drc Robust Options Comparison

Xinying Fang

2022-08-18

Contents

Robustification options are provided in the drc package, including median estimation ("median"), least median of squares ("lms"), least trimmed squares ("lts"), metric trimming ("trimmed"), metric winsorizing ("winsor") and Tukey's biweight ("tukey"). In our comparative study, we only used the non-robust least squares estimation ("mean") of drc, so for completeness, we conduct this additional comparative study to compare non-robust least squares estimation and robust options within drc to see which option of drc can best estimate the median effect equation.

Scenario 1

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMSE
drc_lms	0.09 (0.11)	0.02 (0.10)	0.04 (0.16)	0.03 (0.11)	-0.51 (1.03)	1.33 (10.95)	0.20 (4.09)	16.80 (585.60)	0.93 (4.20)	18.49 (541.74)
drc_lts	-0.02 (0.08)	0.01 (0.01)	-0.23 (0.16)	0.08 (0.08)	-1.02 (1.08)	2.20 (3.35)	2.22 (23.11)	101.00 (101.00)	1.62 (50.31)	101.00 (101.00)
drc_mean	0.04 (0.11)	0.01 (0.03)	0.01 (0.15)	0.02 (0.04)	-0.03 (1.35)	1.82 (5.07)	0.10 (0.56)	0.33 (0.78)	0.45 (1.00)	1.19 (3.10)
drc_median	0.10 (0.12)	0.03 (0.04)	0.00 (0.15)	0.02 (0.04)	-0.76 (0.97)	1.53 (1.99)	0.30 (1.42)	2.11 (93.56)	1.35 (12.98)	101.00 (101.00)
drc_trimmed	0.15 (0.34)	0.14 (1.28)	0.10 (0.37)	0.15 (1.13)	-0.45 (1.09)	1.39 (3.04)	0.20 (12.84)	101.00 (101.00)	2.38 (8.56)	78.97 (1193.64)
drc_tukey	0.14 (0.46)	0.23 (1.93)	0.08 (0.46)	0.22 (1.78)	-0.36 (1.22)	1.62 (4.53)	-0.90 (36.21)	101.00 (101.00)	4.22 (25.89)	101.00 (101.00)
drc_winsor	0.08 (0.12)	0.02 (0.06)	0.01 (0.16)	0.03 (0.05)	-0.41 (1.14)	1.46 (3.25)	0.26 (2.13)	4.61 (102.25)	1.10 (4.85)	24.78 (427.58)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_lts	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_mean	0.26 (0.94)	0.29 (0.20)	3.86 (5.97)	0.87 (0.65)	1.78 (1.97)
drc_median	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	6.99 (507.58)	0.02 (0.54)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	19.13 (319.23)
drc_winsor	0.00 (0.01)	0.00 (0.01)	0.04 (0.14)	0.03 (1.51)	0.05 (1.71)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.66	0.59	0.66	0.56	0.65
drc_median	0.00	0.00	0.01	0.00	0.01
drc_lms	0.18	0.20	0.18	0.20	0.18
drc_lts	0.14	0.08	0.17	0.09	0.18
drc_trimmed	0.03	0.03	0.03	0.04	0.03
drc_winsor	0.01	0.01	0.01	0.01	0.01
drc_tukey	0.01	0.01	0.01	0.01	0.01

Scenario 2

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMSE
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	20.87 (1294.61)	101.00 (101.00)	1.40 (26.01)	101.00 (101.00)
drc_lts	0.01 (0.11)	0.01 (0.01)	-0.16 (0.16)	0.05 (0.08)	-0.97 (0.62)	1.33 (1.76)	0.97 (14.00)	101.00 (101.00)	0.66 (3.80)	14.87 (1205.54)
drc_mean	0.02 (0.11)	0.01 (0.02)	-0.00 (0.13)	0.02 (0.03)	0.13 (1.36)	1.85 (27.30)	0.04 (0.36)	0.13 (0.62)	0.26 (0.96)	0.99 (5.13)
drc_median	0.07 (0.11)	0.02 (0.03)	0.02 (0.14)	0.02 (0.04)	-0.42 (0.91)	1.01 (2.53)	20.60 (1523.23)	101.00 (101.00)	0.76 (4.78)	23.41 (1581.81)
drc_trimmed	0.57 (1.60)	2.88 (166.24)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	-1.96 (5.27)	31.62 (494.20)	3.51 (5.11)	38.40 (185.67)
drc_tukey	0.70 (27.08)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	-1.07 (6.49)	43.21 (1163.33)	2.40 (8.37)	75.77 (2162.84)
drc_winsor	0.05 (0.11)	0.02 (0.03)	0.00 (0.13)	0.02 (0.03)	0.69 (92.27)	101.00 (101.00)	0.09 (0.57)	0.33 (10.26)	0.55 (1.35)	2.14 (40.46)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_lts	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	95.64 (9408.62)
drc_mean	1.00 (55.61)	0.39 (0.30)	10.51 (368.76)	0.87 (0.52)	2.31 (1.85)
drc_median	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	4.94 (253.35)	0.15 (1.54)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (NA)	101.00 (NA)	101.00 (NA)	38.48 (1446.04)	25.54 (828.62)
drc_winsor	0.01 (0.01)	0.01 (0.02)	2.34 (212.23)	0.03 (0.12)	0.05 (0.18)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.83	0.83	0.87	0.79	0.84
drc_median	0.02	0.02	0.04	0.02	0.03
drc_lms	0.08	0.05	0.18	0.11	0.14
drc_lts	0.41	0.21	0.26	0.11	0.37
drc_trimmed	0.07	0.07	0.14	0.12	0.11
drc_winsor	0.04	0.04	0.05	0.03	0.03
drc_tukey	0.01	0.01	0.02	0.02	0.01

Scenario 3

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	
drc_lms	0.04 (0.07)	0.01 (0.01)	-0.15 (0.20)	0.06 (1.99)	-1.20 (4.44)	21.12 (1540.30)	1.04 (0.86)	1.84 (3.57)	1.07 (0.93)	
drc_lts	-0.00 (0.07)	0.01 (0.01)	-0.23 (0.11)	0.07 (0.05)	-1.23 (1.25)	3.07 (20.94)	1.64 (2.00)	6.67 (23.01)	1.16 (1.75)	4
drc_mean	0.03 (0.09)	0.01 (0.02)	0.01 (0.13)	0.02 (0.03)	0.15 (1.58)	2.52 (11.87)	0.06 (0.45)	0.20 (0.59)	0.30 (0.91)	
drc_median	0.06 (0.08)	0.01 (0.02)	0.01 (0.14)	0.02 (0.05)	-0.34 (1.29)	1.78 (9.33)	0.15 (0.54)	0.31 (0.64)	0.59 (0.86)	
drc_trimmed	0.20 (6.76)	45.69 (3745.83)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	1.28 (5.26)	29.26 (619.38)	1.91 (3.77)	1

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	
drc_tukey	0.06 (0.51)	0.26 (20.95)	93.60 (8392.44)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.76 (3.16)	10.56 (298.49)	1.10 (3.56)	1
drc_winsor	0.05 (0.09)	0.01 (0.02)	0.02 (0.14)	0.02 (0.05)	-0.09 (1.55)	2.42 (15.93)	0.11 (0.53)	0.29 (0.78)	0.49 (0.99)	

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	1.22 (23.43)	2.00 (43.51)
drc_lts	0.08 (0.12)	0.14 (0.28)	1.92 (14.30)	1.88 (7.69)	1.84 (6.49)
drc_mean	0.29 (0.27)	0.34 (0.20)	5.71 (10.85)	0.97 (0.60)	2.02 (1.94)
drc_median	0.01 (0.02)	0.01 (0.02)	0.11 (0.51)	0.02 (0.04)	0.04 (0.10)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	1.20 (61.73)	0.56 (19.71)
drc_winsor	0.01 (0.01)	0.01 (0.02)	0.16 (0.58)	0.03 (0.04)	0.04 (0.06)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.81	0.75	0.81	0.73	0.81
drc_median	0.03	0.01	0.02	0.01	0.02
drc_lms	0.20	0.10	0.09	0.09	0.15
drc_lts	0.35	0.12	0.24	0.16	0.33
drc_trimmed	0.08	0.06	0.05	0.08	0.07
drc_winsor	0.04	0.03	0.04	0.03	0.02
drc_tukey	0.02	0.01	0.02	0.01	0.01

Scenario 4

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMSE
drc_lms	0.02 (0.03)	0.00 (0.00)	0.01 (0.07)	0.00 (0.01)	-0.08 (0.41)	0.18 (0.33)	-0.01 (0.19)	0.04 (0.06)	0.10 (0.20)	0.05 (0.09)
drc_lts	-0.02 (0.03)	0.00 (0.00)	-0.09 (0.07)	0.01 (0.02)	-0.35 (0.45)	0.32 (0.43)	0.29 (0.27)	0.15 (0.92)	0.05 (0.26)	0.07 (0.27)

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMSE
drc_mean	0.00 (0.03)	0.00 (0.00)	0.00 (0.05)	0.00 (0.00)	-0.00 (0.41)	0.17 (0.26)	0.01 (0.14)	0.02 (0.03)	0.04 (0.21)	0.05 (0.08)
drc_median	0.01 (0.03)	0.00 (0.00)	-0.00 (0.05)	0.00 (0.00)	-0.09 (0.44)	0.20 (0.30)	0.03 (0.17)	0.03 (0.04)	0.09 (0.25)	0.07 (0.16)
drc_trimmed	0.03 (0.11)	0.01 (0.37)	0.02 (0.15)	0.02 (0.40)	-0.13 (0.53)	0.30 (0.70)	0.02 (1.68)	2.83 (111.51)	0.24 (1.23)	1.56 (44.36)
drc_tukey	0.02 (0.08)	0.01 (0.20)	0.01 (0.10)	0.01 (0.15)	-0.08 (0.47)	0.23 (0.44)	-0.05 (2.89)	8.38 (498.33)	0.16 (2.30)	5.33 (310.38)
drc_winsor	0.01 (0.03)	0.00 (0.00)	0.00 (0.05)	0.00 (0.00)	-0.06 (0.41)	0.17 (0.26)	0.02 (0.16)	0.02 (0.04)	0.07 (0.22)	0.05 (0.12)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.73 (3.77)	0.57 (4.06)
drc_lts	0.02 (0.03)	0.05 (0.09)	0.41 (1.28)	0.17 (0.35)	0.19 (0.27)
drc_mean	0.07 (0.03)	0.10 (0.04)	1.05 (0.52)	0.25 (0.11)	0.46 (0.21)
drc_median	0.00 (0.00)	0.00 (0.01)	0.02 (0.06)	0.01 (0.02)	0.01 (0.01)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	42.80 (2420.32)	9.37 (474.76)
drc_tukey	101.00 (NA)	101.00 (NA)	101.00 (NA)	3.75 (362.28)	0.34 (30.20)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.01 (0.01)	0.00 (0.00)	0.00 (0.00)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.74	0.65	0.74	0.60	0.69
drc_median	0.01	0.01	0.01	0.00	0.01
drc_lms	0.20	0.21	0.20	0.20	0.18
drc_lts	0.21	0.11	0.24	0.10	0.26
drc_trimmed	0.01	0.01	0.01	0.01	0.01
drc_winsor	0.01	0.01	0.01	0.01	0.01
drc_tukey	0.00	0.00	0.00	0.00	0.00

