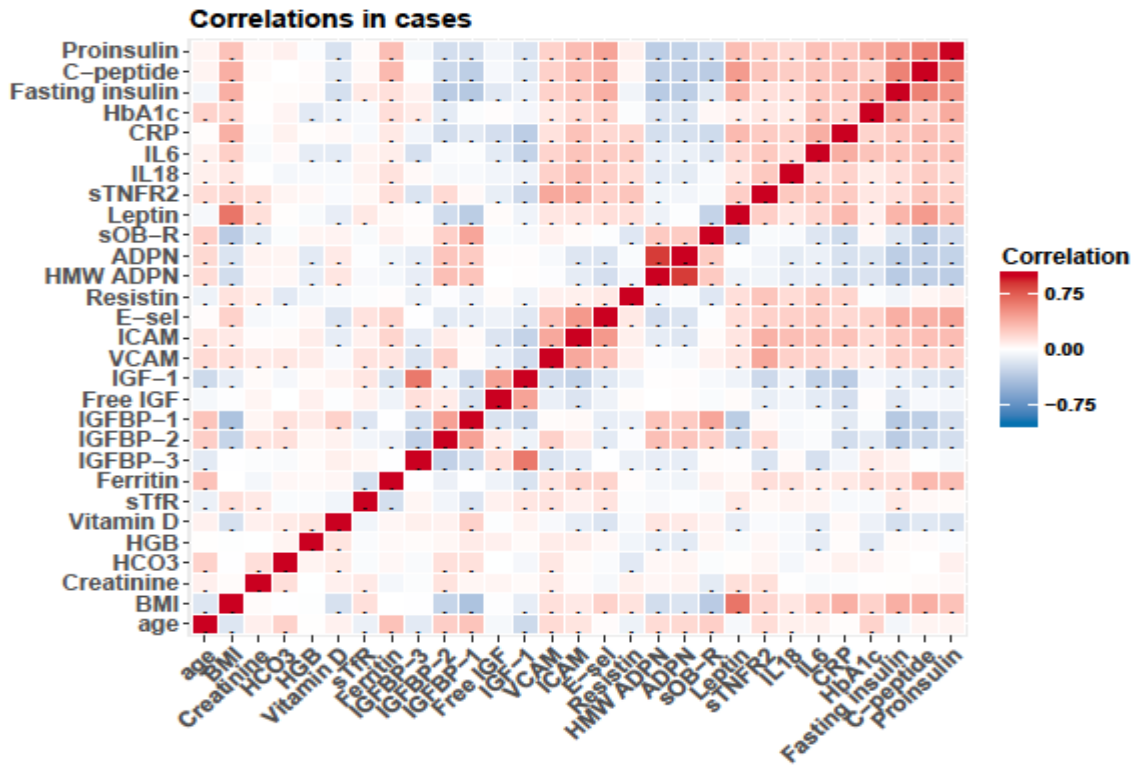


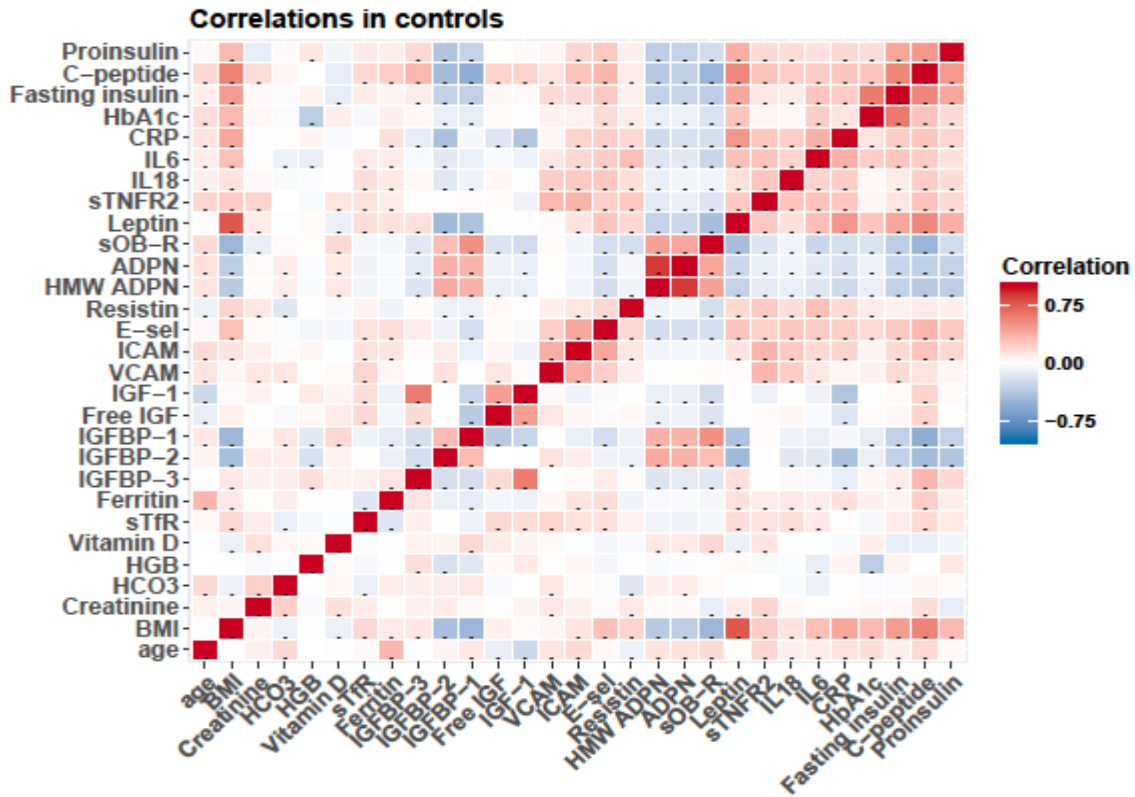
SUPPLEMENTARY DATA

Supplementary Figure 1. Pairwise crude Spearman correlations among biomarkers, age and BMI in (a) diabetes