Supplementary Material 1
https://doi.org/10.17305/bjbms.2022.8369

SUPPLEMENTAL DATA

Risk factors for recurrent IgA nephropathy after renal transplantation: A meta-analysis

Supplementary Material 1

Table S1. Search strategy used for the identification of potential studies in PubMed, Embase, Medline and Web of Science.

Database	Search steps	Search terms
PubMed	#1	((((((((("Kidney Transplantation"[Mesh]) OR (Renal Transplantation[Title/Abstract])) OR (Renal Transplantations[Title/Abstract])) OR (Transplantations, Renal[Title/Abstract])) OR (Transplantation, Renal[Title/Abstract])) OR (Grafting, Kidney[Title/Abstract])) OR (Kidney Grafting[Title/Abstract])) OR (Transplantation, Kidney[Title/Abstract])) OR (Kidney Transplantations[Title/Abstract])) OR (Transplantations, Kidney[Title/Abstract])
	#2	((((("Glomerulonephritis"[Mesh]) OR (Glomerulonephritides[Title/Abstract])) OR (Kidney Scarring[Title/Abstract])) OR (Scarring, Kidney[Title/Abstract])) OR (Bright Disease[Title/Abstract])
	#3	(#1) AND (#2)
	Filter for case-control studies	"cohort studies"[mesh] OR "case-control studies"[mesh] OR "comparative study"[pt] OR "risk factors"[mesh] OR "cohort"[tw] OR "compared"[tw] OR "groups"[tw] OR "case control"[tw] OR "multivariate"[tw]
	#1	'kidney transplantation'/exp

Supplementary Material 1
https://doi.org/10.17305/bjbms.2022.8369

Embase	#2	('kidney allograft transplantation':ab,ti,kw OR 'kidney allotransplantation':ab,ti,kw OR 'kidney cadaver transplantation':ab,ti,kw OR 'kidney grafting':ab,ti,kw OR 'kidney homotransplantation':ab,ti,kw OR 'kidney retransplantation':ab,ti,kw OR 'renal homotransplantation':ab,ti,kw OR 'renal transplantation':ab,ti,kw OR 'second set kidney transplantation':ab,ti,kw OR 'transplantation, kidney':ab,ti,kw)
	#3	#1 OR #2
	#4	'glomerulonephritis'/exp
	#5	('anti-glomerular basement membrane disease':ab,ti,kw OR 'bright disease':ab,ti,kw OR 'diffuse nephritis':ab,ti,kw OR 'glomerular nephritis':ab,ti,kw OR 'glomerulo nephritis':ab,ti,kw OR 'kidney glomerular disease':ab,ti,kw OR 'kidney glomerulus disease':ab,ti,kw OR 'masugi glomerulonephritis':ab,ti,kw OR 'nephritis, diffuse':ab,ti,kw OR 'nephritis, glomerular':ab,ti,kw)
	#6	#4 OR #5
	#7	#3 AND #6
	Filter for case-control studies	'clinical article'/exp OR 'controlled study'/exp OR 'major clinical study'/exp OR 'prospective study'/exp OR 'cohort analysis'/exp OR 'cohort':ti,ab OR 'compared':ti,ab OR 'groups':ti,ab OR 'case control':ti,ab OR 'multivariate':ti,ab
Medline	#1	(Kidney Transplantation)OR(Renal Transplantation)OR(Renal Transplantations)OR(Transplantations, Renal)OR(Transplantation, Renal)OR(Grafting, Kidney)OR(Kidney Grafting)OR(Transplantation, Kidney)OR(Kidney Transplantations)OR(Transplantations, Kidney)
	#2	(Glomerulonephritis)OR(Glomerulonephritides)OR(Kidney Scarring)OR(Scarring, Kidney)OR(Bright Disease)
	#3	(#1) AND (#2)
Web of Science	#1	((((((((((TS=(Kidney Transplantation)) OR AB=(Renal Transplantation)) OR AB=(Renal Transplantations)) OR AB=(Transplantations, Renal)) OR AB=(Transplantation, Renal)) OR AB=(Grafting, Kidney)) OR AB=(Kidney Grafting)) OR AB=(Transplantation, Kidney)) OR AB=(Kidney Transplantations)) OR AB=(Transplantations, Kidney)
	#2	(((((TS=(Glomerulonephritis)) OR AB=(Glomerulonephritides)) OR AB=(Kidney Scarring)) OR AB=(Scarring, Kidney)) OR AB=(Bright Disease)
	#3	(#1) AND (#2)

**Table S2.** Newcastle-Ottawa Scale in detail for assessing the quality of studies.

Study (First author/year)		Selection				Comparability	Exposure			NOS
		Adequate definition of cases	Representativeness of the cases	Selection of controls	Definition of controls	Control for important factor	Ascertainment of exposure	Same method of ascertainment for cases and controls	Nonresponse rate	
Okumi M et al.	2019	1	1	1	1	2	1	1	0	8
Martín-Penagos et al.	2019	1	1	1	1	2	1	1	0	8
Jo HA et al.	2019	1	1	1	1	2	1	1	0	8
Di Vico MC et al.	2018	1	1	1	1	2	1	0	0	7
Garnier AS et al.	2018	1	1	1	1	2	1	1	0	8
S. Temurhana et al.	2017	1	0	0	1	2	1	1	1	7
Avasare RS et al.	2017	1	1	1	1	2	1	1	0	8
Sato K et al.	2013	1	1	1	1	1	1	1	0	7
Gabriella et al.	2013	1	1	1	1	2	1	0	1	8
Lida M et al.	2020	1	1	1	1	2	1	1	0	8
Namba et al.	2004	1	1	1	1	1	1	1	0	7

Coppo R et al.	2007	1	1	1	1	2	1	0	0	7
Ponticelli C et al.	2001	1	1	1	1	2	1	0	0	7
Wang et al.	2001	1	1	1	1	1	1	1	0	7
Ortiz, F et al.	2012	1	1	1	1	2	1	1	0	8
Bumgardner et al.	1998	1	1	1	1	2	1	0	0	7
Park WY et al.	2021	1	1	1	1	2	0	1	0	7
Moriyama T et al.	2005	1	1	1	1	2	1	0	0	7
Lionaki S et al.	2021	1	1	1	1	2	1	1	0	8
Maixnerova et al.	2021	1	1	1	1	2	1	0	0	7