Scenario 5

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias
drc_lms	0.15 (0.17)	0.05 (0.08)	0.20 (0.18)	0.07 (0.10)	-0.05 (0.54)	0.29 (0.49)	-0.56 (0.58)	0.66 (1.06)	0.70 (0.87)
drc_lts	-0.01 (0.04)	0.00 (0.00)	-0.07 (0.05)	0.01 (0.01)	-0.34 (0.31)	0.21 (0.22)	0.22 (0.14)	0.07 (0.08)	0.08 (0.24)
drc_mean	0.00 (0.03)	0.00 (0.00)	0.00 (0.04)	0.00 (0.00)	0.01 (0.36)	0.13 (0.20)	0.00 (0.10)	0.01 (0.01)	0.02 (0.21)
drc_median	0.01 (0.03)	0.00 (0.00)	0.00 (0.05)	0.00 (0.00)	-0.05 (0.36)	0.13 (0.21)	0.01 (0.12)	0.01 (0.02)	0.07 (0.22)
drc_trimmed	0.68 (21.97)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	-1.87 (3.69)	17.09 (349.55)	1.58 (2.52)
drc_tukey	3.67 (244.62)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	-0.87 (2.02)	4.85 (20.24)	1.14 (2.36)
drc_winsor	0.01 (0.03)	0.00 (0.00)	-0.00 (0.04)	0.00 (0.00)	-0.04 (0.34)	0.12 (0.19)	0.01 (0.17)	0.03 (1.77)	0.05 (0.43)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	37.69 (1072.14)	0.94 (8.94)	1.12 (3.38)	1.48 (3.33)	1.84 (3.51)
drc_lts	0.04 (0.04)	0.05 (0.05)	0.49 (0.38)	0.13 (0.11)	0.29 (0.24)
drc_mean	0.10 (0.03)	0.11 (0.04)	1.26 (0.53)	0.26 (0.09)	0.59 (0.21)
drc_median	0.00 (0.00)	0.00 (0.01)	0.05 (0.09)	0.01 (0.02)	0.02 (0.03)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (NA)	101.00 (NA)	101.00 (NA)	7.37 (449.33)	5.95 (346.80)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.02 (0.02)	0.01 (0.24)	0.01 (0.47)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.84	0.80	0.88	0.76	0.81
drc_median	0.03	0.02	0.04	0.02	0.03
drc_lms	0.08	0.06	0.12	0.08	0.11
drc_lts	0.41	0.17	0.35	0.11	0.39
drc_trimmed	0.09	0.08	0.09	0.17	0.14
drc_winsor	0.01	0.01	0.02	0.01	0.01
drc_tukey	0.00	0.00	0.02	0.01	0.01

Scenario 6

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b
drc_lms	0.01 (0.03)	0.00 (0.00)	-0.09 (0.10)	0.02 (0.04)	-0.67 (0.88)	1.22 (6.68)	0.51 (0.56)	0.57 (0.98)	0.43 (0.54)	0
drc_lts	-0.00 (0.03)	0.00 (0.00)	-0.12 (0.07)	0.02 (0.02)	-0.71 (0.64)	0.91 (1.05)	0.54 (0.55)	0.60 (1.35)	0.37 (0.55)	0
drc_mean	0.00 (0.02)	0.00 (0.00)	0.00 (0.04)	0.00 (0.00)	0.02 (0.39)	0.15 (0.26)	0.00 (0.12)	0.01 (0.02)	0.02 (0.19)	0
drc_median	0.01 (0.03)	0.00 (0.00)	0.01 (0.05)	0.00 (0.00)	-0.03 (0.43)	0.19 (0.32)	0.00 (0.14)	0.02 (0.03)	0.06 (0.21)	0
drc_trimmed	0.04 (3.66)	13.38 (1304.36)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	1.50 (2.92)	10.75 (191.18)	1.01 (1.45)	3.
drc_tukey	0.01 (0.08)	0.01 (0.10)	-0.07 (0.19)	0.04 (0.86)	-0.48 (3.53)	12.71 (1057.82)	0.52 (1.26)	1.86 (21.50)	0.47 (1.13)	1.
drc_winsor	0.00 (0.02)	0.00 (0.00)	0.00 (0.04)	0.00 (0.00)	-0.00 (0.40)	0.16 (0.27)	0.01 (0.13)	0.02 (0.03)	0.04 (0.19)	0

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	0.03 (0.10)	0.08 (1.19)	5.29 (274.04)	0.27 (0.66)	0.31 (0.57)
drc_lts	0.05 (0.04)	0.11 (0.14)	0.94 (1.41)	0.59 (1.00)	0.63 (0.96)
drc_mean	0.08 (0.03)	0.11 (0.04)	1.26 (0.56)	0.28 (0.10)	0.53 (0.19)
drc_median	0.00 (0.01)	0.00 (0.01)	0.04 (0.09)	0.01 (0.01)	0.02 (0.04)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	35.48 (1896.09)
drc_tukey	101.00 (NA)	101.00 (NA)	101.00 (NA)	2.99 (203.68)	1.67 (111.40)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.02 (0.02)	0.00 (0.00)	0.01 (0.00)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.86	0.79	0.85	0.74	0.81
drc_median	0.04	0.02	0.03	0.02	0.03
drc_lms	0.16	0.09	0.12	0.08	0.13
drc_lts	0.44	0.20	0.33	0.21	0.39
drc_trimmed	0.10	0.04	0.05	0.09	0.07
drc_winsor	0.02	0.01	0.02	0.01	0.01
drc_tukey	0.02	0.01	0.01	0.01	0.01

Scenario 7

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMSE
drc_lms	0.01 (0.03)	0.00 (0.00)	0.01 (0.07)	0.00 (0.01)	-0.10 (0.47)	0.23 (0.48)	0.02 (0.21)	0.05 (0.09)	0.10 (0.21)	0.06 (0.11)
drc_lts	-0.02 (0.03)	0.00 (0.00)	-0.10 (0.07)	0.01 (0.02)	-0.43 (0.48)	0.42 (0.56)	0.34 (0.38)	0.26 (2.15)	0.10 (0.29)	0.09 (0.48)
drc_mean	0.00 (0.03)	0.00 (0.00)	0.00 (0.05)	0.00 (0.00)	0.00 (0.45)	0.20 (0.32)	0.01 (0.15)	0.02 (0.03)	0.04 (0.22)	0.05 (0.09)
drc_median	0.01 (0.03)	0.00 (0.00)	-0.00 (0.05)	0.00 (0.00)	-0.09 (0.49)	0.25 (0.37)	0.03 (0.18)	0.03 (0.05)	0.10 (0.27)	0.08 (0.21)
drc_trimmed	0.03 (0.11)	0.01 (0.32)	0.01 (0.15)	0.02 (0.31)	-0.21 (0.59)	0.39 (0.87)	0.11 (2.87)	8.26 (444.04)	0.31 (1.92)	3.78 (146.28)
drc_tukey	0.02 (0.09)	0.01 (0.43)	0.00 (0.11)	0.01 (0.36)	-0.13 (0.53)	0.29 (0.55)	-0.04 (10.44)	101.00 (101.00)	0.21 (5.53)	30.64 (2875.18)
drc_winsor	0.01 (0.03)	0.00 (0.00)	-0.00 (0.05)	0.00 (0.00)	-0.06 (0.45)	0.20 (0.32)	0.02 (0.17)	0.03 (0.04)	0.07 (0.24)	0.06 (0.15)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	2.25 (85.61)	10.23 (403.55)	101.00 (101.00)	0.59 (1.57)	0.45 (0.84)
drc_lts	0.02 (0.03)	0.05 (0.08)	0.40 (0.75)	0.18 (0.47)	0.19 (0.31)
drc_mean	0.08 (0.03)	0.10 (0.05)	1.10 (0.58)	0.26 (0.12)	0.48 (0.22)
drc_median	0.00 (0.00)	0.00 (0.01)	0.02 (0.09)	0.01 (0.03)	0.01 (0.02)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	97.02 (3538.87)	22.29 (845.54)
drc_tukey	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	1.66 (119.20)	0.20 (16.68)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.01 (0.01)	0.00 (0.00)	0.00 (0.00)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.76	0.66	0.72	0.59	0.69
drc_median	0.01	0.01	0.01	0.00	0.01
drc_lms	0.20	0.21	0.19	0.19	0.17
drc_lts	0.23	0.11	0.21	0.10	0.25
drc_trimmed	0.01	0.01	0.01	0.01	0.01
drc_winsor	0.01	0.01	0.01	0.00	0.00
drc_tukey	0.00	0.00	0.00	0.00	0.00

