**Supplemental Material**

This Data Supplement has been provided by the authors to give readers additional information about their work.

Supplement to:

Zhang DY, et al. Subtypes of masked hypertension and target organ damage in untreated Chinese patients

**Table S1.** Characteristics of the participants by subtype of hypertension

**Table S2.** Quality control of 24-hour ambulatory blood pressure monitoring

**Table S3**. Multivariate-adjusted correlation of target organ damage indices with daytime and nighttime blood pressures in the total population

**Table S1.** Characteristics of the participants by subtype of hypertension.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Characteristic | Total  (*n*=1808) | Normotension  (*n*=550) | White-coat hypertension  (*n*=81) | Masked hypertension  (*n*=672) | Sustained hypertension  (*n*=505) | *p* |
| Demographic Characteristics |  |  |  |  |  |  |
| Age, y | 51.1 ± 10.6 | 54.1 ± 10.3 | 56.4 ± 11.1 | 49.5 ± 9.9‡ | 49.1 ± 11.0‡ | <0.001 |
| Male sex, *n* (%) | 875 (48.4) | 186 (33.8) | 25 (30.9) | 388 (57.7)‡ | 276 (54.7)‡ | <0.001 |
| Body mass index, kg/m² | 24.6 ± 3.1 | 23.9 ± 3.3 | 23.9 ± 2.8 | 24.8 ± 2.9‡ | 25.0 ± 3.1‡ | <0.001 |
| Smokers, *n* (%) | 306 (16.9) | 53 (9.7) | 5 (6.2) | 150 (22.4)‡ | 98 (19.5)‡ | <0.001 |
| Alcohol drinkers, *n* (%) | 352 (19.5) | 63 (11.5) | 6 (7.4) | 169 (25.2)‡ | 114 (22.7)‡ | <0.001 |
| Diabetes mellitus, *n* (%) | 82 (4.5) | 31 (5.6) | 1 (1.2) | 22 (3.3) | 28 (5.5) | 0.064 |
| Clinic BP, mmHg |  |  |  |  |  |  |
| Systolic | 132.6 ± 13.0 | 123.4 ± 9.8 | 145.6 ± 7.5‡ | 128.5 ± 7.0‡ | 146.1 ± 10.1‡ | <0.001 |
| Diastolic | 82.2 ± 9.1 | 74.6 ± 6.9 | 82.9 ± 7.3‡ | 81.6 ± 5.2‡ | 91.1 ± 7.7‡ | <0.001 |
| Ambulatory BP, mmHg |  |  |  |  |  |  |
| 24-H systolic | 127.7 ± 12.3 | 116.1 ± 7.3 | 121.4 ± 5.9‡ | 130.0 ± 8.7‡ | 138.2 ± 10.4‡ | <0.001 |
| 24-H diastolic | 82.1 ± 9.0 | 73.2 ± 5.0 | 74.0 ± 4.6 | 84.8 ± 4.9‡ | 89.6 ± 7.9‡ | <0.001 |
| Daytime systolic | 134.6 ± 13.4 | 122.7 ± 8.4 | 129.1 ± 7.5‡ | 136.7 ± 9.9‡ | 145.7 ± 11.8‡ | <0.001 |
| Daytime diastolic | 86.9 ± 9.7 | 77.6 ± 5.9 | 78.7 ± 6.3 | 89.5 ± 5.9‡ | 94.7 ± 8.6‡ | <0.001 |
| Nighttime systolic | 114.4 ± 13.4 | 103.7 ± 9.0 | 106.3 ± 10.3\* | 116.7 ± 10.6‡ | 124.2 ± 12.4‡ | <0.001 |
| Nighttime diastolic | 72.8 ± 9.6 | 64.6 ± 6.2 | 64.5 ± 5.9 | 75.3 ± 6.5‡ | 79.8 ± 9.3‡ | <0.001 |
| 24-H pulse rate, bpm | 73.0 ± 7.9 | 70.4 ± 7.5 | 69.8 ± 6.9 | 74.5 ± 7.7‡ | 74.5 ± 7.9‡ | <0.001 |
| Serum measurements, mmol/L |  |  |  |  |  |  |
| Fasting glucose | 5.07 ± 0.82 | 5.07 ± 0.82 | 5.19 ± 0.63 | 4.98 ± 0.68\* | 5.18 ± 0.98\* | <0.001 |
| Total cholesterol | 5.12 ± 0.94 | 5.16 ± 0.94 | 5.23 ± 0.89 | 5.06 ± 0.92 | 5.12 ± 0.96 | 0.195 |
| HDL cholesterol | 1.52 ± 0.41 | 1.62 ± 0.44 | 1.67 ± 0.49 | 1.46 ± 0.37‡ | 1.45 ± 0.37‡ | <0.001 |
| LDL cholesterol | 2.94 ± 0.84 | 2.93 ± 0.86 | 2.94 ± 0.81 | 2.94 ± 0.82 | 2.96 ± 0.83 | 0.942 |
| Triglycerides | 1.31 (0.92 - 1.81) | 1.23 (0.90 - 1.70) | 1.22 (0.90 - 1.64) | 1.31 (0.93 - 1.79)\* | 1.43 (0.93 – 2.01)‡ | <0.001 |