cases and (b) non-cases. The dot indicates significant correlations after multiple comparison correction based on the false discovery rate <math>< 0.05</math>.

(a)



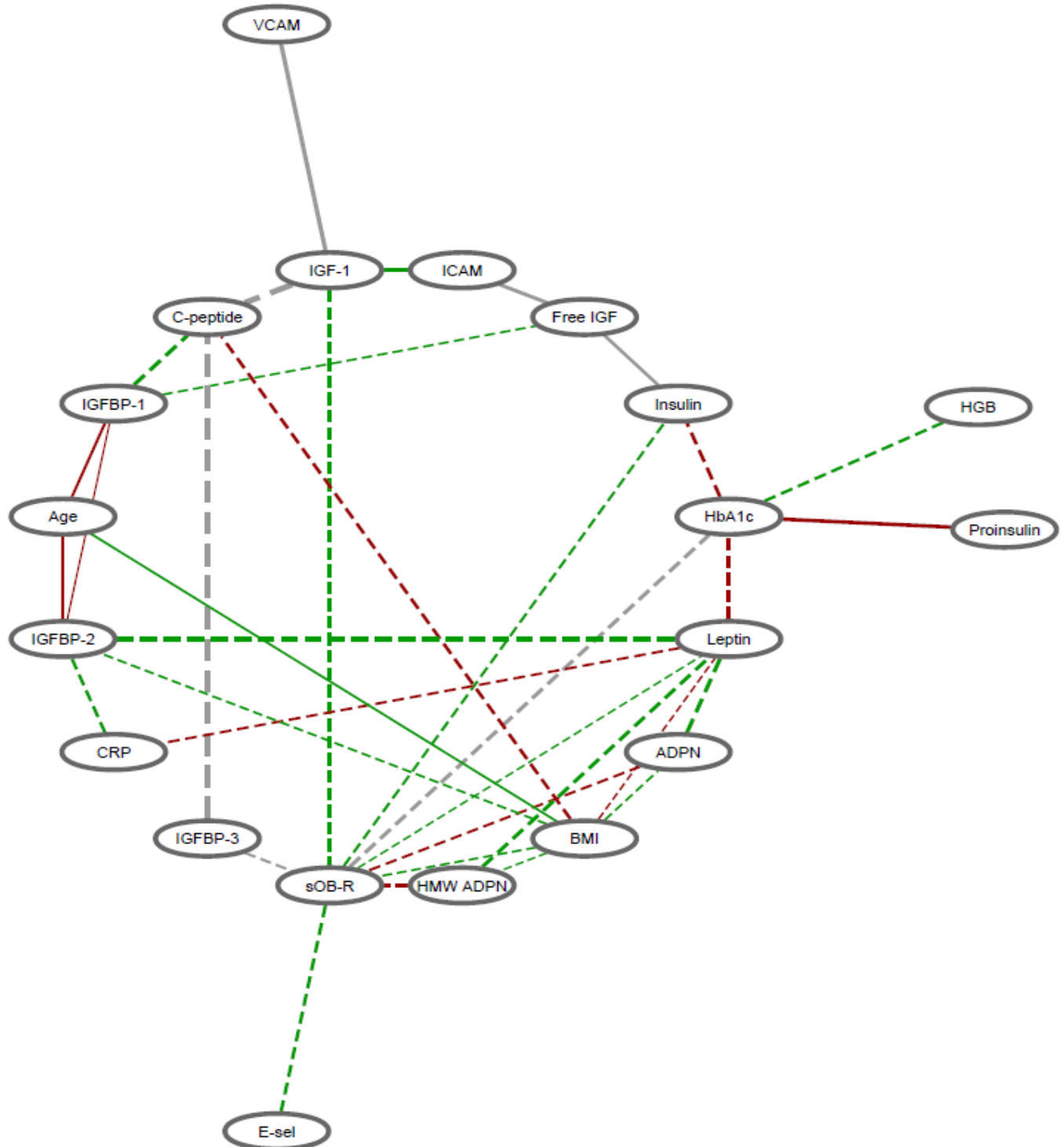
(b)