Scenario 8

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMSE
drc_lms	0.12 (0.14)	0.03 (0.06)	0.16 (0.16)	0.05 (0.08)	-0.05 (0.31)	0.10 (0.14)	-0.45 (0.51)	0.45 (0.84)	0.50 (0.71)	0.76 (1.50)
drc_lts	-0.02 (0.03)	0.00 (0.00)	-0.06 (0.05)	0.01 (0.01)	-0.19 (0.20)	0.08 (0.10)	0.17 (0.12)	0.04 (0.05)	-0.02 (0.18)	0.03 (0.05)
drc_mean	0.00 (0.03)	0.00 (0.00)	-0.00 (0.04)	0.00 (0.00)	0.01 (0.29)	0.08 (0.13)	0.00 (0.09)	0.01 (0.01)	0.02 (0.19)	0.04 (0.05)
drc_median	0.00 (0.03)	0.00 (0.00)	0.00 (0.04)	0.00 (0.00)	-0.02 (0.23)	0.05 (0.09)	-0.00 (0.10)	0.01 (0.01)	0.03 (0.17)	0.03 (0.05)
drc_trimmed	0.20 (0.23)	0.10 (0.82)	0.35 (0.35)	0.24 (0.90)	0.28 (1.04)	1.16 (92.20)	-0.89 (1.58)	3.28 (114.39)	0.59 (0.91)	1.17 (29.36)
drc_tukey	0.11 (0.15)	0.03 (0.09)	0.17 (0.24)	0.09 (0.21)	0.03 (0.34)	0.11 (0.41)	-0.41 (0.85)	0.88 (5.86)	0.45 (1.12)	1.46 (15.79)
drc_winsor	0.00 (0.03)	0.00 (0.00)	-0.00 (0.04)	0.00 (0.01)	0.14 (15.74)	101.00 (101.00)	0.00 (0.10)	0.01 (0.02)	0.03 (0.17)	0.03 (0.07)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	24.14 (658.25)	0.92 (11.11)	33.76 (1363.80)	1.29 (2.89)	1.62 (2.95)
drc_lts	0.02 (0.02)	0.03 (0.03)	0.28 (0.22)	0.07 (0.06)	0.15 (0.13)
drc_mean	0.08 (0.03)	0.09 (0.04)	1.01 (0.47)	0.21 (0.09)	0.48 (0.20)
drc_median	0.00 (0.01)	0.00 (0.01)	0.03 (0.06)	0.01 (0.01)	0.01 (0.04)
drc_trimmed	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	1.43 (7.03)	0.64 (3.16)
drc_tukey	1.61 (114.78)	0.17 (9.57)	0.03 (0.85)	0.18 (1.73)	0.22 (3.20)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.09 (8.35)	0.00 (0.00)	0.00 (0.00)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.76	0.70	0.88	0.72	0.75
drc_median	0.02	0.01	0.03	0.02	0.02
drc_lms	0.10	0.07	0.14	0.08	0.13
drc_lts	0.24	0.11	0.33	0.08	0.30
drc_trimmed	0.05	0.04	0.03	0.07	0.05
drc_winsor	0.00	0.00	0.01	0.00	0.01
drc_tukey	0.00	0.00	0.01	0.00	0.00

Scenario 9

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias
drc_lms	0.02 (0.05)	0.00 (0.00)	-0.10 (0.50)	0.26 (14.23)	1.50 (155.03)	101.00 (101.00)	0.71 (0.85)	1.23 (2.43)	0.66 (0.85)
drc_lts	-0.00 (0.05)	0.00 (0.00)	-0.14 (0.09)	0.03 (0.03)	-0.69 (1.05)	1.59 (7.46)	0.84 (1.05)	1.81 (5.13)	0.61 (1.12)
drc_mean	0.00 (0.03)	0.00 (0.00)	0.00 (0.04)	0.00 (0.00)	0.01 (0.34)	0.12 (0.20)	0.00 (0.10)	0.01 (0.01)	0.02 (0.19)
drc_median	0.01 (0.03)	0.00 (0.00)	0.01 (0.04)	0.00 (0.00)	-0.06 (0.35)	0.13 (0.22)	-0.00 (0.11)	0.01 (0.02)	0.08 (0.21)
drc_trimmed	0.03 (0.13)	0.02 (0.13)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	1.95 (3.81)	18.29 (199.41)	1.67 (2.35)
drc_tukey	0.18 (15.21)	101.00 (101.00)	0.34 (36.40)	101.00 (101.00)	2.99 (167.67)	101.00 (101.00)	0.63 (1.87)	3.89 (59.09)	0.59 (1.55)
drc_winsor	0.01 (0.03)	0.00 (0.00)	0.00 (0.04)	0.00 (0.00)	-0.02 (0.34)	0.11 (0.19)	0.00 (0.10)	0.01 (0.02)	0.04 (0.20)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.37 (1.29)	0.44 (1.12)
drc_lts	0.07 (0.10)	0.16 (0.30)	3.77 (191.36)	1.24 (3.55)	1.30 (3.48)
drc_mean	0.10 (0.04)	0.12 (0.05)	1.49 (0.83)	0.33 (0.13)	0.61 (0.26)
drc_median	0.00 (0.01)	0.00 (0.01)	0.05 (0.14)	0.01 (0.02)	0.02 (0.06)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (NA)	101.00 (NA)	101.00 (NA)	75.95 (6699.23)	7.41 (566.13)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.03 (0.05)	0.01 (0.01)	0.01 (0.01)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.86	0.86	0.92	0.86	0.85
drc_median	0.03	0.03	0.04	0.03	0.04
drc_lms	0.14	0.12	0.15	0.11	0.13
drc_lts	0.37	0.26	0.45	0.34	0.37
drc_trimmed	0.12	0.07	0.08	0.12	0.10
drc_winsor	0.03	0.03	0.04	0.03	0.02
drc_tukey	0.02	0.02	0.02	0.02	0.01

Scenario 10

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMSE
drc_lms	0.06 (0.06)	0.01 (0.01)	0.06 (0.22)	0.05 (0.14)	-3.64 (11.94)	101.00 (101.00)	0.09 (3.83)	14.70 (1006.24)	0.40 (2.05)	4.37 (282.59)
drc_lts	0.00 (0.04)	0.00 (0.01)	-0.29 (0.19)	0.12 (0.10)	-2.46 (37.15)	101.00 (101.00)	0.75 (0.94)	1.45 (10.03)	0.25 (1.38)	1.96 (156.99)
drc_mean	0.02 (0.05)	0.00 (0.01)	0.03 (0.24)	0.06 (0.11)	2.17 (15.31)	101.00 (101.00)	0.03 (0.35)	0.13 (0.34)	0.12 (0.38)	0.16 (0.86)
drc_median	0.03 (0.06)	0.00 (0.02)	0.03 (0.26)	0.07 (0.17)	0.20 (17.10)	101.00 (101.00)	0.06 (0.40)	0.17 (0.36)	0.20 (0.38)	0.18 (0.74)
drc_trimmed	0.07 (0.09)	0.01 (0.10)	0.09 (0.26)	0.08 (0.27)	-2.22 (44.79)	101.00 (101.00)	0.01 (0.73)	0.54 (22.39)	0.44 (0.76)	0.77 (9.26)
drc_tukey	0.04 (0.09)	0.01 (0.10)	0.04 (0.28)	0.08 (0.22)	-0.58 (16.39)	101.00 (101.00)	0.05 (1.13)	1.29 (65.53)	0.30 (1.24)	1.64 (73.11)
drc_winsor	0.03 (0.06)	0.00 (0.02)	0.02 (0.25)	0.06 (0.14)	0.22 (14.83)	101.00 (101.00)	0.06 (0.40)	0.16 (0.42)	0.19 (0.41)	0.20 (0.93)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (NA)	101.00 (NA)	101.00 (NA)	67.86 (4550.52)	32.98 (2234.11)
drc_lts	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	3.22 (114.37)	1.37 (40.73)
drc_mean	0.30 (6.04)	0.80 (0.46)	98.67 (541.60)	0.93 (0.46)	0.96 (0.87)
drc_median	0.01 (0.17)	0.05 (0.11)	6.15 (200.83)	0.06 (0.10)	0.06 (0.09)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	21.31 (833.02)
drc_tukey	0.31 (30.07)	0.05 (1.77)	2.03 (10.01)	0.10 (2.87)	0.06 (1.19)
drc_winsor	0.01 (0.01)	0.05 (0.06)	3.57 (16.44)	0.06 (0.06)	0.04 (0.04)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.88	0.83	0.87	0.82	0.88
drc_median	0.05	0.04	0.06	0.03	0.05
drc_lms	0.14	0.21	0.15	0.21	0.13
drc_lts	0.46	0.21	0.41	0.19	0.43
drc_trimmed	0.05	0.08	0.06	0.07	0.03
drc_winsor	0.09	0.08	0.09	0.07	0.06
drc_tukey	0.05	0.04	0.05	0.04	0.03

Scenario 11

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bia
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	-0.55 (42.81)	101.00 (101.00)	0.94 (2.1
drc_lts	0.04 (0.08)	0.01 (0.02)	-0.23 (0.25)	0.11 (0.15)	0.77 (382.66)	101.00 (101.00)	0.54 (0.63)	0.69 (19.65)	0.38 (0.6
drc_mean	0.03 (0.07)	0.01 (0.02)	0.01 (0.27)	0.07 (0.11)	5.13 (38.03)	101.00 (101.00)	0.00 (0.80)	0.64 (52.77)	0.11 (0.4
drc_median	0.06 (0.09)	0.01 (0.03)	0.04 (0.30)	0.09 (0.15)	23.43 (1737.09)	101.00 (101.00)	-0.01 (0.41)	0.17 (0.30)	0.27 (0.4
drc_trimmed	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (NA)	-1.62 (3.45)	14.55 (108.12)	1.24 (1.6
drc_tukey	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (NA)	-0.92 (3.60)	13.77 (387.39)	0.81 (2.2
drc_winsor	0.04 (0.08)	0.01 (0.02)	0.02 (0.28)	0.08 (0.12)	101.00 (101.00)	101.00 (101.00)	0.01 (0.64)	0.41 (15.23)	0.21 (0.5

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	2.64 (77.70)	1.13 (2.39)
drc_lts	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.55 (4.41)	0.85 (0.96)
drc_mean	101.00 (101.00)	1.18 (4.99)	101.00 (101.00)	0.97 (7.10)	1.25 (0.97)
drc_median	0.13 (9.33)	0.04 (0.07)	101.00 (101.00)	0.04 (0.07)	0.08 (0.14)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (NA)	101.00 (NA)	101.00 (NA)	12.72 (624.49)	8.45 (447.85)
drc_winsor	101.00 (NA)	101.00 (NA)	101.00 (NA)	43.39 (2475.73)	0.05 (0.05)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.86	0.87	0.90	0.80	0.88
drc_median	0.06	0.04	0.08	0.03	0.06
drc_lms	0.09	0.06	0.18	0.08	0.14
drc_lts	0.51	0.39	0.34	0.20	0.46
drc_trimmed	0.06	0.05	0.13	0.09	0.07
drc_winsor	0.07	0.07	0.09	0.06	0.05
drc_tukey	0.03	0.03	0.04	0.03	0.02

