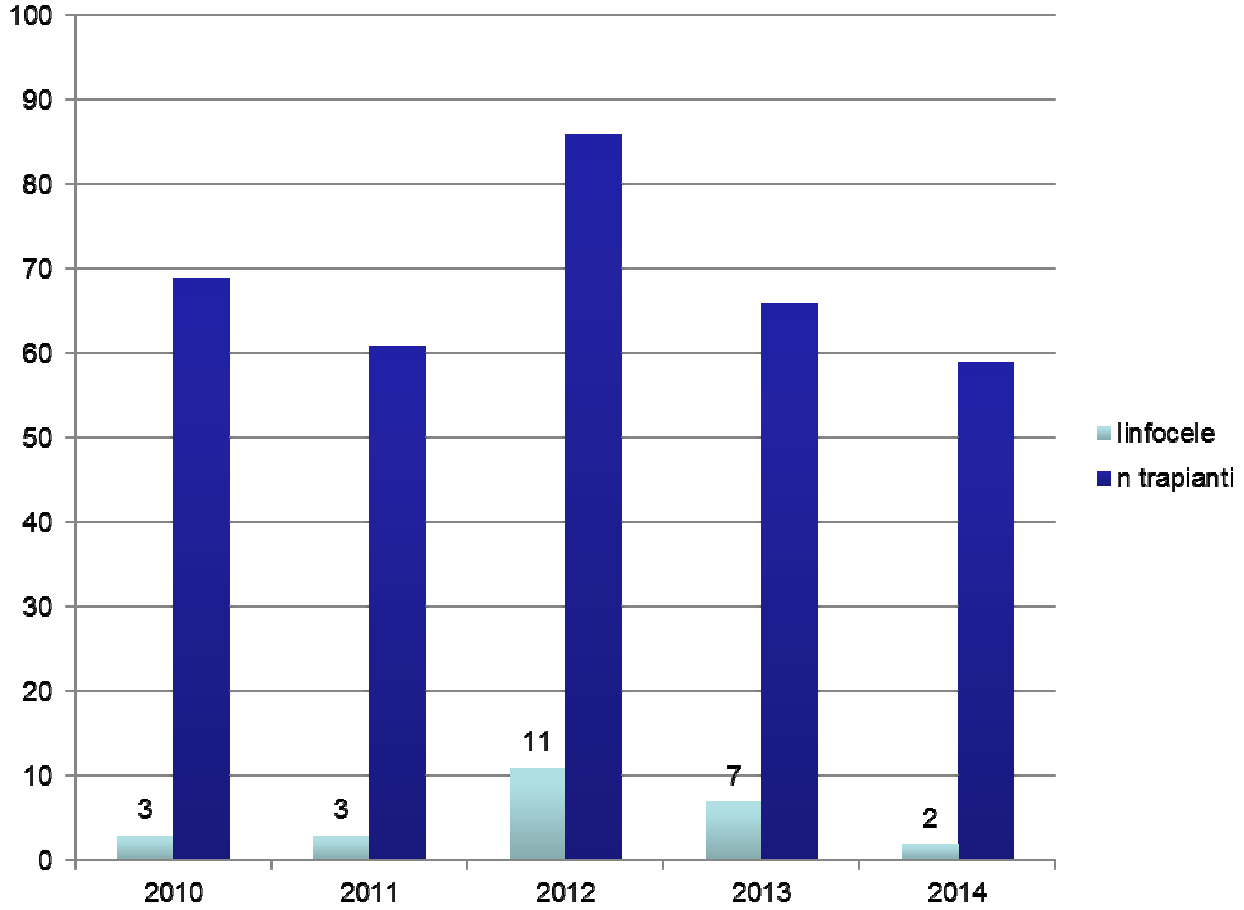
Post-op. data:
1-7% ureter complication



Post-op. data:
Removal of the graft for any reason



Post-op. data:
11-13% seroma



Comparison data

	Data literature	Previous data	2010-2011	2012-13-14
ECD	30%	50%	45%	50%
Ischemia time	15-18 hr	16-17 hr	12 hr	12 hr
Vascular anomaly	6%	-	32%	25%
Re-op.	5-10%	20-27%	3%	2%
Vascular complication	5-10%	8-12%	5%	0.5%
Ureter complication	4-5%	12-15%	7%	1.5%
Seroma	4-6%	-	5%	9%

