**Supplementary Table 2. Independent IVs of body lean mass (㎏), handgrip strength (left, kg) and handgrip strength (right, kg) in stage 2 analysis.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SNP | exposure | outcome | beta.exposure | se.exposure | pval.exposure | beta.outcome | se.outcome | pval.outcome | proxy.outcome | target\_snp.outcome | proxy\_snp.outcome |  |
| rs10080815 | CAD | body lean mass | -0.247  | 0.031  | 1.33E-15 | 0.004  | 0.005  | 0.444  | NA | NA | NA |  |
| rs10840293 | CAD | body lean mass | 0.055  | 0.010  | 1.28E-08 | 0.004  | 0.002  | 0.005  | NA | NA | NA |  |
| rs11065979 | CAD | body lean mass | -0.069  | 0.011  | 1.93E-10 | 0.015  | 0.002  | 0.000  | NA | NA | NA |  |
| rs11191416 | CAD | body lean mass | 0.079  | 0.014  | 4.65E-09 | -0.016  | 0.003  | 0.000  | NA | NA | NA |  |
| rs11556924 | CAD | body lean mass | 0.073  | 0.011  | 5.34E-11 | -0.002  | 0.002  | 0.165  | NA | NA | NA |  |
| rs115654617 | CAD | body lean mass | -0.138  | 0.016  | 3.12E-18 | -0.004  | 0.002  | 0.098  | NA | NA | NA |  |
| rs11838776 | CAD | body lean mass | -0.069  | 0.011  | 1.83E-10 | -0.004  | 0.002  | 0.015  | NA | NA | NA |  |
| rs1199338 | CAD | body lean mass | -0.074  | 0.012  | 3.90E-09 | 0.007  | 0.002  | 0.002  | NA | NA | NA |  |
| rs12202017 | CAD | body lean mass | 0.067  | 0.010  | 1.98E-11 | 0.003  | 0.002  | 0.079  | NA | NA | NA |  |
| rs1412444 | CAD | body lean mass | -0.067  | 0.010  | 5.15E-12 | 0.000  | 0.002  | 0.813  | NA | NA | NA |  |
| rs16986953 | CAD | body lean mass | -0.085  | 0.015  | 1.45E-08 | 0.001  | 0.003  | 0.722  | NA | NA | NA |  |
| rs17087335 | CAD | body lean mass | -0.061  | 0.011  | 4.59E-08 | -0.007  | 0.002  | 0.001  | NA | NA | NA |  |
| rs17678683 | CAD | body lean mass | -0.099  | 0.017  | 3.00E-09 | -0.005  | 0.003  | 0.070  | TRUE | rs17678683 | rs17740744 |  |
| rs180803 | CAD | body lean mass | -0.181  | 0.028  | 1.64E-10 | 0.000  | 0.007  | 0.955  | TRUE | rs180803 | rs5760293 |  |
| rs1870634 | CAD | body lean mass | 0.076  | 0.010  | 5.55E-15 | -0.002  | 0.002  | 0.350  | NA | NA | NA |  |
| rs2107595 | CAD | body lean mass | -0.073  | 0.011  | 8.05E-11 | 0.002  | 0.002  | 0.260  | NA | NA | NA |  |
| rs2128739 | CAD | body lean mass | -0.066  | 0.010  | 7.05E-11 | -0.003  | 0.002  | 0.073  | NA | NA | NA |  |
| rs2487928 | CAD | body lean mass | -0.063  | 0.010  | 4.41E-11 | 0.002  | 0.002  | 0.266  | NA | NA | NA |  |
| rs2519093 | CAD | body lean mass | -0.080  | 0.012  | 1.19E-11 | 0.004  | 0.002  | 0.057  | NA | NA | NA |  |
| rs2681472 | CAD | body lean mass | -0.074  | 0.011  | 6.17E-11 | -0.007  | 0.002  | 0.001  | NA | NA | NA |  |
| rs28451064 | CAD | body lean mass | -0.128  | 0.016  | 1.33E-15 | 0.003  | 0.002  | 0.164  | NA | NA | NA |  |
| rs2891168 | CAD | body lean mass | -0.193  | 0.009  | 2.29E-98 | 0.000  | 0.002  | 0.944  | NA | NA | NA |  |
