

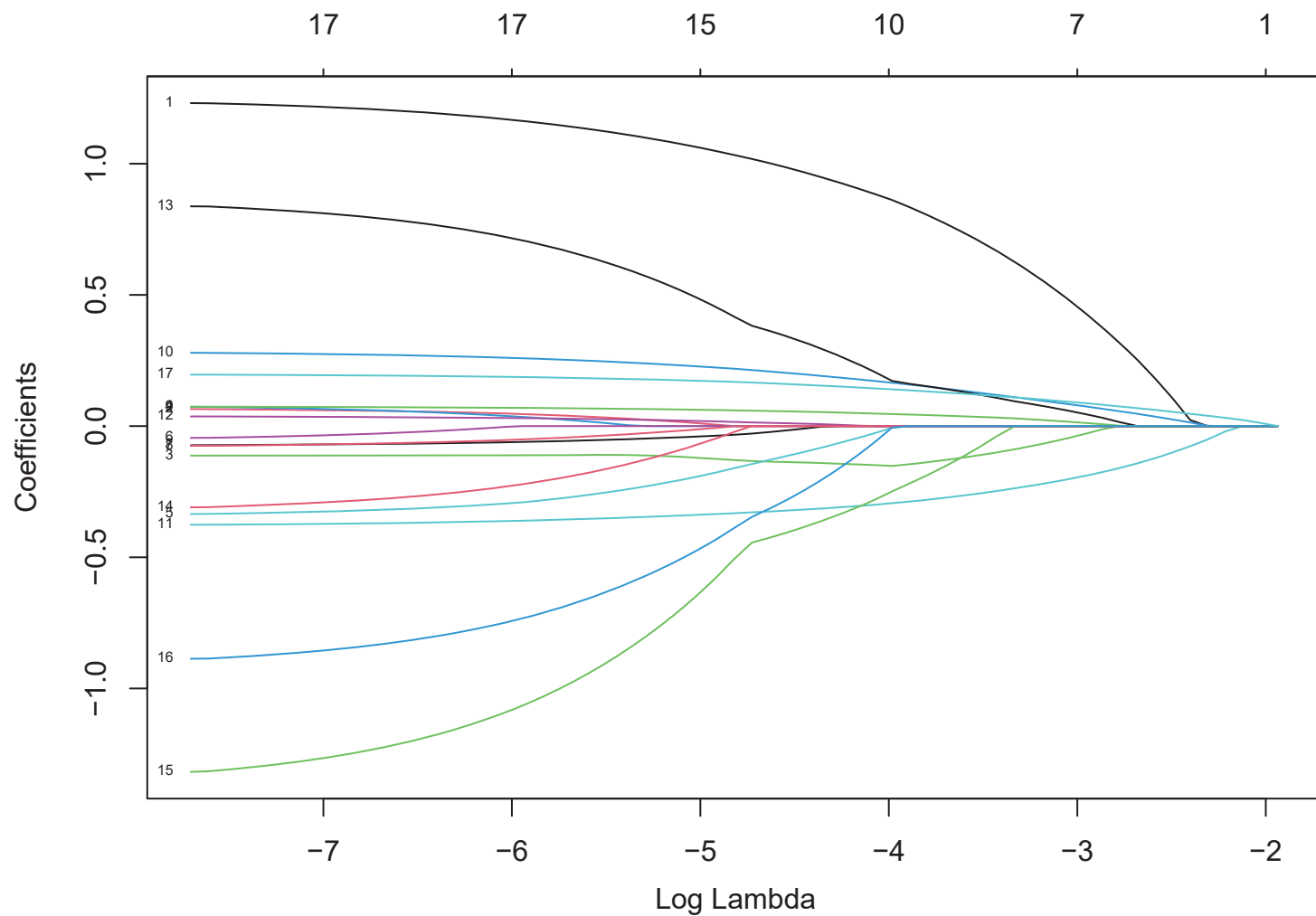
SUPPLEMENTARY TABLE 1

Table 1 Variables assignment	
Indexes	Description
Y: dependent variable	0: Control group; 1: Hypertension group
X: independent variable	
X ₁ : Family history of hypertension	0: No; 1: Yes
X ₂ : Marital status	1: Unmarried; 2: Married; 3: Divorce or separation; 4: Widowed
X ₃ : Education levels	1: Primary school or below; 2: Junior middle school; 3: Bachelor degree and above
X ₄ : Per capita income (yuan/month)	1: <1000; 2: 1000~; 3: 5000~; 4: >10000
X ₅ : Smoking status	0: No; 1: Yes
X ₆ : Alcohol drinking status	0: No; 1: Yes
X ₇ : Sleep status	1: Better; 2: Average; 3: Poor
X ₈ : Physical exercise (times/week)	1: >3; 2: 2~3; 3: ≤1