Supplementary Material 2
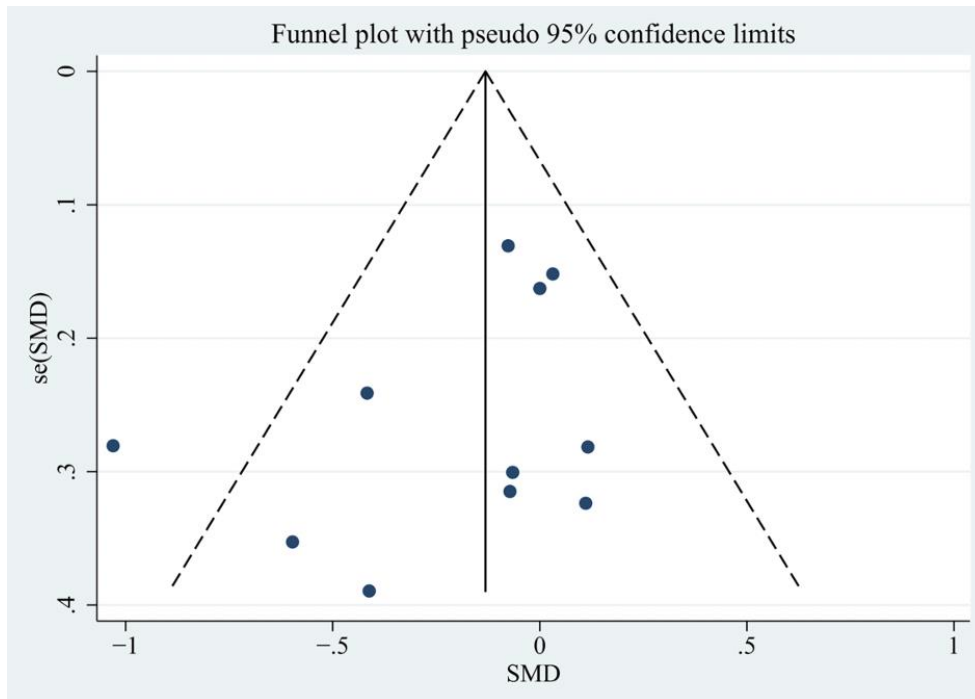
Figure S1. Funnel chart results for young donor age as a risk factor. SMD: standardized mean difference.
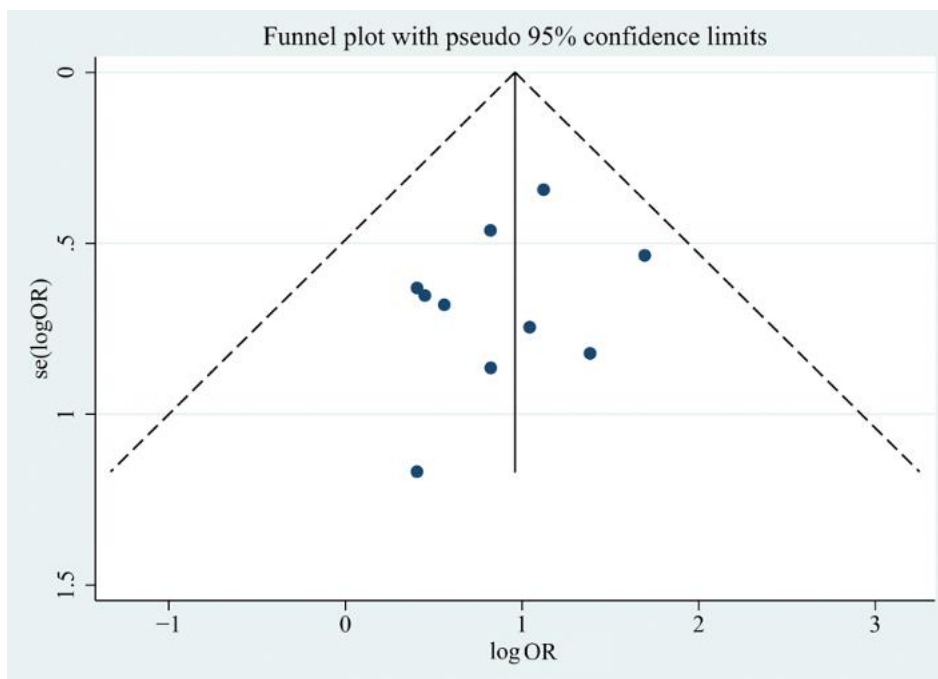
Figure S2. Funnel chart results for related donor as a risk factor. OR: Odds ratio; SE: Standard error.