SUPPLEMENTARY DATA

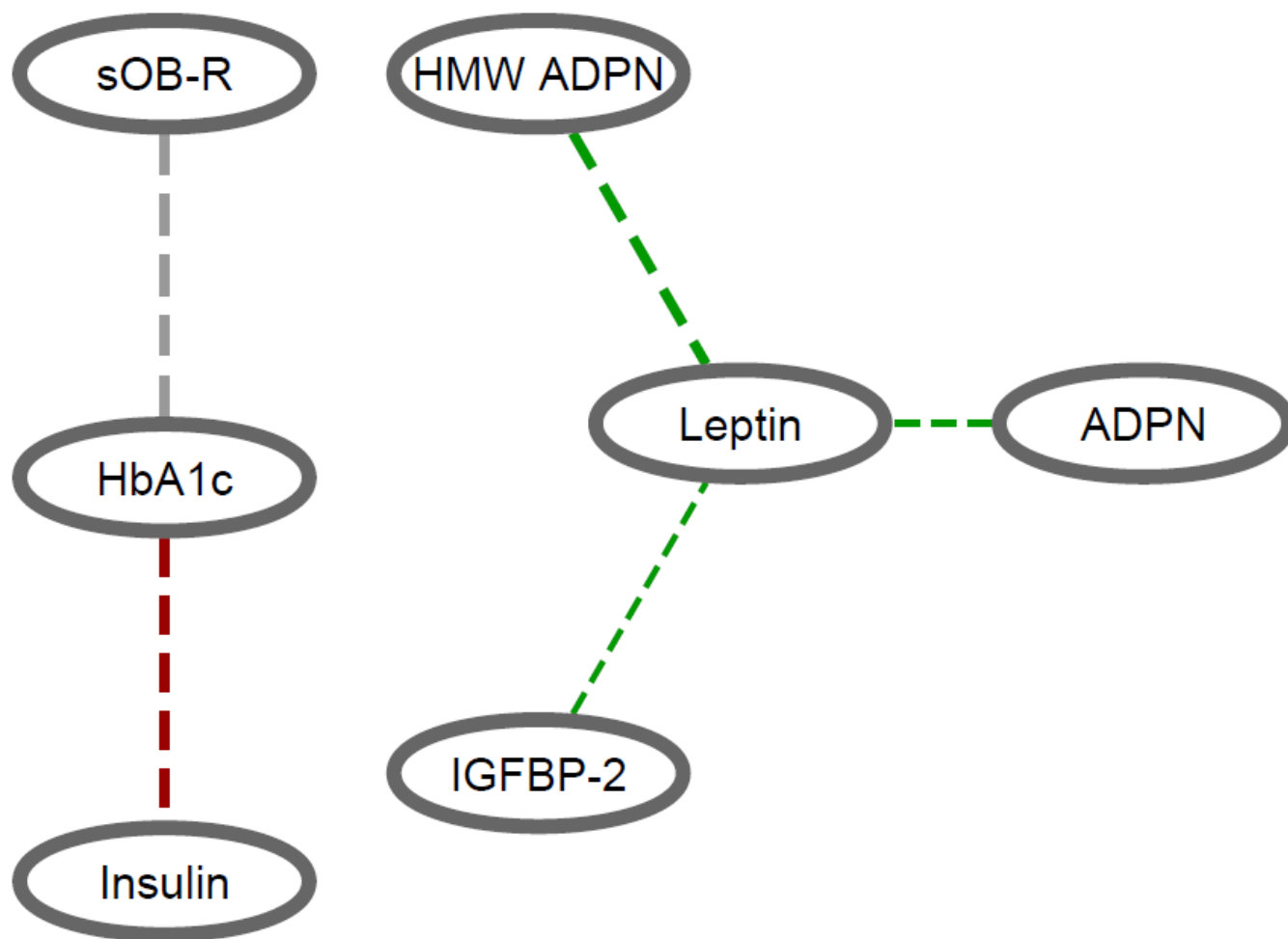
Supplementary Figure 2. Biomarker correlation network comparing 1303 diabetes cases versus 1627 non-cases based on varied thresholds for selecting significant edges. The width of the edge is proportional to the corresponding difference in the biomarker correlation between cases and non-cases. A solid edge indicates that the absolute value of the correlation is stronger in cases than in non-cases, and a dashed edge indicates the opposite. The color of the edge indicates the direction of the correlation in cases and non-cases: Red - positive correlations in both cases and non-cases; Green - negative correlations in both cases and non-cases; Grey - opposite correlations between cases and non-cases.

