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| --- | --- | --- | --- | --- | --- | --- |
| **Table 2. Association results for 4 PRS with their corresponding trait in the UK Biobank.** | | | | | | |
| **Lipid Trait PRS** | **Independent**  **SNPS in PRS** | **UK Biobank  Effective**  **sample size** | **Mean increase in**  **cholesterol trait per**  **1-SD increase in PRS** | **Standard error** | **Variance explained** | **P** |
|  | | | | | | |  |  | **Primary analysis \*** |
| **Total Cholesterol** | 410 | 316,428 | 0.33 mmol/L (12.76 mg/dL) | 0.0018 | 9.33% | <1x10-100 |
| **LDL Cholesterol** | 339 | 315,841 | 0.24 mmol/L (9.28 mg/dL) | 0.0014 | 8.38% | <1x10-100 |
| **HDL Cholesterol** | 393 | 289,349 | 0.11 mmol/L (4.25 mg/dL) | 0.0006 | 8.17% | <1x10-100 |
| **Triglycerides** | 317 | 316,174 | 0.22 mmol/L (19.49 mg/dL) | 0.0017 | 4.8% | <1x10-100 |
|  | | | | | | |  |  | **Secondary analysis \*\*** |
| **Total Cholesterol** | 410 | 437,676 | 0.26 mmol/L (10.05 mg/dL) | 0.0017 | 5.21% | <1x10-100 |
| **LDL Cholesterol** | 339 | 436,867 | 0.19 mmol/L (7.35 mg/dL) | 0.0013 | 4.72% | <1x10-100 |
| **HDL Cholesterol** | 393 | 400,579 | 0.11 mmol/L (4.25 mg/dL) | 0.0005 | 8.04% | <1x10-100 |
| **Triglycerides** | 317 | 437,331 | 0.23 mmol/L (20.37 mg/dL) | 0.0015 | 5% | <1x10-100 |

**Acronyms:** PRS: polygenic risk score; UK: United Kingdom; SNP: single nucleotide polymorphism; LDL: low-density lipoprotein; HDL: High-density lipoprotein. Conversion of mmol/L to mg/dL: for TC, LDL and HDL 1 mmol/L = 38.67 mg/dL; for triglycerides, 1 mmol/L = 88.57 mg/dL.

\* The primary analysis was restricted to unrelated study participant of genetically-determined European ancestry who were not taking lipid-lowering medications.

\*\* The secondary analysis included all study participants of self-reported European ancestry without any other filters.