Values are arithmetic mean ± SD or geometric mean (interquartile range) or number of subjects (percentage of the column). Abbreviations: BP, blood pressure, HDL, high-density lipoprotein; LDL, low-density lipoprotein; MHT, masked hypertension. Comparison with the normotension group, \**p* < 0.05, †*p* < 0.01, ‡*p* < 0.001.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Quality index | Median | P25–P75 | P10–P90 | P5–P95 |
| N° of readings per patient | | | | |
| Daytime readings | 27 | 25–29 | 21–30 | 19–31 |
| Nighttime readings | 12 | 11–12 | 11–12 | 10–12 |
| Whole day readings | 60 | 56–62 | 50–64 | 47–64 |

**Table S2**. Quality control of 24-h ambulatory blood pressure monitoring.

Daytime was defined as 8 AM to 6 PM and nighttime as 11 PM to 5 AM. P5, P10, P25, P75, P90, P95 are the percentiles.

**Table S3.** Multivariate-adjusted correlation of target organ damage indices with daytime and nighttime blood pressures in total population

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Target organ damage indice | Systolic blood pressure, mmHg | | *p* | Diastolic blood pressure, mmHg | | *p* |
| Daytime | Nighttime | Daytime | Nighttime |
| cfPWV, m/s  (n = 1808) | 0.33  (0.29, 0.37)‡ | 0.31  (0.26, 0.35)‡ | 0.39 | 0.16  (0.12, 0.21)‡ | 0.20  (0.15, 0.24)‡ | 0.29 |
| Carotid IMT, µm  (n = 1188) | 0.20  (0.16, 0.25)‡ | 0.21  (0.17, 0.26)‡ | 0.81 | 0.11  (0.06, 0.15)‡ | 0.14  (0.09. 0.18)‡ | 0.39 |
| LVMI, g/m2  (n = 1330) | 0.15  (0.10, 0.20)‡ | 0.16  (0.10, 0.21)‡ | 0.85 | 0.14  (0.08, 0.19)‡ | 0.15  (0.09, 0.20)‡ | 0.80 |
| E/E’  (n = 1753) | 0.16  (0.10,0.21)‡ | 0.18  (0.13, 0.23)‡ | 0.55 | 0.11  (0.05, 0.16)‡ | 0.13  (0.07, 0.18)‡ | 0.65 |
| eGFR, ml/min/1.73 m2  (n = 1801) | 0.06  (0.02, 0.11)† | 0.06  (0.01, 0.10)\* | 0.90 | 0.02  (-0.02, 0.07) | 0.01  (-0.04, 0.06) | 0.71 |
| Urinary ACR, mg/mmol  (n = 1808) | 0.20  (0.15, 0.24)‡ | 0.23  (0.19, 0.28)‡ | 0.31 | 0.19  (0.15, 0.24)‡ | 0.23  (0.19, 0.28)‡ | 0.20 |

Values are partial correlation coefficient (*r*) with 95% confidence interval (CI) in the parentheses. Covariates in adjusted models included age, sex, body mass index, 24-h pulse rate, smoking, alcohol drinking, serum total cholesterol and fasting glucose. *p* values are for the comparison between daytime and nighttime blood pressures. Significance of the partial *r*, \**p* < 0.05, †*p* < 0.01, ‡*p* < 0.001. For abbreviations, please refer to the footnotes of Table 2.