(a) A lower threshold of $|\Delta r| > 0.1$ and $z > 3$ (equivalent to a 2-sided p -value < 0.0027)



SUPPLEMENTARY DATA

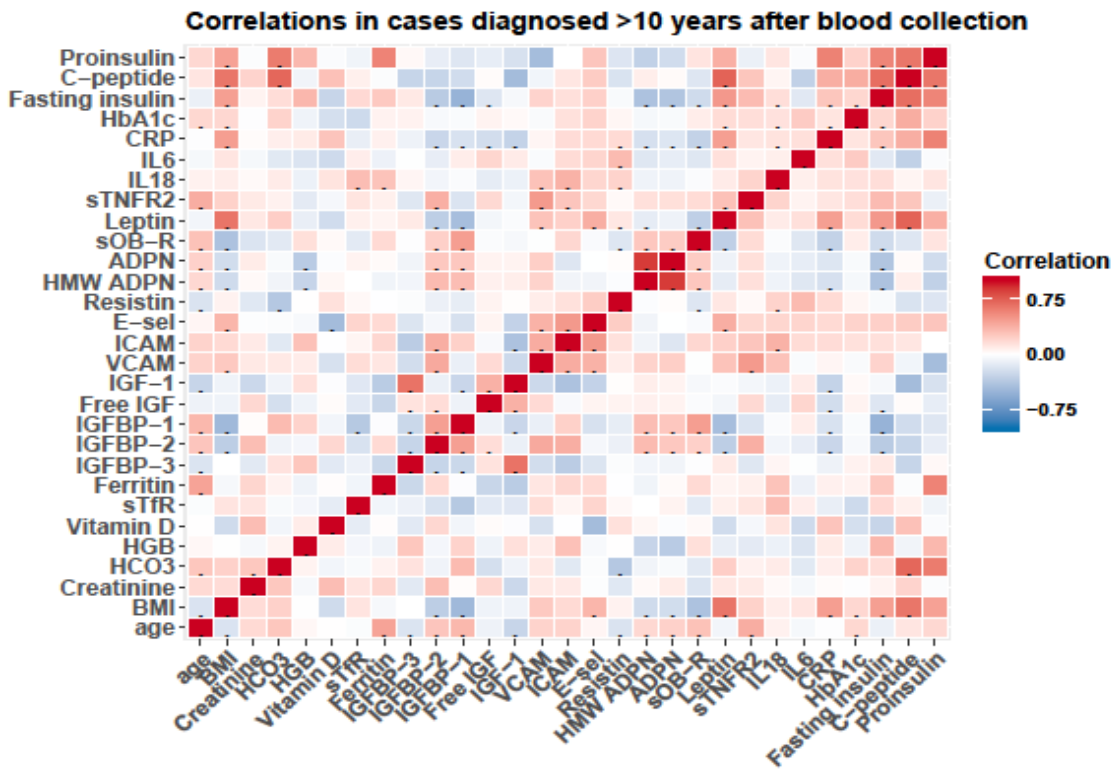
(b) A higher threshold of $|\Delta r| > 0.2$ and $z > 4$ (equivalent to a 2-sided p-value < 0.00006)