| rs3918226 | CAD | body lean mass | -0.133  | 0.022  | 1.69E-09 | 0.022  | 0.003  | 0.000  | NA | NA | NA |  |
| rs4420638 | CAD | body lean mass | -0.092  | 0.014  | 7.07E-11 | 0.006  | 0.002  | 0.003  | NA | NA | NA |  |
| rs4468572 | CAD | body lean mass | 0.077  | 0.010  | 4.44E-16 | 0.000  | 0.002  | 0.844  | NA | NA | NA |  |
| rs4593108 | CAD | body lean mass | 0.071  | 0.012  | 8.82E-10 | 0.000  | 0.002  | 0.876  | NA | NA | NA |  |
| rs515135 | CAD | body lean mass | 0.067  | 0.012  | 3.09E-08 | -0.003  | 0.002  | 0.116  | NA | NA | NA |  |
| rs55730499 | CAD | body lean mass | -0.317  | 0.024  | 5.39E-39 | 0.001  | 0.003  | 0.824  | NA | NA | NA |  |
| rs56062135 | CAD | body lean mass | 0.070  | 0.012  | 4.52E-09 | 0.003  | 0.002  | 0.054  | NA | NA | NA |  |
| rs56289821 | CAD | body lean mass | 0.134  | 0.017  | 4.44E-15 | -0.011  | 0.002  | 0.000  | NA | NA | NA |  |
| rs56336142 | CAD | body lean mass | 0.067  | 0.012  | 1.85E-08 | -0.002  | 0.002  | 0.416  | NA | NA | NA |  |
| rs663129 | CAD | body lean mass | -0.058  | 0.011  | 3.20E-08 | -0.044  | 0.002  | 0.000  | NA | NA | NA |  |
| rs6689306 | CAD | body lean mass | -0.056  | 0.009  | 2.60E-09 | 0.002  | 0.002  | 0.120  | NA | NA | NA |  |
| rs67180937 | CAD | body lean mass | 0.079  | 0.011  | 1.01E-12 | 0.004  | 0.002  | 0.031  | NA | NA | NA |  |
| rs7212798 | CAD | body lean mass | -0.080  | 0.014  | 1.88E-08 | 0.002  | 0.002  | 0.273  | TRUE | rs7212798 | rs8080784 |  |
| rs7528419 | CAD | body lean mass | 0.115  | 0.011  | 1.97E-23 | -0.009  | 0.002  | 0.000  | NA | NA | NA |  |
| rs8042271 | CAD | body lean mass | -0.097  | 0.018  | 3.68E-08 | -0.001  | 0.004  | 0.817  | NA | NA | NA |  |
| rs9349379 | CAD | body lean mass | -0.132  | 0.010  | 1.81E-42 | 0.001  | 0.002  | 0.587  | NA | NA | NA |  |
| rs9970807 | CAD | body lean mass | 0.126  | 0.017  | 5.00E-14 | -0.002  | 0.003  | 0.452  | NA | NA | NA |  |
| rs10080815 | CAD | Hand grip strength (left) | -0.247  | 0.031  | 1.33E-15 | -0.001  | 0.006  | 0.869  | NA | NA | NA |  |
| rs10840293 | CAD | Hand grip strength (left) | 0.055  | 0.010  | 1.28E-08 | -0.001  | 0.002  | 0.675  | NA | NA | NA |  |
| rs11065979 | CAD | Hand grip strength (left) | -0.069  | 0.011  | 1.93E-10 | 0.004  | 0.002  | 0.029  | NA | NA | NA |  |
| rs11191416 | CAD | Hand grip strength (left) | 0.079  | 0.014  | 4.65E-09 | -0.007  | 0.003  | 0.027  | NA | NA | NA |  |
| rs11556924 | CAD | Hand grip strength (left) | 0.073  | 0.011  | 5.34E-11 | -0.004  | 0.002  | 0.037  | NA | NA | NA |  |
| rs115654617 | CAD | Hand grip strength (left) | -0.138  | 0.016  | 3.12E-18 | -0.001  | 0.003  | 0.731  | NA | NA | NA |  |
| rs11838776 | CAD | Hand grip strength (left) | -0.069  | 0.011  | 1.83E-10 | 0.000  | 0.002  | 0.843  | NA | NA | NA |  |
| rs1199338 | CAD | Hand grip strength (left) | -0.074  | 0.012  | 3.90E-09 | 0.003  | 0.002  | 0.181  | NA | NA | NA |  |