Scenario 12

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMS
drc_lms	0.04 (0.05)	0.00 (0.01)	-0.15 (0.20)	0.06 (0.11)	101.00 (101.00)	101.00 (101.00)	0.47 (0.46)	0.44 (0.64)	0.42 (0.38)	0.32 (0.4
drc_lts	0.01 (0.04)	0.00 (0.00)	-0.31 (0.15)	0.12 (0.09)	65.36 (6049.27)	101.00 (101.00)	0.82 (0.81)	1.32 (5.99)	0.30 (0.53)	0.37 (1.3
drc_mean	0.02 (0.05)	0.00 (0.02)	0.04 (0.23)	0.06 (0.12)	3.82 (24.02)	101.00 (101.00)	0.01 (0.33)	0.11 (0.35)	0.10 (0.36)	0.14 (0.8
drc_median	0.03 (0.06)	0.00 (0.01)	0.03 (0.26)	0.07 (0.15)	1.65 (77.86)	101.00 (101.00)	0.07 (0.41)	0.17 (0.32)	0.23 (0.38)	0.20 (0.6
drc_trimmed	0.05 (0.22)	0.05 (2.72)	68.51 (5258.44)	101.00 (101.00)	101.00 (101.00)	101.00 (NA)	0.38 (1.34)	1.93 (44.70)	0.48 (0.83)	0.92 (9.4
drc_tukey	0.03 (0.07)	0.01 (0.10)	-0.00 (0.73)	0.53 (42.91)	6.67 (544.36)	101.00 (101.00)	0.17 (0.76)	0.61 (13.51)	0.26 (0.74)	0.61 (13.9
drc_winsor	0.02 (0.06)	0.00 (0.02)	0.03 (0.25)	0.06 (0.14)	2.15 (22.92)	101.00 (101.00)	0.04 (0.37)	0.14 (0.45)	0.15 (0.37)	0.16 (0.7

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.42 (1.05)	0.48 (0.95)
drc_lts	33.74 (3365.59)	0.27 (0.33)	101.00 (101.00)	0.96 (2.42)	0.68 (1.37)
drc_mean	0.27 (2.87)	0.82 (0.49)	101.00 (101.00)	0.92 (0.45)	0.97 (0.85)
drc_median	101.00 (101.00)	0.18 (12.09)	101.00 (101.00)	0.05 (0.17)	0.06 (0.16)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	16.67 (770.55)
drc_tukey	0.01 (0.03)	0.04 (0.49)	11.71 (650.62)	0.08 (1.55)	0.05 (0.86)
drc_winsor	0.01 (0.01)	0.06 (0.07)	5.85 (29.21)	0.07 (0.06)	0.05 (0.06)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.89	0.85	0.89	0.83	0.90
drc_median	0.07	0.04	0.06	0.04	0.06
drc_lms	0.20	0.13	0.14	0.12	0.16
drc_lts	0.52	0.18	0.39	0.19	0.47
drc_trimmed	0.08	0.07	0.06	0.06	0.05
drc_winsor	0.12	0.10	0.11	0.08	0.07
drc_tukey	0.06	0.06	0.06	0.04	0.04

Scenario 13

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMSE
drc_lms	0.01 (0.02)	0.00 (0.00)	0.05 (0.10)	0.01 (0.02)	-0.11 (4.39)	19.28 (50.39)	-0.04 (0.13)	0.02 (0.03)	0.06 (0.13)	0.02 (0.04)
drc_lts	-0.00 (0.01)	0.00 (0.00)	-0.12 (0.09)	0.02 (0.02)	-1.73 (3.46)	14.95 (20.29)	0.18 (0.15)	0.06 (0.07)	0.02 (0.11)	0.01 (0.03)
drc_mean	0.00 (0.01)	0.00 (0.00)	0.01 (0.08)	0.01 (0.01)	0.31 (2.92)	8.63 (16.31)	-0.01 (0.10)	0.01 (0.02)	0.01 (0.07)	0.01 (0.01)
drc_median	0.00 (0.01)	0.00 (0.00)	0.02 (0.09)	0.01 (0.01)	0.34 (3.30)	11.01 (23.41)	-0.01 (0.12)	0.01 (0.02)	0.01 (0.08)	0.01 (0.01)
drc_trimmed	0.02 (0.05)	0.00 (0.11)	0.05 (0.13)	0.02 (0.22)	101.00 (101.00)	101.00 (101.00)	-0.03 (0.39)	0.15 (7.20)	0.06 (0.66)	0.44 (18.20)
drc_tukey	0.00 (0.01)	0.00 (0.00)	0.00 (0.09)	0.01 (0.05)	101.00 (101.00)	101.00 (101.00)	-0.01 (1.44)	2.07 (205.26)	0.01 (0.43)	0.18 (16.70)
drc_winsor	0.00 (0.01)	0.00 (0.00)	0.00 (0.08)	0.01 (0.01)	0.00 (2.83)	7.99 (15.16)	0.01 (0.10)	0.01 (0.02)	0.01 (0.07)	0.01 (0.01)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.28 (0.75)	0.17 (0.31)
drc_lts	0.02 (0.01)	0.13 (0.07)	5.66 (3.67)	0.19 (0.12)	0.15 (0.08)
drc_mean	0.05 (0.02)	0.25 (0.09)	12.31 (5.91)	0.28 (0.09)	0.26 (0.08)
drc_median	0.00 (0.01)	0.02 (0.03)	1.00 (1.92)	0.02 (0.03)	0.02 (0.03)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	3.22 (54.97)	3.83 (72.68)
drc_tukey	101.00 (NA)	101.00 (101.00)	101.00 (NA)	0.09 (7.11)	0.04 (1.88)
drc_winsor	0.00 (0.00)	0.01 (0.01)	0.31 (0.27)	0.01 (0.01)	0.00 (0.00)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.92	0.85	0.93	0.80	0.90
drc_median	0.08	0.06	0.07	0.05	0.07
drc_lms	0.25	0.26	0.27	0.24	0.22
drc_lts	0.51	0.21	0.48	0.18	0.49
drc_trimmed	0.05	0.05	0.05	0.05	0.04
drc_winsor	0.04	0.04	0.04	0.03	0.02
drc_tukey	0.02	0.02	0.02	0.02	0.01

Scenario 14

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_R
drc_lms	0.19 (0.22)	0.09 (0.13)	0.49 (0.44)	0.43 (0.56)	-2.60 (4.15)	23.98 (34.29)	-0.72 (0.73)	1.06 (1.54)	0.54 (0.59)	0.64 (
drc_lts	0.01 (0.03)	0.00 (0.00)	-0.09 (0.12)	0.02 (0.04)	-2.64 (2.93)	15.55 (19.47)	0.15 (0.15)	0.05 (0.08)	0.08 (0.17)	0.04 (
drc_mean	0.00 (0.02)	0.00 (0.00)	0.00 (0.09)	0.01 (0.01)	0.34 (2.98)	8.96 (18.31)	-0.00 (0.10)	0.01 (0.02)	0.01 (0.11)	0.01 (
drc_median	0.00 (0.02)	0.00 (0.00)	0.00 (0.10)	0.01 (0.02)	0.05 (3.26)	10.62 (28.11)	0.00 (0.12)	0.02 (0.02)	0.02 (0.12)	0.01 (
drc_trimmed	0.48 (1.98)	4.15 (96.50)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (NA)	-1.02 (2.36)	6.63 (52.10)	0.49 (0.97)	1.17 (
drc_tukey	0.10 (0.38)	0.16 (4.11)	0.28 (0.86)	0.82 (13.36)	101.00 (101.00)	101.00 (101.00)	-0.31 (1.60)	2.67 (172.21)	0.17 (0.72)	0.54 (
drc_winsor	0.00 (0.02)	0.00 (0.00)	-0.00 (0.09)	0.01 (0.01)	-0.03 (2.85)	8.10 (15.74)	0.01 (0.11)	0.01 (0.02)	0.02 (0.11)	0.01 (

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	45.12 (2118.63)	101.00 (101.00)	0.65 (1.38)	0.59 (1.13)
drc_lts	0.06 (0.37)	0.18 (0.31)	6.06 (6.00)	0.19 (0.18)	0.25 (0.17)
drc_mean	0.08 (0.03)	0.29 (0.09)	13.76 (6.88)	0.29 (0.08)	0.36 (0.11)
drc_median	0.01 (0.19)	0.02 (0.03)	1.21 (15.65)	0.02 (0.02)	0.03 (0.05)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	32.90 (2027.93)	12.66 (826.92)
drc_tukey	101.00 (NA)	101.00 (101.00)	101.00 (NA)	0.23 (3.66)	0.08 (1.09)
drc_winsor	0.00 (0.00)	0.01 (0.01)	0.37 (0.33)	0.01 (0.01)	0.01 (0.01)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.91	0.86	0.94	0.80	0.89
drc_median	0.07	0.05	0.10	0.04	0.07
drc_lms	0.14	0.09	0.21	0.08	0.16
drc_lts	0.53	0.43	0.44	0.29	0.47
drc_trimmed	0.07	0.07	0.22	0.11	0.09
drc_winsor	0.04	0.04	0.05	0.03	0.03
drc_tukey	0.02	0.02	0.04	0.02	0.02

Scenario 15

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_R
drc_lms	0.00 (0.02)	0.00 (0.00)	-0.08 (0.11)	0.02 (0.02)	-2.04 (4.57)	24.99 (60.38)	0.15 (0.19)	0.06 (0.10)	0.07 (0.15)	0.03 (
drc_lts	-0.00 (0.01)	0.00 (0.00)	-0.14 (0.07)	0.02 (0.02)	-2.96 (3.65)	22.12 (27.13)	0.24 (0.17)	0.09 (0.14)	0.07 (0.15)	0.03 (
drc_mean	0.00 (0.01)	0.00 (0.00)	0.00 (0.07)	0.01 (0.01)	0.28 (3.04)	9.32 (20.61)	0.00 (0.10)	0.01 (0.01)	0.01 (0.07)	0.01 (
drc_median	0.00 (0.01)	0.00 (0.00)	0.00 (0.08)	0.01 (0.01)	0.06 (3.45)	11.91 (27.15)	0.01 (0.11)	0.01 (0.02)	0.02 (0.08)	0.01 (
drc_trimmed	0.01 (0.11)	0.01 (0.26)	0.92 (98.54)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.19 (2.03)	4.16 (178.83)	0.12 (0.75)	0.58 (1
drc_tukey	0.00 (0.05)	0.00 (0.14)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	-0.02 (2.04)	4.17 (251.18)	0.01 (0.63)	0.40 (2
drc_winsor	0.00 (0.01)	0.00 (0.00)	-0.00 (0.07)	0.01 (0.01)	0.14 (3.06)	9.41 (20.64)	0.01 (0.10)	0.01 (0.01)	0.01 (0.08)	0.01 (