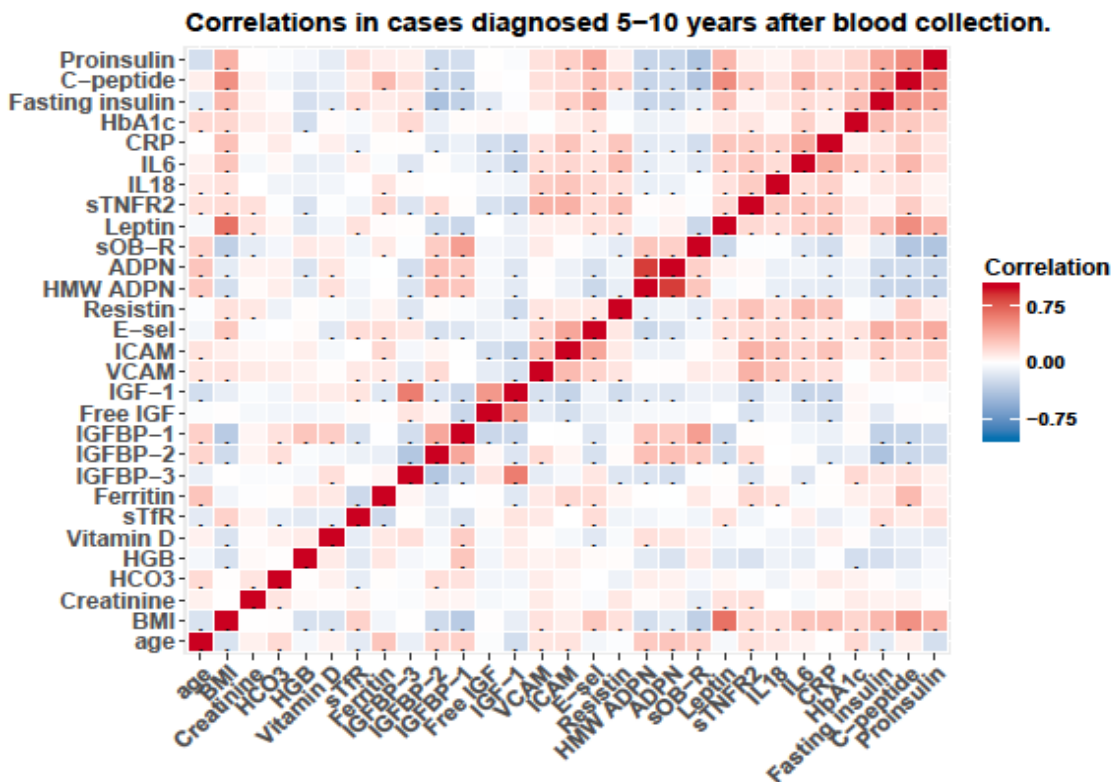
SUPPLEMENTARY DATA

Supplementary Figure 3. Pairwise crude Spearman correlations among biomarkers, age and BMI in diabetes cases: (a) diagnosed >10 years after blood collection; (b) diagnosed 5-10 years after blood collection; (c) diagnosed <5 years after blood collection. The dot indicates significant correlations after multiple comparison correction based on the false discovery rate<0.05.

(a)

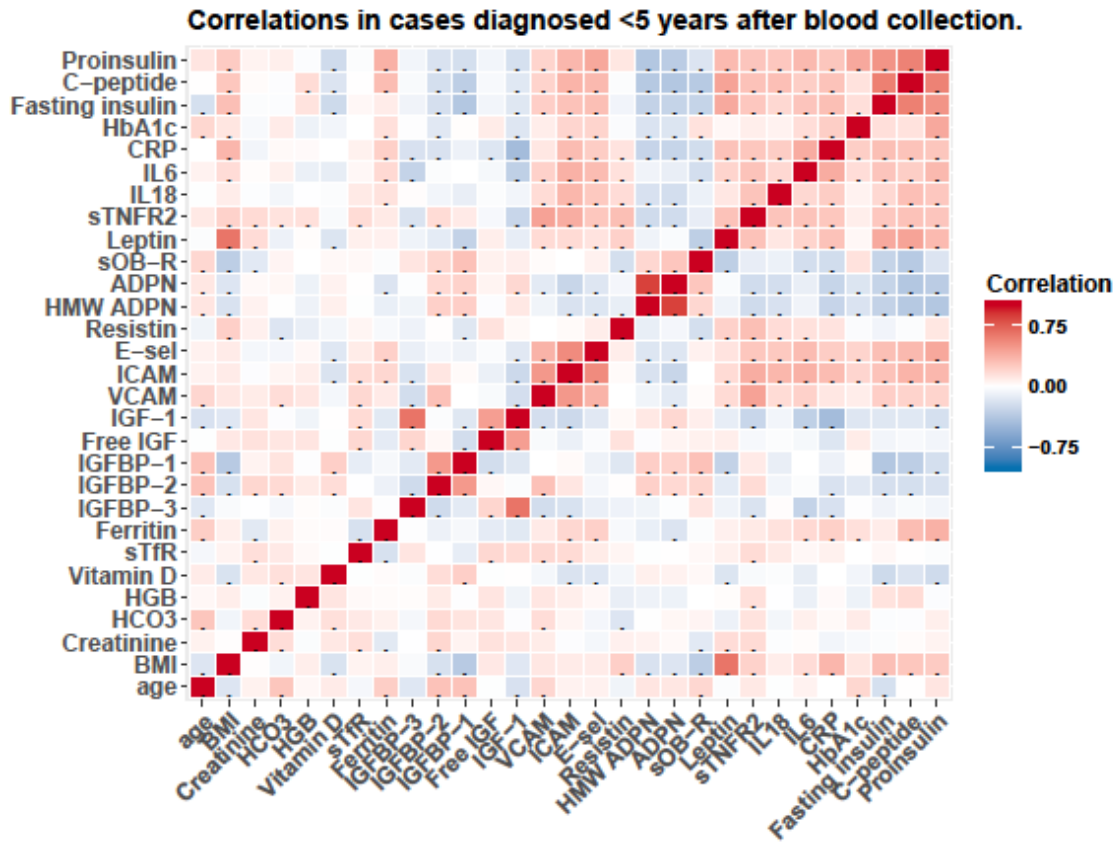


(b)