Innovation since last years

Combine liver and double kidney transplantation

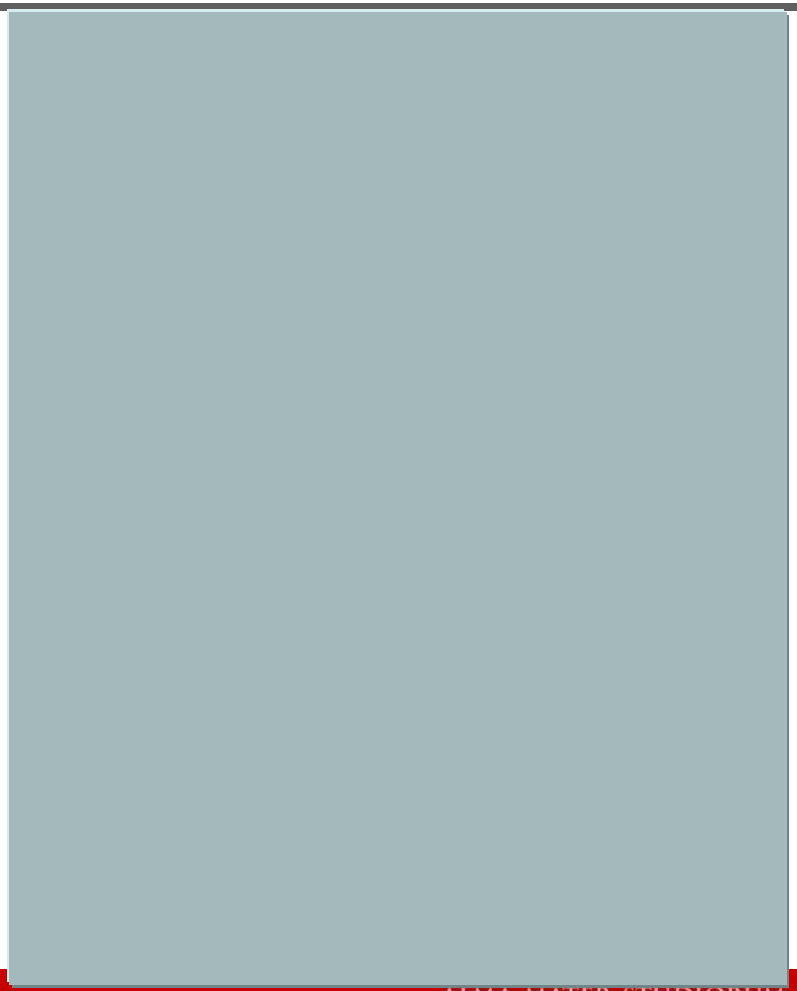
Living donation with fibro dysplasia artery

Pediatric Living donation with multiple arteries

Machine Perfusion of discharged kideny

Prolong ischemia/improve graft/recruit discharged graft

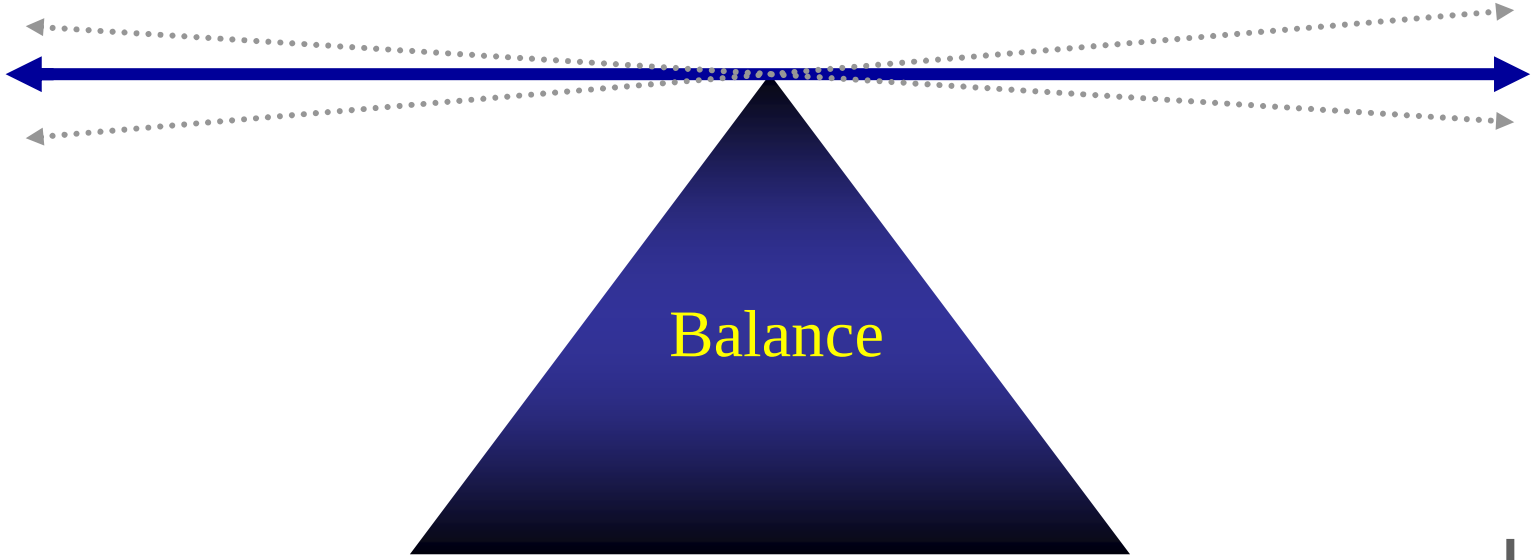
Ricarichiamo il rene …



Surgical selection, point of view

Risk donor nephrectomy

Recipient and graft survival



Kidney living donor like fireman

Risk of donor nephrectomy

- ***Donors Peri-operative Mortality***
- living donor mortality from three large American surveys (covering nearly 10,000 operations)
- reported death rates range from 0.03% – 0.06%
- most common causes of death pulmonary embolus, hepatitis and cardiac events (myocardial infarction and arrhythmias)
- these death rates are lower the risk in the USA of dying in a road traffic accident in one year (0.02%)

