

**Table S1.** GWAS gene sets that tend to be aberrantly expressed in LCLs of European descent.

GWAS catalog gene set	Number of genes <sup>#</sup>
<b>Genes tend to be aberrantly expressed</b>	
Adverse response to chemotherapy (neutropenia/leucopenia) (all platinum-based drugs)	2 / 6
Conduct disorder (symptom count)	4 / 7
Fasting insulin-related traits (interaction with BMI)	15 / 21
Metabolite levels (Dihydroxy docosatrienoic acid)	7 / 20
Obesity (extreme)	10 / 18
Retinal vascular caliber	14 / 18
Temperament	9 / 17
Thyroid hormone levels	14 / 28
<b>Genes tend not to be aberrantly expressed</b>	
Alcohol dependence	11 / 31
Metabolic syndrome	25 / 41

<sup>#</sup>Number of genes included in SSMD estimation / Number of genes in the GWAS catalog gene set.