**S2 Table. Association of rs9349379 in *PHACTR1* with carotid artery parameters in PPS3 controls.**

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|  |  | **Additive model** | **Recessive model** |
| **Carotid geometry** | **Samplea** | **βq.t. (95% CI)** | **β** | ***P*** | **βq.t. (95% CI)** | **β** | ***P*** |
| Intima–media thickness(IMT), μm | All | 0.070 (0.034 to 0.106) | 11.65 | 1.65 × 10-4 | 0.078 (0.042 to 0.115) | 18.97 | 2.44 × 10-5 |
| Females | 0.095 (0.038 to 0.152) | 14.83 | 0.001 | 0.095 (0.039 to 0.152) | 22.09 | 0.001 |
| Males | 0.056 (0.009 to 0.104) | 9.69 | 0.02 | 0.069 (0.022 to 0.116) | 17.12 | 0.004 |
| External diameter(Dext), mm | All | 0.029 (-0.005 to 0.062) | 0.03 | 0.10 | 0.037 (0.004 to 0.071) | 0.05 | 0.03 |
| Females | 0.021 (-0.037 to 0.079) | 0.02 | 0.47 | 0.026 (-0.032 to 0.084) | 0.04 | 0.37 |
| Males | 0.039 (-0.008 to 0.086) | 0.04 | 0.11 | 0.050 (0.003 to 0.098) | 0.07 | 0.04 |
| Internal diameter(Dint), mm | All | 0.003 (-0.031 to 0.038) | 0.006 | 0.85 | 0.009 (-0.025 to 0.044) | 0.02 | 0.59 |
| Females | -0.018 (-0.079 to 0.042) | -0.010 | 0.56 | -0.014 (-0.074 to 0.047) | -0.009 | 0.66 |
| Males | 0.020 (-0.029 to 0.069) | 0.02 | 0.43 | 0.026 (-0.023 to 0.075) | 0.03 | 0.29 |
| Wall to lumen ratio(WLR) | All | 0.059 (0.022 to 0.097) | 0.004 | 0.002 | 0.063 (0.026 to 0.101) | 0.006 | 8.24 × 10-4 |
| Females | 0.093 (0.032 to 0.153) | 0.006 | 0.003 | 0.091 (0.030 to 0.151) | 0.009 | 0.003 |
| Males | 0.041 (-0.008 to 0.091) | 0.003 | 0.10 | 0.050 (0.001 to 0.099) | 0.005 | 0.05 |
| Circumferential wall stress at DBP(CWS-DBP), kPa | All | -0.055 (-0.091 to -0.018) | -0.72 | 0.004 | -0.064 (-0.101 to -0.028) | -1.19 | 6.04 × 10-4 |
| Females | -0.062 (-0.122 to -0.002) | -0.71 | 0.04 | -0.066 (-0.126 to -0.006) | -1.02 | 0.03 |
| Males | -0.052 (-0.102 to -0.003) | -0.72 | 0.04 | -0.066 (-0.115 to -0.017) | -1.29 | 0.009 |
| **Arterial Stiffness** |   |   |   |   |   |   |   |
| Stiffness,m × s-1 | All | -0.027 (-0.065 to 0.011) | 0.05 | 0.16 | -0.025 (-0.063 to 0.014) | 0.07 | 0.21 |
| Females | -0.008 (-0.068 to 0.051) | 0.01 | 0.79 | -0.021 (-0.080 to 0.039) | 0.07 | 0.49 |
| Males | -0.044 (-0.093 to 0.006) | 0.07 | 0.09 | -0.027 (-0.076 to 0.023) | 0.06 | 0.29 |
| Cross-sectional distensibility,(Dist), kPa-1 × 10-3 | All | -0.029 (-0.067 to 0.009) | -0.33 | 0.13 | -0.028 (-0.065 to 0.010) | -0.40 | 0.15 |
