

Supplementary Table 13. Stratification analysis of the incident risk of other diseases of the gallbladder and the pancreas following zoster vaccination in the propensity score-matched cohort

Others ^{a)}	Events, n (%)	Incidence rate ^{c)}	aHR (95% CI)	
			Model 1 ^{d)}	Model 2 ^{e)}
Sex				
Male				
Unvaccinated	10,269 (3.23)	2.55	1.0 (reference)	1.0 (reference)
Vaccinated	8817 (2.74)	2.43	0.92 (0.90 to 0.95) ^{f)}	0.92 (0.89 to 0.95) ^{f)}
Female				
Unvaccinated	14,280 (3.45)	3.55	1.0 (reference)	1.0 (reference)
Vaccinated	13,255 (3.24)	3.65	0.97 (0.95 to 1.00)	0.96 (0.94 to 0.99)
Age (yr)				
< 60				
Unvaccinated	9,438 (4.85)	2.35	1.0 (reference)	1.0 (reference)
Vaccinated	7,886 (4.01)	2.17	0.86 (0.84 to 0.89) ^{f)}	0.86 (0.83 to 0.88) ^{f)}
≥ 60				
Unvaccinated	15,111 (2.82)	3.75	1.0 (reference)	1.0 (reference)
Vaccinated	14,186 (2.65)	3.91	1.01 (0.99 to 1.03)	1.00 (0.98 to 1.03)
Region of residence				
Urban				
Unvaccinated	12,249 (3.61)	3.04	1.0 (reference)	1.0 (reference)
Vaccinated	11,380 (3.35)	3.14	0.98 (0.95 to 1.00)	0.97 (0.95 to 1.00)
Rural				
Unvaccinated	12,300 (3.14)	3.06	1.0 (reference)	1.0 (reference)
Vaccinated	10,692 (2.73)	2.95	0.93 (0.90 to 0.95) ^{f)}	0.92 (0.90 to 0.95) ^{f)}
Household income				
Low (0th–39th percentile)				
Unvaccinated	6,780 (3.21)	1.68	1.0 (reference)	1.0 (reference)
Vaccinated	6,004 (2.86)	1.65	0.95 (0.92 to 0.98) ^{f)}	0.94 (0.91 to 0.98) ^{f)}
Middle (40th–79th percentile)				
Unvaccinated	8,636 (3.27)	2.15	1.0 (reference)	1.0 (reference)
Vaccinated	7,562 (2.89)	2.08	0.95 (0.92 to 0.98) ^{f)}	0.94 (0.91 to 0.97) ^{f)}
High (80th–100th percentile)				
Unvaccinated	9,133 (3.58)	2.27	1.0 (reference)	1.0 (reference)
Vaccinated	8,506 (3.28)	2.34	0.96 (0.93 to 0.99) ^{f)}	0.95 (0.93 to 0.98) ^{f)}
Body mass index (kg/m ²)				
< 23.0				
Unvaccinated	7,023 (3.67)	1.75	1.0 (reference)	1.0 (reference)
Vaccinated	6,483 (3.39)	1.79	0.97 (0.94 to 1.00)	0.96 (0.93 to 0.99) ^{f)}
23.0–24.9				
Unvaccinated	7,038 (3.51)	1.75	1.0 (reference)	1.0 (reference)
Vaccinated	6,359 (3.20)	1.75	0.97 (0.94 to 1.00)	0.96 (0.93 to 0.99) ^{f)}
≥ 25.0				
Unvaccinated	10,488 (3.09)	2.61	1.0 (reference)	1.0 (reference)
Vaccinated	9,230 (2.71)	2.54	0.93 (0.90 to 0.96) ^{f)}	0.93 (0.90 to 0.95) ^{f)}

