Article title: Analyzing self-controlled case series data when case confirmation rates are estimated from an internal validation sample

Programs in folder q0_50_q1_50	**Produced results in**	**parameters**	**Methods**
all reviewed_alpha_neg12_beta_069_q0_50_q1_50	Table 3, Table 5	β_0=-12 β_1=0.69 q_0=50% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(100 100 100 100),	Confirmed case only
all reviewed_alpha_neg13_beta_069_q0_50_q1_50	Table 4, Table 5	β_0=-13 β_1=0.69 q_0=50% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(100 100 100 100)	Confirmed case only
all reviewed_type 1 error_alpha_neg12_beta_0_q0_50_q1_50	Table 2	β_0=-12 β_1=0 q_0=50% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(100 100 100 100)	Confirmed case only
all reviewed_type 1 error_alpha_neg13_beta_0_q0_50_q1_50	Table 2	β_0=-13 β_1=0 q_0=50% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(100 100 100 100)	Confirmed case only
alpha_neg12_beta_069_q0_50_q1_50	Table 3, Table 5	β_0=-12 β_1=0.69 q_0=50% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(80 80 80 80), (50 50 50 50), (80 100 80 100), and (50 100 50 100)	Observed, Confirmed case only, known confirmation rate, Multiple imputation
alpha_neg13_beta_069_q0_50_q1_50	Table 4, Table 5	β_0=-13 β_1=0.69 q_0=50% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(80 80 80 80), (50 50 50 50), (80 100 80 100), and (50 100 50 100)	Observed, Confirmed case only, known confirmation rate, Multiple imputation
Type 1 error_alpha_neg12_beta_0_q0_50_q1_50	Table 2	β_0=-12 β_1=0 q_0=50% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(80 80 80 80), (50 50 50 50), (80 100 80 100), and (50 100 50 100)	Observed, Confirmed case only, known confirmation rate, Multiple imputation
Type 1 error_alpha_neg13_beta_0_q0_50_q1_50	Table 2	β_0=-13 β_1=0 q_0=50% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(80 80 80 80), (50 50 50 50), (80 100 80 100), and (50 100 50 100)	Observed, Confirmed case only, known confirmation rate, Multiple imputation
Programs in folder q0_80_q1_50			
all reviewed_alpha_neg12_beta_069_q0_80_q1_50	Table 3, Table 5	β_0=-12 β_1=0.69 q_0=80% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(100 100 100 100),	Confirmed case only
all reviewed_alpha_neg13_beta_069_q0_80_q1_50	Table 4, Table 5	β_0=-13 β_1=0.69 q_0=80% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(100 100 100 100)	Confirmed case only
all reviewed_type 1 error_alpha_neg12_beta_0_q0_80_q1_50	Table 2	β_0=-12 β_1=0 q_0=80% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(100 100 100 100)	Confirmed case only
all reviewed_type 1 error_alpha_neg13_beta_0_q0_80_q1_50	Table 2	β_0=-13 β_1=0 q_0=80% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(100 100 100 100)	Confirmed case only
alpha_neg12_beta_069_q0_80_q1_50	Table 3, Table 5	β_0=-12 β_1=0.69 q_0=80% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(80 80 80 80), (50 50 50 50), (80 100 80 100), and =(50 100 50 100)	Observed, Confirmed case only, known confirmation rate, Multiple imputation
alpha_neg12_beta_069_q0_80_q1_50	Table 4, Table 5	β_0=-13 β_1=0.69 q_0=80% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(80 80 80 80), (50 50 50 50), (80 100 80 100), and (50 100 50 100)	Observed, Confirmed case only, known confirmation rate, Multiple imputation
Type I error_alpha_neg12_beta_0_q0_80_q1_50	Table 2	β_0=-12 β_1=0 q_0=80% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(80 80 80 80), (50 50 50 50), (80 100 80 100), and (50 100 50 100)	Observed, Confirmed case only, known confirmation rate, Multiple imputation
Type I error_alpha_neg12_beta_0_q0_80_q1_50	Table 2	β_0=-13 β_1=0 q_0=80% q_1=50% (R_{M0} R_{M1} R_{L0} R_{L1}) =(80 80 80 80), (50 50 50 50), (80 100 80 100), and (50 100 50 100)	Observed, Confirmed case only, known confirmation rate, Multiple imputation