SUPPLEMENTARY DATA

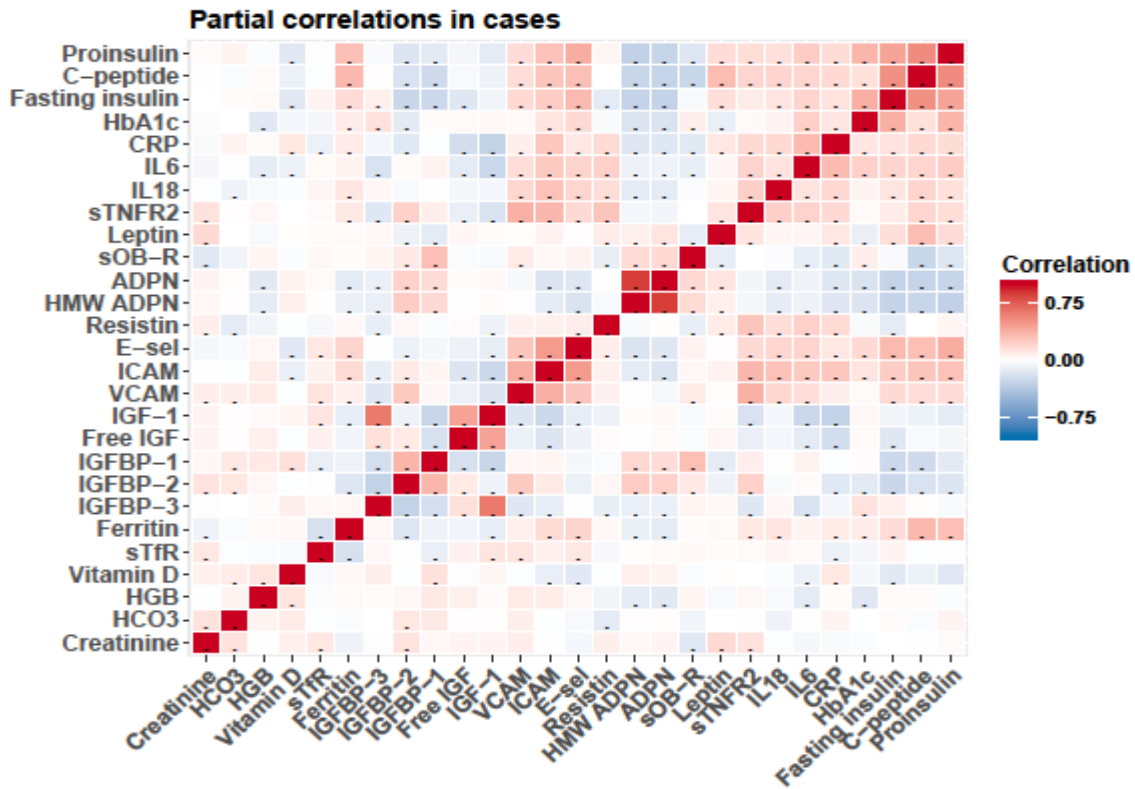
(c)



