

SUPPLEMENTARY DATA

Search strategy

("hypertense"[All Fields] OR "Hypertension"[MeSH Terms] OR "Hypertension"[All Fields] OR "hypertension s"[All Fields] OR "hypertensions"[All Fields] OR "hypertensive"[All Fields] OR "hypertensive s"[All Fields] OR "hypertensives"[All Fields] OR ("Essential Hypertension"[MeSH Terms] OR ("essential"[All Fields] AND "Hypertension"[All Fields]) OR "Essential Hypertension"[All Fields]) OR (("resist"[All Fields] OR "resistance"[All Fields] OR "resistances"[All Fields] OR "resistant"[All Fields] OR "resistants"[All Fields] OR "resisted"[All Fields] OR "resistance"[All Fields] OR "resistences"[All Fields] OR "resistent"[All Fields] OR "resistibility"[All Fields] OR "resisting"[All Fields] OR "resistive"[All Fields] OR "resistively"[All Fields] OR "resistivities"[All Fields] OR "resistivity"[All Fields] OR "resists"[All Fields]) AND ("hypertense"[All Fields] OR "Hypertension"[MeSH Terms] OR "Hypertension"[All Fields] OR "hypertension s"[All Fields] OR "hypertensions"[All Fields] OR "hypertensive"[All Fields] OR "hypertensive s"[All Fields] OR "hypertensives"[All Fields])))) AND ("Hypertension"[MeSH Terms] OR "Essential Hypertension"[MeSH Terms] OR "Hypertension Resistant to Conventional Therapy"[Supplementary Concept]) AND (((("renal"[All Fields] OR "renals"[All Fields]) AND ("denervate"[All Fields] OR "denervated"[All Fields] OR "denervates"[All Fields] OR "denervating"[All Fields] OR "Denervation"[MeSH Terms] OR "Denervation"[All Fields] OR "denervations"[All Fields] OR "denerved"[All Fields])) OR (("renal artery"[MeSH Terms] OR ("renal"[All Fields] AND "artery"[All Fields]) OR "renal artery"[All Fields] OR ("artery"[All Fields] AND "renal"[All Fields]) OR "artery renal"[All Fields]) AND ("denervate"[All Fields] OR "denervated"[All Fields] OR "denervates"[All Fields] OR "denervating"[All Fields] OR "Denervation"[MeSH Terms] OR "Denervation"[All Fields] OR "denervations"[All Fields] OR "denerved"[All Fields])) OR "RND"[All Fields]) AND "Denervation"[MeSH Terms]) AND (((("diagnostic imaging"[MeSH Subheading] OR ("diagnostic"[All Fields] AND "imaging"[All Fields]) OR "diagnostic imaging"[All Fields] OR "ultrasound"[All Fields] OR "ultrasonography"[MeSH Terms] OR "ultrasonography"[All Fields] OR "ultrasonics"[MeSH Terms] OR "ultrasonics"[All Fields] OR "ultrasounds"[All Fields] OR "ultrasound s"[All Fields]) AND ("ablate"[All Fields] OR "ablated"[All Fields] OR "ablates"[All Fields] OR "ablating"[All Fields] OR "ablation"[All Fields] OR "ablational"[All Fields] OR "ablations"[All Fields])) OR "USA"[All Fields] OR ("High-Intensity Focused Ultrasound Ablation"[MeSH Terms] OR "Ultrasonic Surgical Procedures"[MeSH Terms])) AND (("clinical"[Title/Abstract] AND "trial"[Title/Abstract]) OR "clinical trials as topic"[MeSH Terms] OR "clinical trial"[Publication Type] OR "random*"[Title/Abstract] OR "random allocation"[MeSH Terms] OR "therapeutic use"[MeSH Subheading] OR ("randomized controlled trial"[Publication Type] OR "controlled clinical trial"[Publication Type] OR "randomized"[Title/Abstract] OR "placebo"[Title/Abstract] OR "drug therapy"[MeSH Subheading] OR "randomly"[Title/Abstract] OR "trial"[Title/Abstract] OR "groups"[Title/Abstract]))

