

**Supplemental figure 1.** Association of absolute (left panel) and relative (right panel) HDL particle. concentration with cholesterol efflux. Diagrams are showing estimated marginal means and 95% confidence intervals obtained in a general; linear model, adjusted for the use of statins, age, CAD, diabetes mellitus, smoking, LDL cholesterol, HDL cholesterol and triglycerides. Age, LDL-cholesterol and triglycerides (log transformed) were included as continuous rather than categorical covariables. p values are given for comparison with the first category of each variable.



**Supplemental figure 2.** Spline curves showing hazard ratios for cardiovascular death according to cholesterol efflux capacity in the whole study population (n = 2468). Calculations were repeated with following models of adjustment: Model 1: not adjusted. Model 2: adjusted for age and gender. Model 3: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides and LDL-cholesterol. Model 4: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides, LDLcholesterol and HDL-cholesterol. Model 5: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides, LDLcholesterol and HDL-cholesterol. Model 5: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides, LDLcholesterol, HDL-cholesterol, HDL-cholesterol, apolipoprotein AI, apolipoprotein AII, HDL-C'. Model 6: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides, LDLcholesterol, HDL-cholesterol, adiponectin, fibrinogen, C-reactive protein.



**Supplementary figure 3.** Spline curves showing hazard ratios for cardiovascular death according to cholesterol efflux capacity in CAD patients (n = 1886). Calculations were repeated with following models of adjustment: Model 1: not adjusted. Model 2: adjusted for age and gender. Model 3: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides and LDL-cholesterol. Model 4: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides, LDLcholesterol and HDL-cholesterol. Model 5: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides, LDLcholesterol, HDL-cholesterol, apolipoprotein AI, apolipoprotein AI, HDL-C'. Model 6: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides, LDLcholesterol, HDL-cholesterol, adjusted, CAD, diabetes mellitus, smoking, triglycerides, LDLcholesterol, HDL-cholesterol, AII, HDL-C'. Model 6: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides, LDLcholesterol, HDL-cholesterol, AII, HDL-C'. Model 6: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides, LDLcholesterol, Adjusterol, AI, Apolipoprotein AI, apolipoprotein AII, HDL-C'. Model 6: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides, LDLcholesterol, Adjusterol, Adjusterol, AI, Apolipoprotein AI, Apolipoprotein AI, Apolipoprotein AI, Apolipoprotein AI, HDL-C'.



**Supplemental figure 4.** Box plots showing the distribution of cholesterol efflux capacity according to cardiovascular risk factors. Boxplots are displaying minimum, first quartile, median, third quartile, and maximum, as well as outliers.



**Supplemental figure 5.** Box plots showing the distribution of cholesterol efflux capacity according to HDL parameters. Boxplots are displaying minimum, first quartile, median, third quartile, and maximum, as well as outliers.

**Supplementary Table 1.** Hazard ratio for cardiovascular death according to cholesterol efflux in 833 patients of the LURIC study without a history of an acute coronary event but with a high risk for CAD (pooled cohort equation > 7.5).

Efflux Quartile	Model 1 HR (95% CI)	р	Model 2 HR (95% CI)	p	Model 3 HR (95% CI)	р
1 <sup>st</sup> (n=188)	1.0 <sup>reference</sup>		1.0 reference		1.0 reference	
2 <sup>nd</sup> (n=216)	0.521 (0.324-0.863)	0.007	0.522 (0.325-0.840)	0.007	0.481 (0.298-0.774)	0.003
3 <sup>rd</sup> (n=199)	0.500 (0.304-0.822)	0.006	0.500 (0.304-0.823)	0.006	0.484 (0.294-0.799)	0.005
4 <sup>th</sup> (n=230)	0.547 (0.346-0.866)	0.010	0.550 (0.345-0.878)	0.012	0.533 (0.333-0.852)	0.009
	Model 4 HR (95% CI)	р	Model 5 HR (95% CI)	р	Model 6 HR (95% CI)	р
1 <sup>st</sup> (n=188)	1.0 reference		1.0 reference		1.0 <sup>reference</sup>	
2 <sup>nd</sup> (n=216)	0.514 (0.318-0.830)	0.006	0.537 (0.331-0.870)	0.012	0.558 (0.337-0.925)	0.024
3 <sup>rd</sup> (n=199)	0.540 (0.326-0.897)	0.017	0.562 (0.337-0.935)	0.027	0.695 (0.412-1.174)	0.174
4 <sup>th</sup> (n=230)	0.636 (0.405-1.086)	0.103	0.734 (0.443-1.217)	0.231	0.799 (0.476-1.342)	0.396

Model 1: not adjusted. Model 2: adjusted for age and gender. Model 3: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides and LDL-cholesterol. Model 4: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides, LDL-cholesterol and HDL-cholesterol. Model 5: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides, LDL-cholesterol, apolipoprotein AI, apolipoprotein AII, HDL-C'. Model 6: adjusted for age, gender, use of statins, CAD, diabetes mellitus, smoking, triglycerides, LDL-cholesterol, HDL-cholesterol, adjusted for age, confidence interval, HR = hazard ratio.