Simulation Result 1: C~Exp(0.2)

Success rate, include non-converged results

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Table 1: Summary of the estimated SAUC for Biomarker1 when the true censoring is distributed as $Exp(0.2)$.

			$p = 0.7$		$p = 0.5$		$p = 0.3$	
Patients	N	Method	Median (Q1, Q3)	CR	Median (Q1, Q3)	CR	Median (Q1, Q3)	CR
50-150	20	HZ_P	0.00 (73.45, 76.48)	99.4	0.00 (73.43, 75.97)	99.2	0.00 (73.69, 75.66)	98.2
		HZ_O	1.33 (74.33, 78.03)	99.4	1.73 (74.57, 78.51)	99.2	2.35 (75.15, 79.14)	98.2
		$Prop_n$	0.56 (73.34, 77.73)	99.4	-0.12 (72.30, 77.25)	99.2	-0.95 (71.08, 76.28)	98.2
		$Prop_o$	1.32 (73.91, 78.60)	99.4	1.50 (73.63, 78.58)	99.2	1.28 (73.02, 78.95)	98.2
		$Prop_p$	0.76 (73.47, 77.88)	99.4	0.45 (73.02, 77.68)	99.2	0.02 (72.10, 77.02)	98.2
	30	HZ_P	0.00 (73.58, 75.95)	99.7	0.00 (73.54, 75.58)	99.6	0.00 (73.76, 75.32)	99.1
		HZ_O	1.10 (74.27, 77.41)	99.7	1.62 (74.54, 77.85)	99.6	2.48 (75.42, 78.57)	99.1
		$Prop_n$	0.47 (73.61, 77.12)	99.7	-0.20 (72.43, 76.43)	99.6	-0.79 (71.64, 76.14)	99.1
		$Prop_o$	0.87 (74.00, 77.81)	99.7	0.68 (73.10, 77.53)	99.6	0.74 (72.85, 77.47)	99.1
		$Prop_p$	0.59 (73.72, 77.27)	99.7	0.20 (72.84, 76.69)	99.6	-0.05 (72.28, 76.40)	99.1
	50	HZ_P	0.00 (73.78, 75.58)	100.0	0.00 (73.73, 75.38)	100.0	0.00 (73.85, 75.12)	99.9
		HZ_O	1.08 (74.67, 76.93)	100.0	1.67 (75.06, 77.32)	100.0	2.28 (75.60, 78.07)	99.9
		$Prop_n$	0.47 (73.59, 76.57)	100.0	-0.12 (73.00, 75.91)	100.0	-0.74 (71.90, 75.78)	99.9
		$Prop_o$	0.64 (73.84, 76.85)	100.0	0.31 (73.30, 76.59)	100.0	-0.07 (72.60, 76.53)	99.9
		$Prop_p$	0.51 (73.68, 76.58)	100.0	0.03 (73.16, 76.16)	100.0	-0.31 (72.42, 76.02)	99.9
	100	HZ_P	0.00 (73.87, 75.17)	100.0	0.00 (73.96, 75.05)	100.0	0.00 (73.93, 74.82)	100.0
		HZ_O	0.99 (74.75, 76.31)	100.0	1.59 (75.32, 76.94)	100.0	2.38 (75.93, 77.54)	100.0
		$Prop_n$	0.29 (73.81, 76.07)	100.0	0.03 (73.37, 76.02)	100.0	-0.37 (72.62, 75.44)	100.0
		$Prop_o$	0.42 (73.89, 76.18)	100.0	0.26 (73.61, 76.24)	100.0	-0.09 (72.99, 75.66)	100.0
		$Prop_p$	0.34 (73.85, 76.11)	100.0	0.10 (73.50, 76.13)	100.0	-0.22 (72.92, 75.48)	100.0
50-300	20	HZ_P	0.00 (74.66, 77.07)	99.4	0.00 (74.79, 76.82)	99.6	0.00 (74.99, 76.53)	98.9
		HZ_O	0.86 (75.22, 78.36)	99.4	1.56 (75.65, 78.87)	99.6	2.18 (76.18, 79.45)	98.9
		$Prop_n$	0.04 (73.60, 77.91)	99.4	-0.28 (72.87, 77.78)	99.6	-1.77 (69.71, 76.45)	98.9
		$Prop_o$	1.11 (74.93, 78.66)	99.4	1.23 (74.88, 78.91)	99.6	0.84 (74.66, 79.21)	98.9
		$Prop_p$	0.65 (74.68, 78.10)	99.4	0.62 (74.51, 77.90)	99.6	0.09 (73.93, 77.37)	98.9
	30	HZ_P	0.00 (74.85, 76.88)	100.0	0.00 (74.84, 76.53)	99.6	0.00 (75.03, 76.33)	99.7
		HZ_O	0.93 (75.43, 77.98)	100.0	1.34 (75.77, 78.34)	99.6	2.10 (76.19, 79.14)	99.7
		$Prop_n$	0.11 (74.29, 77.55)	100.0	-0.13 (73.65, 77.53)	99.6	-1.18 (71.58, 76.61)	99.7
		$Prop_o$	0.81 (75.17, 78.11)	100.0	0.76 (74.87, 78.35)	99.6	0.55 (74.59, 78.21)	99.7
		$Prop_p$	0.62 (75.03, 77.75)	100.0	0.34 (74.59, 77.53)	99.6	0.10 (74.15, 77.29)	99.7
	50	HZ_P	0.00 (74.96, 76.51)	100.0	0.00 (75.04, 76.22)	100.0	0.00 (75.08, 76.07)	100.0
		HZ_O	0.75 (75.48, 77.45)	100.0	1.13 (75.81, 77.69)	100.0	1.81 (76.36, 78.48)	100.0
		$Prop_n$	0.13 (74.75, 77.25)	100.0	-0.10 (74.30, 76.84)	100.0	-0.76 (73.01, 76.32)	100.0
		$Prop_o$	0.49 (75.15, 77.54)	100.0	0.35 (74.92, 77.23)	100.0	0.27 (74.57, 77.21)	100.0
		$Prop_p$	0.36 (75.04, 77.33)	100.0	0.17 (74.79, 76.96)	100.0	-0.02 (74.42, 76.76)	100.0
	100	HZ_P	0.00 (75.04, 76.11)	100.0	0.00 (75.10, 75.98)	100.0	0.00 (75.15, 75.81)	100.0
		HZ_O	0.72 (75.58, 76.95)	100.0	1.03 (75.92, 77.29)	100.0	1.61 (76.37, 77.76)	100.0
		$Prop_n$	0.30 (75.12, 76.74)	100.0	0.07 (74.79, 76.49)	100.0	-0.46 (74.02, 75.99)	100.0
		$Prop_o$	0.41 (75.20, 76.82)	100.0	0.29 (75.04, 76.65)	100.0	-0.05 (74.65, 76.40)	100.0
		$Prop_p$	0.38 (75.15, 76.78)	100.0	0.21 (74.96, 76.59)	100.0	-0.14 (74.54, 76.27)	100.0

