Table 1. Baseline characteristics Athero-Express Biobank Study - eQTL data only (b37, n=626), stratified by Gender

| **Characteristic** | **female  N = 1651** | **male  N = 4611** | **p-value2** |
| --- | --- | --- | --- |
| **Hospital** |  |  | 0.2 |
| St. Antonius, Nieuwegein | 102 (62%) | 256 (56%) |  |
| UMC Utrecht | 63 (38%) | 205 (44%) |  |
| **Age** | 68 (10) | 69 (9) | 0.7 |
| **TC\_final** | 4.90 (1.34) | 4.58 (1.20) | 0.013 |
| Unknown | 50 | 141 |  |
| **LDL\_final** | 2.82 (1.07) | 2.75 (1.03) | 0.3 |
| Unknown | 61 | 174 |  |
| **HDL\_final** | 1.29 (0.42) | 1.10 (0.34) | <0.001 |
| Unknown | 55 | 161 |  |
| **TG\_final** | 1.58 (0.89) | 1.64 (0.95) | 0.4 |
| Unknown | 56 | 157 |  |
| **systolic** | 155 (25) | 154 (25) | 0.6 |
| Unknown | 23 | 79 |  |
| **diastoli** | 82 (13) | 83 (14) | 0.5 |
| Unknown | 23 | 79 |  |
| **GFR\_MDRD** | 71 (21) | 74 (21) | 0.14 |
| Unknown | 2 | 4 |  |
| **BMI** | 26.7 (4.6) | 26.6 (3.5) | 0.9 |
| Unknown | 17 | 23 |  |
| **KDOQI** |  |  | 0.5 |
| No data available/missing | 0 (0%) | 0 (0%) |  |
| Normal kidney function | 26 (16%) | 89 (19%) |  |
| CKD 2 (Mild) | 91 (56%) | 251 (55%) |  |
| CKD 3 (Moderate) | 43 (26%) | 110 (24%) |  |
| CKD 4 (Severe) | 2 (1.2%) | 7 (1.5%) |  |
| CKD 5 (Failure) | 1 (0.6%) | 0 (0%) |  |
| Unknown | 2 | 4 |  |
| **BMI\_WHO** |  |  | 0.3 |
| No data available/missing | 0 (0%) | 0 (0%) |  |
| Underweight | 3 (2.0%) | 3 (0.7%) |  |
| Normal | 47 (32%) | 156 (36%) |  |
| Overweight | 69 (47%) | 212 (48%) |  |
| Obese | 28 (19%) | 67 (15%) |  |
| Unknown | 18 | 23 |  |
| **SmokerCurrent** |  |  | 0.019 |
| no data available/missing | 0 (0%) | 0 (0%) |  |
| no | 89 (56%) | 307 (67%) |  |
| yes | 70 (44%) | 151 (33%) |  |
| Unknown | 6 | 3 |  |
| **eCigarettes** | 52,512 (65,982) | 38,049 (63,894) | 0.8 |
| Unknown | 20 | 51 |  |
| **ePackYearsSmoking** | 7 (9) | 5 (9) | 0.8 |
| Unknown | 20 | 51 |  |
| **DiabetesStatus** |  |  | 0.8 |
| Control (no Diabetes Dx/Med) | 131 (79%) | 360 (78%) |  |
| Diabetes | 34 (21%) | 101 (22%) |  |
| **Hypertension.selfreport** |  |  | 0.4 |
| No data available/missing | 0 (0%) | 0 (0%) |  |
| no | 40 (25%) | 128 (29%) |  |
| yes | 122 (75%) | 319 (71%) |  |
| Unknown | 3 | 14 |  |
| **Hypertension.selfreportdrug** |  |  | >0.9 |
| No data available/missing | 0 (0%) | 0 (0%) |  |
| no | 53 (34%) | 153 (34%) |  |
| yes | 105 (66%) | 295 (66%) |  |
| Unknown | 7 | 13 |  |
| **Hypertension.composite** |  |  | 0.3 |
| No data available/missing | 0 (0%) | 0 (0%) |  |
| no | 25 (15%) | 55 (12%) |  |
| yes | 140 (85%) | 406 (88%) |  |
| **Hypertension.drugs** |  |  | 0.11 |
| No data available/missing | 0 (0%) | 0 (0%) |  |
| no | 45 (27%) | 97 (21%) |  |
| yes | 119 (73%) | 364 (79%) |  |
| Unknown | 1 | 0 |  |
| **Med.anticoagulants** |  |  | 0.072 |
| No data available/missing | 0 (0%) | 0 (0%) |  |
| no | 151 (92%) | 399 (87%) |  |
| yes | 13 (7.9%) | 62 (13%) |  |