Programs in folder q0_50_q1_80			
all reviewed_alpha_neg12_beta_069_q0_50_q1_80	Table 3, Table 5	β_0=-12 β_1=0.69 q_0=50% q_1=80% (R_{M0} R_{M1} R_{L0} R_{L1}) =(100 100 100 100),	Confirmed case only
all reviewed_alpha_neg13_beta_069_q0_50_q1_80	Table 4, Table 5	β_0=-13 β_1=0.69 q_0=50% q_1=80% (R_{M0} R_{M1} R_{L0} R_{L1}) =(100 100 100 100)	Confirmed case only
all reviewed_type 1 error_alpha_neg12_beta_0_q0_50_q1_80	Table 2	β_0=-12 β_1=0 q_0=50% q_1=80% (R_{M0} R_{M1} R_{L0} R_{L1}) =(100 100 100 100)	Confirmed case only
all reviewed_type 1 error_alpha_neg13_beta_0_q0_50_q1_80	Table 2	β_0=-13 β_1=0 q_0=50% q_1=80% (R_{M0} R_{M1} R_{L0} R_{L1}) =(100 100 100 100)	Confirmed case only
alpha_neg12_beta_069_q0_50_q1_80	Table 3, Table 5	β_0=-12 β_1=0.69 q_0=50% q_1=80% (R_{M0} R_{M1} R_{L0} R_{L1}) =(80 80 80 80), (50 50 50 50), (80 100 80 100), and (50 100 50 100)	Observed, Confirmed case only, known confirmation rate, Multiple imputation
alpha_neg13_beta_069_q0_50_q1_80	Table 4, Table 5	β_0=-13 β_1=0.69 q_0=50% q_1=80% (R_{M0} R_{M1} R_{L0} R_{L1}) =(80 80 80 80), (50 50 50 50), (80 100 80 100), and (50 100 50 100)	Observed, Confirmed case only, known confirmation rate, Multiple imputation
Type I error_alpha_neg12_beta_0_q0_50_q1_80	Table 2	β_0=-12 β_1=0 q_0=50% q_1=80% (R_{M0} R_{M1} R_{L0} R_{L1}) =(80 80 80 80), (50 50 50 50), (80 100 80 100), and (50 100 50 100)	Observed, Confirmed case only, known confirmation rate, Multiple imputation
Type I error_alpha_neg13_beta_0_q0_50_q1_80	Table 2	β_0=-13 β_1=0 q_0=50% q_1=80% (R_{M0} R_{M1} R_{L0} R_{L1}) =(80 80 80 80), (50 50 50 50), (80 100 80 100), and (50 100 50 100)	Observed, Confirmed case only, known confirmation rate, Multiple imputation

defining/explaining all the variables that are used in your macros:

sim_start: where the simulation starts in the macro;
numsim: where the simulation ends in the macro; number of simulated datasets would be (numsim - sim_start+1)
Nsubj: number of subjects in each simulated dataset
Studyend: study follow-up period, which was set to 360 days for all simulations
Riskwindow: risk window represents a period time after vaccination that may have elevated risk of outcome. It was set to 42 days in all simulations;
Alpha: it is the intercept in the simulation model. It determined the baseline incidence rate. In the paper it is β_0;
Beta: the coefficient for the vaccination effect. In the paper, it is β_1;
true_confirm_rate_S0: true positive confirmation rate for unexposed cases at the small site;
true_confirm_rate_S1: true positive confirmation rate for exposed cases at the small site;
true_confirm_rate_M0: true positive confirmation rate for unexposed cases at the medium site;
true_confirm_rate_M1: true positive confirmation rate for exposed cases at the medium site;
true_confirm_rate_L0: true positive confirmation rate for unexposed cases at the large site;
true_confirm_rate_L1: true positive confirmation rate for exposed cases at the large site;

chart_review_p_S0: proportion of reviewed cases for unexposed cases at the small site;

chart_review_p_S1: proportion of reviewed cases for exposed cases at the small site;
chart_review_p_M0: proportion of reviewed cases for unexposed cases at the medium site;
chart_review_p_M1: proportion of reviewed cases for exposed cases at the medium site;
chart_review_p_L0: proportion of reviewed cases for unexposed cases at the large site;
chart_review_p_L1: proportion of reviewed cases for exposed cases at the large site;