Median with 25th and 75th empirical quartiles (Q1, Q3) of the SAUC at $t = 2$ are reported. N denotes the number of the published studies. Prop denotes the proposed sensitivity analysis method; HZ_P denotes the HZ model using the population (published and unpublished) studies; HZ_O denotes the HZ model using only the observed (published) studies. CR denotes the proportion of successfully convergenced estimates among 1000 repetition. All the entries are multiplied by 100.

Table 2: Summary of the estimated SAUC for Biomarker2 when the true censoring is distributed as $Exp(0.2)$.

			$p = 0.7$		$p = 0.5$		$p = 0.3$	
Patients	N	Method	Median (Q1, Q3)	CR	Median (Q1, Q3)	CR	Median (Q1, Q3)	CR
50-150	20	HZ_P	0.00 (56.65, 58.68)	98.7	0.00 (56.91, 58.64)	98.9	0.00 (57.07, 58.42)	97.8
		HZ_O	1.79 (58.40, 60.65)	98.7	2.95 (59.44, 61.90)	98.9	4.28 (60.72, 63.20)	97.8
		$Prop_n$	1.26 (57.56, 60.17)	98.7	1.78 (57.62, 61.13)	98.9	2.39 (57.02, 62.10)	97.8
		$Prop_o$	1.49 (57.82, 60.40)	98.7	2.60 (58.50, 61.74)	98.9	3.81 (59.17, 62.99)	97.8
		$Prop_p$	1.11 (57.45, 59.85)	98.7	1.43 (57.54, 60.66)	98.9	1.96 (57.22, 61.72)	97.8
	30	HZ_P	0.00 (56.95, 58.56)	99.6	0.00 (57.03, 58.42)	99.7	0.00 (57.23, 58.27)	97.6
		HZ_O	1.85 (58.67, 60.63)	99.6	2.87 (59.74, 61.60)	99.7	4.11 (60.92, 62.90)	97.6
		$Prop_n$	1.33 (57.76, 60.19)	99.6	1.85 (57.61, 61.07)	99.7	2.62 (56.93, 62.04)	97.6
		$Prop_o$	1.49 (58.03, 60.41)	99.6	2.51 (58.64, 61.39)	99.7	3.89 (60.12, 62.79)	97.6
		$Prop_p$	1.00 (57.67, 59.81)	99.6	1.52 (57.69, 60.63)	99.7	2.42 (57.32, 61.83)	97.6
	50	HZ_P	0.00 (57.09, 58.33)	99.9	0.00 (57.16, 58.24)	99.6	0.00 (57.32, 58.15)	95.8
		HZ_O	1.85 (58.88, 60.38)	99.9	2.94 (59.98, 61.41)	99.6	4.27 (61.22, 62.73)	95.8
		$Prop_n$	1.40 (58.21, 60.02)	99.9	1.98 (57.55, 60.92)	99.6	3.13 (56.98, 62.14)	95.8
		$Prop_o$	1.53 (58.21, 60.14)	99.9	2.75 (59.44, 61.24)	99.6	4.11 (60.66, 62.64)	95.8
		$Prop_p$	1.05 (57.76, 59.65)	99.9	1.75 (57.61, 60.63)	99.6	2.83 (57.09, 61.98)	95.8
	100	HZ_P	0.00 (57.31, 58.19)	100.0	0.00 (57.36, 58.10)	99.6	0.00 (57.44, 58.02)	95.9
