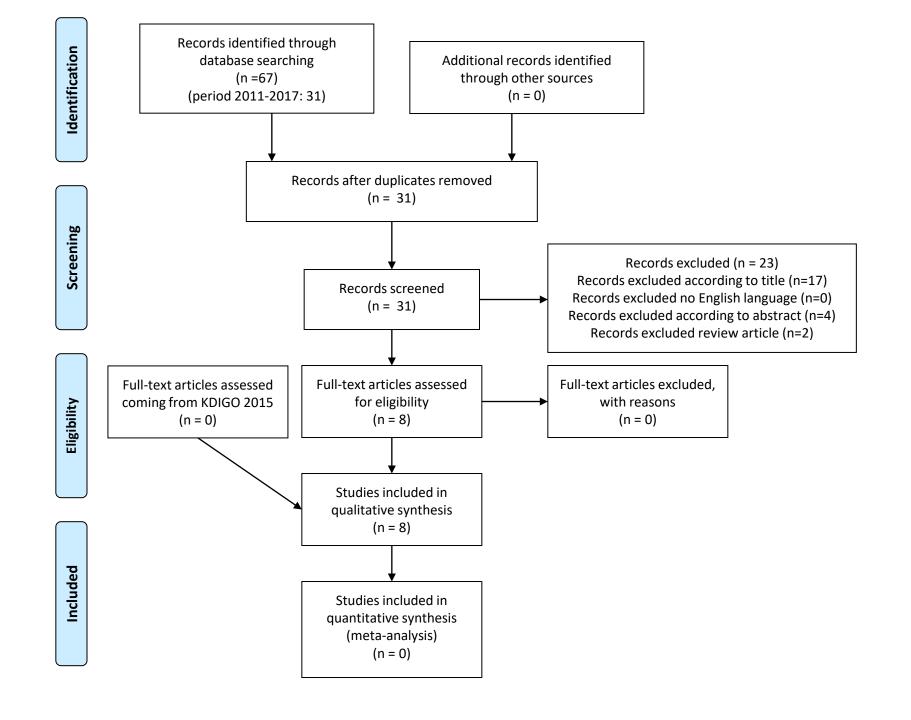
Tabagismo

Systematic: Quirino Lai e Samuele Iesari (L'Aquila)

Linee guida ERBP 2013

No linee guida



Studi selezionati

Study

<u>Kidney-Failure Risk Projection for the Living Kidney-Donor Candidate.</u> Grams ME, Sang Y, Levey AS, Matsushita K, Ballew S, Chang AR, Chow EK, Kasiske BL, Kovesdy CP, Nadkarni GN, Shalev V, Segev DL, Coresh J, Lentine KL, Garg AX; Chronic **Kidney** Disease Prognosis Consortium. N Engl J Med. 2016 Feb 4;374(5):411-21. doi: 10.1056/NEJMoa1510491.

Effect of Kidney Transplantation on Smoking Habits of Kidney Donors. Keles M, Avsar U, Avsar Z, Emre H, Cankaya E, Cansever Z, Kaya A, Topdagi O, Uyanik A, Aydinli B. Transplant Proc. 2015 Jun;47(5):1302-5. doi: 10.1016/j.transproceed.2015.04.055.

Cigarette smoking in living kidney donors: donor and recipient outcomes. Underwood PW, Sheetz KH, Cron DC, Terjimanian MN, Englesbe MJ, Waits SA. Clin Transplant. 2014 Apr;28(4):419-22. doi: 10.1111/ctr.12330.

Associations of **smoking** with alterations in **renal** hemodynamics may depend on sex-investigations in potential **kidney donors**. Guberina H, Baumann M, Bruck H, Feldkamp T, Nürnberger J, Kribben A, Philipp T, Witzke O, Sotiropoulos G, Mitchell A. **Kidney** Blood Press Res. 2013;37(6):611-21. doi: 10.1159/000355741.

Donor Smoking Negatively Affects **Donor** and Recipient **Renal** Function following **Living Donor** Nephrectomy. Heldt J, Torrey R, Han D, Baron P, Tenggardjaja C, McLarty J, Lindler T, Baldwin DD. Adv Urol. 2011;2011:929263. doi: 10.1155/2011/929263.

<u>Kidney-Failure Risk Projection for the Living Kidney-Donor Candidate.</u> Grams ME, Sang Y, Levey AS, Matsushita K, Ballew S, Chang AR, Chow EK, Kasiske BL, Kovesdy CP, Nadkarni GN, Shalev V, Segev DL, Coresh J, Lentine KL, Garg AX; Chronic **Kidney** Disease Prognosis Consortium. N Engl J Med. 2016 Feb 4;374(5):411-21. doi: 10.1056/NEJMoa1510491.