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.17 (0.75)	0.17 (0.41)
drc_lts	0.03 (0.02)	0.16 (0.09)	6.45 (12.48)	0.29 (0.31)	0.22 (0.22)
drc_mean	0.05 (0.02)	0.24 (0.08)	12.71 (6.09)	0.28 (0.08)	0.27 (0.08)
drc_median	0.00 (0.00)	0.01 (0.02)	0.82 (1.42)	0.02 (0.02)	0.02 (0.03)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	7.97 (86.33)	5.57 (103.48)
drc_tukey	101.00 (NA)	101.00 (101.00)	101.00 (NA)	0.35 (12.18)	0.14 (3.80)
drc_winsor	0.00 (0.00)	0.01 (0.01)	0.37 (0.32)	0.01 (0.01)	0.01 (0.00)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.93	0.88	0.93	0.83	0.90
drc_median	0.08	0.06	0.07	0.05	0.07
drc_lms	0.32	0.16	0.26	0.14	0.27
drc_lts	0.58	0.23	0.45	0.20	0.51
drc_trimmed	0.09	0.05	0.06	0.05	0.05
drc_winsor	0.05	0.04	0.05	0.03	0.03
drc_tukey	0.03	0.02	0.03	0.02	0.02

Scenario 16

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMSE
drc_lms	0.01 (0.02)	0.00 (0.00)	0.05 (0.10)	0.01 (0.02)	0.07 (5.12)	26.18 (93.58)	-0.05 (0.14)	0.02 (0.04)	0.06 (0.14)	0.02 (0.05)
drc_lts	-0.00 (0.01)	0.00 (0.00)	-0.12 (0.10)	0.02 (0.02)	-2.64 (3.49)	19.20 (22.96)	0.20 (0.17)	0.07 (0.08)	0.05 (0.11)	0.01 (0.02)
drc_mean	0.00 (0.01)	0.00 (0.00)	0.01 (0.08)	0.01 (0.01)	0.43 (3.34)	11.31 (21.23)	-0.01 (0.11)	0.01 (0.02)	0.01 (0.08)	0.01 (0.01)
drc_median	0.00 (0.01)	0.00 (0.00)	0.02 (0.10)	0.01 (0.01)	0.52 (3.93)	15.71 (35.01)	-0.01 (0.13)	0.02 (0.02)	0.01 (0.09)	0.01 (0.01)
drc_trimmed	0.02 (0.31)	0.09 (5.70)	0.05 (0.36)	0.13 (6.60)	101.00 (101.00)	101.00 (NA)	-0.06 (1.55)	2.40 (144.43)	0.09 (0.65)	0.43 (16.44)
drc_tukey	0.00 (0.01)	0.00 (0.00)	0.00 (0.09)	0.01 (0.02)	101.00 (101.00)	101.00 (101.00)	0.01 (0.22)	0.05 (2.96)	0.03 (0.17)	0.03 (1.83)
drc_winsor	0.00 (0.01)	0.00 (0.00)	0.00 (0.08)	0.01 (0.01)	-0.02 (3.25)	10.56 (19.33)	0.01 (0.11)	0.01 (0.02)	0.02 (0.08)	0.01 (0.01)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	0.27 (8.51)	20.74 (1482.17)	101.00 (101.00)	0.27 (0.63)	0.17 (0.28)
drc_lts	0.02 (0.01)	0.13 (0.07)	5.27 (3.56)	0.21 (0.14)	0.16 (0.09)
drc_mean	0.05 (0.02)	0.27 (0.10)	13.23 (6.99)	0.30 (0.09)	0.28 (0.09)
drc_median	0.00 (0.01)	0.02 (0.03)	1.10 (2.25)	0.02 (0.03)	0.02 (0.04)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	5.96 (182.61)	5.39 (234.10)
drc_tukey	101.00 (NA)	101.00 (101.00)	101.00 (NA)	0.05 (2.89)	0.06 (3.80)
drc_winsor	0.00 (0.00)	0.01 (0.01)	0.32 (0.30)	0.01 (0.01)	0.00 (0.00)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.93	0.85	0.91	0.78	0.89
drc_median	0.08	0.05	0.07	0.04	0.07
drc_lms	0.25	0.24	0.25	0.22	0.20
drc_lts	0.58	0.20	0.38	0.16	0.47
drc_trimmed	0.05	0.05	0.05	0.05	0.04
drc_winsor	0.04	0.03	0.04	0.03	0.02
drc_tukey	0.02	0.02	0.02	0.02	0.01

Scenario 17

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_I
drc_lms	0.13 (0.21)	0.06 (0.12)	0.35 (0.40)	0.29 (0.51)	-1.88 (2.69)	10.80 (17.54)	-0.53 (0.69)	0.76 (1.45)	0.37 (0.55)	0.44
drc_lts	-0.00 (0.02)	0.00 (0.00)	-0.10 (0.11)	0.02 (0.03)	-0.88 (1.90)	4.40 (7.93)	0.13 (0.13)	0.03 (0.04)	-0.01 (0.12)	0.01
drc_mean	0.00 (0.02)	0.00 (0.00)	-0.00 (0.08)	0.01 (0.01)	0.14 (1.90)	3.63 (6.13)	-0.00 (0.09)	0.01 (0.01)	0.00 (0.09)	0.01
drc_median	0.00 (0.01)	0.00 (0.00)	0.00 (0.09)	0.01 (0.01)	0.02 (1.25)	1.55 (5.61)	0.00 (0.10)	0.01 (0.02)	0.00 (0.07)	0.00
drc_trimmed	0.59 (2.36)	5.90 (99.24)	101.00 (101.00)	101.00 (101.00)	101.00 (NA)	101.00 (NA)	-0.99 (3.18)	11.09 (323.97)	0.54 (1.28)	1.92 (
drc_tukey	0.17 (1.48)	2.22 (34.70)	2.23 (167.33)	101.00 (101.00)	101.00 (101.00)	101.00 (NA)	-0.03 (1.68)	2.81 (41.92)	0.03 (0.70)	0.49
drc_winsor	0.00 (0.01)	0.00 (0.00)	-0.00 (0.09)	0.01 (0.01)	-0.06 (1.45)	2.11 (3.54)	0.00 (0.10)	0.01 (0.01)	0.01 (0.08)	0.01

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	1.14 (34.42)	36.52 (1015.59)	0.52 (1.02)	0.49 (0.82)
drc_lts	0.02 (0.02)	0.08 (0.07)	2.99 (1.88)	0.09 (0.07)	0.11 (0.09)
drc_mean	0.05 (0.02)	0.19 (0.07)	8.40 (4.18)	0.19 (0.07)	0.24 (0.09)
drc_median	0.00 (0.00)	0.01 (0.01)	0.36 (0.43)	0.01 (0.01)	0.01 (0.01)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	41.07 (113.23)	14.36 (47.83)
drc_tukey	101.00 (NA)	101.00 (101.00)	101.00 (NA)	1.65 (13.87)	0.68 (11.76)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.08 (0.07)	0.00 (0.00)	0.00 (0.00)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.80	0.70	0.96	0.64	0.80
drc_median	0.04	0.03	0.10	0.02	0.05
drc_lms	0.20	0.13	0.32	0.11	0.24
drc_lts	0.27	0.20	0.55	0.16	0.29
drc_trimmed	0.30	0.31	0.34	0.32	0.31
drc_winsor	0.01	0.01	0.02	0.01	0.01
drc_tukey	0.03	0.03	0.05	0.05	0.04

Scenario 18

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMSE
drc_lms	0.01 (0.03)	0.00 (0.00)	-0.05 (0.13)	0.02 (0.03)	-1.73 (5.35)	31.63 (175.48)	0.12 (0.26)	0.08 (0.21)	0.11 (0.25)	0.07 (0.18)
drc_lts	-0.01 (0.04)	0.00 (0.00)	-0.18 (0.13)	0.05 (0.07)	101.00 (101.00)	101.00 (101.00)	0.30 (0.35)	0.21 (0.87)	0.02 (0.39)	0.15 (0.40)
drc_mean	0.00 (0.02)	0.00 (0.00)	-0.00 (0.07)	0.01 (0.01)	0.66 (4.97)	25.09 (192.80)	0.00 (0.09)	0.01 (0.01)	0.01 (0.11)	0.01 (0.02)
drc_median	0.01 (0.02)	0.00 (0.00)	0.01 (0.08)	0.01 (0.01)	-0.50 (2.76)	7.84 (48.91)	-0.01 (0.10)	0.01 (0.02)	0.04 (0.10)	0.01 (0.02)
drc_trimmed	0.05 (0.20)	0.04 (0.78)	-0.07 (0.31)	0.10 (1.07)	-0.95 (217.39)	101.00 (101.00)	0.38 (1.47)	2.30 (39.25)	0.46 (0.94)	1.10 (11.70)
drc_tukey	0.01 (0.08)	0.01 (0.19)	-0.00 (0.18)	0.03 (1.25)	4.77 (478.47)	101.00 (101.00)	0.06 (2.59)	6.74 (654.79)	0.07 (1.05)	1.11 (96.31)
drc_winsor	0.00 (0.02)	0.00 (0.00)	0.00 (0.08)	0.01 (0.01)	0.31 (3.98)	15.96 (87.79)	-0.00 (0.09)	0.01 (0.01)	0.01 (0.11)	0.01 (0.02)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	0.29 (9.47)	101.00 (101.00)	0.21 (0.52)	0.24 (0.47)
drc_lts	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.53 (1.12)	0.42 (0.80)
drc_mean	0.11 (1.89)	0.37 (0.23)	101.00 (101.00)	0.42 (0.20)	0.40 (0.20)
drc_median	0.00 (0.01)	0.02 (0.03)	1.01 (2.26)	0.02 (0.03)	0.03 (0.04)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (101.00)	101.00 (101.00)	64.35 (6310.25)	0.24 (8.50)	0.10 (2.74)
drc_winsor	0.00 (0.00)	0.02 (0.02)	1.32 (3.57)	0.02 (0.02)	0.02 (0.02)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.89	0.94	0.97	0.94	0.90
drc_median	0.08	0.06	0.12	0.06	0.08
drc_lms	0.27	0.20	0.35	0.20	0.28
drc_lts	0.29	0.30	0.56	0.31	0.28
drc_trimmed	0.10	0.11	0.12	0.12	0.09
drc_winsor	0.07	0.10	0.11	0.10	0.05
drc_tukey	0.04	0.06	0.06	0.06	0.03