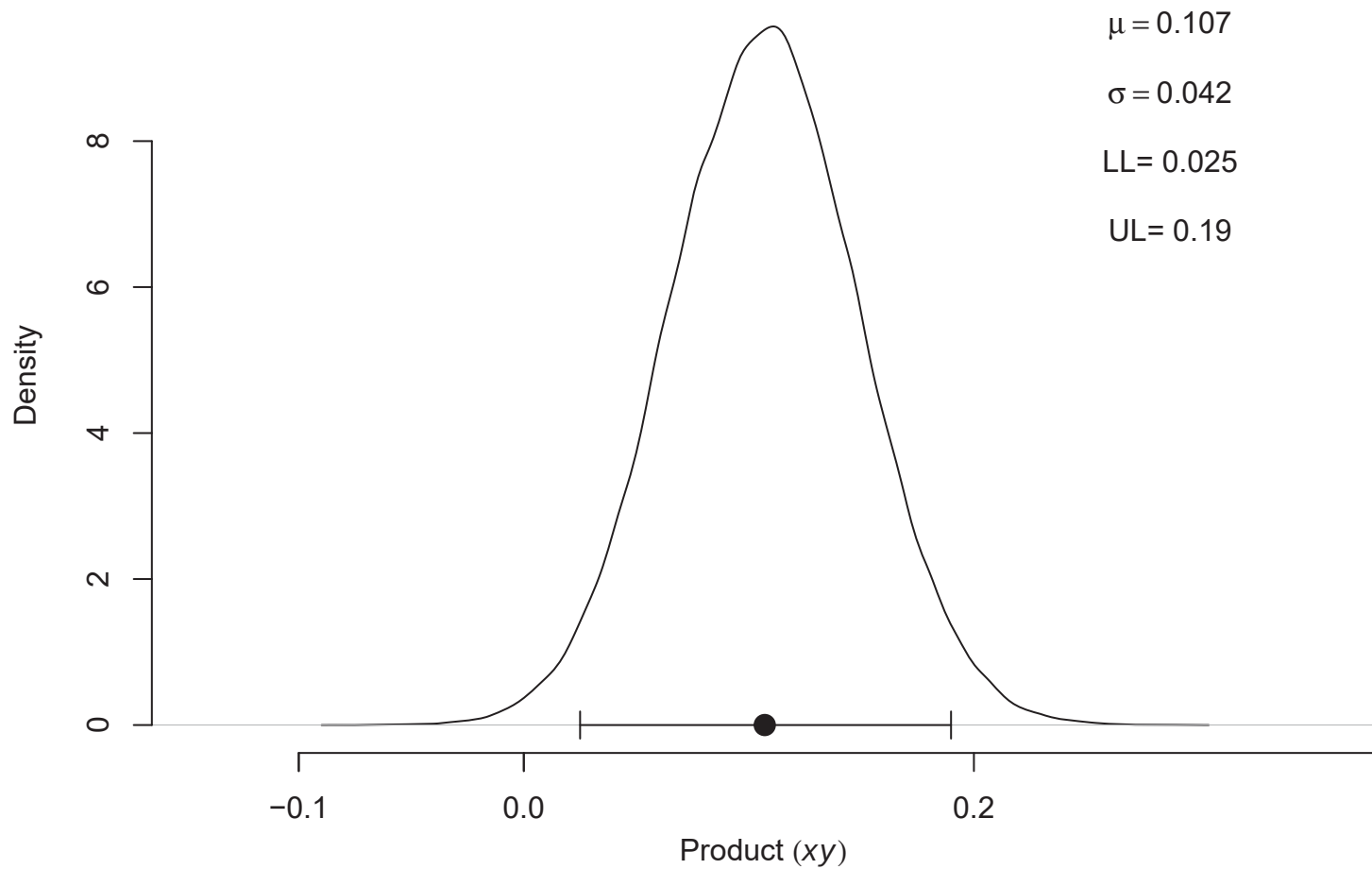
SUPPLEMENTARY FIGURE LEGENDS

Supplementary Fig. 1. The ordinate was the value of the coefficient and the lower abscissa was $\log(\lambda)$ and $\lambda = 0.05$. The upper abscissa was the number of non-zero coefficients in the model at this time.

Supplementary Fig. 2. 95% confidence interval test of mediating effect ($Z_A \times Z_B$) not contain zero ($\alpha=0.05$).



Supplementary Fig. 1. Lasso regression variable screening model diagram



Supplementary Fig. 2. 95% confidence interval test chart of mediating effect ($\alpha=0.05$)

SUPPLEMENTARY LEGENDS: Test of statistical efficiency. The sample size of this study is 426, which has 97% efficiency to estimate the correlation between urinary cadmium level and telomere length.

