**Supplemental Table S1.** Results of stepwise multiple regression analysis for errors of ASBP estimation with different methods with respect to physiological/hemodynamic factors

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| --- | --- | --- | --- | --- |
| **SCWR**  Adjusted R-squared value: 0.118 | | | | |
|  |  | SE | P | VIF |
| *T* | 0.350 | 0.823 | <0.001 | 1.107 |
| WFP1 | -0.230 | 1.774 | 0.001 | 1.107 |
| **GTF.rad** Adjusted R-squared value: 0.789 | | | | |
|  |  | S.E. | P | VIF |
| *H* | 0.615 | 0.834 | <0.001 | 1.007 |
| *D* | 0.585 | 0.678 | <0.001 | 2.236 |
| APP | -0.218 | 0.005 | <0.001 | 1.798 |
| *T* | 0.180 | 0.641 | <0.001 | 1.216 |
| WFP1 | -0.257 | 1.934 | <0.001 | 2.386 |
| **GTF.bra** Adjusted R-squared value: 0.710 | | | | |
|  |  | SE | P | VIF |
| *D* | -0.304 | 0.469 | <0.001 | 1.692 |
| *β*ao | -0.186 | 0.049 | 0.006 | 3.530 |
| *T* | 0.449 | 0.548 | <0.001 | 1.406 |
| *H* | -0.259 | 0.676 | <0.001 | 1.047 |
| WFP1 | -0.404 | 2.241 | <0.001 | 5.071 |
| **SBP2** Adjusted R-squared value: 0.840 | | | | |
|  |  | SE | P | VIF |
| *T* | 0.503 | 1.243 | <0.001 | 1.035 |
| *D* | -0.180 | 1.122 | <0.001 | 1.387 |
| *R*p | 0.147 | 0.653 | <0.001 | 1.041 |
| *H* | -0.121 | 1.761 | <0.001 | 1.017 |
| *β*ao | -0.528 | 0.084 | <0.001 | 1.455 |
| APP | 0.551 | 0.010 | <0.001 | 1.595 |
| **NPMA.5** Adjusted R-squared value: 0.839 | | | | |
|  |  | SE | P | VIF |
| WFP3 | 0.318 | 13.954 | <0.001 | 2.970 |
| *R*p | -0.324 | 0.327 | <0.001 | 1.487 |
| *H* | 0.488 | 0.821 | <0.001 | 1.254 |
| *β*ao | -0.351 | 0.032 | <0.001 | 1.207 |
| *T* | 0.281 | 0.592 | <0.001 | 1.334 |
| APP | -0.193 | 0.005 | <0.001 | 2.517 |
| **NPMA.6** Adjusted R-squared value: 0.759 | | | | |
|  |  | SE | P | VIF |
| *H* | 0.640 | 0.724 | <0.001 | 1.058 |
| *R*p | -0.333 | 0.306 | <0.001 | 1.413 |
| *β*ao | -0.229 | 0.054 | <0.001 | 3.764 |
| *T* | 0.393 | 0.562 | <0.001 | 1.308 |
| WFP1 | -0.166 | 2.236 | 0.016 | 4.453 |
| **NPMA.4** Adjusted R-squared value: 0.910 | | | | |
|  |  | SE | P | VIF |
| WFP3 | 0.439 | 16.669 | <0.001 | 2.970 |
| *R*p | -0.186 | 0.391 | <0.001 | 1.487 |
| *β*ao | -0.382 | 0.038 | <0.001 | 1.207 |
| *H* | 0.267 | 0.981 | <0.001 | 1.254 |
| APP | -0.336 | 0.007 | <0.001 | 2.517 |
| *T* | 0.139 | 0.707 | <0.001 | 1.334 |
| **Direct** Adjusted R-squared value: 0.924 | | | | |
|  |  | SE | P | VIF |
| *D* | -0.706 | 0.440 | <0.001 | 2.063 |
| *R*p | -0.503 | 0.214 | <0.001 | 1.081 |
| *H* | 0.383 | 0.563 | <0.001 | 1.005 |
| APP | 0.166 | 0.004 | <0.001 | 1.775 |
| WFP1 | 0.152 | 1.238 | <0.001 | 2.142 |
| **MBWA**  Adjusted R-squared value: 0.859 | | | | |
|  |  | SE | P | VIF |
|  | -0.602 | 0.768 | <0.001 | 2.063 |
| *R*p | -0.582 | 0.374 | <0.001 | 1.081 |
| *H* | 0.419 | 0.984 | <0.001 | 1.005 |
| WFP1 | 0.111 | 2.163 | 0.002 | 2.142 |
| APP | 0.089 | 0.006 | 0.007 | 1.775 |

, standardized regression coefficient; SE, standard error, VIF, variance inflation factor.

Abbreviations: APP, aortic pulse pressure; *H*, body height; *D*, vascular diameter; *T*, cardiac cycle; *β*ao, stiffness of the aorta; *R*p, peripheral vascular resistance; WFP1, waveform parameter 1; WFP3, waveform parameter 3.