5
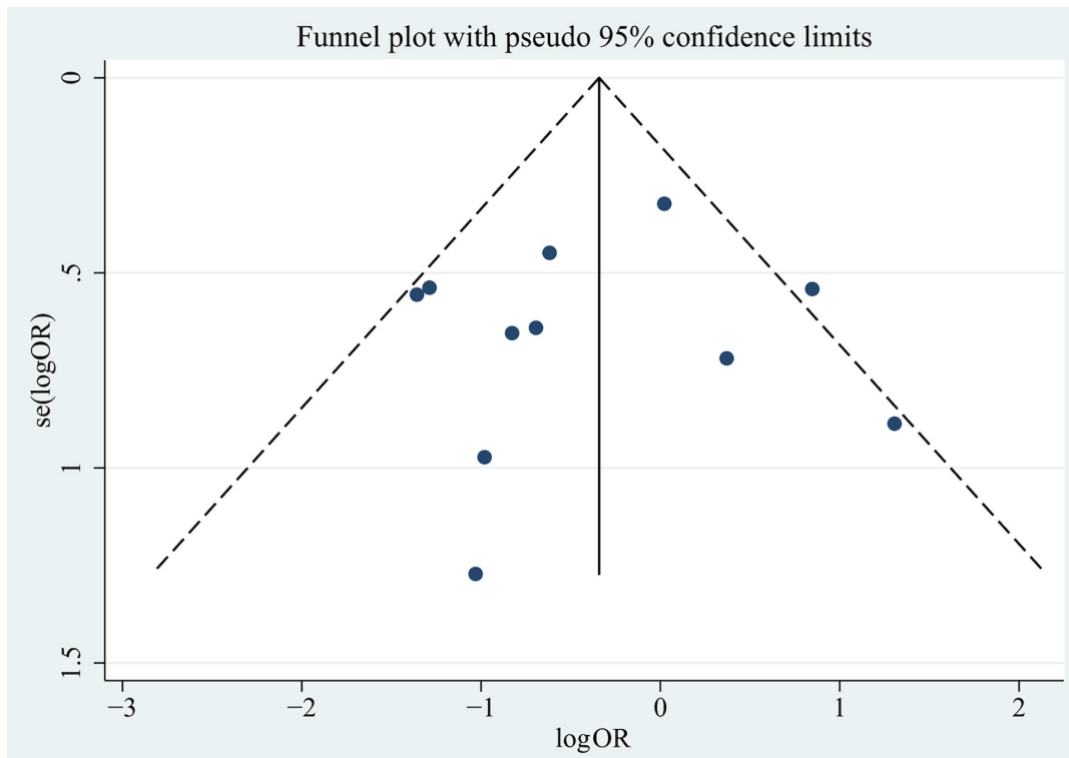
Figure S3. Funnel chart results for tacrolimus use as a protective factor. OR: Odds ratio; SE: Standard error.
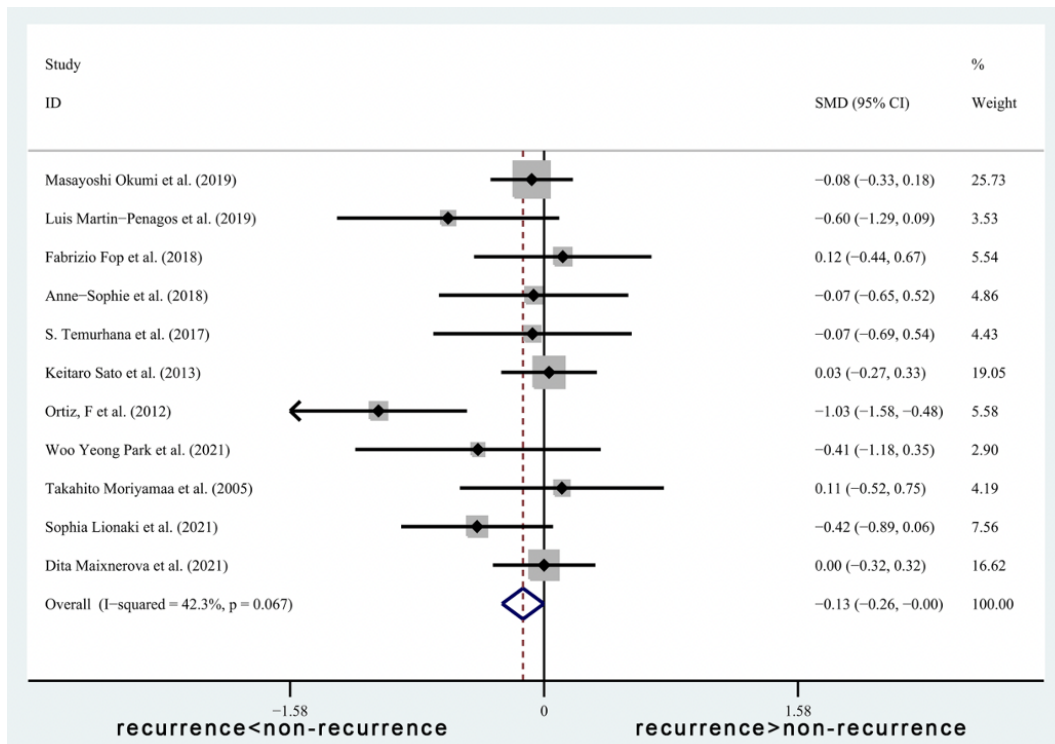
Figure S4. Forest plot of young donor age as a risk factor. SMD: standardized mean difference; CI: Confidence interval.
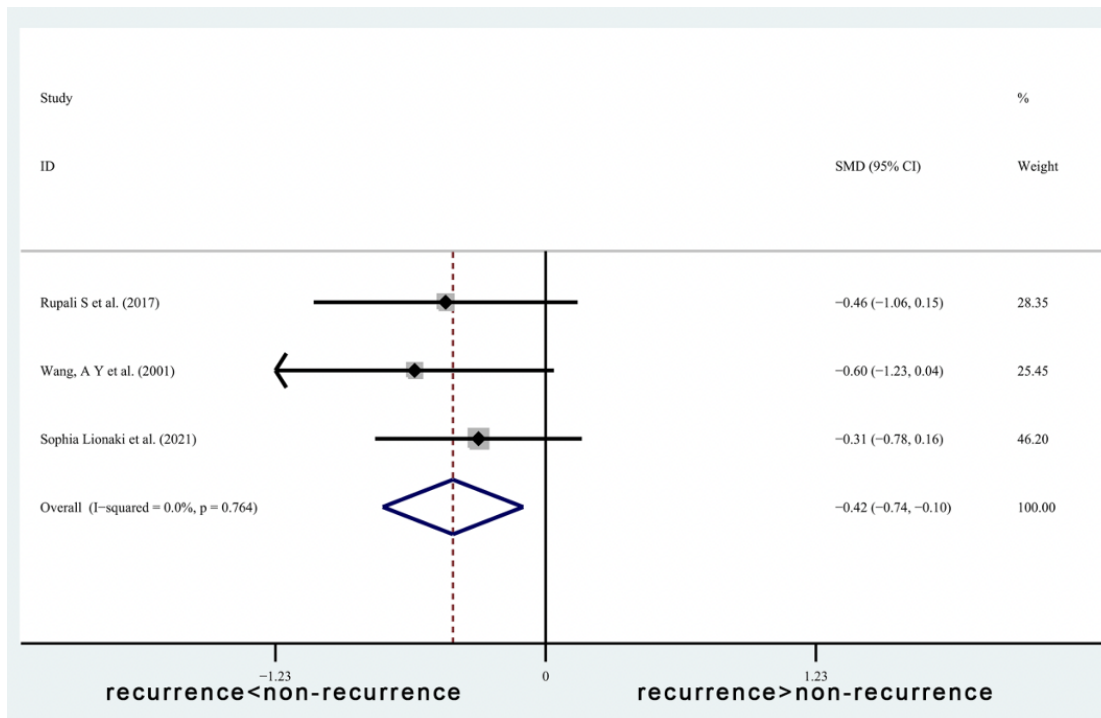
Figure S5. Forest plot of short time from diagnosis to end-stage renal disease as a risk factor. SMD: standardized mean difference; CI: Confidence interval.
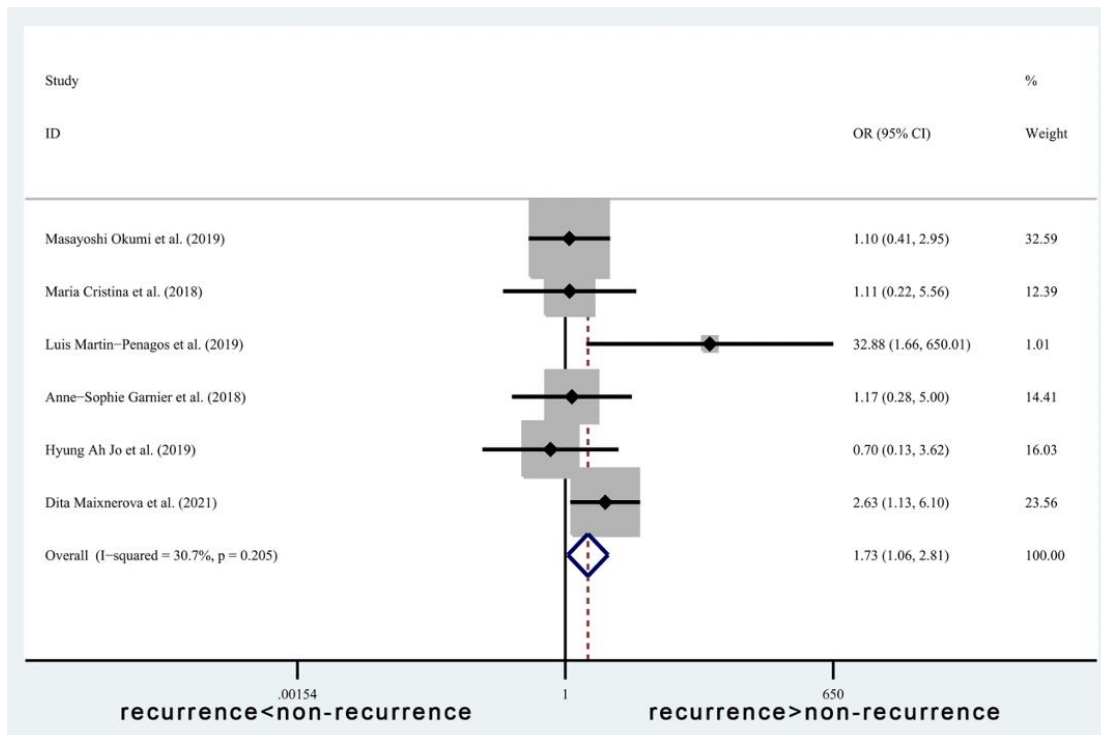
Figure S6. Forest plot of previous transplantation as a risk factor. OR: Odds ratio; CI: Confidence interval.
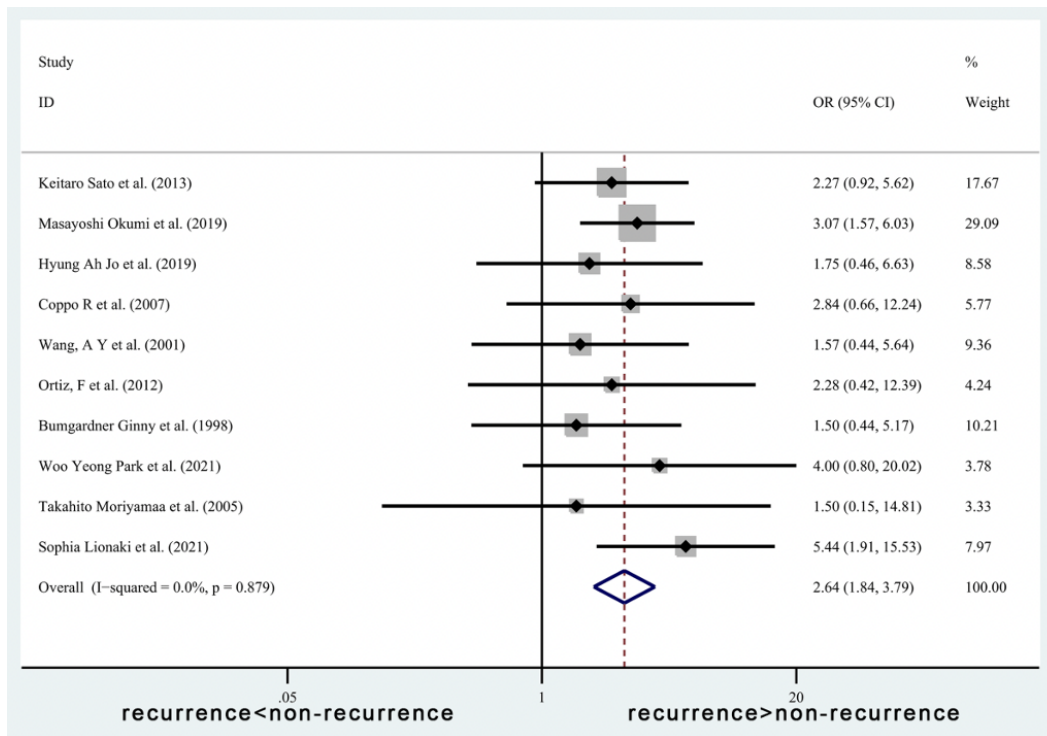
