**Table S3**. A comparison of common variant-metabolite association among ARIC, KORA and TwinsUK studies

|  |  |  |  |
| --- | --- | --- | --- |
| **Metabolites** | **ARIC** | **KORA** | **TwinsUK** |
| **Top SNP** | **P** | **Top SNP** | **P** | **Top SNP** | **P** |
| creatine | rs243361015kb from *GATM* | 9🞨10-12 | rs3111102not in LD | 5🞨10-6 | rs1860867 not in LD | 2🞨10-6 |
| phenylacetate | rs7499271*ACSM2B* (intron) | 6🞨10-11 | rs358749not in LD | 2🞨10-7 | rs4243233 not in LD | 8🞨10-8 |
| acetylcarnitine | rs12282107*SIAE* (missense) | 8🞨10-14 | rs1632879not in LD |  7🞨10-7 | rs160851not in LD | 1🞨10-6 |
| hexadecanedioate | rs170286156 kb from *ADH4* | 2🞨10-15 | rs1282not in LD | 3🞨10-6 | rs7571804 not in LD | 6🞨10-6 |