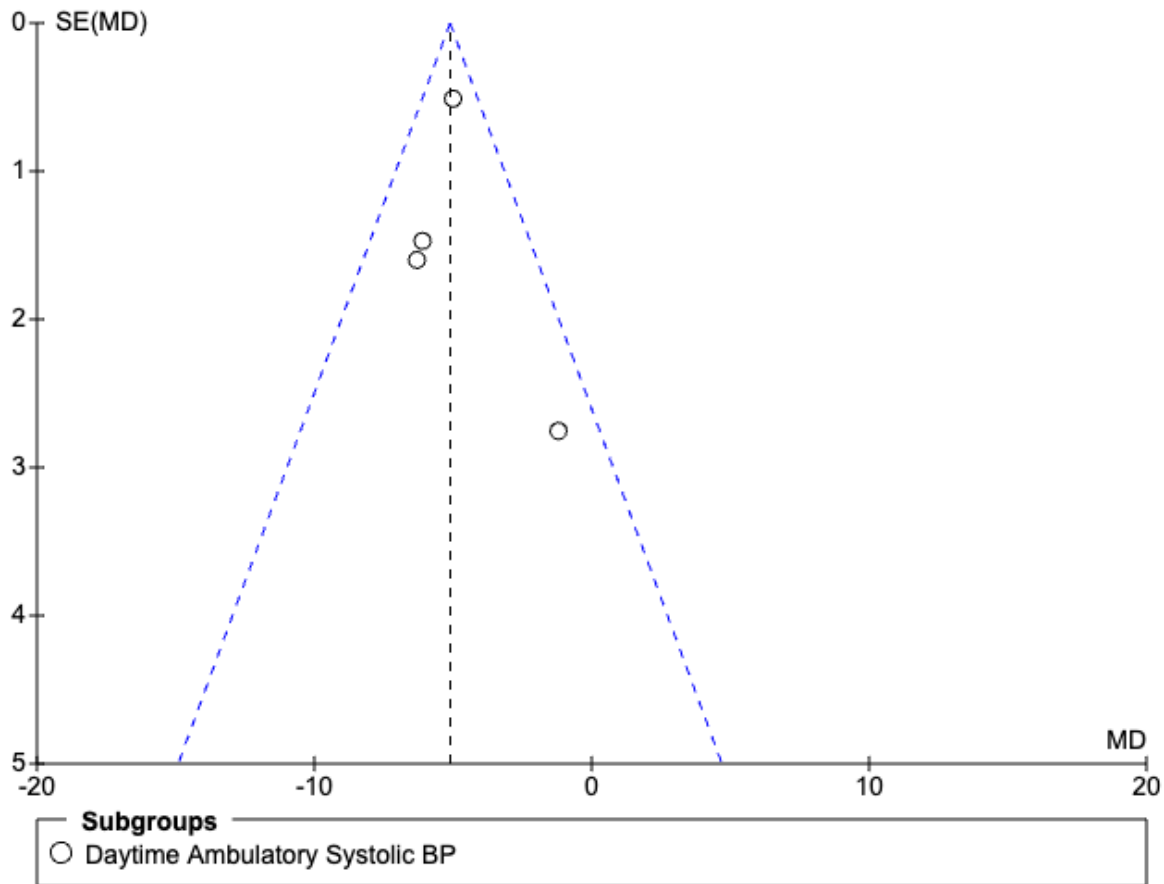


Figure 1 of the supplementary data. Funnel Plot. Funnel plot assessing publication bias in studies evaluating the effect of RDN on daytime ambulatory systolic blood pressure (BP). The x-axis represents the mean difference (MD) in daytime ambulatory systolic blood pressure, while the y-axis represents the standard error (SE) of MD. The dashed vertical line represents the overall pooled effect, while the dashed triangular region represents the anticipated distribution of study outcomes under the presumption of absence of bias. The observed distribution of studies indicates asymmetry, suggesting the potential presence of publication bias. Furthermore, the heterogeneity of the funnel plot reflects variations in effects across studies and could indicate a potential outlier, methodological differences, or population variations.

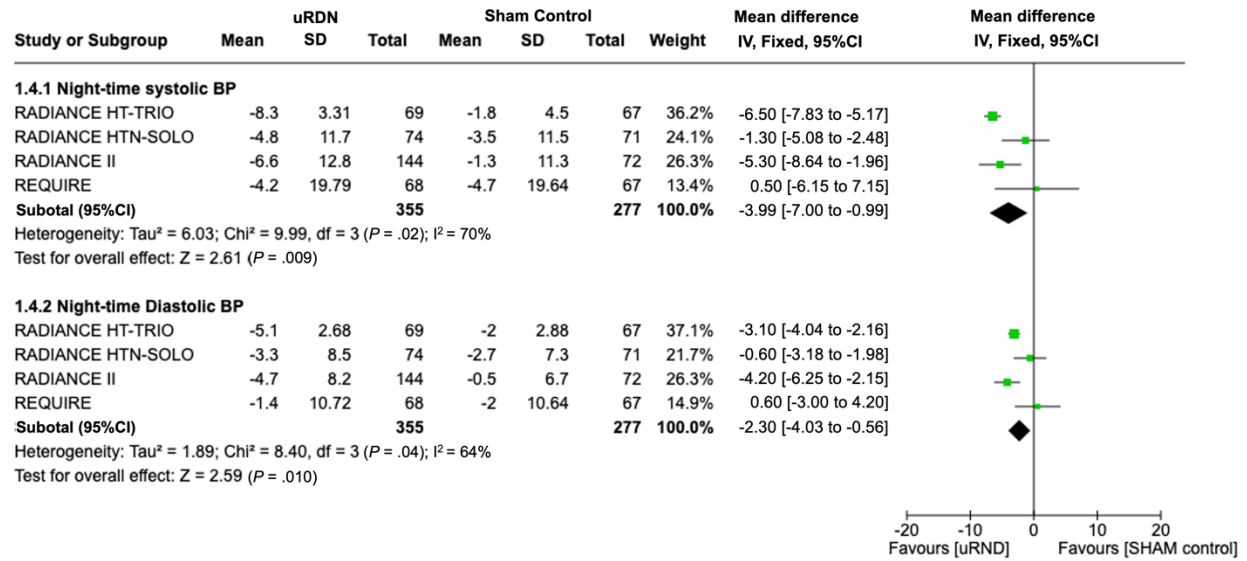


Figure 2 of the supplementary data. Difference in night-time blood pressure up to 2 months. Forest plots showing mean difference from random assignment from systolic and diastolic nighttime blood pressure between ultrasound renal denervation (uRDN) and sham control groups. 95%CI, 95% confidence interval; BP: blood pressure; SD: standard deviation; uRDN: ultrasound renal denervation. The bibliographical references mentioned in this figure correspond to: Azizi *et al.*¹⁶ 2018, Azizi *et al.*¹⁷ 2021, Azizi *et al.*¹⁸ 2023, Kario *et al.*²¹ 2022.

Table 1 of the supplementary data. Risk of bias assessment