		HZ_O	1.92 (59.13, 60.14)	100.0	2.96 (60.14, 61.21)	99.6	4.26 (61.44, 62.53)	95.9
		$Prop_n$	1.74 (58.71, 60.03)	100.0	1.87 (57.27, 60.72)	99.6	3.46 (57.19, 62.11)	95.9
		$Prop_o$	1.73 (58.51, 60.05)	100.0	2.84 (59.81, 61.14)	99.6	4.21 (61.30, 62.50)	95.9
		$Prop_p$	1.29 (57.97, 59.72)	100.0	1.97 (57.54, 60.69)	99.6	3.69 (57.61, 62.17)	95.9
50-300	20	HZ_P	0.00 (57.09, 58.64)	97.8	0.00 (57.31, 58.54)	97.8	0.00 (57.50, 58.38)	94.2
		HZ_O	1.36 (58.30, 60.07)	97.8	2.18 (59.24, 60.89)	97.8	3.13 (60.11, 61.99)	94.2
		$Prop_n$	0.55 (57.41, 59.46)	97.8	1.02 (57.46, 60.09)	97.8	1.58 (57.18, 61.26)	94.2
		$Prop_o$	1.01 (57.82, 59.91)	97.8	1.77 (58.02, 60.76)	97.8	2.85 (58.70, 61.94)	94.2
		$Prop_p$	0.47 (57.46, 59.23)	97.8	0.46 (57.17, 59.43)	97.8	-0.03 (56.53, 59.14)	94.2
	30	HZ_P	0.00 (57.24, 58.59)	97.4	0.00 (57.37, 58.37)	97.5	0.00 (57.52, 58.33)	95.1
		HZ_O	1.39 (58.57, 60.05)	97.4	2.22 (59.44, 60.82)	97.5	3.15 (60.30, 61.81)	95.1
		$Prop_n$	0.47 (57.61, 59.26)	97.4	0.84 (57.41, 60.03)	97.5	1.98 (57.25, 61.33)	95.1
		$Prop_o$	0.87 (57.73, 59.89)	97.4	1.51 (57.65, 60.60)	97.5	2.86 (58.83, 61.78)	95.1
		$Prop_p$	0.37 (57.47, 59.11)	97.4	0.23 (57.19, 59.03)	97.5	-0.32 (56.63, 58.77)	95.1
	50	HZ_P	0.00 (57.47, 58.40)	99.0	0.00 (57.50, 58.35)	98.3	0.00 (57.60, 58.23)	95.5
		HZ_O	1.40 (58.82, 59.91)	99.0	2.16 (59.55, 60.68)	98.3	3.17 (60.50, 61.64)	95.5
		$Prop_n$	0.36 (57.62, 59.03)	99.0	0.55 (57.47, 59.76)	98.3	2.20 (57.51, 61.22)	95.5
		$Prop_o$	0.67 (57.72, 59.49)	99.0	1.27 (57.64, 60.38)	98.3	3.01 (59.34, 61.58)	95.5
		$Prop_p$	0.27 (57.61, 58.89)	99.0	0.03 (57.18, 58.74)	98.3	-0.48 (56.64, 58.30)	95.5
	100	HZ_P	0.00 (57.56, 58.21)	99.1	0.00 (57.61, 58.18)	99.6	0.00 (57.68, 58.15)	94.1
		HZ_O	1.38 (58.92, 59.64)	99.1	2.20 (59.71, 60.53)	99.6	3.11 (60.66, 61.49)	94.1
		$Prop_n$	0.12 (57.53, 58.50)	99.1	0.12 (57.29, 59.57)	99.6	2.56 (57.42, 61.18)	94.1
		$Prop_o$	0.28 (57.61, 58.89)	99.1	0.65 (57.48, 60.04)	99.6	3.01 (60.03, 61.45)	94.1
		$Prop_p$	0.11 (57.52, 58.45)	99.1	-0.18 (57.17, 58.29)	99.6	-0.62 (56.69, 57.91)	94.1