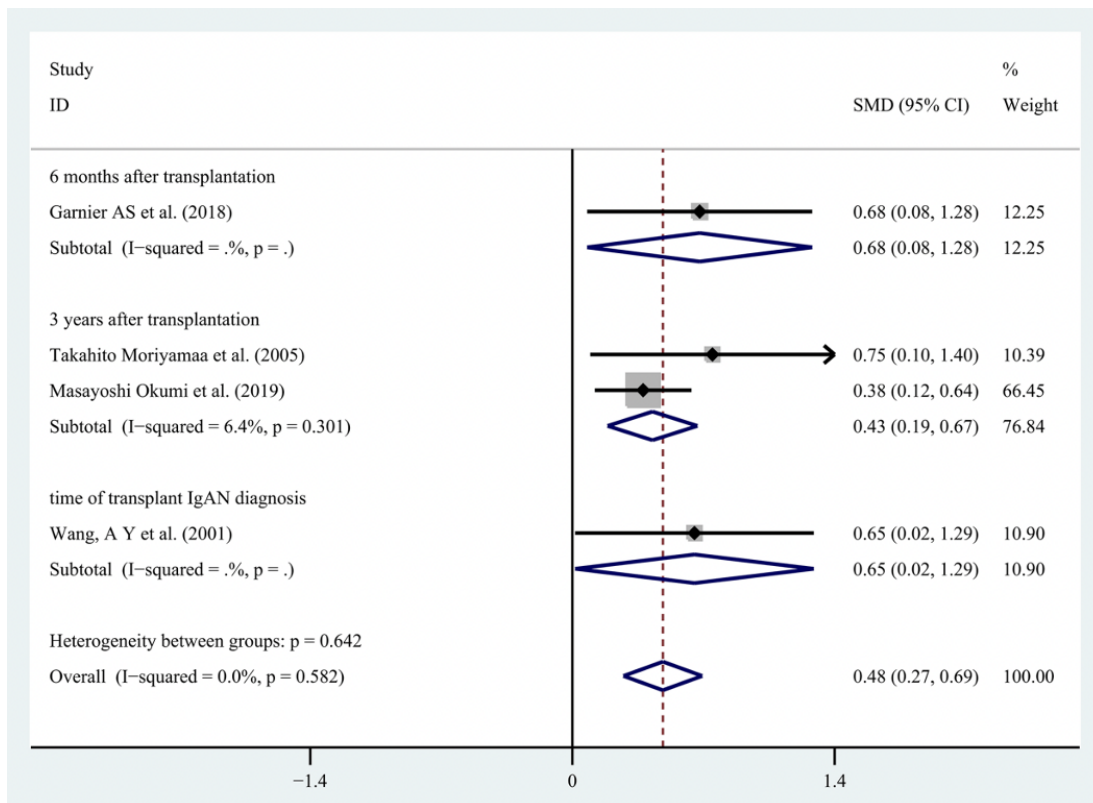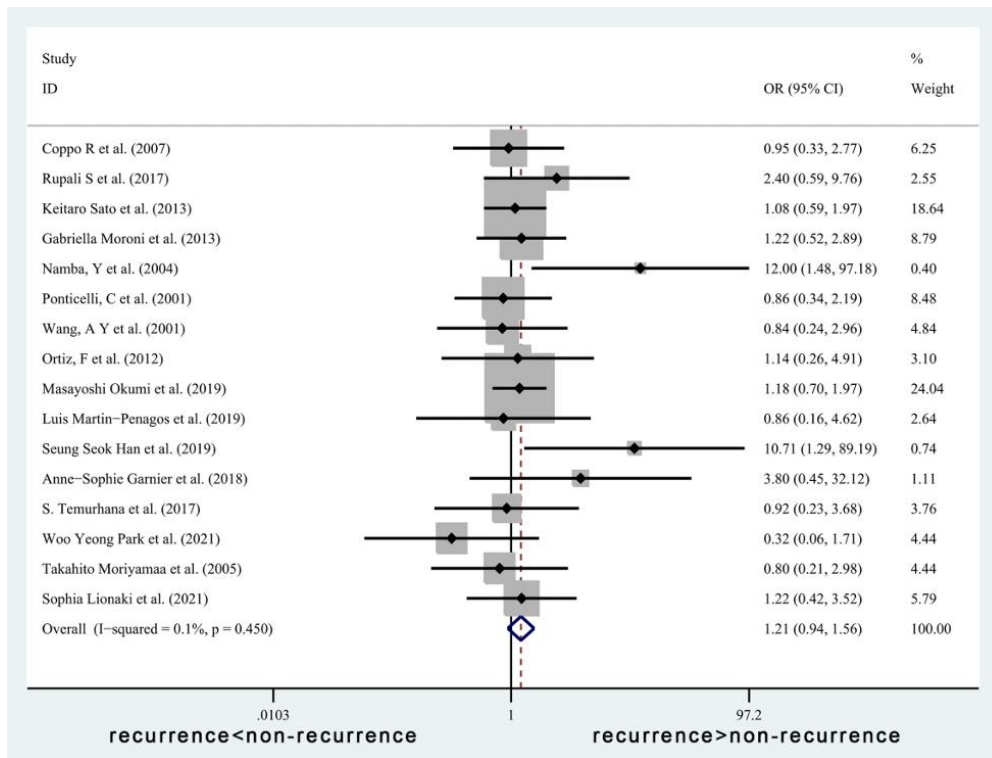**Figure S7.** Forest plot of related donor as a risk factor. OR: Odds ratio; CI: Confidence interval.
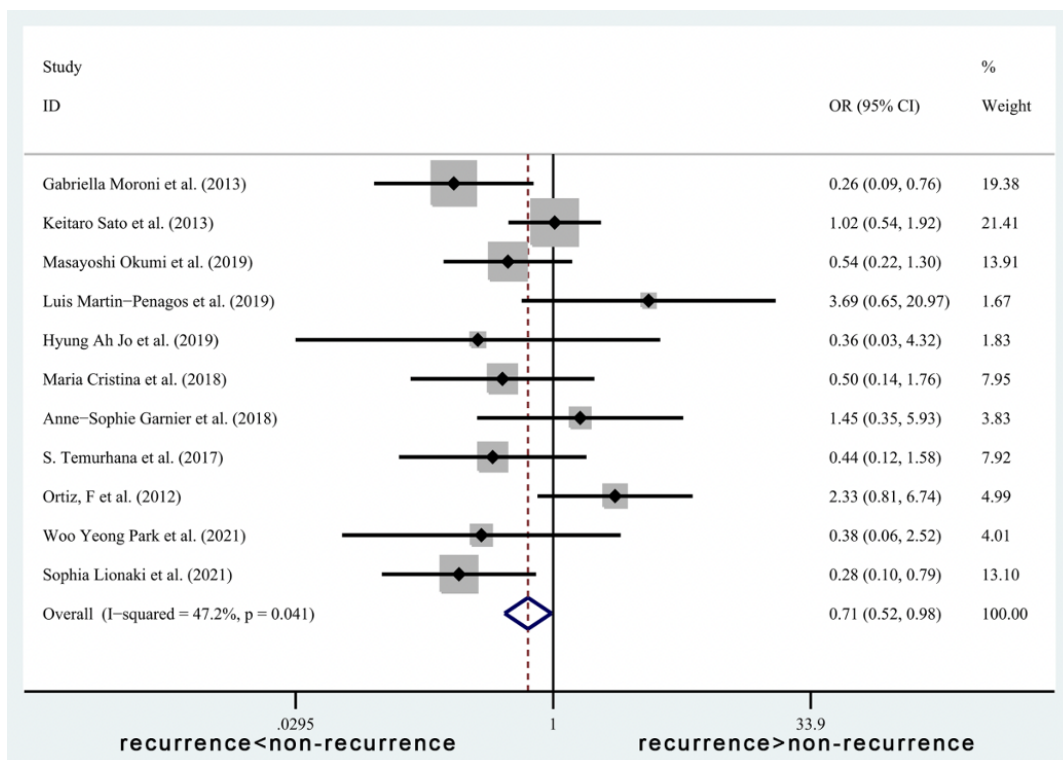
Figure S8. Forest plot of tacrolimus use as a protective factor. OR: Odds ratio; CI: Confidence interval.
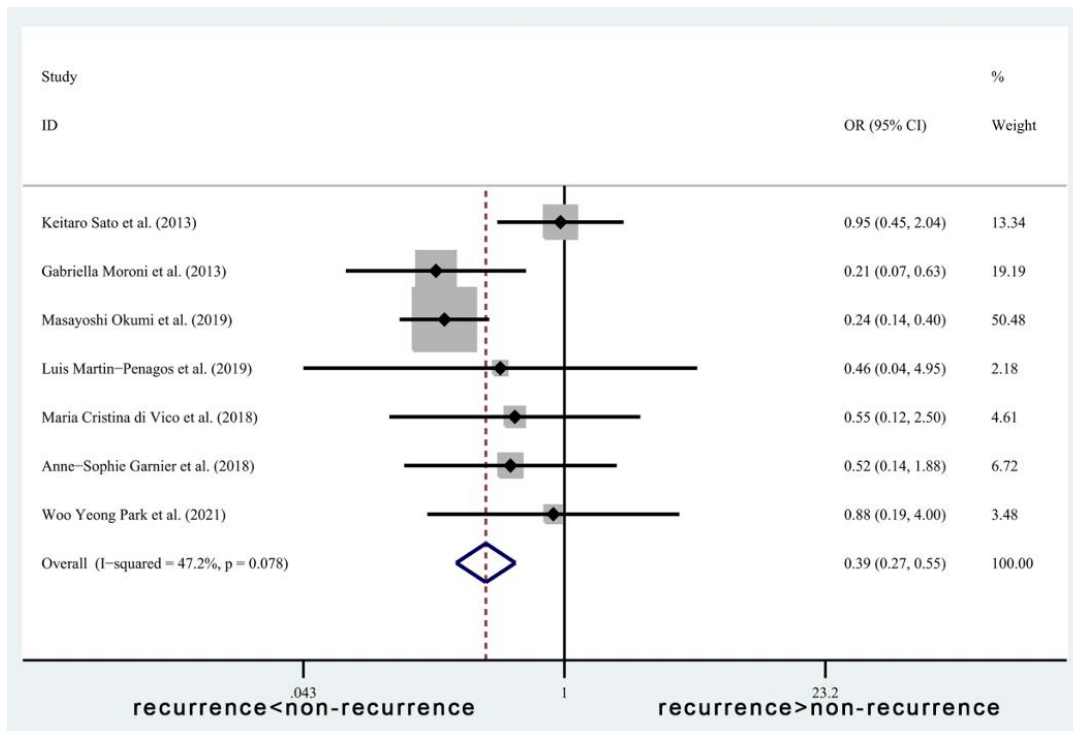
Figure S9. Forest plot of basiliximab use as a protective factor. OR: Odds ratio; CI: Confidence interval.
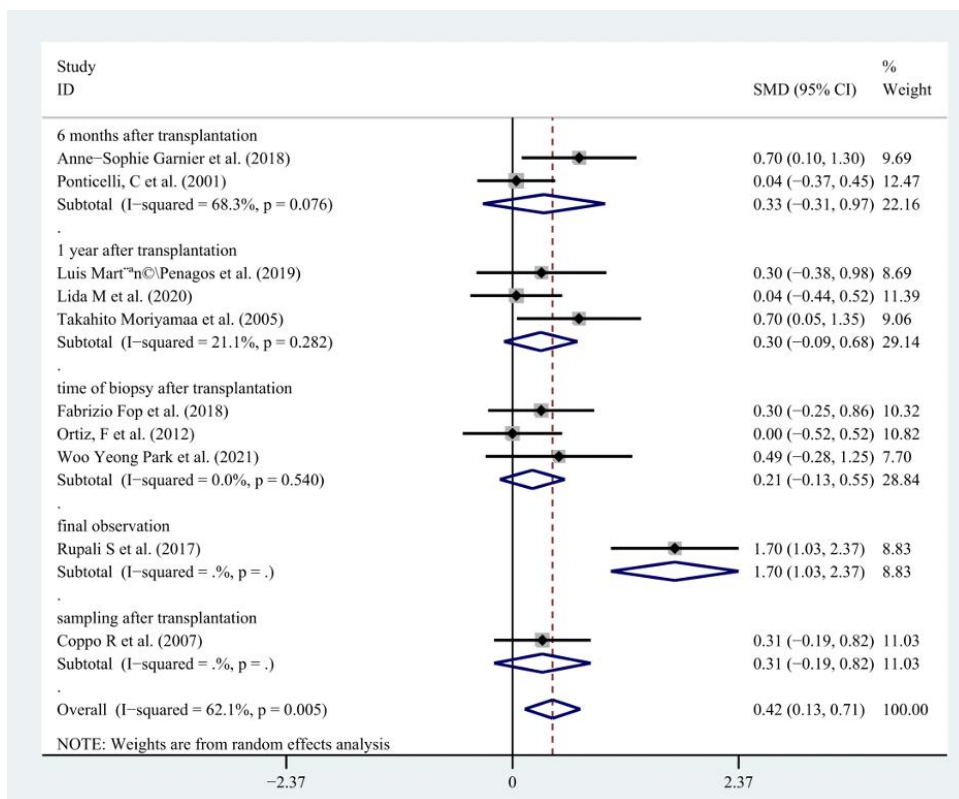
Figure S10. Forest plot of high level of proteinuria as a risk factor. SMD: standardized mean difference; CI: Confidence interval.
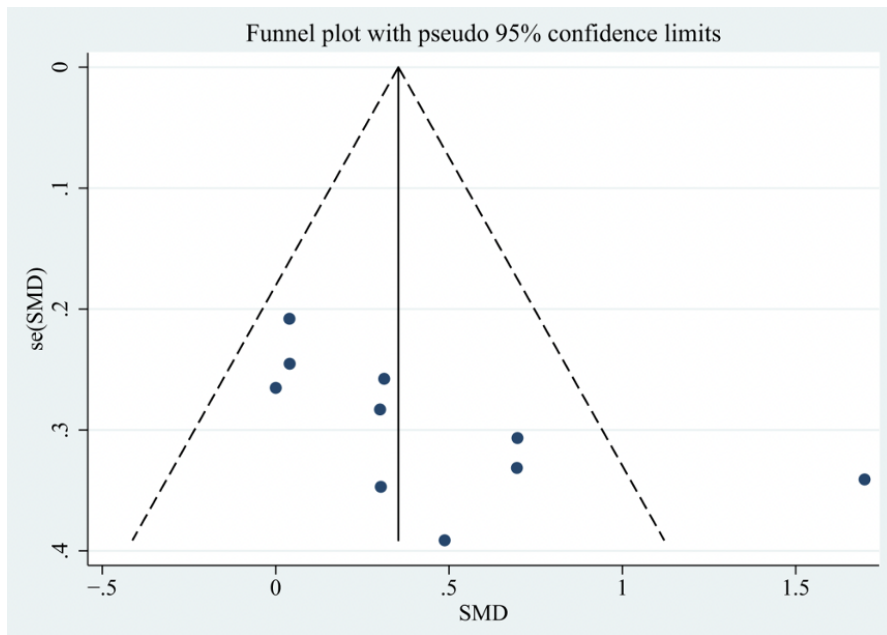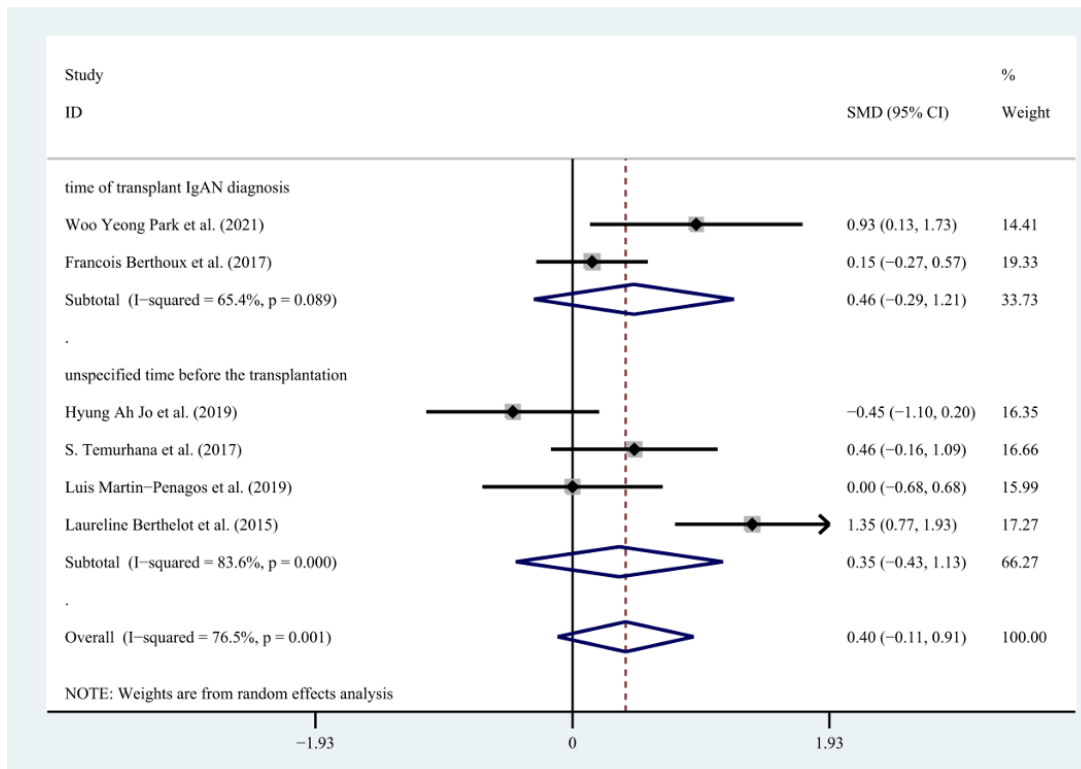
Figure S11. Funnel plot of proteinuria as a risk factor. SMD: Standardized mean difference.

