

Table 1 Simulation scenarios, assessing performance of different confounding adjustment methods*.

Parameters	Scenario I	Scenario II	Scenario III	Scenario IV	Scenario V	Scenario VI	Scenario VII
<i>Training data</i>							
Sample size [n]	5000	5000	5000	5000	5000	5000	5000
OR of reference treatment A vs. treatment B [δ_1]	1.00	0.30	0.30	0.30	{0.3, 0.70, 1.00, 1.50, 3.0}	0.30	0.90
OR of treatment by Z_1 interaction [δ_{int}]	1.00	0.30	3.0	{0.3, 0.70, 1.00, 1.50, 3.0}	3.00	3.00	1.25
Confounder Z_1 OR (event [δ_2]/treatment[α_1])	0.60/0.60	0.60/0.60	0.60/0.60	0.60/0.60	0.60/0.60	0.60/0.60	0.80/0.80
Other confounders (event [δ_{j-1}]/treatment[α_{j-1}])	0.97/0.97	0.97/0.97	0.97/0.97	0.97/0.97	0.97/0.97	0.97/0.97	0.97/0.97
<i>Test data</i>							
Sample size [n]	400	400	400	400	400	400	400
OR of reference treatment A vs. treatment C [δ_1]	1.00	1.00	1.00	1.00	1.00	{0.3, 0.70, 1.00, 1.50, 3.0}	1.00
OR of treatment by Z_1 interaction [δ_{int}]	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Events per coefficient	{10, 5, 2.5, 1, 0.5}	10	10	2.5	2.5	2.5	10
Number of coefficients	20-400	20	20	80	80	80	20
Confounder Z_1 OR (event [δ_2]/treatment[α_1])	0.60/0.60	0.60/0.60	0.60/0.60	0.60/0.60	0.60/0.60	0.60/0.60	0.80/0.80
Other confounders (event [δ_{j-1}]/treatment[α_{j-1}])	0.97/0.97	0.97/0.97	0.97/0.97	0.97/0.97	0.97/0.97	0.97/0.97	0.97/0.97

* Changes from the previous scenario (on the left) are presented in bold.