Scenario 19

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1
drc_lms	0.11 (0.14)	0.03 (0.18)	0.04 (0.15)	0.02 (0.18)	-0.23 (0.52)	0.32 (0.60)	0.32 (7.62)	58.16 (3424.76)	1.80 (5.58)	34.3
drc_lts	-0.03 (0.10)	0.01 (0.01)	-0.20 (0.14)	0.06 (0.07)	-0.68 (0.49)	0.70 (0.77)	5.68 (81.75)	101.00 (101.00)	3.99 (61.78)	101.0
drc_mean	0.04 (0.11)	0.01 (0.02)	0.01 (0.12)	0.01 (0.02)	-0.03 (0.65)	0.42 (1.04)	0.16 (1.57)	2.50 (175.81)	0.80 (4.46)	20.4
drc_median	0.09 (0.11)	0.02 (0.04)	0.01 (0.13)	0.02 (0.03)	-0.32 (0.41)	0.27 (0.44)	0.29 (1.02)	1.12 (19.90)	1.45 (1.73)	5.1
drc_trimmed	0.40 (3.24)	10.63 (241.03)	0.43 (6.51)	42.50 (890.40)	0.39 (14.85)	101.00 (101.00)	2.11 (27.31)	101.00 (101.00)	7.60 (15.22)	101.0
drc_tukey	0.29 (0.99)	1.06 (7.63)	0.21 (0.97)	0.99 (7.08)	0.05 (1.21)	1.47 (5.71)	-0.98 (126.17)	101.00 (101.00)	21.69 (80.97)	101.0
drc_winsor	0.10 (0.16)	0.03 (0.08)	0.01 (0.15)	0.02 (0.03)	-0.25 (0.57)	0.39 (0.69)	2.04 (10.91)	101.00 (101.00)	6.08 (23.17)	101.0

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_lts	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_mean	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	4.64 (222.06)	5.34 (232.56)
drc_median	0.00 (0.00)	0.00 (0.00)	0.00 (0.01)	0.00 (0.01)	0.00 (0.02)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)
drc_winsor	0.00 (0.01)	0.00 (0.01)	0.00 (0.02)	0.02 (1.59)	0.01 (0.31)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.41	0.36	0.46	0.31	0.39
drc_median	0.00	0.00	0.00	0.00	0.00
drc_lms	0.38	0.37	0.38	0.36	0.38
drc_lts	0.08	0.04	0.04	0.03	0.03
drc_trimmed	0.02	0.02	0.02	0.02	0.01
drc_winsor	0.00	0.00	0.00	0.00	0.00
drc_tukey	0.00	0.00	0.00	0.01	0.00

Scenario 20

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bi
drc_lms	0.78 (23.62)	101.00 (101.00)	0.73 (23.69)	101.00 (101.00)	0.38 (23.77)	101.00 (101.00)	24.98 (1199.53)	101.00 (101.00)	4.86 (62
drc_lts	0.01 (0.11)	0.01 (0.02)	-0.13 (0.13)	0.03 (0.07)	-0.57 (0.32)	0.42 (0.39)	101.00 (101.00)	101.00 (101.00)	10.22 (43
drc_mean	0.02 (0.11)	0.01 (0.02)	-0.00 (0.09)	0.01 (0.01)	0.02 (0.54)	0.29 (0.60)	0.13 (1.68)	2.82 (254.33)	0.56 (4
drc_median	0.06 (0.13)	0.02 (0.04)	-0.00 (0.15)	0.02 (0.08)	-0.22 (0.48)	0.28 (0.57)	16.14 (216.11)	101.00 (101.00)	2.28 (9
drc_trimmed	0.54 (0.57)	0.61 (3.90)	0.46 (0.60)	0.56 (4.62)	0.00 (0.76)	0.58 (5.05)	-2.51 (7.98)	69.91 (1294.58)	7.29 (10
drc_tukey	0.84 (20.15)	101.00 (101.00)	29.70 (1260.40)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	-0.95 (21.08)	101.00 (101.00)	7.99 (34
drc_winsor	0.07 (0.12)	0.02 (0.04)	0.01 (0.09)	0.01 (0.02)	-0.18 (0.44)	0.23 (0.37)	0.25 (1.52)	2.38 (41.46)	1.68 (7

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (NA)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)
drc_lts	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_mean	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	2.55 (157.93)	3.13 (2.96)
drc_median	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	42.29 (403.41)	0.79 (5.37)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_winsor	101.00 (NA)	101.00 (NA)	101.00 (NA)	0.55 (44.06)	0.21 (12.56)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.86	0.87	0.90	0.80	0.88
drc_median	0.06	0.04	0.08	0.03	0.06
drc_lms	0.09	0.06	0.18	0.08	0.14
drc_lts	0.51	0.39	0.34	0.20	0.46
drc_trimmed	0.06	0.05	0.13	0.09	0.07
drc_winsor	0.07	0.07	0.09	0.06	0.05
drc_tukey	0.03	0.03	0.04	0.03	0.02

Scenario 21

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	-38.66 (2245.44)	101.00 (101.00)	1.03
drc_lts	-0.03 (0.08)	0.01 (0.01)	-0.18 (0.11)	0.05 (0.05)	-0.57 (0.46)	0.54 (1.05)	1.65 (2.17)	7.44 (25.52)	1.15
drc_mean	0.04 (0.10)	0.01 (0.02)	0.01 (0.10)	0.01 (0.01)	-0.03 (0.60)	0.36 (1.17)	0.15 (0.62)	0.41 (1.10)	0.67
drc_median	0.07 (0.10)	0.02 (0.03)	0.00 (0.11)	0.01 (0.02)	-0.25 (0.50)	0.31 (0.60)	0.32 (0.76)	0.68 (1.82)	1.28
drc_trimmed	0.33 (7.81)	61.06 (3786.67)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	1.20 (11.50)	101.00 (101.00)	5.65
drc_tukey	0.14 (6.72)	45.21 (3047.52)	76.70 (5176.92)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	2.29 (15.52)	101.00 (101.00)	3.42
drc_winsor	0.07 (0.11)	0.02 (0.03)	0.01 (0.11)	0.01 (0.02)	-0.19 (0.57)	0.36 (0.90)	0.30 (1.31)	1.79 (61.12)	1.33

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_lts	0.37 (31.85)	101.00 (101.00)	101.00 (101.00)	0.98 (7.49)	1.01 (5.61)
drc_mean	0.24 (0.30)	0.19 (0.12)	1.53 (1.79)	0.98 (0.82)	2.76 (2.97)
drc_median	0.00 (0.01)	0.00 (0.00)	0.01 (0.08)	0.01 (0.01)	0.02 (0.05)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	35.09 (622.86)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.01 (0.05)	0.01 (0.02)	0.01 (0.06)

Coverage probability of the true estimation:

	cp_ic5	cp_ic50	cp_ic95	cp_b0	cp_b1
drc_mean	0.67	0.58	0.67	0.58	0.66
drc_median	0.01	0.00	0.00	0.00	0.01
drc_lms	0.24	0.18	0.18	0.17	0.24
drc_lts	0.13	0.04	0.13	0.06	0.18
drc_trimmed	0.06	0.07	0.07	0.09	0.07
drc_winsor	0.01	0.01	0.01	0.01	0.00
drc_tukey	0.01	0.01	0.01	0.01	0.01

Scenario 22

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMSE
drc_lms	0.00 (0.07)	0.00 (0.08)	0.03 (0.08)	0.01 (0.05)	0.18 (0.35)	0.15 (0.30)	0.03 (3.41)	11.62 (259.19)	0.18 (4.62)	21.32 (482.6
drc_lts	-0.03 (0.05)	0.00 (0.01)	-0.11 (0.09)	0.02 (0.03)	-0.31 (0.31)	0.19 (0.30)	0.67 (2.06)	4.68 (291.46)	0.27 (1.33)	1.85 (95.57
drc_mean	0.00 (0.04)	0.00 (0.00)	0.00 (0.04)	0.00 (0.00)	0.00 (0.22)	0.05 (0.07)	0.01 (0.19)	0.03 (0.05)	0.07 (0.39)	0.16 (0.27)
drc_median	0.02 (0.04)	0.00 (0.00)	-0.00 (0.04)	0.00 (0.00)	-0.07 (0.21)	0.05 (0.06)	0.06 (0.20)	0.04 (0.07)	0.22 (0.42)	0.23 (0.39)
drc_trimmed	0.20 (1.17)	1.42 (24.09)	0.13 (1.32)	1.75 (32.68)	0.00 (1.75)	3.06 (45.68)	0.81 (25.63)	101.00 (101.00)	4.89 (15.37)	101.00 (101.0
drc_tukey	0.19 (0.87)	0.79 (4.55)	0.14 (0.88)	0.80 (4.43)	0.04 (1.06)	1.12 (3.70)	-1.64 (98.11)	101.00 (101.00)	11.20 (54.27)	101.00 (101.0
drc_winsor	0.01 (0.04)	0.00 (0.00)	0.00 (0.04)	0.00 (0.00)	-0.01 (0.23)	0.06 (0.08)	0.02 (0.21)	0.04 (0.06)	0.12 (0.43)	0.20 (0.35)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	25.64 (255.27)	13.34 (217.70)
drc_lts	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.64 (33.26)	0.23 (3.86)
drc_mean	0.05 (0.03)	0.05 (0.03)	0.31 (0.21)	0.19 (0.11)	0.47 (0.28)
drc_median	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.50	0.42	0.47	0.36	0.43
drc_median	0.00	0.00	0.00	0.00	0.00
drc_lms	0.18	0.19	0.16	0.17	0.15
drc_lts	0.05	0.03	0.06	0.03	0.07
drc_trimmed	0.02	0.02	0.02	0.03	0.02
drc_winsor	0.00	0.00	0.00	0.00	0.00
drc_tukey	0.01	0.01	0.01	0.01	0.01