| Unknown | 1 | 0 |  |
| **Med.all.antiplatelet** |  |  | 0.3 |
| No data available/missing | 0 (0%) | 0 (0%) |  |
| no | 13 (7.9%) | 52 (11%) |  |
| yes | 151 (92%) | 409 (89%) |  |
| Unknown | 1 | 0 |  |
| **Med.Statin.LLD** |  |  | 0.8 |
| No data available/missing | 0 (0%) | 0 (0%) |  |
| no | 41 (25%) | 111 (24%) |  |
| yes | 123 (75%) | 350 (76%) |  |
| Unknown | 1 | 0 |  |
| **Stroke\_Dx** |  |  | >0.9 |
| Missing | 0 (0%) | 0 (0%) |  |
| No stroke diagnosed | 122 (81%) | 348 (81%) |  |
| Stroke diagnosed | 29 (19%) | 84 (19%) |  |
| Unknown | 14 | 29 |  |
| **sympt** |  |  | 0.6 |
| missing | 0 (0%) | 0 (0%) |  |
| Asymptomatic | 16 (9.9%) | 62 (14%) |  |
| TIA | 62 (38%) | 187 (41%) |  |
| minor stroke | 25 (15%) | 70 (15%) |  |
| Major stroke | 18 (11%) | 41 (9.1%) |  |
| Amaurosis fugax | 31 (19%) | 58 (13%) |  |
| Four vessel disease | 5 (3.1%) | 7 (1.5%) |  |
| Vertebrobasilary TIA | 0 (0%) | 1 (0.2%) |  |
| Retinal infarction | 1 (0.6%) | 9 (2.0%) |  |
| Symptomatic, but aspecific symtoms | 4 (2.5%) | 13 (2.9%) |  |
| Contralateral symptomatic occlusion | 0 (0%) | 3 (0.7%) |  |
| retinal infarction | 0 (0%) | 1 (0.2%) |  |
| armclaudication due to occlusion subclavian artery, CEA needed for bypass | 0 (0%) | 0 (0%) |  |
| retinal infarction + TIAs | 0 (0%) | 0 (0%) |  |
| Ocular ischemic syndrome | 0 (0%) | 1 (0.2%) |  |
| ischemisch glaucoom | 0 (0%) | 0 (0%) |  |
| subclavian steal syndrome | 0 (0%) | 0 (0%) |  |
| TGA | 0 (0%) | 0 (0%) |  |
| Unknown | 3 | 8 |  |
| **Symptoms.5G** |  |  | 0.3 |
| Asymptomatic | 16 (9.9%) | 62 (14%) |  |
| Ocular | 31 (19%) | 59 (13%) |  |
| Other | 9 (5.6%) | 23 (5.1%) |  |
| Retinal infarction | 1 (0.6%) | 10 (2.2%) |  |
| Stroke | 43 (27%) | 111 (25%) |  |
| TIA | 62 (38%) | 188 (42%) |  |
| Unknown | 3 | 8 |  |
| **restenos** |  |  | 0.015 |
| missing | 0 (0%) | 0 (0%) |  |
| de novo | 152 (96%) | 450 (99%) |  |
| restenosis | 6 (3.8%) | 3 (0.7%) |  |
| stenose bij angioseal na PTCA | 0 (0%) | 0 (0%) |  |
| Unknown | 7 | 8 |  |
| **EP\_composite** |  |  | 0.2 |
| No data available. | 0 (0%) | 0 (0%) |  |
| No composite endpoints | 127 (78%) | 331 (72%) |  |
| Composite endpoints | 36 (22%) | 127 (28%) |  |
| Unknown | 2 | 3 |  |
| **EP\_composite\_time** | 2.72 (1.18) | 2.56 (1.22) | 0.033 |
| Unknown | 2 | 3 |  |
| **macmean0** | 0.88 (1.23) | 0.86 (1.02) | 0.6 |
| Unknown | 2 | 9 |  |
| **smcmean0** | 2.38 (2.26) | 1.79 (1.79) | 0.004 |
| Unknown | 2 | 11 |  |
| **Macrophages.bin** |  |  | 0.029 |
| no/minor | 82 (50%) | 182 (40%) |  |
| moderate/heavy | 83 (50%) | 274 (60%) |  |
| Unknown | 0 | 5 |  |
| **SMC.bin** |  |  | 0.2 |
| no/minor | 44 (27%) | 146 (32%) |  |
| moderate/heavy | 121 (73%) | 310 (68%) |  |
| Unknown | 0 | 5 |  |
| **neutrophils** | 218 (654) | 206 (321) | 0.12 |
| Unknown | 137 | 385 |  |
| **Mast\_cells\_plaque** | 142 (123) | 181 (184) | 0.7 |
| Unknown | 141 | 388 |  |