| rs12202017 | CAD | Hand grip strength (left) | 0.067  | 0.010  | 1.98E-11 | 0.002  | 0.002  | 0.257  | NA | NA | NA |  |
| rs1412444 | CAD | Hand grip strength (left) | -0.067  | 0.010  | 5.15E-12 | 0.000  | 0.002  | 0.819  | NA | NA | NA |  |
| rs16986953 | CAD | Hand grip strength (left) | -0.085  | 0.015  | 1.45E-08 | 0.001  | 0.003  | 0.836  | NA | NA | NA |  |
| rs17087335 | CAD | Hand grip strength (left) | -0.061  | 0.011  | 4.59E-08 | -0.003  | 0.002  | 0.236  | NA | NA | NA |  |
| rs17678683 | CAD | Hand grip strength (left) | -0.099  | 0.017  | 3.00E-09 | 0.000  | 0.003  | 0.950  | TRUE | rs17678683 | rs17740744 |  |
| rs180803 | CAD | Hand grip strength (left) | -0.181  | 0.028  | 1.64E-10 | 0.001  | 0.008  | 0.934  | TRUE | rs180803 | rs5760293 |  |
| rs1870634 | CAD | Hand grip strength (left) | 0.076  | 0.010  | 5.55E-15 | 0.001  | 0.002  | 0.480  | NA | NA | NA |  |
| rs2107595 | CAD | Hand grip strength (left) | -0.073  | 0.011  | 8.05E-11 | 0.002  | 0.002  | 0.317  | NA | NA | NA |  |
| rs2128739 | CAD | Hand grip strength (left) | -0.066  | 0.010  | 7.05E-11 | -0.001  | 0.002  | 0.482  | NA | NA | NA |  |
| rs2487928 | CAD | Hand grip strength (left) | -0.063  | 0.010  | 4.41E-11 | 0.003  | 0.002  | 0.057  | NA | NA | NA |  |
| rs2519093 | CAD | Hand grip strength (left) | -0.080  | 0.012  | 1.19E-11 | 0.010  | 0.002  | 0.000  | NA | NA | NA |  |
| rs2681472 | CAD | Hand grip strength (left) | -0.074  | 0.011  | 6.17E-11 | 0.001  | 0.002  | 0.806  | NA | NA | NA |  |
| rs28451064 | CAD | Hand grip strength (left) | -0.128  | 0.016  | 1.33E-15 | 0.001  | 0.003  | 0.833  | NA | NA | NA |  |
| rs2891168 | CAD | Hand grip strength (left) | -0.193  | 0.009  | 2.29E-98 | 0.001  | 0.002  | 0.561  | NA | NA | NA |  |
| rs3918226 | CAD | Hand grip strength (left) | -0.133  | 0.022  | 1.69E-09 | 0.000  | 0.003  | 0.977  | NA | NA | NA |  |
| rs4420638 | CAD | Hand grip strength (left) | -0.092  | 0.014  | 7.07E-11 | -0.002  | 0.002  | 0.304  | NA | NA | NA |  |
| rs4468572 | CAD | Hand grip strength (left) | 0.077  | 0.010  | 4.44E-16 | 0.001  | 0.002  | 0.537  | NA | NA | NA |  |
| rs4593108 | CAD | Hand grip strength (left) | 0.071  | 0.012  | 8.82E-10 | -0.002  | 0.002  | 0.359  | NA | NA | NA |  |
| rs515135 | CAD | Hand grip strength (left) | 0.067  | 0.012  | 3.09E-08 | 0.003  | 0.002  | 0.157  | NA | NA | NA |  |
| rs55730499 | CAD | Hand grip strength (left) | -0.317  | 0.024  | 5.39E-39 | 0.004  | 0.003  | 0.181  | NA | NA | NA |  |
| rs56062135 | CAD | Hand grip strength (left) | 0.070  | 0.012  | 4.52E-09 | 0.004  | 0.002  | 0.087  | NA | NA | NA |  |
| rs56289821 | CAD | Hand grip strength (left) | 0.134  | 0.017  | 4.44E-15 | -0.002  | 0.003  | 0.417  | NA | NA | NA |  |
| rs56336142 | CAD | Hand grip strength (left) | 0.067  | 0.012  | 1.85E-08 | -0.001  | 0.002  | 0.548  | NA | NA | NA |  |
| rs663129 | CAD | Hand grip strength (left) | -0.058  | 0.011  | 3.20E-08 | -0.009  | 0.002  | 0.000  | NA | NA | NA |  |