Scenario 23

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias
drc_lms	17.94 (786.39)	101.00 (101.00)	18.38 (805.10)	101.00 (101.00)	18.68 (824.24)	101.00 (101.00)	-0.11 (29.75)	101.00 (101.00)	1.14 (3.28)
drc_lts	-0.01 (0.05)	0.00 (0.01)	-0.06 (0.06)	0.01 (0.02)	-0.21 (0.18)	0.08 (0.09)	0.34 (0.69)	0.60 (42.17)	0.21 (0.83)
drc_mean	0.00 (0.03)	0.00 (0.00)	0.00 (0.03)	0.00 (0.00)	0.00 (0.17)	0.03 (0.04)	0.01 (0.13)	0.02 (0.03)	0.04 (0.32)
drc_median	0.01 (0.04)	0.00 (0.00)	0.00 (0.03)	0.00 (0.00)	-0.01 (0.17)	0.03 (0.05)	0.00 (0.15)	0.02 (0.04)	0.08 (0.35)
drc_trimmed	0.57 (0.63)	0.72 (3.38)	0.58 (0.68)	0.80 (3.33)	0.32 (0.78)	0.71 (2.77)	-2.72 (17.35)	101.00 (101.00)	4.61 (10.09)
drc_tukey	0.40 (0.76)	0.74 (6.00)	0.43 (0.78)	0.79 (5.93)	0.33 (0.75)	0.67 (5.16)	-1.21 (20.57)	101.00 (101.00)	3.02 (15.88)
drc_winsor	0.01 (0.03)	0.00 (0.00)	0.00 (0.03)	0.00 (0.00)	-0.02 (0.17)	0.03 (0.05)	0.02 (0.20)	0.04 (1.67)	0.10 (0.50)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_lts	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.40 (27.92)	0.26 (0.66)
drc_mean	0.08 (0.04)	0.06 (0.03)	0.46 (0.22)	0.27 (0.12)	0.74 (0.33)
drc_median	0.00 (0.00)	0.00 (0.00)	0.01 (0.02)	0.00 (0.01)	0.01 (0.02)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	44.49 (862.01)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.75	0.69	0.77	0.65	0.71
drc_median	0.01	0.01	0.01	0.01	0.01
drc_lms	0.13	0.13	0.16	0.13	0.14
drc_lts	0.17	0.07	0.15	0.06	0.18
drc_trimmed	0.07	0.07	0.06	0.09	0.08
drc_winsor	0.00	0.00	0.00	0.00	0.00
drc_tukey	0.00	0.00	0.00	0.01	0.01

Scenario 24

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	
drc_lms	-0.02 (0.04)	0.00 (0.00)	-0.07 (0.11)	0.02 (0.19)	-0.21 (0.76)	0.63 (23.33)	0.51 (0.76)	0.84 (2.32)	0.31 (0.79)	
drc_lts	-0.02 (0.04)	0.00 (0.00)	-0.11 (0.07)	0.02 (0.02)	-0.35 (0.36)	0.26 (0.35)	0.80 (0.97)	1.58 (4.48)	0.53 (1.07)	
drc_mean	0.00 (0.03)	0.00 (0.00)	0.00 (0.03)	0.00 (0.00)	-0.00 (0.17)	0.03 (0.05)	0.01 (0.15)	0.02 (0.03)	0.05 (0.31)	
drc_median	0.01 (0.03)	0.00 (0.00)	0.00 (0.03)	0.00 (0.00)	-0.02 (0.18)	0.03 (0.06)	0.02 (0.17)	0.03 (0.04)	0.09 (0.33)	
drc_trimmed	0.09 (2.47)	6.13 (279.22)	13.08 (518.10)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	2.64 (7.67)	65.83 (622.62)	2.38 (4.79)	2
drc_tukey	0.31 (21.30)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.89 (6.17)	38.87 (495.65)	1.13 (5.25)	2
drc_winsor	0.01 (0.03)	0.00 (0.00)	0.00 (0.03)	0.00 (0.00)	-0.02 (0.18)	0.03 (0.05)	0.02 (0.16)	0.03 (0.05)	0.08 (0.32)	

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.32 (1.47)	0.55 (4.55)
drc_lts	0.03 (0.04)	0.06 (0.15)	0.29 (2.99)	0.51 (1.73)	0.60 (1.78)
drc_mean	0.08 (0.03)	0.06 (0.03)	0.45 (0.21)	0.28 (0.12)	0.70 (0.32)
drc_median	0.00 (0.00)	0.00 (0.00)	0.01 (0.02)	0.00 (0.01)	0.01 (0.02)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (NA)	101.00 (NA)	101.00 (NA)	37.34 (1612.86)	5.73 (164.72)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.75	0.66	0.75	0.62	0.70
drc_median	0.01	0.01	0.01	0.01	0.01
drc_lms	0.15	0.10	0.12	0.09	0.14
drc_lts	0.21	0.11	0.18	0.11	0.23
drc_trimmed	0.04	0.05	0.06	0.08	0.07
drc_winsor	0.00	0.00	0.00	0.00	0.00
drc_tukey	0.00	0.00	0.00	0.00	0.00

Scenario 25

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	
drc_lms	-0.00 (0.06)	0.00 (0.02)	0.02 (0.08)	0.01 (0.02)	0.16 (0.37)	0.16 (0.31)	0.13 (6.89)	47.48 (1794.83)	0.13 (4.75)	2
drc_lts	-0.03 (0.05)	0.00 (0.01)	-0.12 (0.10)	0.02 (0.04)	-0.37 (0.34)	0.26 (0.36)	0.81 (1.21)	2.12 (41.75)	0.36 (0.71)	
drc_mean	0.00 (0.04)	0.00 (0.00)	0.00 (0.04)	0.00 (0.00)	0.00 (0.23)	0.05 (0.08)	0.02 (0.20)	0.04 (0.06)	0.07 (0.39)	
drc_median	0.02 (0.04)	0.00 (0.00)	-0.00 (0.04)	0.00 (0.00)	-0.07 (0.22)	0.05 (0.07)	0.06 (0.22)	0.05 (0.07)	0.21 (0.42)	
drc_trimmed	0.28 (2.47)	6.18 (170.62)	0.34 (6.60)	43.63 (1371.05)	0.55 (18.59)	101.00 (101.00)	-2.32 (35.41)	101.00 (101.00)	5.89 (20.04)	10
drc_tukey	0.45 (5.83)	34.22 (1269.68)	0.59 (14.16)	101.00 (101.00)	0.97 (34.86)	101.00 (101.00)	-4.13 (129.33)	101.00 (101.00)	19.33 (73.25)	10
drc_winsor	0.01 (0.04)	0.00 (0.00)	0.00 (0.04)	0.00 (0.00)	-0.01 (0.24)	0.06 (0.08)	0.02 (0.53)	0.28 (22.44)	0.13 (0.85)	

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_lts	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.61 (22.04)	0.36 (9.08)
drc_mean	0.06 (0.03)	0.05 (0.03)	0.32 (0.21)	0.20 (0.11)	0.49 (0.28)
drc_median	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.52	0.43	0.47	0.36	0.44
drc_median	0.00	0.00	0.00	0.00	0.00
drc_lms	0.18	0.19	0.16	0.17	0.14
drc_lts	0.06	0.03	0.05	0.03	0.07
drc_trimmed	0.02	0.02	0.02	0.02	0.02
drc_winsor	0.00	0.00	0.00	0.00	0.00
drc_tukey	0.01	0.01	0.01	0.01	0.01

Scenario 26

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMSE
drc_lms	0.12 (0.12)	0.03 (0.04)	0.13 (0.12)	0.03 (0.05)	0.04 (0.15)	0.02 (0.06)	-0.51 (0.52)	0.54 (0.86)	0.68 (0.77)	1.05 (1.66)
drc_lts	-0.03 (0.04)	0.00 (0.00)	-0.06 (0.05)	0.01 (0.01)	-0.12 (0.11)	0.03 (0.03)	0.25 (0.17)	0.09 (0.13)	-0.03 (0.29)	0.09 (0.15)
drc_mean	0.00 (0.03)	0.00 (0.00)	-0.00 (0.03)	0.00 (0.00)	-0.00 (0.15)	0.02 (0.03)	0.01 (0.11)	0.01 (0.02)	0.04 (0.31)	0.10 (0.15)
drc_median	0.01 (0.03)	0.00 (0.00)	0.00 (0.03)	0.00 (0.00)	-0.01 (0.13)	0.02 (0.03)	-0.00 (0.13)	0.02 (0.03)	0.06 (0.29)	0.09 (0.17)
drc_trimmed	0.31 (0.44)	0.29 (0.87)	0.35 (0.52)	0.39 (1.16)	0.26 (0.61)	0.44 (1.15)	-1.63 (2.77)	10.34 (38.94)	2.21 (4.75)	27.41 (172.11)
drc_tukey	0.15 (0.35)	0.14 (0.64)	0.18 (0.40)	0.19 (0.81)	0.14 (0.42)	0.20 (0.74)	-0.74 (2.86)	8.71 (65.02)	1.00 (5.06)	26.63 (444.10)
drc_winsor	0.00 (0.03)	0.00 (0.00)	0.00 (0.03)	0.00 (0.00)	-0.01 (0.13)	0.02 (0.03)	0.01 (0.12)	0.01 (0.03)	0.06 (0.61)	0.37 (28.35)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	3.04 (15.94)	3.87 (15.19)
drc_lts	0.02 (0.04)	0.02 (0.05)	0.07 (0.08)	0.07 (0.12)	0.16 (0.22)
drc_mean	0.07 (0.03)	0.06 (0.03)	0.40 (0.20)	0.24 (0.11)	0.64 (0.31)
drc_median	0.00 (0.00)	0.00 (0.00)	0.00 (0.01)	0.00 (0.01)	0.01 (0.02)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	16.32 (470.30)	2.57 (55.75)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.67	0.64	0.76	0.66	0.65
drc_median	0.00	0.01	0.01	0.00	0.00
drc_lms	0.11	0.12	0.15	0.12	0.13
drc_lts	0.13	0.05	0.15	0.04	0.18
drc_trimmed	0.06	0.05	0.04	0.06	0.06
drc_winsor	0.00	0.00	0.00	0.00	0.00
drc_tukey	0.00	0.00	0.00	0.00	0.00

Scenario 27

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias
drc_lms	-0.01 (0.05)	0.00 (0.00)	-0.08 (0.14)	0.03 (0.46)	-0.23 (1.19)	1.48 (58.41)	0.67 (1.14)	1.75 (5.04)	0.50 (1.19)
drc_lts	-0.03 (0.05)	0.00 (0.01)	-0.12 (0.09)	0.02 (0.03)	-0.35 (0.44)	0.31 (0.48)	1.06 (1.60)	3.67 (10.36)	0.74 (1.75)
drc_mean	0.00 (0.03)	0.00 (0.00)	-0.00 (0.03)	0.00 (0.00)	-0.00 (0.15)	0.02 (0.03)	0.01 (0.13)	0.02 (0.02)	0.04 (0.30)
drc_median	0.01 (0.03)	0.00 (0.00)	0.00 (0.03)	0.00 (0.00)	-0.02 (0.15)	0.02 (0.03)	0.01 (0.14)	0.02 (0.03)	0.09 (0.31)
drc_trimmed	0.11 (2.02)	4.11 (187.58)	20.14 (1094.54)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	2.14 (11.72)	101.00 (101.00)	2.76 (5.72)
drc_tukey	0.16 (10.81)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.72 (7.15)	51.68 (1427.70)	0.81 (3.95)
drc_winsor	0.01 (0.03)	0.00 (0.00)	0.00 (0.03)	0.00 (0.00)	-0.02 (0.14)	0.02 (0.03)	0.01 (0.13)	0.02 (0.03)	0.08 (0.30)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (NA)	1.04 (46.63)	1.15 (31.86)
drc_lts	0.04 (0.05)	0.08 (0.21)	0.44 (3.67)	0.71 (2.95)	0.81 (3.04)
drc_mean	0.08 (0.04)	0.07 (0.03)	0.47 (0.24)	0.29 (0.13)	0.72 (0.34)
drc_median	0.00 (0.00)	0.00 (0.00)	0.01 (0.01)	0.00 (0.01)	0.01 (0.02)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (NA)	101.00 (NA)	101.00 (NA)	33.44 (1084.73)	9.16 (355.13)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.00 (0.01)	0.00 (0.00)	0.00 (0.01)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.73	0.69	0.81	0.71	0.72
drc_median	0.01	0.01	0.01	0.01	0.01
drc_lms	0.16	0.13	0.20	0.13	0.20
drc_lts	0.19	0.13	0.31	0.15	0.25
drc_trimmed	0.06	0.06	0.07	0.08	0.07
drc_winsor	0.01	0.01	0.01	0.01	0.00
drc_tukey	0.00	0.00	0.00	0.00	0.00