| **vessel\_density\_averaged** | 8.5 (6.3) | 8.9 (6.4) | 0.4 |
| Unknown | 11 | 37 |  |
| **IPH.bin** | 87 (53%) | 300 (66%) | 0.004 |
| Unknown | 0 | 4 |  |
| **Calc.bin** |  |  | 0.090 |
| no/minor | 66 (40%) | 220 (48%) |  |
| moderate/heavy | 99 (60%) | 238 (52%) |  |
| Unknown | 0 | 3 |  |
| **Collagen.bin** |  |  | 0.6 |
| no/minor | 33 (20%) | 84 (18%) |  |
| moderate/heavy | 129 (80%) | 373 (82%) |  |
| Unknown | 3 | 4 |  |
| **Fat.bin\_10** |  |  | 0.004 |
| <10% | 54 (33%) | 98 (21%) |  |
| >10% | 111 (67%) | 360 (79%) |  |
| Unknown | 0 | 3 |  |
| **Fat.bin\_40** |  |  | 0.003 |
| <40% | 133 (81%) | 310 (68%) |  |
| >40% | 32 (19%) | 148 (32%) |  |
| Unknown | 0 | 3 |  |
| **OverallPlaquePhenotype** |  |  | 0.001 |
| atheromatous | 31 (19%) | 150 (33%) |  |
| fibroatheromatous | 65 (39%) | 172 (38%) |  |
| fibrous | 69 (42%) | 136 (30%) |  |
| Unknown | 0 | 3 |  |
| **Plaque\_Vulnerability\_Index** |  |  | 0.046 |
| 0 | 15 (9.1%) | 24 (5.2%) |  |
| 1 | 34 (21%) | 75 (16%) |  |
| 2 | 45 (27%) | 118 (26%) |  |
| 3 | 54 (33%) | 154 (33%) |  |
| 4 | 13 (7.9%) | 59 (13%) |  |
| 5 | 4 (2.4%) | 31 (6.7%) |  |
| **SMC\_rankNorm** | 0.14 (0.97) | -0.08 (0.88) | 0.004 |
| Unknown | 2 | 11 |  |
| **MAC\_rankNorm** | 0.27 (0.99) | 0.32 (0.92) | 0.6 |
| Unknown | 2 | 9 |  |
| **Neutrophils\_rankNorm** | -0.06 (1.11) | 0.32 (0.97) | 0.12 |
| Unknown | 137 | 385 |  |
| **MastCells\_rankNorm** | -0.09 (0.94) | 0.06 (1.05) | 0.7 |
| Unknown | 141 | 388 |  |
| **VesselDensity\_rankNorm** | 0.09 (0.98) | 0.17 (0.92) | 0.4 |
| Unknown | 11 | 37 |  |
| **CHIP** |  |  | 0.4 |
| AffyAxiomCEU | 99 (60%) | 246 (53%) |  |
| AffySNP5 | 63 (38%) | 205 (44%) |  |
| IllGSA | 3 (1.8%) | 10 (2.2%) |  |
| **PCA** |  |  | 0.3 |
| EUR | 161 (98%) | 454 (99%) |  |
| nonEUR | 4 (2.4%) | 6 (1.3%) |  |
| Unknown | 0 | 1 |  |
| **Artery\_summary** |  |  | >0.9 |
| No artery known (yet), no surgery (patient ill, died, exited study), re-numbered to AAA | 0 (0%) | 0 (0%) |  |
| carotid (left & right) | 163 (99%) | 451 (98%) |  |
| femoral/iliac (left, right or both sides) | 2 (1.2%) | 8 (1.7%) |  |
| other carotid arteries (common, external) | 0 (0%) | 2 (0.4%) |  |
| carotid bypass and injury (left, right or both sides) | 0 (0%) | 0 (0%) |  |
| aneurysmata (carotid & femoral) | 0 (0%) | 0 (0%) |  |
| aorta | 0 (0%) | 0 (0%) |  |
| other arteries (renal, popliteal, vertebral) | 0 (0%) | 0 (0%) |  |
| femoral bypass, angioseal and injury (left, right or both sides) | 0 (0%) | 0 (0%) |  |
| **PCSK9\_plasma** | 37,773 (20,667) | 29,768 (17,480) | <0.001 |
| Unknown | 76 | 200 |  |
| **PCSK9\_plasma\_rankNorm** | 0.32 (1.04) | -0.12 (0.97) | <0.001 |
| Unknown | 76 | 200 |  |
| 1n (%); Mean (SD) | | | |
| 2Pearson's Chi-squared test with simulated p-value  (based on 2000 replicates); Wilcoxon rank sum test; Fisher's Exact Test for Count Data with simulated p-value  (based on 2000 replicates); Fisher's exact test | | | |