Median with 25th and 75th empirical quartiles (Q1, Q3) of the SAUC at $t = 2$ are reported. N denotes the number of the published studies. Prop denotes the proposed sensitivity analysis method; HZ_P denotes the HZ model using the population (published and unpublished) studies; HZ_O denotes the HZ model using only the observed (published) studies. CR denotes the proportion of successfully convergenced estimates among 1000 repetition. All the entries are multiplied by 100.

Table 3: Summary of the estimated SAUC for Biomarker1 when the true censoring is distributed as $U(1,4)$, but a misspecified exponential distribution is fitted.

			$p = 0.7$		$p = 0.5$		$p = 0.3$	
Patients	N	Method	Median (Q1, Q3)	CR	Median (Q1, Q3)	CR	Median (Q1, Q3)	CR
50-150	20	HZ_P	0.00 (73.54, 76.47)	99.9	0.00 (73.75, 76.05)	100	0.00 (74.04, 75.88)	100.0
		HZ_O	1.22 (74.13, 78.10)	99.9	1.86 (74.77, 78.67)	100	2.65 (75.62, 79.53)	100.0
		$Prop_n$	1.37 (74.01, 78.84)	99.9	0.42 (72.79, 77.89)	100	-1.21 (71.39, 76.53)	100.0
		$Prop_o$	2.08 (74.91, 79.43)	99.9	2.42 (74.61, 79.83)	100	2.26 (73.85, 80.34)	100.0
		$Prop_p$	1.40 (74.27, 78.62)	99.9	0.93 (73.57, 77.99)	100	0.17 (72.99, 77.49)	100.0
	30	HZ_P	0.00 (73.89, 76.20)	100.0	0.00 (73.98, 75.91)	100	0.00 (74.06, 75.66)	100.0
		HZ_O	1.19 (74.85, 77.58)	100.0	1.84 (75.36, 78.17)	100	2.39 (75.80, 78.85)	100.0
		$Prop_n$	1.14 (74.35, 78.33)	100.0	0.41 (73.20, 77.59)	100	-1.26 (71.47, 75.97)	100.0
		$Prop_o$	1.85 (74.82, 79.14)	100.0	1.82 (74.40, 79.05)	100	1.53 (73.55, 79.17)	100.0
		$Prop_p$	1.22 (74.64, 78.23)	100.0	0.84 (73.92, 77.63)	100	-0.03 (72.72, 76.92)	100.0
	50	HZ_P	0.00 (73.92, 75.78)	100.0	0.00 (74.04, 75.59)	100	0.00 (74.21, 75.36)	100.0
		HZ_O	1.01 (74.84, 77.03)	100.0	1.50 (75.05, 77.39)	100	2.18 (75.87, 78.08)	100.0
		$Prop_n$	0.92 (74.36, 77.53)	100.0	0.11 (73.09, 76.49)	100	-1.40 (71.84, 75.31)	100.0
		$Prop_o$	1.29 (74.65, 78.08)	100.0	0.95 (73.70, 77.91)	100	0.28 (73.05, 77.74)	100.0
		$Prop_p$	1.00 (74.50, 77.38)	100.0	0.27 (73.51, 76.59)	100	-0.38 (72.73, 76.17)	100.0
	100	HZ_P	0.00 (74.14, 75.41)	100.0	0.00 (74.27, 75.28)	100	0.00 (74.30, 75.19)	100.0
