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| **Supplementary Table 2.** The effect of smoking on diesel vs filtered air induced changes in hemodynamic and vascular parameters, sympathetic activity and circulating biomarkers by linear mixed model analysis |
|  | Smokers | Non-smokers |  |
|  | Diesel vs filtered air\*T0vsT2 | Diesel vs filtered air\*T0vsT24 | Diesel vs filtered air\*T0vsT2 | Diesel vs filtered air\*T0vsT24 | Smoking\*exposure status interaction |
|  | Coefficient (95% CIs) | Coefficient (95% CIs) | Coefficient (95% CIs) | Coefficient (95% CIs) | Coefficient (95% CIs) |
| FMD (%) | -4.65 (-6.21, -3.09) \*\* | -6.28 (-7.85, -4.72) \*\* | -4.29 (-6.11, -2.48) \*\* | -5.38 (-7.19, -3.57) \*\* | 0.64 (-0.47, 1.75) |
| EID (%) | 0.70 (-1.16, 2.57) | 1.93 (0.06, 3.80)\* | -0.73 (-1.94, 0.49) | 0.14 (-1.07, 1.35) | 0.50 (-0.38, 1.38) |
| PWV (m/sec) | 1.42 (1.04, 1.79) \*\* | 1.08 (0.71, 1.46) \*\* | 1.15 (0.83, 1.46) \*\* | 1.00 (0.69, 1.31) \*\* | -0.09 (-0.31, 0.12) |
| AIx (%) | 4.15 (1.41, 6.88) \* | 6.22 (3.63, 8.82)\*\* | 6.78 (4.26, 9.29) \*\* | 5.77 (3.29, 8.25)\*\* | -0.33 (-1.96, 1.29) |
| SBP (mmHg) | 1.66 (-5.12, 8.45) | -2.6 (-9.38, 4.18) | 3.24 (-2.02, 8.50) | -1.12 (-6.38, 4.14) | 1.71 (-1.81, 5.23) |
| DBP (mmHg) | 0.48 (-4.26, 5.24) | 4.30 (-0.45, 9.07) | 2.61 (-3.03, 8.26) | 3.40 (-2.23, 9.03) | 1.17 (-5.71, 3.15) |
| SDNN (ms) | -14.27 (-26.44, -2.10) \* | -19.01 (-31.19, -6.81) \* | -22.68 (-42.95, -2.41) \* | -21.75 (-41.95, -1.55) \* | -1.81 (-13.30, 9.67) |
| CRP (mg/L) | 0.92 (0.14, 1.69) \* | 1.14 (0.36, 1.91) \* | 0.13 (-0.33, 0.58) | 0.08 (-0.37, 0.53) | -0.84 (-1.18, -0.49) \*\* |
| Fibrinogen (mg/dl) | 34.74 (-4.76, 74.24) | 48.82 (9.31, 88.32) \* | 66.26 (28.28, 104.24) \*\* | 35.22 (-2.75, 73.2) | 20.18 (-3.62, 43.99) |
| Protein C levels (%) | -24.66 (-34.36, -14.97) \*\* | -18.4 ( -28.09, -8.70) \*\* | -16.6 (-24.74, -8.45) \*\* | -12.2 (-20.34, -4.05) \* | 0.74 (-4.73, 6.22) |
| Protein S Activity (%) | -8.31 (-13.25, -3.36) \* | -13.61 (-18.56, -8.66) \*\* | -14.09 (-19.06, -9.12) \*\* | -22.29 (-27.26, -17.32) \*\* | -4.41 (-7.51, -1.31)\* |
| In each session, measurement was performed at baseline (before exposure-T0), at the end of the 2 hours session (T2) and 24 hours after the end of exposure (T24);Estimated differences are derived from linear mixed model analysis with the following fixed terms (age, gender, smoking, BMI and SBP-only for vascular parameters) and two random terms (random intercept and slope)\* indicates observed significance <0.05\*\* indicates observed significance <0.001FMD: Flow mediated dilation; EID: Endothelial independent dilation; PWV: Pulse wave velocity; AIx: Augmentation Index; SBP: Systolic Blood Pressure; DBP: Diastolic Blood Pressure; SDNN: standard deviation of normal to normal intervals; CRP: C reactive protein; APC: activated protein C; |