| rs6689306 | CAD | Hand grip strength (left) | -0.056  | 0.009  | 2.60E-09 | 0.003  | 0.002  | 0.057  | NA | NA | NA |  |
| rs67180937 | CAD | Hand grip strength (left) | 0.079  | 0.011  | 1.01E-12 | 0.001  | 0.002  | 0.804  | NA | NA | NA |  |
| rs7212798 | CAD | Hand grip strength (left) | -0.080  | 0.014  | 1.88E-08 | -0.002  | 0.002  | 0.543  | TRUE | rs7212798 | rs8080784 |  |
| rs7528419 | CAD | Hand grip strength (left) | 0.115  | 0.011  | 1.97E-23 | -0.006  | 0.002  | 0.009  | NA | NA | NA |  |
| rs8042271 | CAD | Hand grip strength (left) | -0.097  | 0.018  | 3.68E-08 | 0.001  | 0.005  | 0.836  | NA | NA | NA |  |
| rs9349379 | CAD | Hand grip strength (left) | -0.132  | 0.010  | 1.81E-42 | -0.009  | 0.002  | 0.000  | NA | NA | NA |  |
| rs9970807 | CAD | Hand grip strength (left) | 0.126  | 0.017  | 5.00E-14 | 0.000  | 0.003  | 0.888  | NA | NA | NA |  |
| rs10080815 | CAD | Hand grip strength (right) | -0.247  | 0.031  | 1.33E-15 | -0.001  | 0.006  | 0.842  | NA | NA | NA |  |
| rs10840293 | CAD | Hand grip strength (right) | 0.055  | 0.010  | 1.28E-08 | -0.001  | 0.002  | 0.541  | NA | NA | NA |  |
| rs11065979 | CAD | Hand grip strength (right) | -0.069  | 0.011  | 1.93E-10 | 0.003  | 0.002  | 0.093  | NA | NA | NA |  |
| rs11191416 | CAD | Hand grip strength (right) | 0.079  | 0.014  | 4.65E-09 | -0.006  | 0.003  | 0.045  | NA | NA | NA |  |
| rs11556924 | CAD | Hand grip strength (right) | 0.073  | 0.011  | 5.34E-11 | -0.004  | 0.002  | 0.034  | NA | NA | NA |  |
| rs115654617 | CAD | Hand grip strength (right) | -0.138  | 0.016  | 3.12E-18 | -0.002  | 0.003  | 0.448  | NA | NA | NA |  |
| rs11838776 | CAD | Hand grip strength (right) | -0.069  | 0.011  | 1.83E-10 | 0.000  | 0.002  | 0.822  | NA | NA | NA |  |
| rs1199338 | CAD | Hand grip strength (right) | -0.074  | 0.012  | 3.90E-09 | 0.005  | 0.002  | 0.037  | NA | NA | NA |  |
| rs12202017 | CAD | Hand grip strength (right) | 0.067  | 0.010  | 1.98E-11 | 0.000  | 0.002  | 0.948  | NA | NA | NA |  |
| rs1412444 | CAD | Hand grip strength (right) | -0.067  | 0.010  | 5.15E-12 | 0.002  | 0.002  | 0.267  | NA | NA | NA |  |
| rs16986953 | CAD | Hand grip strength (right) | -0.085  | 0.015  | 1.45E-08 | 0.002  | 0.004  | 0.528  | NA | NA | NA |  |
| rs17087335 | CAD | Hand grip strength (right) | -0.061  | 0.011  | 4.59E-08 | -0.001  | 0.002  | 0.697  | NA | NA | NA |  |
| rs17678683 | CAD | Hand grip strength (right) | -0.099  | 0.017  | 3.00E-09 | -0.001  | 0.003  | 0.867  | TRUE | rs17678683 | rs17740744 |  |
| rs180803 | CAD | Hand grip strength (right) | -0.181  | 0.028  | 1.64E-10 | 0.002  | 0.008  | 0.856  | TRUE | rs180803 | rs5760293 |  |
| rs1870634 | CAD | Hand grip strength (right) | 0.076  | 0.010  | 5.55E-15 | 0.001  | 0.002  | 0.546  | NA | NA | NA |  |
| rs2107595 | CAD | Hand grip strength (right) | -0.073  | 0.011  | 8.05E-11 | 0.001  | 0.002  | 0.575  | NA | NA | NA |  |