		HZ_O	1.00 (74.98, 76.59)	100.0	1.55 (75.54, 77.10)	100	2.27 (76.18, 77.76)	100.0
		$Prop_n$	0.74 (74.46, 76.75)	100.0	0.10 (73.64, 76.24)	100	-1.14 (72.32, 74.97)	100.0
		$Prop_o$	0.86 (74.51, 77.01)	100.0	0.47 (74.01, 76.66)	100	-0.05 (73.23, 76.53)	100.0
		$Prop_p$	0.73 (74.48, 76.72)	100.0	0.22 (73.85, 76.25)	100	-0.42 (73.01, 75.60)	100.0
50-300	20	HZ_P	0.00 (75.28, 77.32)	99.9	0.00 (75.17, 77.04)	100	0.00 (75.20, 76.64)	99.9
		HZ_O	0.91 (75.76, 78.71)	99.9	1.61 (76.27, 79.15)	100	2.27 (76.68, 79.81)	99.9
		$Prop_n$	1.01 (74.27, 80.09)	99.9	0.71 (73.69, 79.38)	100	-0.72 (71.38, 77.56)	99.9
		$Prop_o$	1.82 (75.16, 80.72)	99.9	2.05 (75.32, 81.35)	100	2.04 (74.75, 81.51)	99.9
		$Prop_p$	1.21 (75.14, 79.55)	99.9	0.78 (74.83, 78.65)	100	0.08 (74.26, 77.71)	99.9
	30	HZ_P	0.00 (75.08, 76.99)	100.0	0.00 (75.14, 76.71)	100	0.00 (75.30, 76.36)	100.0
		HZ_O	0.91 (75.62, 78.19)	100.0	1.52 (76.27, 78.79)	100	2.34 (76.64, 79.48)	100.0
		$Prop_n$	0.61 (74.55, 79.18)	100.0	0.58 (73.80, 78.95)	100	-0.49 (72.40, 77.26)	100.0
		$Prop_o$	1.21 (75.08, 79.86)	100.0	1.41 (74.93, 80.52)	100	1.36 (74.52, 80.73)	100.0
		$Prop_p$	0.88 (75.11, 78.73)	100.0	0.57 (74.86, 78.17)	100	0.22 (74.49, 77.57)	100.0
	50	HZ_P	0.00 (75.23, 76.61)	100.0	0.00 (75.36, 76.50)	100	0.00 (75.34, 76.26)	100.0
		HZ_O	0.75 (75.82, 77.63)	100.0	1.38 (76.24, 78.24)	100	1.98 (76.50, 79.06)	100.0
		$Prop_n$	0.54 (74.95, 78.27)	100.0	0.21 (74.18, 77.92)	100	-0.79 (72.96, 76.79)	100.0
		$Prop_o$	0.77 (75.36, 78.82)	100.0	0.80 (75.00, 78.84)	100	0.34 (74.46, 78.70)	100.0
		$Prop_p$	0.66 (75.38, 78.08)	100.0	0.51 (75.08, 77.62)	100	-0.18 (74.52, 76.95)	100.0
	100	HZ_P	0.00 (75.31, 76.34)	100.0	0.00 (75.37, 76.19)	100	0.00 (75.40, 76.05)	100.0
		HZ_O	0.65 (75.79, 77.16)	100.0	1.04 (76.15, 77.60)	100	1.62 (76.62, 78.16)	100.0
		$Prop_n$	0.35 (75.25, 77.34)	100.0	-0.14 (74.52, 76.81)	100	-1.10 (73.27, 75.74)	100.0
		$Prop_o$	0.47 (75.39, 77.43)	100.0	0.35 (75.17, 77.16)	100	-0.38 (74.40, 76.49)	100.0
		$Prop_p$	0.46 (75.47, 77.20)	100.0	0.21 (75.11, 76.89)	100	-0.45 (74.47, 76.16)	100.0