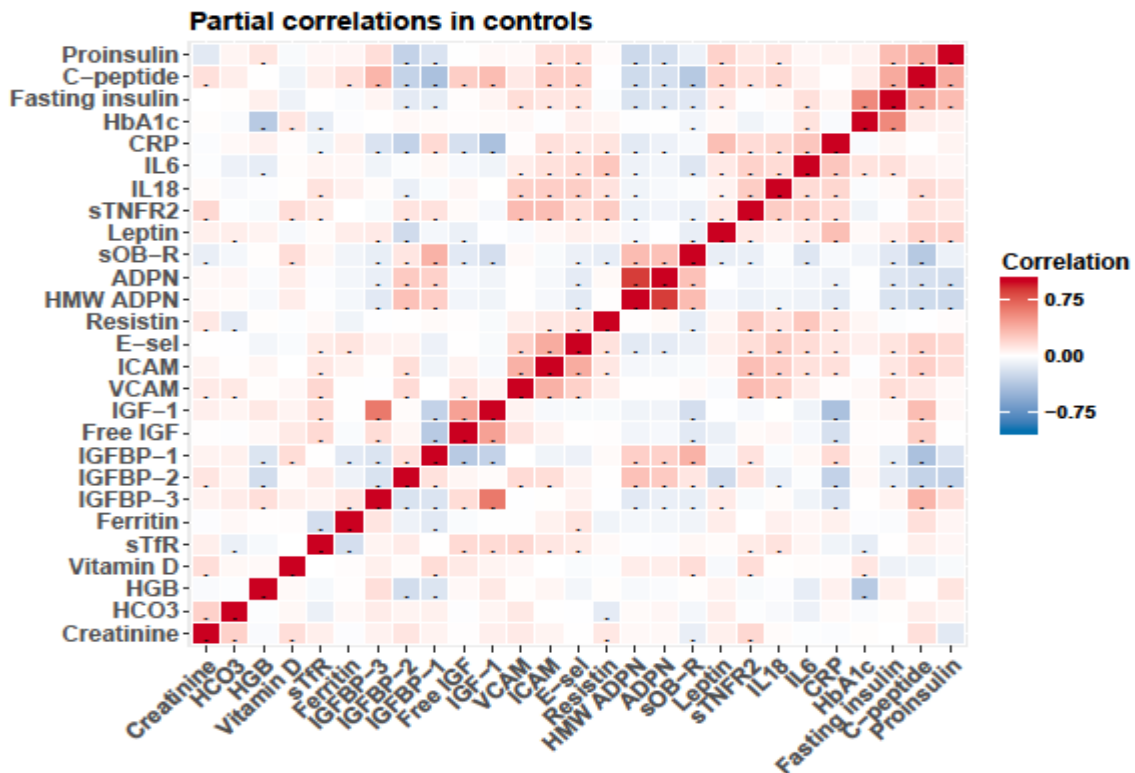
SUPPLEMENTARY DATA

Supplementary Figure 4. Pairwise partial Spearman biomarker correlations adjusted for age and BMI in (a) diabetes cases and (b) non-cases. The dot indicates significant correlations after multiple comparison correction based on the false discovery rate <math>< 0.05</math>.

(a)



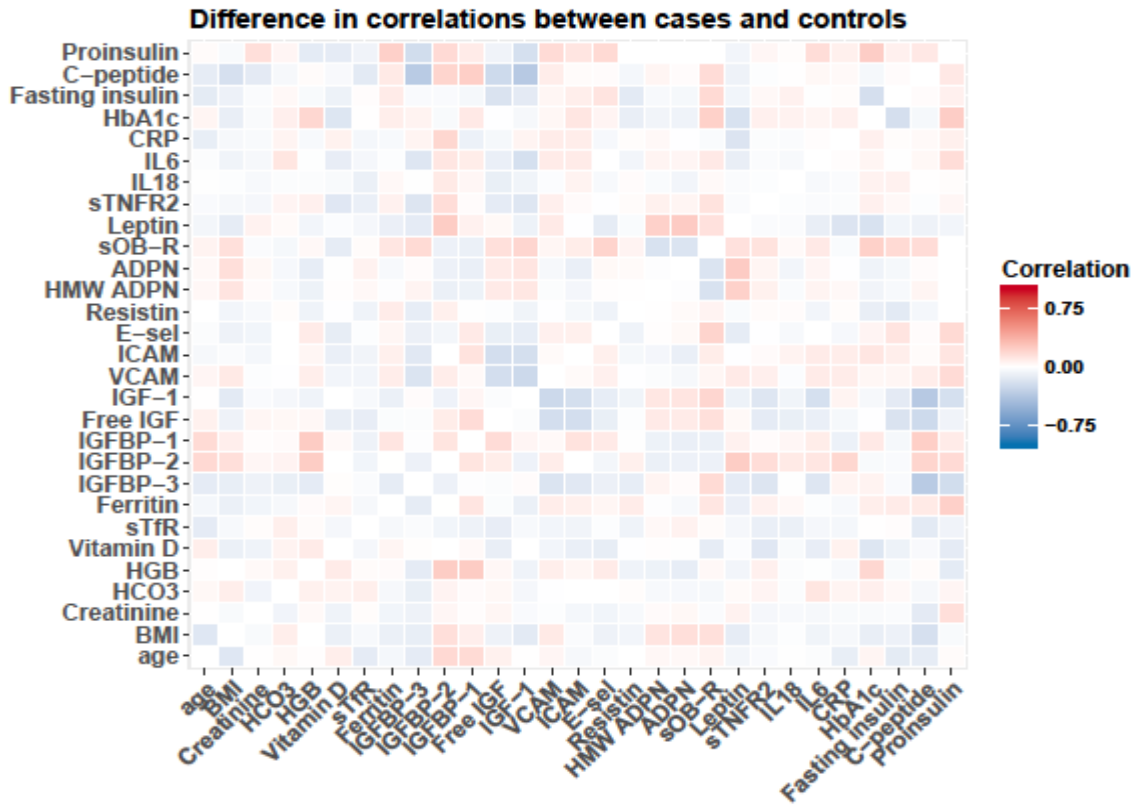
(b)