4,933,314 cases from seven cohorts, median FU 4-16 years. For a white 40-year-old healthy person, 15-year ESRD risk is 0.06% among men and 0.04% among women.

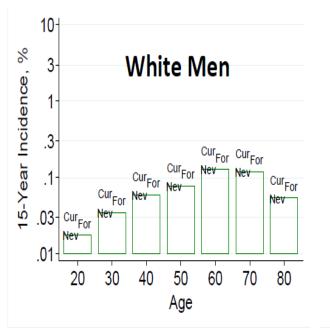
Risk projections were higher in the presence of current or former smoking.

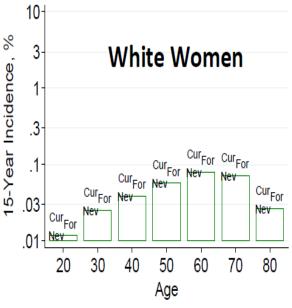
White 40-year-old man

Smoking status: Former smoker HR=1.45 (95%CI=1.23–1.71)

Current smoker HR=1.76 (95%CI=1.29–2.41)

9/10,000 cases 11/10,000 cases





Effect of Kidney Transplantation on Smoking Habits of Kidney Donors. Keles M, Avsar U, Avsar Z, Emre H, Cankaya E, Cansever Z, Kaya A, Topdagi O, Uyanik A, Aydinli B. Transplant Proc. 2015 Jun;47(5):1302-5. doi: 10.1016/j.transproceed.2015.04.055.

98 donors from Turkey.

Preoperative smoking status was 47%, whereas the postoperative rate decreased to 29%.

Table 1. Sociodemographic Data of the Donors

Characteristic	All Donors (n = 98)	Continued Smoking Group (n = 28)	Quit Smoking Group (n = 18)	P Continued vs Quit
Age (years)	48.27 ± 10.8	44.43 ± 9.70	48.89 ± 10.4	.146
Gender, n (%)				.38
Male	44 (44.9)	24 (85.7)	10 (29.4)	
Female	54 (55.1)	4 (14.3)	8 (66.7)	
Affinity to recipient, n (%)				.411
Parents	39 (39.8)	3 (75)	1 (25)	
Sibling	24 (24.5)	9 (64.3)	5 (35.7)	
Spouse	20 (20.4)	3 (50)	3 (50)	
Relative	8 (8.2)	6 (100)	0 (0)	
Youngster	7 (7.1)	7 (43.8)	9 (56.2)	
Educational status, n (%)				.739
Unschooled	31 (31.6)	3 (37.5)	5 (62.5)	
Primary school	50 (51)	17 (65.4)	9 (34.6)	
High school	14 (14.3)	7 (70)	3 (30)	
University	3 (3.1)	1 (50)	1 (50)	
Occupational status, n (%)				.053
Housewife	54 (55.1)	4 (33.3)	8 (66.7)	
Retired	12 (12.2)	5 (62.5)	3 (37.5)	
Unskilled worker	11 (11.2)	9 (100)	0 (0)	
Business	10 (10.2)	8 (100)	0 (0)	
Farmer	7 (7.1)	1 (20)	4 (80)	
Officer	2 (2)	1 (50)	1 (50)	
Employee	2 (2)	0 (0)	2 (100)	
Income status, n (%)	.,		, ,	.391
Low	43 (43.9)	13 (61.9)	8 (38.1)	
Moderate	53 (54.1)	15 (62.5)	9 (37.5)	
High	2 (2)	0 (0)	1 (100)	

<u>Cigarette smoking in living kidney donors: donor and recipient outcomes.</u> Underwood PW, Sheetz KH, Cron DC, Terjimanian MN, Englesbe MJ, Waits SA. Clin Transplant. 2014 Apr;28(4):419-22. doi: 10.1111/ctr.12330.

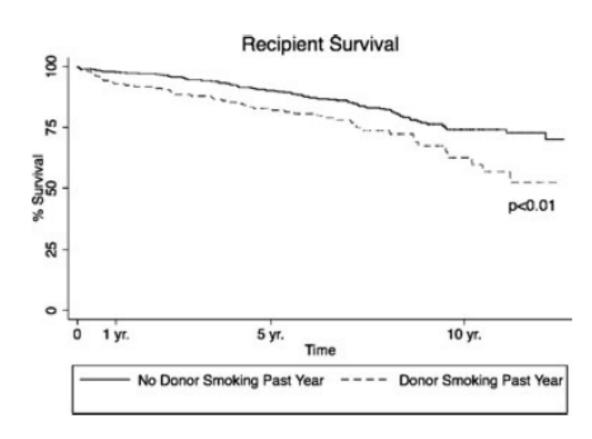
602 living kidney donors from US.

