

SUPPLEMENTAL DATA

Trabecular bone score as a marker of skeletal fragility across the spectrum of chronic kidney disease: a systematic review and meta-analysis

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Supplementary Table 1. Quality assessment of the cross-sectional studies according to the Appraisal Tool for Cross-Sectional Studies (AXIS). Abbreviations: N, no; U, unclear; Y, yes.

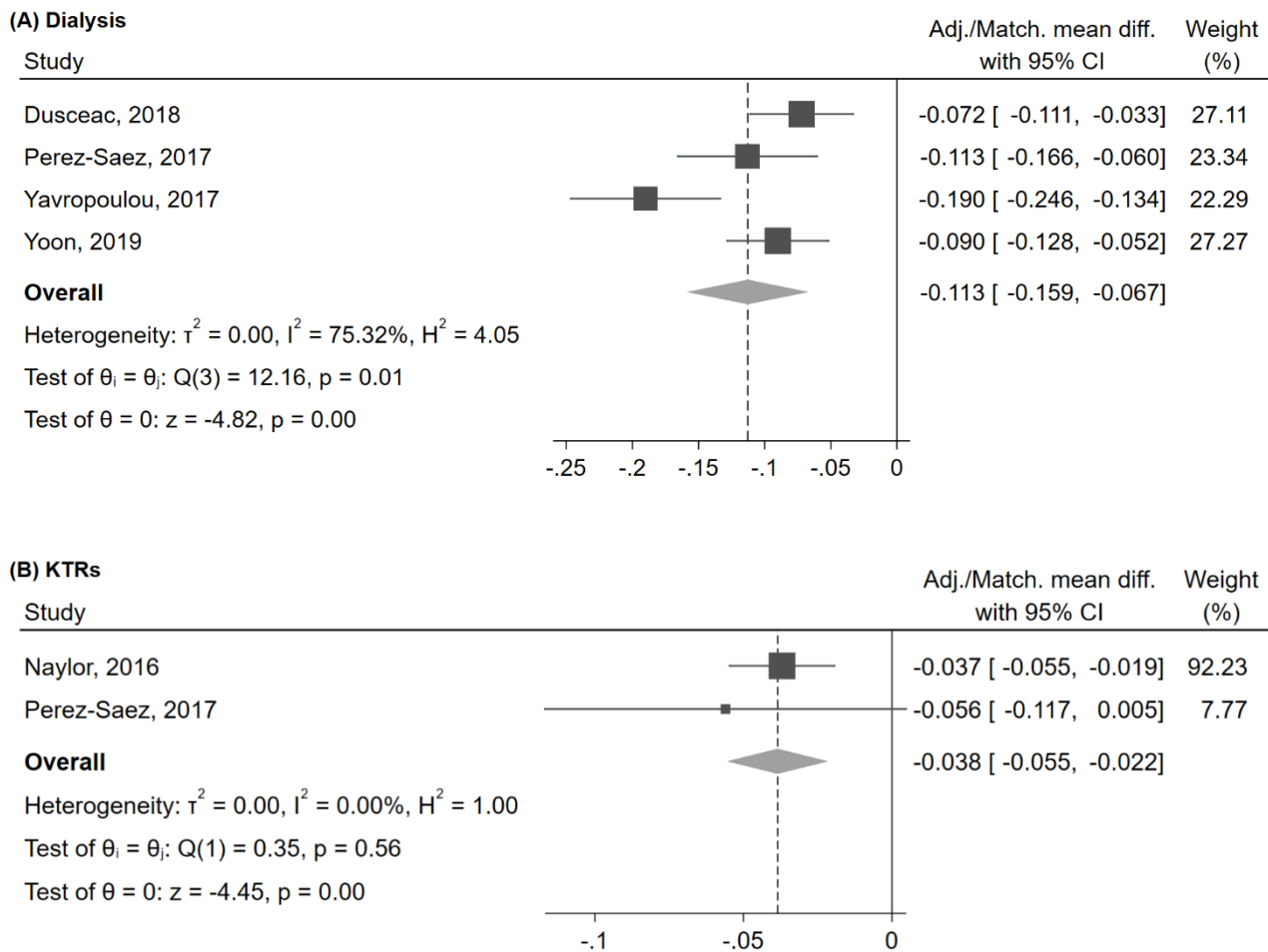
20. Was ethical approval or consent of participants attained?	Y
19. Were there any funding sources or conflicts of interest that may affect the authors' interpretation of the results?	N
18. Were the limitations of the study discussed?	Y
17. Were the authors' discussions and conclusions justified by the results?	Y
16. Were the results for the analyses described in the methods presented?	Y
15. Were the results internally consistent?	Y
14. If appropriate, was information about non-responders described?	N
13. Does the response rate raise concerns about non-response bias?	N
12. Were the basic data adequately described?	Y
11. Were the methods sufficiently described to enable them to be repeated?	Y
10. Is it clear what was used to determined statistical significance and/or precision estimates?	Y
9. Were the risk factor and outcome variables measured correctly using instruments that had been trialled, piloted or published previously?	Y
8. Were the risk factor and outcome variables measured appropriate to the aims of the study?	Y
7. Were measures undertaken to address and categorise non-responders?	N
6. Was the selection process likely to select subjects/ participants that were representative of the target/reference population under investigation?	Y
5. Was the sample frame taken from an appropriate population base so that it closely represented the target/reference population under investigation?	Y
4. Was the target/reference population clearly defined? (Is it clear who the research was about?)	Y
3. Was the sample size justified?	N
2. Was the study design appropriate for the stated aim (s)?	Y
1. Were the aims/objectives of the study clear?	Y
Aleksova, 2018 (38)	Y
Catalano, 2022 (50)	Y
Dusceac, 2018 (53)	Y
Holloway-Kew, 2020 (47)	Y
Kim, 2021 (48)	Y
Lamacchia, 2020 (49)	Y