Figure S12. Forest plot of high level of serum IgA level as a risk factor. SMD: Standardized mean difference; CI: Confidence interval; IgAN: IgA nephropathy.

Figure S13. Forest plot of sex as a risk factor. OR: Odds ratio; CI: Confidence interval.
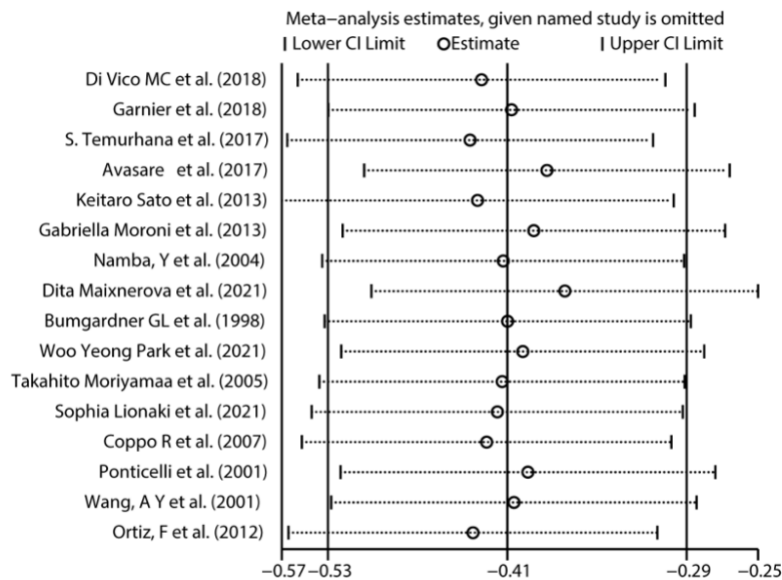