| rs2128739 | CAD | Hand grip strength (right) | -0.066  | 0.010  | 7.05E-11 | 0.000  | 0.002  | 0.897  | NA | NA | NA |  |
| rs2487928 | CAD | Hand grip strength (right) | -0.063  | 0.010  | 4.41E-11 | 0.001  | 0.002  | 0.453  | NA | NA | NA |  |
| rs2519093 | CAD | Hand grip strength (right) | -0.080  | 0.012  | 1.19E-11 | 0.010  | 0.002  | 0.000  | NA | NA | NA |  |
| rs2681472 | CAD | Hand grip strength (right) | -0.074  | 0.011  | 6.17E-11 | 0.001  | 0.002  | 0.607  | NA | NA | NA |  |
| rs28451064 | CAD | Hand grip strength (right) | -0.128  | 0.016  | 1.33E-15 | 0.000  | 0.003  | 0.852  | NA | NA | NA |  |
| rs2891168 | CAD | Hand grip strength (right) | -0.193  | 0.009  | 2.29E-98 | -0.001  | 0.002  | 0.774  | NA | NA | NA |  |
| rs3918226 | CAD | Hand grip strength (right) | -0.133  | 0.022  | 1.69E-09 | 0.001  | 0.003  | 0.845  | NA | NA | NA |  |
| rs4420638 | CAD | Hand grip strength (right) | -0.092  | 0.014  | 7.07E-11 | -0.005  | 0.002  | 0.028  | NA | NA | NA |  |
| rs4468572 | CAD | Hand grip strength (right) | 0.077  | 0.010  | 4.44E-16 | 0.002  | 0.002  | 0.270  | NA | NA | NA |  |
| rs4593108 | CAD | Hand grip strength (right) | 0.071  | 0.012  | 8.82E-10 | -0.002  | 0.002  | 0.361  | NA | NA | NA |  |
| rs515135 | CAD | Hand grip strength (right) | 0.067  | 0.012  | 3.09E-08 | 0.003  | 0.002  | 0.273  | NA | NA | NA |  |
| rs55730499 | CAD | Hand grip strength (right) | -0.317  | 0.024  | 5.39E-39 | 0.005  | 0.003  | 0.132  | NA | NA | NA |  |
| rs56062135 | CAD | Hand grip strength (right) | 0.070  | 0.012  | 4.52E-09 | 0.003  | 0.002  | 0.149  | NA | NA | NA |  |
| rs56289821 | CAD | Hand grip strength (right) | 0.134  | 0.017  | 4.44E-15 | -0.004  | 0.003  | 0.142  | NA | NA | NA |  |
| rs56336142 | CAD | Hand grip strength (right) | 0.067  | 0.012  | 1.85E-08 | -0.001  | 0.002  | 0.488  | NA | NA | NA |  |
| rs663129 | CAD | Hand grip strength (right) | -0.058  | 0.011  | 3.20E-08 | -0.009  | 0.002  | 0.000  | NA | NA | NA |  |
| rs6689306 | CAD | Hand grip strength (right) | -0.056  | 0.009  | 2.60E-09 | 0.003  | 0.002  | 0.078  | NA | NA | NA |  |
| rs67180937 | CAD | Hand grip strength (right) | 0.079  | 0.011  | 1.01E-12 | 0.000  | 0.002  | 0.988  | NA | NA | NA |  |
| rs7212798 | CAD | Hand grip strength (right) | -0.080  | 0.014  | 1.88E-08 | -0.002  | 0.002  | 0.472  | TRUE | rs7212798 | rs8080784 |  |
| rs7528419 | CAD | Hand grip strength (right) | 0.115  | 0.011  | 1.97E-23 | -0.006  | 0.002  | 0.003  | NA | NA | NA |  |
| rs8042271 | CAD | Hand grip strength (right) | -0.097  | 0.018  | 3.68E-08 | -0.001  | 0.005  | 0.894  | NA | NA | NA |  |
| rs9349379 | CAD | Hand grip strength (right) | -0.132  | 0.010  | 1.81E-42 | -0.007  | 0.002  | 0.000  | NA | NA | NA |  |
| rs9970807 | CAD | Hand grip strength (right) | 0.126  | 0.017  | 5.00E-14 | -0.002  | 0.003  | 0.534  | NA | NA | NA |  |

**CAD: coronary artery disease;**