SUPPLEMENTARY FIGURES



Supplementary Figure 1. Associations of rs17145750 and rs6967028 from the MLXIPL gene locus with TG and HDL-C in each cohort separately. The results are presented for cohorts included in the meta-analysis (black dots), the meta-analysis itself (META, blue dots), and UKB (red dots) for comparison. The X-axis shows the effect sizes beta of the associations with the outcomes: (A) TG and (B) HDL-C. The horizontal lines indicate 95% confidence intervals. Blue vertical lines represent the effect sizes in the US meta-analysis.



Supplementary Figure 2. Associations of rs17145750 and rs6967028 from the *MLXIPL* gene locus with AD and CHD in each cohort separately. The results are presented for cohorts included in the meta-analysis (black dots), the meta-analysis itself (META, blue dots), and UKB (red dots) for comparison. The X-axis shows the effect sizes beta of the associations with the outcomes: (A) AD and (B) CHD. The horizontal lines indicate 95% confidence intervals. Blue vertical lines represent the effect sizes in the US meta-analysis.



Supplementary Figure 3. Indirect effect through TG and HDL-C in the associations of rs17145750 and rs6967028 from the *MLXIPL* gene locus with CHD in each cohort separately. The results are presented for cohorts included in the meta-analysis (black dots), the meta-analysis itself (META, blue dots), and UKB (red dots) for comparison. The X-axis shows the effect sizes beta of the indirect effect (IE) through (A) TG and (B) HDL-C in the associations with CHD. The horizontal lines indicate 95% confidence intervals. Blue vertical lines represent the effect sizes in the US meta-analysis.



Supplementary Figure 4. Indirect effect through TG and HDL-C in the associations of rs17145750 and rs6967028 from the *MLXIPL* gene locus with AD in each cohort separately. The results are presented for cohorts included in the meta-analysis (black dots), the meta-analysis itself (META, blue dots), and UKB (red dots) for comparison. The X-axis shows the effect sizes beta of the indirect effect (IE) through (A) TG and (B) HDL-C in the associations with AD. The horizontal lines indicate 95% confidence intervals. Blue vertical lines represent the effect sizes in the US meta-analysis.

NC_000007.13:7299988073046241 Homo sapiens chromosome 7, GRCh37.p13 Primary Assembly									
73 M	73,005 K	rs1051921 73,010 K	73,015 K	73,020 K	rs117607523,025	rs17145750	73,030 K	73,035 K	73,04 rs6967028
NCBI Homo sapier	ns Annotation Rele	ase 105.20220307							
		╡╏╶┥╴╢╢╢╋──┽╴╂╴		1.4	4	4	*	MLX	IPL [+9]

Supplementary Figure 5. Position of four selected SNPs in the *MLXIPL* gene region. (From dbSNP, NCBI).