Figure S14. Forest plot of galactose deficient IgA1. SMD: Standardized mean difference; CI: Confidence interval.
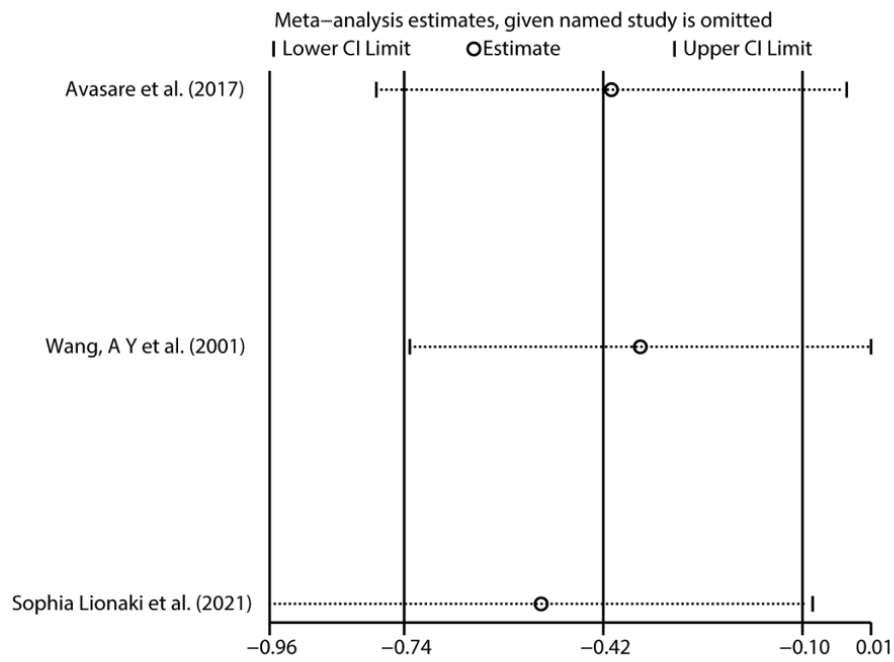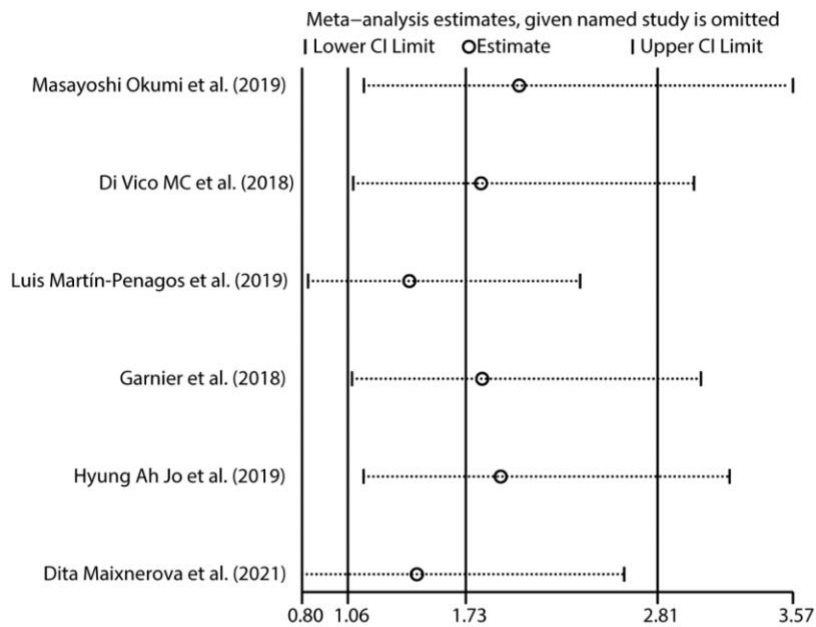
Supplementary Material 3
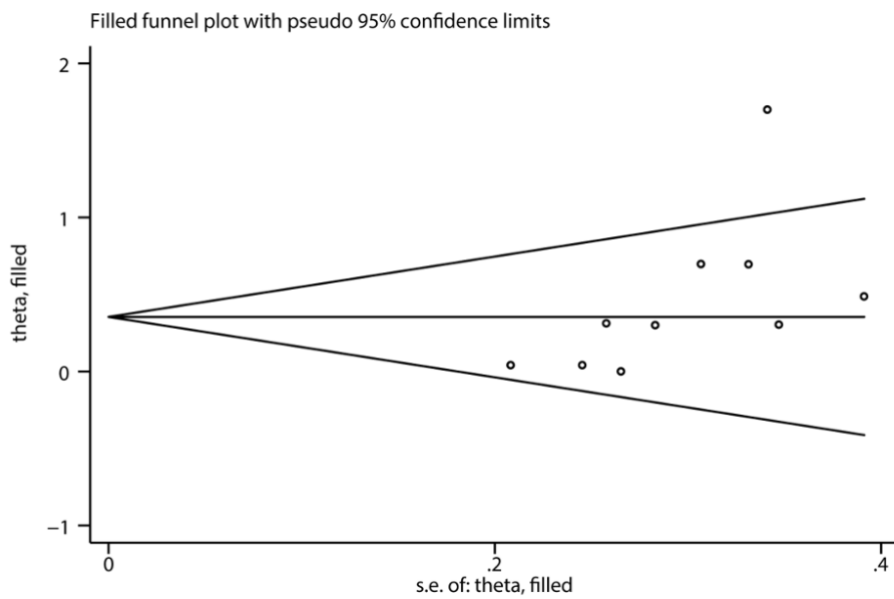
Figure S1. The results for proteinuria in the trim-and-fill analysis.
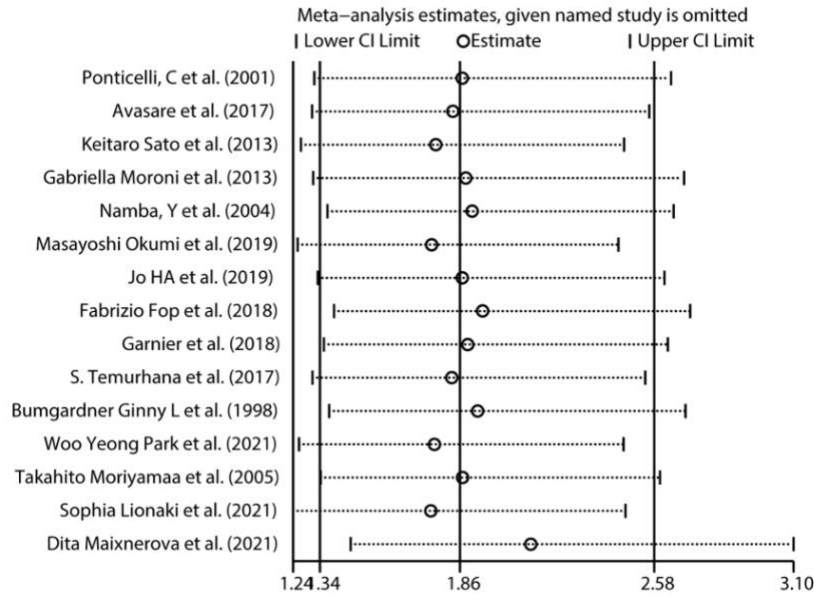