Median with 25th and 75th empirical quartiles (Q1, Q3) of the SAUC at $t = 2$ are reported. N denotes the number of the published studies. Prop denotes the proposed sensitivity analysis method; HZ_P denotes the HZ model using the population (published and unpublished) studies; HZ_O denotes the HZ model using only the observed (published) studies. CR denotes the proportion of successfully convergenced estimates among 1000 repetition. All the entries are multiplied by 100.

Table 4: Summary of the estimated SAUC for Biomarker2 when the true censoring is distributed as $U(1,4)$, but a misspecified exponential distribution is fitted.

			$p = 0.7$		$p = 0.5$		$p = 0.3$	
Patients	N	Method	Median (Q1, Q3)	CR	Median (Q1, Q3)	CR	Median (Q1, Q3)	CR
50-150	20	HZ_P	0.00 (56.84, 58.68)	99.3	0.00 (56.96, 58.65)	99.6	0.00 (57.16, 58.39)	99.2
		HZ_O	2.04 (58.64, 60.88)	99.3	3.29 (59.90, 62.16)	99.6	4.68 (61.29, 63.67)	99.2
		$Prop_n$	1.02 (57.30, 60.27)	99.3	1.63 (57.16, 61.33)	99.6	2.44 (56.70, 62.73)	99.2
		$Prop_o$	1.94 (58.21, 60.94)	99.3	2.98 (59.17, 62.13)	99.6	4.40 (60.38, 63.62)	99.2
		$Prop_p$	0.93 (57.60, 59.84)	99.3	1.03 (57.39, 60.22)	99.6	0.65 (56.70, 60.35)	99.2
	30	HZ_P	0.00 (56.99, 58.42)	99.3	0.00 (57.13, 58.40)	99.7	0.00 (57.29, 58.32)	98.9
		HZ_O	2.07 (58.96, 60.71)	99.3	3.29 (60.17, 61.93)	99.7	4.70 (61.65, 63.44)	98.9
		$Prop_n$	1.08 (57.54, 60.01)	99.3	1.48 (57.10, 61.18)	99.7	3.37 (56.81, 62.87)	98.9
		$Prop_o$	1.88 (58.42, 60.57)	99.3	2.88 (59.07, 61.74)	99.7	4.37 (60.11, 63.25)	98.9
		$Prop_p$	0.86 (57.60, 59.57)	99.3	0.83 (57.28, 59.96)	99.7	0.23 (56.56, 60.13)	98.9
	50	HZ_P	0.00 (57.27, 58.43)	99.9	0.00 (57.34, 58.29)	99.6	0.00 (57.37, 58.16)	98.4
		HZ_O	2.06 (59.30, 60.62)	99.9	3.26 (60.49, 61.76)	99.6	4.64 (61.72, 63.12)	98.4
		$Prop_n$	0.95 (57.69, 60.10)	99.9	1.24 (57.26, 61.16)	99.6	3.88 (57.00, 62.82)	98.4
		$Prop_o$	1.70 (58.39, 60.48)	99.9	2.81 (58.53, 61.55)	99.6	4.35 (59.47, 63.01)	98.4
		$Prop_p$	0.60 (57.77, 59.39)	99.9	0.48 (57.39, 59.55)	99.6	-0.09 (56.48, 59.24)	98.4
	100	HZ_P	0.00 (57.37, 58.21)	99.8	0.00 (57.47, 58.17)	99.6	0.00 (57.54, 58.08)	99.6
		HZ_O	2.04 (59.38, 60.32)	99.8	3.32 (60.64, 61.59)	99.6	4.64 (61.98, 62.94)	99.6
		$Prop_n$	0.85 (57.57, 59.89)	99.8	1.12 (57.23, 61.14)	99.6	4.38 (57.18, 62.83)	99.6
