

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Glucose and lipid trait correlated DE signatures for all genes in all seven tissues, expressed as FDR.

File Name: Supplementary Data 2

Description: Gene Ontology for all differentially expressed gene lists in all seven tissues.

File Name: Supplementary Data 3

Description: Modules identified by WGCNA in all seven tissues.

File Name: Supplementary Data 4

Description: Correlation statistics between the first 3 principal components of the 20 glucose and lipid enriched modules and the glucose and lipid traits. P-values are from a two-sided Student's t test testing whether the correlation coefficient is zero. No multiple test correction was applied. FDR values are from the same test with a Benjamini-Hochberg correction applied.

File Name: Supplementary Data 5

Description: Results from molecular signature database (mSigDB) enrichment with GLD module as well as full Gene Ontology results. Only reporting results with an $FDR \leq 5\%$.

File Name: Supplementary Data 6

Description: Correlation statistics between the 1st PCs of the GLD equivalent modules and the glucose and lipid traits in cohorts split by statins and HbA1c. P-values are from a two-sided Student's t test testing whether the correlation coefficient is zero. No multiple test correction was applied. FDR values are from the same test with a Benjamini-Hochberg correction applied.

File Name: Supplementary Data 7

Description: Significantly different metabolites in relation to statin status as well as metabolites correlation to GLD module. P-values are output from the edgeR R package's glmFit procedure, which internally uses a likelihood ratio test. No multiple test correction was applied. FDR values are from the same test with a Benjamini-Hochberg correction applied.

File Name: Supplementary Data 8

Description: Overlap between modules in STARNET liver and modules in the obese cohort.

File Name: Supplementary Data 9

Description: Results from MetaXcan analysis. P-values are output from MetaXcan, which internally uses a two-sided Wald test. No multiple test correction was applied.

File Name: Supplementary Data 10

Description: Archive containing Cytoscape network definition files (.cys) describing the four Bayesian Networks constructed from the STARNET data.

File Name: Supplementary Data 11

Description: Full key driver results from all 4 STARNET BNs.