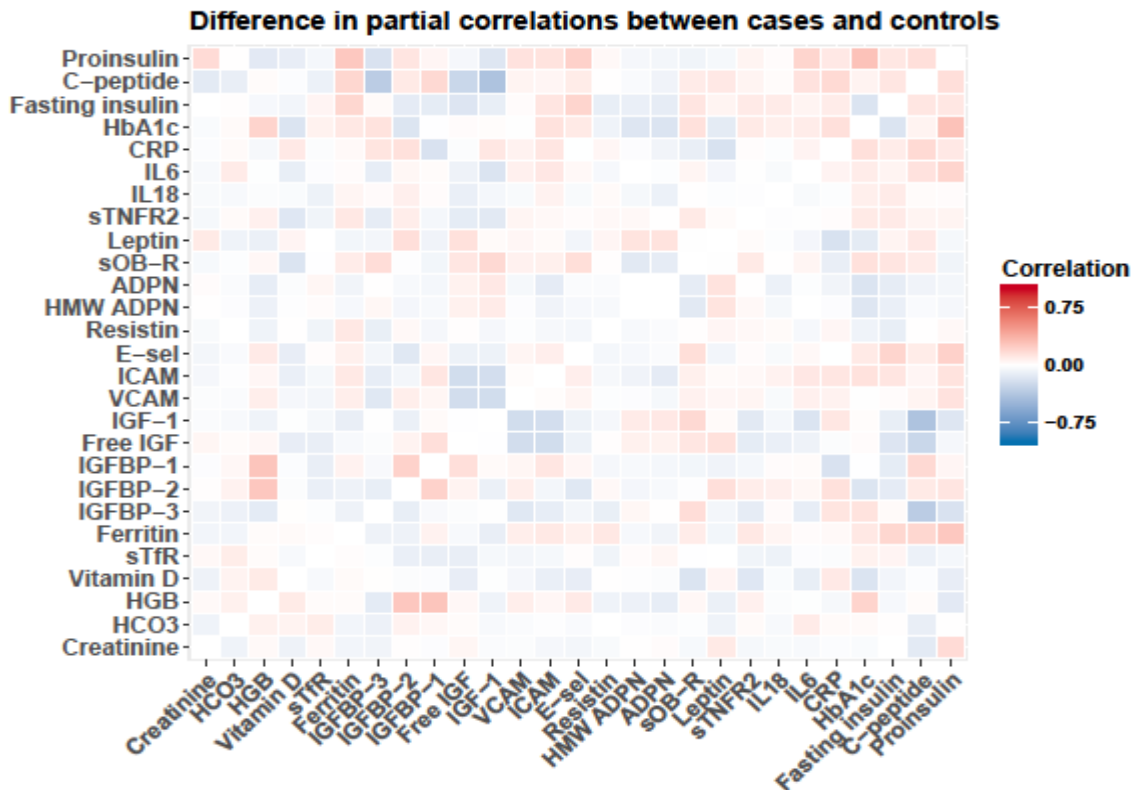
SUPPLEMENTARY DATA

Supplementary Figure 5. Differences in biomarker correlations between cases and non-cases: (a) differences in crude Spearman correlations (i.e., compare Supplemental Figure 1a and 1b) and (b) differences in partial Spearman correlations adjusted for age and BMI (i.e., compare Supplemental Figure 4a and 4b).

(a)



(b)



SUPPLEMENTARY DATA

Supplementary Figure 6. Biomarker correlation network comparing 1303 diabetes cases versus 1627 non-cases using blocked permutation tests, with the case and non-case status randomly assigned within BMI quintiles. Significant edges were identified by the threshold of both $|\Delta r| > 0.15$ and $z > 3.5$ (equivalent to a 2-sided p -value < 0.0005). The width of the edge is proportional to the corresponding difference in the biomarker correlation between cases and non-cases. A solid edge indicates that the absolute value of the correlation is stronger in cases than in non-cases, and a dashed edge indicates the opposite. The color of the edge indicates the direction of the correlation in cases and non-cases: Red - positive correlations in both cases and non-cases; Green - negative correlations in both cases and non-cases; Grey - opposite correlations between cases and non-cases.