		$Prop_o$	1.72 (58.60, 60.14)	99.8	2.75 (58.17, 61.33)	99.6	4.15 (57.73, 62.72)	99.6
		$Prop_p$	0.54 (57.69, 59.07)	99.8	0.11 (57.24, 58.84)	99.6	-0.55 (56.42, 58.31)	99.6
50-300	20	HZ_P	0.00 (57.28, 58.74)	98.1	0.00 (57.33, 58.50)	98.1	0.00 (57.50, 58.45)	96.7
		HZ_O	1.51 (58.68, 60.39)	98.1	2.43 (59.49, 61.11)	98.1	3.40 (60.52, 62.26)	96.7
		$Prop_n$	0.58 (57.52, 59.78)	98.1	0.66 (57.36, 59.97)	98.1	1.59 (57.22, 61.51)	96.7
		$Prop_o$	1.46 (58.31, 60.47)	98.1	2.22 (58.74, 61.12)	98.1	3.33 (60.08, 62.37)	96.7
		$Prop_p$	0.39 (57.45, 59.34)	98.1	0.13 (57.16, 58.98)	98.1	-0.27 (56.65, 58.71)	96.7
	30	HZ_P	0.00 (57.37, 58.56)	98.2	0.00 (57.43, 58.41)	97.3	0.00 (57.58, 58.30)	98.9
		HZ_O	1.53 (58.84, 60.14)	98.2	2.46 (59.66, 61.00)	97.3	3.42 (60.65, 61.98)	98.9
		$Prop_n$	0.39 (57.49, 59.34)	98.2	0.39 (57.33, 59.76)	97.3	2.11 (57.21, 61.48)	98.9
		$Prop_o$	1.22 (58.07, 60.01)	98.2	2.20 (58.58, 61.01)	97.3	3.32 (60.09, 61.94)	98.9
		$Prop_p$	0.25 (57.47, 58.98)	98.2	0.08 (57.23, 58.74)	97.3	-0.35 (56.65, 58.38)	98.9
	50	HZ_P	0.00 (57.50, 58.43)	98.1	0.00 (57.51, 58.30)	98.7	0.00 (57.66, 58.22)	99.3
		HZ_O	1.53 (58.97, 59.99)	98.1	2.42 (59.83, 60.86)	98.7	3.42 (60.79, 61.83)	99.3
		$Prop_n$	0.29 (57.54, 58.99)	98.1	0.24 (57.32, 59.35)	98.7	0.98 (56.96, 61.42)	99.3
		$Prop_o$	1.00 (58.00, 59.77)	98.1	2.08 (58.07, 60.79)	98.7	3.26 (59.88, 61.81)	99.3
		$Prop_p$	0.21 (57.58, 58.79)	98.1	-0.06 (57.19, 58.53)	98.7	-0.52 (56.64, 58.12)	99.3
	100	HZ_P	0.00 (57.63, 58.24)	99.6	0.00 (57.68, 58.18)	99.6	0.00 (57.73, 58.13)	99.9
		HZ_O	1.54 (59.11, 59.83)	99.6	2.41 (59.99, 60.72)	99.6	3.47 (61.02, 61.75)	99.9
		$Prop_n$	0.15 (57.65, 58.58)	99.6	0.02 (57.37, 58.63)	99.6	2.89 (57.20, 61.58)	99.9
		$Prop_o$	0.55 (57.86, 59.44)	99.6	2.01 (57.85, 60.59)	99.6	3.30 (60.28, 61.67)	99.9
		$Prop_p$	0.13 (57.65, 58.50)	99.6	-0.13 (57.27, 58.30)	99.6	-0.59 (56.75, 57.93)	99.9

Median with 25th and 75th empirical quartiles (Q1, Q3) of the SAUC at $t = 2$ are reported. N denotes the number of the published studies. Prop denotes the proposed sensitivity analysis method; HZ_P denotes the HZ model using the population (published and unpublished) studies; HZ_O denotes the HZ model using only the observed (published) studies. CR denotes the proportion of successfully convergenced estimates among 1000 repetition. All the entries are multiplied by 100.