Figure S2. The results for patient age at transplantation in the sensitivity analysis. CI: Confidence interval.
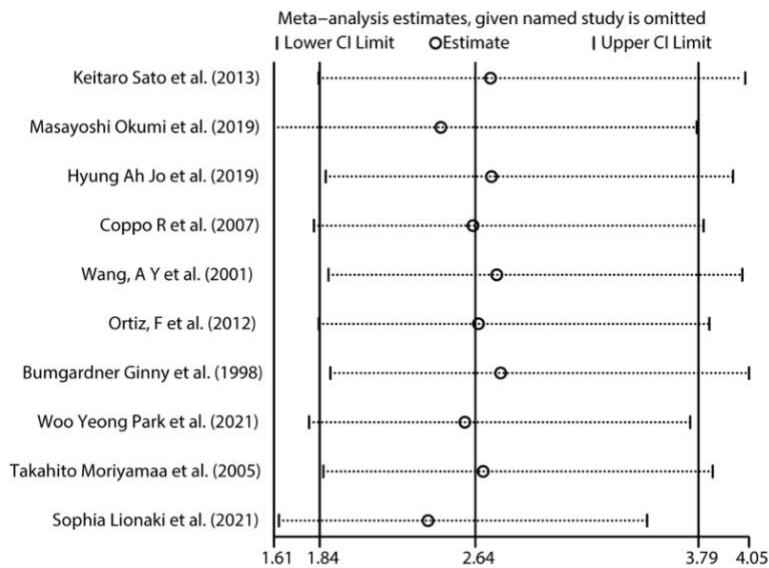
Figure S3. The results for time from diagnosis to end-stage renal disease in the sensitivity analysis. CI: Confidence interval.
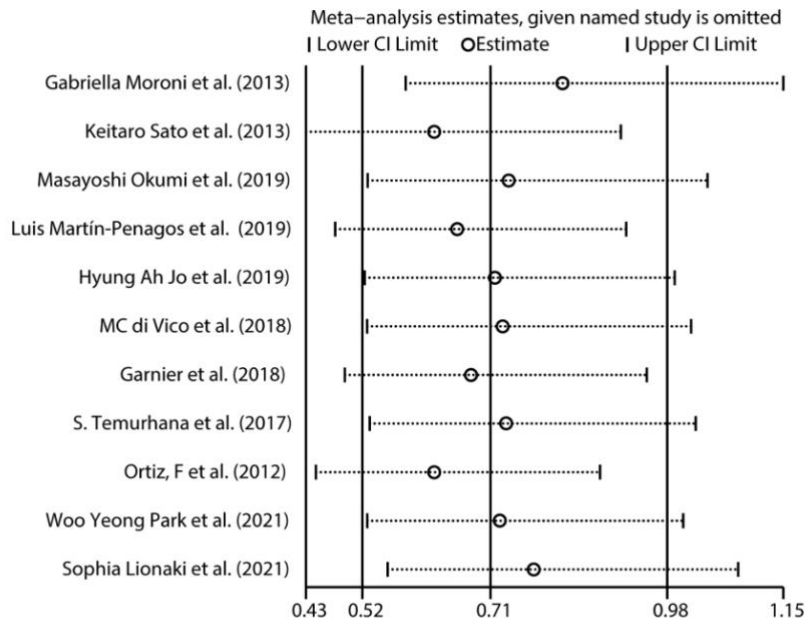