Supplementary Table 13. Continued

Others ^{a)}	Events, n (%)	Incidence rate ^{c)}	aHR (95% CI)	
			Model 1 ^{d)}	Model 2 ^{e)}
Smoking status ^{b)}				
Non-smoker				
Unvaccinated	17,332 (3.43)	4.31	1.0 (reference)	1.0 (reference)
Vaccinated	15,664 (3.13)	4.32	0.96 (0.94 to 0.98) ^{f)}	0.95 (0.93 to 0.97) ^{f)}
Smoker				
Unvaccinated	7,217 (3.20)	1.79	1.0 (reference)	1.0 (reference)
Vaccinated	6,408 (2.78)	1.77	0.94 (0.91 to 0.97) ^{f)}	0.94 (0.91 to 0.97) ^{f)}
Alcohol consumption (day per week)				
< 1				
Unvaccinated	11,471 (2.83)	2.85	1.0 (reference)	1.0 (reference)
Vaccinated	9,229 (2.29)	2.54	0.86 (0.83 to 0.88) ^{f)}	0.85 (0.83 to 0.88) ^{f)}
1–4				
Unvaccinated	12,686 (4.05)	3.15	1.0 (reference)	1.0 (reference)
Vaccinated	12,463 (3.97)	3.43	1.02 (0.99 to 1.05)	1.02 (0.99 to 1.04)
≥ 5				
Unvaccinated	392 (3.25)	0.10	1.0 (reference)	1.0 (reference)
Vaccinated	380 (2.88)	0.10	0.96 (0.83 to 1.11)	0.95 (0.82 to 1.09)
Physical activity				
Insufficient physical activity				
Unvaccinated	18,630 (3.32)	4.63	1.0 (reference)	1.0 (reference)
Vaccinated	16,665 (3.00)	4.59	0.96 (0.94 to 0.98) ^{f)}	0.95 (0.93 to 0.97) ^{f)}
Sufficient physical activity				
Unvaccinated	5,919 (3.48)	1.47	1.0 (reference)	1.0 (reference)
Vaccinated	5,407 (3.08)	1.49	0.94 (0.91 to 0.98) ^{f)}	0.93 (0.90 to 0.97) ^{f)}
Medication use for coronary artery disease				
No				
Unvaccinated	23,679 (3.36)	5.88	1.0 (reference)	1.0 (reference)
Vaccinated	21,279 (3.02)	5.86	0.95 (0.93 to 0.97) ^{f)}	0.95 (0.93 to 0.96) ^{f)}
Yes				
Unvaccinated	870 (3.32)	0.22	1.0 (reference)	1.0 (reference)
Vaccinated	793 (3.07)	0.22	0.97 (0.88 to 1.07)	0.97 (0.88 to 1.06)
Medication use for hypertension				
No				
Unvaccinated	16,599 (3.41)	4.12	1.0 (reference)	1.0 (reference)
Vaccinated	14,533 (3.04)	4.01	0.95 (0.93 to 0.97) ^{f)}	0.94 (0.92 to 0.97) ^{f)}
Yes				
Unvaccinated	7,950 (3.25)	1.98	1.0 (reference)	1.0 (reference)
Vaccinated	7,539 (2.98)	2.08	0.95 (0.92 to 0.98) ^{f)}	0.95 (0.92 to 0.98) ^{f)}

Supplementary Table 13. Continued

Others ^{a)}	Events, n (%)	Incidence rate ^{c)}	aHR (95% CI)	
			Model 1 ^{d)}	Model 2 ^{e)}
Medication use for diabetes				
No				
Unvaccinated	21,338 (3.36)	5.30	1.0 (reference)	1.0 (reference)
Vaccinated	18,993 (3.02)	5.23	0.96 (0.94 to 0.97) ^{f)}	0.95 (0.93 to 0.97) ^{f)}
Yes				
Unvaccinated	3,211 (3.32)	0.80	1.0 (reference)	1.0 (reference)
Vaccinated	3,079 (2.99)	0.85	0.93 (0.88 to 0.98) ^{f)}	0.92 (0.88 to 0.97) ^{f)}
Medication use for hyperlipidemia				
No				
Unvaccinated	20,796 (3.32)	5.17	1.0 (reference)	1.0 (reference)
Vaccinated	18,570 (3.00)	5.12	0.96 (0.94 to 0.98) ^{f)}	0.95 (0.94 to 0.97) ^{f)}
Yes				
Unvaccinated	3,753 (3.56)	0.93	1.0 (reference)	1.0 (reference)
Vaccinated	3,502 (3.13)	0.97	0.90 (0.86 to 0.94) ^{f)}	0.90 (0.85 to 0.94) ^{f)}

aHR, adjusted hazard ratio; CI, confidence interval.

^{a)}Others include other diseases of the gallbladder and the pancreas.

^{b)}Non-smoker indicates individuals who do not currently smoke.

^{c)}Incidence rate expressed as per 1,000 person-years.

^{d)}Models 1: adjusted for age (50–54, 55–59, 60–64, and ≥ 65 years) and sex.

^{e)}Model 2: adjusted for age (50–54, 55–59, 60–64, and ≥ 65 years); sex; household income (low income, middle income, and high income); region of residence (urban and rural); Charlson comorbidity index (0, 1, and ≥ 2); obesity (underweight [$< 18.5 \text{ kg/m}^2$], normal [$18.5\text{--}22.9 \text{ kg/m}^2$], overweight [$23.0\text{--}24.9 \text{ kg/m}^2$], and obese [$\geq 25.0 \text{ kg/m}^2$]); blood pressure (systolic blood pressure $< 140 \text{ mmHg}$ and diastolic blood pressure $< 90 \text{ mmHg}$ and systolic blood pressure $\geq 140 \text{ mmHg}$ or diastolic blood pressure $\geq 90 \text{ mmHg}$); fasting blood glucose (< 100 and $\geq 100 \text{ mg/dL}$); glomerular filtration rate (< 60 , $60\text{--}89$, and $\geq 90 \text{ mL/min/1.73 m}^2$); smoking status (non-, ex-, and current smoker); alcohol consumption (drinks; < 1 , $1\text{--}2$, $3\text{--}4$, and ≥ 5 days per week); aerobic physical activity (sufficient and insufficient); and history of medication use for coronary artery disease, diabetes mellitus, dyslipidemia, and hypertension.

^{f)}Significant differences ($p < 0.05$).