No difference in postoperative complications was seen in smoking versus non-smoking donors.

Donor smoking at time of evaluation did not significantly decrease allograft survival (HR = 1.19, p = 0.52).

Recipient smoking at evaluation did reduce allograft survival (HR = 1.74, p = 0.05).

Both donor and recipient smoking decreased recipient survival (HR = 1.93, p < 0.01 vs HR = 1.74, p = 0.048).

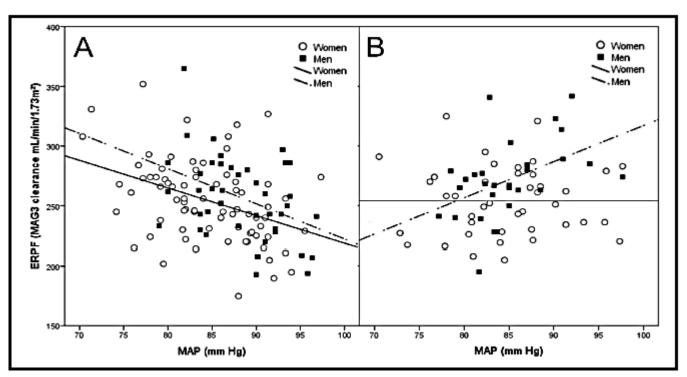


Associations of **smoking** with alterations in **renal** hemodynamics may depend on sex-investigations in potential **kidney donors**. Guberina H, Baumann M, Bruck H, Feldkamp T, Nürnberger J, Kribben A, Philipp T, Witzke O, Sotiropoulos G, Mitchell A. **Kidney** Blood Press Res. 2013;37(6):611-21. doi: 10.1159/000355741.

196 potential living kidney donors in Germany.

Comparing mean arterial blood pressure (MAP) and effective renal plasma flow (ERPF), In non-smokers of both sexes MAP was negatively correlated with ERPF In male, but not in female smokers, ERPF increased with MAP.

As compared to women, smoking men may exhibit an increased glomerular hydrostatic pressure, which is a known promoter of kidney damage.

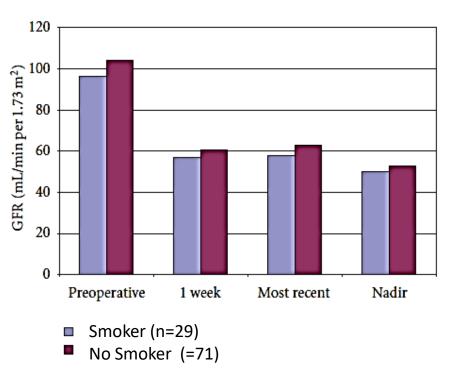


<u>Donor Smoking Negatively Affects Donor and Recipient Renal Function following Living Donor Nephrectomy.</u> Heldt J, Torrey R, Han D, Baron P, Tenggardjaja C, McLarty J, Lindler T, Baldwin DD. Adv Urol. 2011;2011:929263. doi: 10.1155/2011/929263.

29 smoking donors and 71 non-smoking donors from US.

Recipients from smoker donors had a significantly lower calculated GFR

Smoker donors had a larger percent increase in Cr than non-smoker donors (57% versus 40%; P<0.001), with active smokers having a larger increase than those who quit (68% versus 52%; P=0.055).



	Smoker	No Smoker	Р
Recipients	n = 29	n = 71	
Preoperative	7.1	6.8	0.67
1 week	66.5	59.5	0.14
1 month	62.8	60.4	0.60
6 months	53.7	54.9	0.77
1 year	44.1	54.7	0.018
Most recent	37.0	53.0	< 0.001
Peak	77.1	79.4	0.70
Donors	n = 29	n = 71	
Preoperative	96.2	104.0	0.14
1 week	57.0	60.7	0.20
Most recent	57.7	62.8	0.11
Nadir	50.0	52.7	0.21

Use of grafts coming from smokers appears to be connected with reduced graft survivals and reduced GFR.

Smoking is also correlated with a higher risk of ESRD for the donor.

Risk projections after 15 years from donation:

White 40-year-old man

No smoking 6/10,000 cases (one in 1,700)

Former smoker 9/10,000 cases (one in 1,100)

Current smoker 11/10,000 cases (one in 900): doubled risk!