Figure S4. The results for previous transplantation in the sensitivity analysis. CI: Confidence interval.
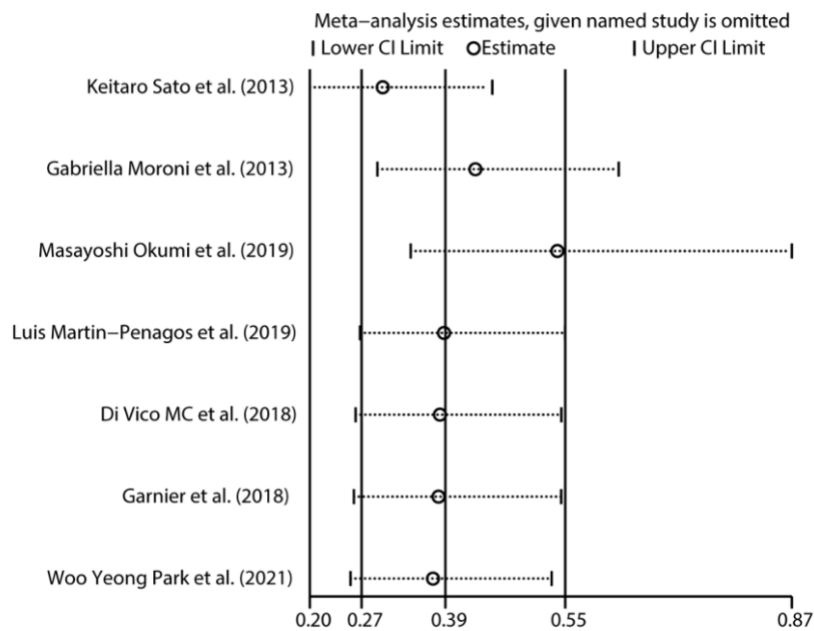
Figure S5. The results for living donor in the sensitivity analysis. CI: Confidence interval.

Figure S6. The results for related donor in the sensitivity analysis. CI: Confidence interval.

Figure S7. The results for tacrolimus use in the sensitivity analysis. CI: Confidence interval.

Figure S8. The results for basiliximab use in the sensitivity analysis. CI: Confidence interval.