Scenario 28

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMSE
drc_lms	0.00 (0.01)	0.00 (0.00)	0.00 (0.03)	0.00 (0.00)	-0.01 (0.16)	0.03 (0.04)	-0.00 (0.09)	0.01 (0.01)	0.01 (0.06)	0.00 (0.01)
drc_lts	-0.02 (0.03)	0.00 (0.00)	-0.10 (0.07)	0.02 (0.02)	-0.45 (0.45)	0.40 (0.54)	0.35 (0.44)	0.31 (11.86)	0.10 (0.33)	0.12 (3.08)
drc_mean	0.02 (0.06)	0.00 (0.01)	0.01 (0.10)	0.01 (0.02)	-0.10 (0.70)	0.50 (0.67)	0.04 (0.32)	0.11 (0.17)	0.18 (0.45)	0.24 (0.62)
drc_median	0.02 (0.05)	0.00 (0.01)	0.00 (0.08)	0.01 (0.01)	-0.12 (0.55)	0.32 (0.59)	0.04 (0.29)	0.08 (0.19)	0.16 (0.44)	0.22 (0.84)
drc_trimmed	0.00 (0.01)	0.00 (0.00)	0.01 (0.04)	0.00 (0.00)	0.00 (0.18)	0.03 (0.07)	-0.01 (0.10)	0.01 (0.02)	0.02 (0.07)	0.00 (0.01)
drc_tukey	0.01 (0.02)	0.00 (0.00)	0.01 (0.05)	0.00 (0.01)	-0.03 (0.27)	0.07 (0.13)	-0.00 (0.14)	0.02 (0.04)	0.04 (0.12)	0.02 (0.04)
drc_winsor	0.02 (0.05)	0.00 (0.01)	0.00 (0.08)	0.01 (0.01)	-0.13 (0.51)	0.27 (0.53)	0.04 (0.28)	0.08 (0.17)	0.14 (0.44)	0.21 (3.74)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	1.49 (2.90)	1.01 (1.74)
drc_lts	0.02 (0.02)	0.03 (0.17)	0.28 (5.89)	0.24 (15.20)	0.20 (7.73)
drc_mean	0.12 (0.08)	0.14 (0.09)	1.55 (1.21)	0.42 (0.27)	0.80 (0.61)
drc_median	0.00 (0.00)	0.00 (0.00)	0.01 (0.03)	0.00 (0.01)	0.00 (0.01)
drc_trimmed	0.00 (0.00)	0.00 (0.00)	0.00 (0.01)	0.00 (0.01)	0.00 (0.00)
drc_tukey	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.03)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.63	0.47	0.64	0.42	0.63
drc_median	0.00	0.00	0.00	0.00	0.00
drc_lms	0.43	0.43	0.44	0.42	0.44
drc_lts	0.13	0.03	0.13	0.03	0.12
drc_trimmed	0.00	0.00	0.01	0.00	0.00
drc_winsor	0.00	0.00	0.00	0.00	0.00
drc_tukey	0.00	0.00	0.00	0.00	0.00

Scenario 29

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1_RMSE
drc_lms	0.02 (0.02)	0.00 (0.00)	0.05 (0.10)	0.01 (0.02)	-1.08 (3.62)	14.25 (24.05)	-0.04 (0.15)	0.02 (0.04)	0.09 (0.14)	0.03 (0.06)
drc_lts	-0.00 (0.02)	0.00 (0.00)	-0.19 (0.13)	0.06 (0.05)	-3.55 (4.73)	34.98 (58.45)	0.37 (0.31)	0.23 (0.38)	0.09 (0.21)	0.05 (0.15)
drc_mean	0.01 (0.02)	0.00 (0.00)	0.02 (0.15)	0.02 (0.04)	0.00 (4.77)	22.74 (42.94)	0.01 (0.21)	0.05 (0.07)	0.04 (0.13)	0.02 (0.05)
drc_median	0.00 (0.02)	0.00 (0.00)	0.02 (0.13)	0.02 (0.02)	-0.16 (3.33)	11.10 (20.60)	-0.00 (0.18)	0.03 (0.06)	0.03 (0.09)	0.01 (0.03)
drc_trimmed	0.02 (0.29)	0.08 (6.91)	0.06 (0.50)	0.25 (18.39)	101.00 (NA)	101.00 (NA)	-0.04 (0.78)	0.61 (31.88)	0.08 (0.69)	0.48 (15.10)
drc_tukey	0.01 (0.09)	0.01 (0.68)	0.01 (0.21)	0.05 (1.09)	101.00 (101.00)	101.00 (101.00)	0.01 (0.51)	0.26 (18.13)	0.05 (0.27)	0.07 (3.31)
drc_winsor	0.01 (0.02)	0.00 (0.00)	0.01 (0.15)	0.02 (0.04)	-0.42 (3.97)	15.96 (26.73)	0.02 (0.21)	0.04 (0.07)	0.04 (0.11)	0.01 (0.03)

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	0.38 (0.82)	0.26 (0.43)
drc_lts	0.03 (0.03)	0.14 (0.09)	6.91 (22.80)	0.29 (0.27)	0.23 (0.21)
drc_mean	0.09 (0.06)	0.42 (0.20)	22.28 (16.93)	0.49 (0.19)	0.47 (0.23)
drc_median	0.13 (10.46)	0.03 (1.12)	101.00 (101.00)	0.02 (0.12)	0.02 (0.12)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	3.72 (54.89)	6.00 (73.43)
drc_tukey	101.00 (NA)	101.00 (101.00)	101.00 (NA)	0.18 (12.31)	0.25 (16.29)
drc_winsor	0.00 (0.00)	0.01 (0.01)	0.44 (0.50)	0.01 (0.01)	0.01 (0.01)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.91	0.77	0.91	0.72	0.92
drc_median	0.07	0.03	0.07	0.03	0.07
drc_lms	0.32	0.32	0.34	0.31	0.30
drc_lts	0.48	0.12	0.33	0.10	0.39
drc_trimmed	0.07	0.07	0.07	0.06	0.06
drc_winsor	0.04	0.03	0.04	0.02	0.02
drc_tukey	0.02	0.02	0.02	0.02	0.02

Scenario 30

Comparison of point estimations (mean(std. dev)):

Methods	IC5_bias	IC5_SqE	IC50_bias	IC50_SqE	IC95_bias	IC95_RMSE	b0_bias	b0_RMSE	b1_bias	b1
drc_lms	0.00 (0.01)	0.00 (0.00)	0.01 (0.03)	0.00 (0.00)	0.07 (0.12)	0.02 (0.05)	-0.06 (0.12)	0.02 (0.07)	-0.05 (0.13)	0.0
drc_lts	-0.02 (0.03)	0.00 (0.00)	-0.07 (0.05)	0.01 (0.01)	-0.19 (0.17)	0.06 (0.09)	0.32 (0.26)	0.17 (0.26)	0.09 (0.28)	0.0
drc_mean	0.02 (0.05)	0.00 (0.00)	0.01 (0.08)	0.01 (0.01)	-0.03 (0.37)	0.14 (0.18)	0.06 (0.40)	0.16 (0.24)	0.25 (0.67)	0.5
drc_median	0.04 (0.05)	0.00 (0.01)	-0.01 (0.07)	0.00 (0.01)	-0.20 (0.30)	0.13 (0.13)	0.20 (0.40)	0.20 (0.28)	0.58 (0.67)	0.7
drc_trimmed	0.26 (0.94)	0.94 (4.04)	0.21 (0.97)	0.96 (4.03)	0.14 (1.10)	1.22 (3.00)	1.13 (20.88)	101.00 (101.00)	4.85 (10.09)	101.0
drc_tukey	1.81 (3.05)	12.52 (26.11)	1.64 (2.94)	11.30 (24.29)	1.17 (2.67)	8.48 (19.34)	-226.17 (428.85)	101.00 (101.00)	101.00 (101.00)	101.0
drc_winsor	0.03 (0.06)	0.00 (0.01)	0.01 (0.08)	0.01 (0.01)	-0.08 (0.36)	0.13 (0.20)	0.43 (4.14)	17.35 (197.79)	0.95 (6.39)	41.6

95% Confidence interval length table (mean(std. dev)):

Methods	IC5_CI.length	IC50_CI.length	IC95_CI.length	b0_CI.length	b1_CI.length
drc_lms	101.00 (101.00)	101.00 (101.00)	101.00 (101.00)	8.17 (12.44)	5.62 (8.16)
drc_lts	0.00 (0.01)	0.01 (0.01)	0.02 (0.04)	0.02 (0.06)	0.04 (0.07)
drc_mean	0.07 (0.06)	0.06 (0.05)	0.39 (0.42)	0.25 (0.17)	0.61 (0.43)
drc_median	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
drc_trimmed	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_tukey	101.00 (NA)	101.00 (NA)	101.00 (NA)	101.00 (101.00)	101.00 (101.00)
drc_winsor	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)

Coverage probability of the true estimation:

	IC5_Cov.prob	IC50_Cov.prob	IC95_Cov.prob	b0_Cov.prob	b1_Cov.prob
drc_mean	0.32	0.25	0.23	0.16	0.25
drc_median	0.00	0.00	0.00	0.00	0.00
drc_lms	0.38	0.36	0.37	0.35	0.37
drc_lts	0.03	0.01	0.03	0.01	0.02
drc_trimmed	0.00	0.00	0.00	0.00	0.00
drc_winsor	0.00	0.00	0.00	0.00	0.00
drc_tukey	0.00	0.00	0.00	0.00	0.00