Najarian JS, Chavers BM, McHugh LE, Matas AJ. 20 years or more of follow-up living kidney donors. *Lancet* 1992

Kasiske BL, et al. The evaluation of living renal transplant donors: clinical practice guidelines. *J Am Soc Nephrol* 1996

15-years risk of ESRD in US 3.5-5.3 times as high vs. nondonors

White men/women
Risk 15-years ESRD
Nondonors

Age 20 years 0.01-0.02%

Age 40 years 0.04-0.06%

Age 60 years 0.08-0.13%

Systolic blood pressure HR 1.4

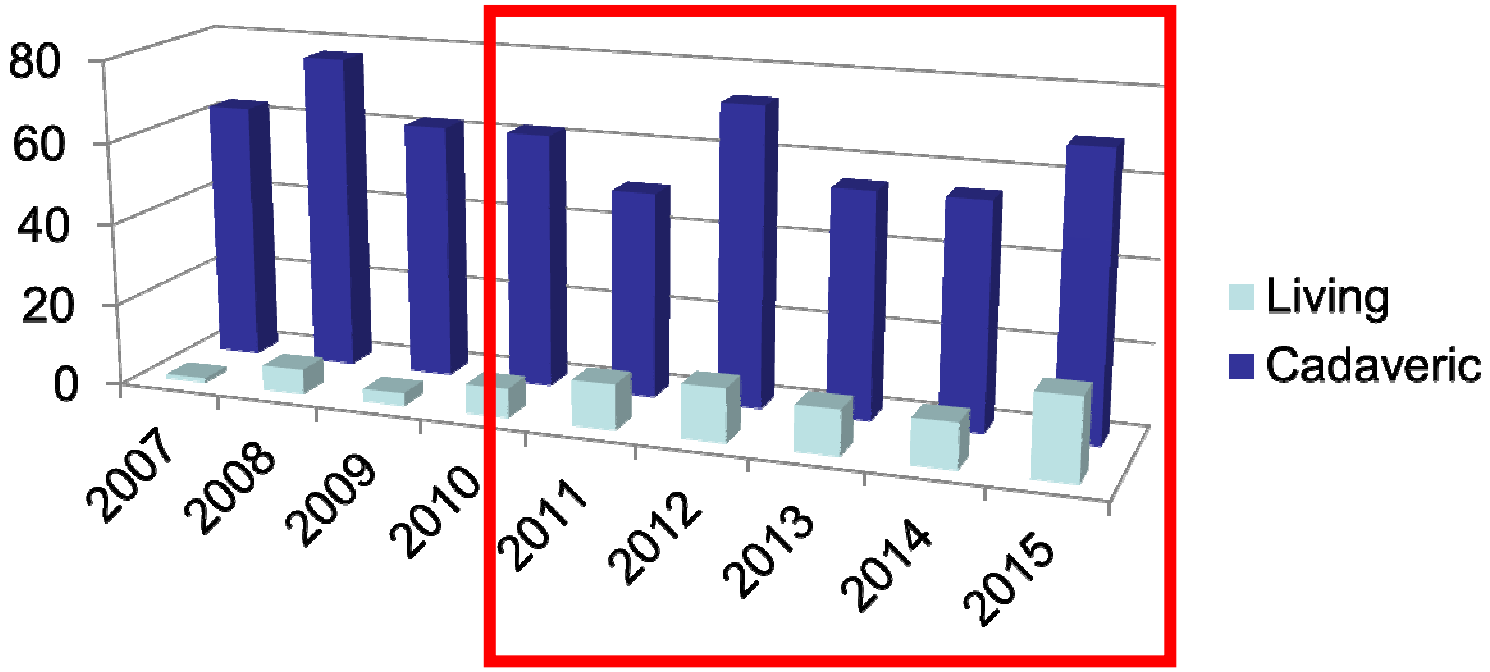
BMI >30 HR 1.2

Former smoker HR 1.5

Current smoker HR 1.8

Bologna data

1967-2010: 147 living; 2011-2015 (Pinna): 66 living



Con un rene solo si può fare tutto!

Anche far perdere lo scudetto…

Nereo Rocco, in un angolo degli spogliatoi, sussurra "sapevo che sarebbe finita così. Per questo avevo chiesto il rinvio. Ma una manica di dilettanti non mi ha creduto'' 1973