Figure S1. Distribution of the propensity score in treated and control subjects (secondary simulations: Beta distribution)

Empirical AUC = 0.55

Empirical AUC = 0.6

Empirical AUC = 0.65

Empirical AUC = 0.69

Empirical AUC = 0.75

Empirical AUC = 0.8

Empirical AUC = 0.85

Empirical AUC = 0.9
Figure S2. Distribution of the propensity score in treated and control subjects (secondary simulations: Chi–squared distribution)

Empirical AUC = 0.55
Empirical AUC = 0.6
Empirical AUC = 0.65
Empirical AUC = 0.71
Empirical AUC = 0.75
Empirical AUC = 0.81
Empirical AUC = 0.84
Empirical AUC = 0.9
Figure S3. Distribution of the propensity score in treated and control subjects (secondary simulations: log-normal distribution)

Empirical AUC = 0.56

Empirical AUC = 0.61

Empirical AUC = 0.65

Empirical AUC = 0.69

Empirical AUC = 0.76

Empirical AUC = 0.8

Empirical AUC = 0.85

Empirical AUC = 0.9
Figure S4. Variance Inflation Factors/Design Effects (secondary simulations: Beta distribution)

VIF/DE for IPTW–ATE

VIF/DE for IPTW–ATT

VIF/DE for IPTW–OW

VIF/DE for IPTW–MW

VIF/DE for IPTW–EW

Empirical c−statistic of PS model

Variance Inflation Factor

Prevalence of treatment

0.6 0.7 0.8 0.9

0 1000 2000 3000 4000

0.6 0.7 0.8 0.9

0 1000 2000 3000 4000

0.6 0.7 0.8 0.9

0 1000 2000 3000 4000

0.6 0.7 0.8 0.9

0 1000 2000 3000 4000

0.6 0.7 0.8 0.9

0 1000 2000 3000 4000

0.6 0.7 0.8 0.9

0 1000 2000 3000 4000

0.6 0.7 0.8 0.9

0 1000 2000 3000 4000

0.6 0.7 0.8 0.9

0 1000 2000 3000 4000

0.6 0.7 0.8 0.9

0 1000 2000 3000 4000
Figure S5. Variance Inflation Factors/Design Effects (secondary simulations: Chi-squared distribution)
Figure S6. Variance Inflation Factors/Design Effects (secondary simulations: log-normal distribution)