| Females | -0.007 (-0.067 to 0.052) | -0.10 | 0.81 | -0.016 (-0.075 to 0.043) | -0.21 | 0.59 |
| Males | -0.047 (-0.096 to 0.002) | -0.51 | 0.06 | -0.036 (-0.085 to 0.014) | -0.51 | 0.16 |
| Cross-sectional compliance,(Comp), mm2 × kPa-1 × 10-3 | All | -0.025 (-0.063 to 0.013) | -0.07 | 0.19 | -0.022 (-0.060 to 0.015) | -0.08 | 0.24 |
| Females | -0.021 (-0.082 to 0.040) | -0.06 | 0.50 | -0.034 (-0.094 to 0.027) | -0.13 | 0.28 |
| Males | -0.030 (-0.081 to 0.020) | -0.08 | 0.24 | -0.016 (-0.067 to 0.034) | -0.04 | 0.53 |
| Young's elastic modulus,(Ceinc), kPa | All | 0.011 (-0.028 to 0.051) | 2.95 | 0.57 | 0.007 (-0.033 to 0.046) | 4.04 | 0.74 |
| Females | -0.010 (-0.072 to 0.052) | -4.07 | 0.75 | 0.004 (-0.058 to 0.066) | 4.38 | 0.90 |
| Males | 0.029 (-0.022 to 0.080) | 8.25 | 0.26 | 0.009 (-0.042 to 0.060) | 3.88 | 0.74 |
| Wall cross-sectional area(WCSA), mm2 | All | 0.060 (0.025 to 0.095) | 0.24 | 8.67 × 10-4 | 0.070 (0.035 to 0.105) | 0.41 | 9.83 × 10-5 |
| Females | 0.078 (0.022 to 0.133) | 0.30 | 0.006 | 0.080 (0.025 to 0.135) | 0.46 | 0.005 |
| Males | 0.051 (0.005 to 0.098) | 0.21 | 0.03 | 0.065 (0.019 to 0.112) | 0.39 | 0.006 |
| **Blood pressure** |   |   |   |   |   |   |   |
| Systolic blood pressure(SBP), mm Hg | All | 0.052 (0.013 to 0.090) | 0.70 | 0.009 | 0.041 (0.002 to 0.079) | 0.76 | 0.04 |
| Females | 0.066 (0.004 to 0.129) | 0.90 | 0.04 | 0.055 (-0.008 to 0.117) | 1.13 | 0.09 |
| Males | 0.044 (-0.007 to 0.094) | 0.47 | 0.09 | 0.032 (-0.018 to 0.083) | 0.50 | 0.21 |
| Diastolic blood pressure(DBP), mm Hg | All | 0.001 (-0.038 to 0.040) | 0.0060 | 0.96 | -0.014 (-0.053 to 0.025) | -0.20 | 0.48 |
| Females | 0.037 (-0.026 to 0.101) | 0.30 | 0.25 | 0.023 (-0.040 to 0.086) | 0.30 | 0.47 |
| Males | -0.022 (-0.073 to 0.029) | -0.20 | 0.39 | -0.038 (-0.088 to 0.013) | -0.52 | 0.15 |
| Mean blood pressure(MBP), mm Hg | All | 0.021 (-0.018 to 0.060) | 0.21 | 0.29 | 0.008 (-0.031 to 0.046) | 0.10 | 0.70 |
| Females | 0.048 (-0.014 to 0.111) | 0.51 | 0.13 | 0.038 (-0.025 to 0.100) | 0.57 | 0.24 |
| Males | 0.003 (-0.048 to 0.054) | 0.02 | 0.90 | -0.013 (-0.064 to 0.038) | -0.19 | 0.62 |
| Centrol pulse pressure,(CPP), mm Hg | All | 0.061 (0.023 to 0.099) | 0.62 | 0.002 | 0.065 (0.027 to 0.103) | 0.62 | 8.57 × 10-4 |
| Females | 0.036 (-0.024 to 0.096) | 0.39 | 0.24 | 0.043 (-0.017 to 0.103) | 0.39 | 0.16 |
| Males | 0.082 (0.033 to 0.132) | 0.79 | 0.001 | 0.081 (0.032 to 0.131) | 0.79 | 0.001 |