Malle, 2022 (54)	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N	Y
Naylor, 2016 (31)	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	U	Y
Naylor, 2016 (32)	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	U	Y
Perez-Saez, 2017 (51)	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	U	N	Y	Y	Y	Y	N	Y
Perez-Saez, 2017 (35)	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	U	N	Y	Y	Y	Y	N	Y
Rampersad, 2020 (34)	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y
Yavropoulou, 2017 (39)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	U	N	Y	Y	Y	Y	N	Y
Yoon, 2019 (52)	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	U	N	Y	Y	Y	Y	N	Y

Supplementary Table 2. Quality assessment of the longitudinal cohort studies according to the Newcastle-Ottawa scale.

	Selection				Comparability	Outcome			Total score
	Representativeness of Exposed Cohort	Selection of Nonexposed Cohort	Ascertainment of Exposure	Outcome Not Present at Baseline	Comparability of cohorts	Assessment of Outcome	Sufficient Follow-Up Duration	Adequate Follow-up	
Brunerova, 2018 (37)	1	1	1	1	2	1	0	1	8
Chandran, 2019 (36)	1	1	1	1	0	1	1	1	7
Naylor, 2016 (31)	1	1	1	1	2	1	1	1	9
Naylor, 2016 (32)	1	1	1	1	2	1	1	1	9
Rampersad, 2020 (34)	1	1	1	1	2	1	1	1	9
Yun, 2020 (55)	1	1	1	1	2	1	0	1	8

Supplementary Figure 1. Comparison of TBS values between dialysis patients and controls (A), and between KTRs and controls (B), focusing the analysis on adjusted or matched data. Abbreviations: Adj, adjusted; CI, confidence interval; Match, matched; KTRs, kidney transplant recipients; TBS, trabecular bone score.



Appendix 1. Electronic search strategy.

PUBMED

Advanced search, All fields

("kidney disease"[tw] OR "renal disease"[tw] OR "chronic kidney disease"[tw] OR "chronic renal disease"[tw] OR "end stage kidney disease"[tw] OR "end stage renal disease"[tw] OR "kidney insufficiency"[tw] OR "renal insufficiency"[tw] OR "kidney failure"[tw] OR "renal failure"[tw] OR "CKD"[tw] OR "dialysis"[tw] OR "hemodialysis"[tw] OR "peritoneal dialysis"[tw] OR "dialyt*"[tw] OR "hemodialyt*"[tw] OR "peritoneal dialyt*"[tw] OR "kidney transplant*"[tw] OR "renal transplant*"[tw] OR "chronic kidney disease-mineral and bone disorder"[tw] OR "CKD-MBD"[tw] OR "kidney osteodystrophy"[tw] OR "renal osteodystrophy"[tw]) AND ("trabecular bone score"[tw] OR "tbs"[tw])

EMBASE

Quick search, All fields

("kidney disease":ti,ab,kw OR "renal disease":ti,ab,kw OR "chronic kidney disease":ti,ab,kw OR "chronic renal disease":ti,ab,kw OR "end stage kidney disease":ti,ab,kw OR "end stage renal disease":ti,ab,kw OR "kidney insufficiency":ti,ab,kw OR "renal insufficiency":ti,ab,kw OR "kidney failure":ti,ab,kw OR "renal failure":ti,ab,kw OR "CKD":ti,ab,kw OR "dialysis":ti,ab,kw OR "hemodialysis":ti,ab,kw OR "peritoneal dialysis":ti,ab,kw OR "dialyt*":ti,ab,kw OR "hemodialyt*":ti,ab,kw OR "peritoneal dialyt*":ti,ab,kw OR "kidney transplant*":ti,ab,kw OR "renal transplant*":ti,ab,kw OR "chronic kidney disease-mineral and bone disorder":ti,ab,kw OR "CKD-MBD":ti,ab,kw OR "kidney osteodystrophy":ti,ab,kw OR "renal osteodystrophy":ti,ab,kw) AND ("trabecular bone score":ti,ab,kw OR "tbs":ti,ab,kw)

COCHRANE LIBRARY

Advanced search, All text

("kidney disease" OR "renal disease" OR "chronic kidney disease" OR "chronic renal disease" OR "end stage kidney disease" OR "end stage renal disease" OR "kidney insufficiency" OR "renal insufficiency" OR "kidney failure" OR "renal failure" OR "CKD" OR "dialysis" OR "hemodialysis" OR "peritoneal dialysis" OR "dialyt*" OR "hemodialyt*" OR "peritoneal dialyt*" OR "kidney transplant*" OR "renal transplant*" OR "chronic kidney disease-mineral and bone disorder" OR "CKD-MBD" OR "kidney osteodystrophy" OR "renal osteodystrophy") AND ("trabecular bone score" OR "tbs")
