Supplemental Table I. Characteristics of included and excluded subjects in the dialysis population

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| Characteristics | Included group (n=179) | Excluded group (n=237) | P |
| Age (@MRI), years | 58(179, 50-67) | 64(230, 53-77) | **<0.001** |
| Female | 101(179, 56.4%) | 109(237, 46.0%) | **0.035** |
| Smoking | 51(179, 28.5%) | 47(181, 26.0%) | 0.590 |
| Drinking | 49(179, 27.4%) | 29(183, 15.8%) | **0.008** |
| BMI, kg/m2 | 22.32(179, 19.85-24.53) | 22.98(139, 20.52-26.23) | 0.153 |
| Systolic blood pressure, mmHg | 136(177, 126-150) | 133(144, 120-150) | 0.121 |
| Diastolic blood pressure, mmHg | 80(177, 70-85) | 77(144, 69-80) | **0.026** |
| Hypertension | 173(179, 96.6%) | 220(237, 92.8%) | 0.091 |
| Diabetes mellitus | 45(179, 25.1%) | 73(237, 30.8%) | 0.205 |
| Hyperlipidemia | 83(179, 46.4%) | 123(237, 51.9%) | 0.264 |
| Self-reported stroke history | 17(179, 9.5%) | 20(237, 8.4%) | 0.707 |
| Self-reported IHD | 11(179, 6.1%) | 18(237, 7.6%) | 0.565 |
| Med\_HTN | 162(179, 90.5%) | 199(237, 84.0%) | 0.051 |
| Med\_Lip | 63(177, 35.6%) | 72(237, 30.4%) | 0.263 |
| Med\_PLT | 68(179, 38.0%) | 75(237, 31.6%) | 0.177 |
| Hematocrit, % | 33.9 (179, 31.4-36.5) | 33.3(236, 30.1-36.0) | 0.125 |
| Serum creatinine, μmol/L | 905(179, 743-1112) | 782(237, 617-1036) | **<0.001** |
| Serum albumin, g/L | 38.0(173,35.0-41.0) | 36.0(229, 31.0-39.0) | **<0.001** |
| hsCRP, mg/L | 2.33(170,1.02-8.25) | 4.18(179, 1.21-12.30) | 0.058 |
| TCHO | 4.29(175,3.63-5.07) | 4.36(220, 3.59-5.26) | 0.731 |
| LDL-C | 2.39(174,1.93-2.94) | 2.40(211, 1.85-3.16) | 0.679 |
| TG | 1.43(175,0.99-2.04) | 1.43(220, 0.99-2.35) | 0.530 |

Data are presented as “median (number of patients with information, interquartile range)” for age, BMI, blood pressure, hematocrit, serum creatinine and serum albumin. Data are presented as “n (number of patients with information, percentage)” for the remaining parameters. The serum creatinine for hemodialysis patients was measured predialysis. Abbreviations: BMI: body mass index; IHD: ischemic heart disease; Med\_HTN: taking medication for hypertension; Med\_Lip: taking medication for hyperlipidemia; Med\_PLT: taking antiplatelet medication; hsCRP: high sensitivity C reactive protein; TCHO: [total](file:///C%3A%5CUsers%5Ckelly%5CAppData%5CLocal%5CYoudao%5CDict%5CApplication%5C7.2.0.0703%5Cresultui%5Cdict%5C?keyword=total) [cholesterol](file:///C%3A%5CUsers%5Ckelly%5CAppData%5CLocal%5CYoudao%5CDict%5CApplication%5C7.2.0.0703%5Cresultui%5Cdict%5C?keyword=cholesterol), TG: triglyceride, LDL-C: low-density lipoprotein cholesterol.

