

Multimedia Appendix 4. Variables used in each predictive model.

| Model | Variables |
|-------------------|---|
| HR-B ^a | Age, gender, body mass index, systolic blood pressure, diastolic blood pressure, fasting plasma glucose, total cholesterol, smoking, exercise status, cardiovascular disease, diabetes, hypertension, psychiatric disorder, and neurological disorder |
| HR-R ^b | Age, body mass index, systolic blood pressure, diastolic blood pressure, fasting plasma glucose, total cholesterol (mean, standard deviation, minimum, and maximum), gender, smoking, exercise status, cardiovascular disease, diabetes, hypertension, psychiatric disorder, and neurological disorder (mean, standard deviation) |
| DL-R ^c | Date of each health examination, age, gender, body mass index, systolic blood pressure, diastolic blood pressure, fasting plasma glucose, total cholesterol, smoking, exercise status, cardiovascular disease, diabetes, hypertension, psychiatric disorder, and neurological disorder at each health examination |

^aHR-B: hazard regression model with baseline data only.

^bHR-R: hazard regression model with repeated measurements.

^cDL-R: deep learning model with repeated measurements.