

Supplementary Information

TABLES

Table S1. Results of cross-validation by using male samples of clinical center 2 as training set.

Analyte clusters	<i>Training/Test sets</i>	Precision (%)	Sensitivity (%)
Insulin, cortisol, leptin, GH,	Male, center 1	78.7	62.3
	<i>Male, center 2</i>	83.9	74.3
	Female, center 1	50.0	51.7
	Female, center 2	90.9	90.9
	Male+Female, center 1	61.7	52.1
	Male+Female, center 1	87.2	73.9
ACE, cortisol, IGF-1, PAI-1	Male, center 1	72.0	42.9
	<i>Male, center 2</i>	89.3	71.4
	Female, center 1	44.4	41.4
	Female, center 2	77.8	63.6
	Male+Female, center 1	60.7	47.9
	Male+Female, center 1	83.8	67.4

FIGURE LEGENDS

Figure S1. A scheme of insulin signalling pathway from the KEGG database. The proteins shown in green are those mapped to the network identified by IPKB software. Insulin receptor substrate are shown in red.

Figure S2. Gaussian kernel PCA projection of schizophrenia and control data using the TAC. Data points (subjects) projected within the red region are considered schizophrenia and those projected into the blue region are considered controls. Precision is the percentage of points in the red region that are real schizophrenia. Male, female and combined male/female samples were tested from clinical centers 1 and 2. Red dots indicate schizophrenia patients and blue dots are controls. Female subjects included 29 schizophrenia and 28 controls from clinical center 1 and 11 schizophrenia and 11 controls from clinical center 2. All of these were matched to male subjects for age and BMI. Notice that the decision boundary is different from that of the TAC model, since it was optimized by considering all the 17 proteins in order to achieve a fair comparison.

Figure S3. The linear PCA projection of the schizophrenia and control data based using the TAC. Data points (subjects) projected within the red region are considered schizophrenia and those projected into the blue region are considered controls. Precision is the percentage of points in the red region that are real schizophrenia. Male, female and combined male/female samples were tested from clinical centers 1 and 2.

Red dots indicate schizophrenia patients and blue dots are controls.

RAW DATA

The protein expression data for both human and rat models are available in the attached files:

raw_data.xls

FIGURE S2

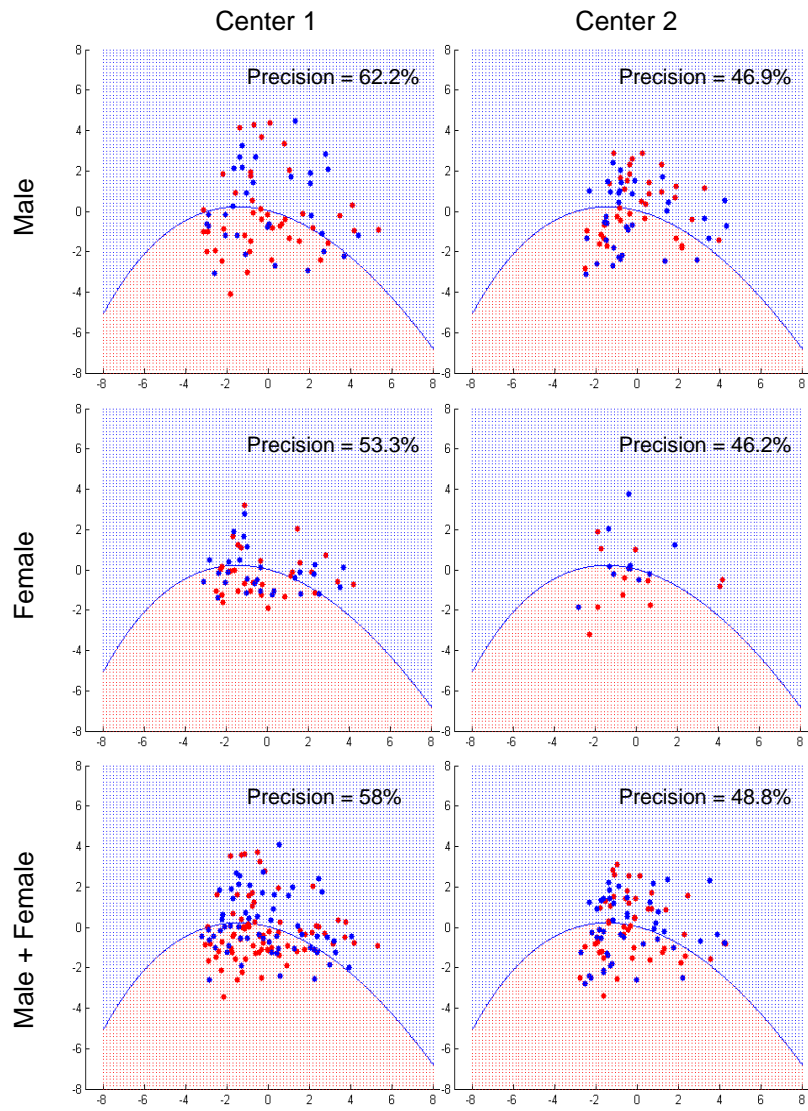


FIGURE S3