Supplemental Table II. Characteristics of the included and excluded subjects in the non-CKD control population

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| Characteristics | Included (n=351) | Excluded (n=854) | P |
| Age (@MRI), years | 59(351,51-66) | 54(854,48-61) | **<0.001** |
| Female | 200(351,57.0%) | 554(854,64.9%) | **0.01** |
| Smoking | 121(351,34.5%) | 233(830,23.1%) | 0.085 |
| Drinking | 106(351,30.2%) | 216(829,26.1%) | 0.343 |
| BMI, kg/m2 | 26.07(344,24.01-27.97) | 26.32(830,23.76-29.25) | 0.080 |
| Systolic blood pressure, mmHg | 129(351,117-144) | 133(849,120-146) | 0.123 |
| Diastolic blood pressure, mmHg | 78(351,71-85) | 79(849,71-86) | 0.495 |
| Hypertension | 179(351,51.0%) | 449(853,52.6%) | 0.605 |
| Diabetes mellitus | 62(351,17.7%) | 146(854,17.1%) | 0.813 |
| Hyperlipidemia | 164(351,46.7%) | 416(854,48.7%) | 0.530 |
| Self-reported stroke history | 33(351,9.4%) | 38(828,4.6%) | **0.001** |
| Self-reported IHD | 8(351,2.3%) | 11(854,1.3%) | 0.210 |
| Med\_HTN | 110(351,31.3%) | 248(830,29.9%) | 0.618 |
| Med\_Lip | 11(351,3.1%) | 29(830,3.5%) | 0.755 |
| Med\_PLT | 31(351,8.8%) | 91(830,11.0%) | 0.170 |
| Serum creatinine, μmol/L | 68(351, 60-78) | 65(854,58-74) | **<0.001** |
| TCHO | 4.86(351,4.26-5.47) | 4.94(854,2.42-3.44) | 0.136 |
| LDL-C | 2.88(298,2.42-3.36) | 2.92(854,2.42-3.44) | 0.415 |
| TG | 1.27(351,0.88-1.95) | 1.28(854,0.87-1.91) | 0.738 |

Data are presented as “median (number of patients included, interquartile range)” for age, BMI, blood pressure, hematocrit, serum creatinine and serum albumin. Data are presented as “n (number of patients included, percentage)” for the remaining parameters. The serum creatinine for hemodialysis patients was measured predialysis. Abbreviations: BMI: body mass index; IHD: ischemic heart disease; Med\_HTN: taking medication for hypertension; Med\_Lip: taking medication for hyperlipidemia; Med\_PLT: taking antiplatelet medication; TCHO: [total](file:///C%3A%5CUsers%5Ckelly%5CAppData%5CLocal%5CYoudao%5CDict%5CApplication%5C7.2.0.0703%5Cresultui%5Cdict%5C?keyword=total) [cholesterol](file:///C%3A%5CUsers%5Ckelly%5CAppData%5CLocal%5CYoudao%5CDict%5CApplication%5C7.2.0.0703%5Cresultui%5Cdict%5C?keyword=cholesterol), TG: triglyceride; LDL-C: low-density lipoprotein cholesterol

Supplemental Table III. Comparison of CSVD in MRI of included and excluded non-CKD control population

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|  | **Prevalence** |  | **Univariable** |  | **Multivariable** |
| **Lesions** | **Included****(n=351)** | **Excluded****(n=854)** |  | **OR****(95% CI)** | **P** |  | **OR** **(95% CI)** | **P** |
| Lacune | 65(351,18.5%) | 123(854,14.4%) |  | 1.35(0.97-1.88) | 0.074 |  | 0.87(0.60-1.25) | 0.440  |
| Microbleeds | 45(351,12.8%) | 80(854,9.4%) |  | 1.42(0.97-2.10) | 0.074 |  | 1.00(0.66-1.52) | 0.986  |
| Abnormal WMHs | 88(351, 25.1%) | 168(854,19.7%) |  | 1.37(1.02-1.83) | **0.037** |  | 0.79(0.56-1.11) | 0.171 |
| PVWMHs | 81(351,23.1%) | 154(854,18.0%) |  | 1.36(1.01-1.85) | **0.045** |  | 0.77(0.54-1.10) | 0.146  |
| DWMHs | 54(351,15.4%) | 92(854,10.8%) |  | 1.51(1.05-2.16) | **0.026** |  | 0.92(0.61-1.37) | 0.671  |

Data are presented as “n (number of patients included, percentage)” in the prevalence part. The multivariable models were also adjusted for age and sex. Abbreviations: PVWMHs: periventricular white matter hyperintensities; DWMHs: deep white matter hyperintensities