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Supplementary Table 9. Stratification analysis of the incident risk of chronic hepatitis following zoster vaccination in the propensity score–matched cohort

Chronic hepatitis	Events, n (%)	Incidence rate[b]	aHR (95% CI)	
			Model 1[c]	Model 2[d]
Sex				
Male				
Unvaccinated	10,889 (3.43)	2.71	1.0 (reference)	1.0 (reference)
Vaccinated	8,191 (2.54)	2.25	0.80 (0.77 to 0.82)[e]	0.79 (0.76 to 0.81)[e]
Female				
Unvaccinated	12,876 (3.12)	3.20	1.0 (reference)	1.0 (reference)
Vaccinated	10,408 (2.54)	2.86	0.84 (0.82 to 0.86)[e]	0.84 (0.81 to 0.86)[e]
Age (yr)				
< 60				
Unvaccinated	9,030 (4.64)	2.25	1.0 (reference)	1.0 (reference)
Vaccinated	6,876 (3.50)	1.89	0.78 (0.75 to 0.80)[e]	0.77 (0.74 to 0.79)[e]
≥ 60				
Unvaccinated	14,735 (2.75)	3.66	1.0 (reference)	1.0 (reference)
Vaccinated	11,723 (2.19)	3.22	0.85 (0.83 to 0.87)[e]	0.84 (0.82 to 0.86)[e]
Region of residence				
Urban				
Unvaccinated	11,044 (3.25)	2.75	1.0 (reference)	1.0 (reference)
Vaccinated	8,589 (2.53)	2.36	0.81 (0.79 to 0.83)[e]	0.80 (0.78 to 0.82)[e]
Rural				
Unvaccinated	12,721 (3.25)	3.16	1.0 (reference)	1.0 (reference)
Vaccinated	10,010 (2.55)	2.75	0.83 (0.81 to 0.85)[e]	0.83 (0.80 to 0.85)[e]
Household income				
Low (0th–39th percentile)				
Unvaccinated	7,346 (3.48)	1.83	1.0 (reference)	1.0 (reference)
Vaccinated	5,483 (2.61)	1.51	0.79 (0.76 to 0.82)[e]	0.78 (0.76 to 0.81)[e]
Middle (40th–79th percentile)				
Unvaccinated	8,727 (3.30)	2.17	1.0 (reference)	1.0 (reference)
Vaccinated	6,701 (2.56)	1.84	0.82 (0.80 to 0.85)[e]	0.81 (0.79 to 0.84)[e]
High (80th–100th percentile)				
Unvaccinated	7,692 (3.01)	1.91	1.0 (reference)	1.0 (reference)
Vaccinated	6,415 (2.48)	1.76	0.85 (0.82 to 0.88)[e]	0.84 (0.82 to 0.87)[e]
Body mass index (kg/m^2)				
< 23.0				
Unvaccinated	5,265 (2.75)	1.31	1.0 (reference)	1.0 (reference)
Vaccinated	4,235 (2.21)	1.16	0.84 (0.81 to 0.88)[e]	0.83 (0.80 to 0.87)[e]
23.0–24.9				
Unvaccinated	6,173 (3.08)	1.54	1.0 (reference)	1.0 (reference)
Vaccinated	4,675 (1.17)	1.28	0.80 (0.77 to 0.83)[e]	0.80 (0.77 to 0.83)[e]
≥ 25.0				
Unvaccinated	12,327 (3.63)	3.07	1.0 (reference)	1.0 (reference)
Vaccinated	9,689 (2.94)	2.66	0.82 (0.80 to 0.84)[e]	0.81 (0.79 to 0.84)[e]

Supplementary Table 9. Continued

Chronic hepatitis	Events, n (%)	Incidence rate[b]	aHR (95% CI)	
			Model 1[c]	Model 2[d]
Smoking status[a]				
Non-smoker				
Unvaccinated	15,991 (3.16)	3.98	1.0 (reference)	1.0 (reference)
Vaccinated	12,621 (2.52)	3.47	0.83 (0.81 to 0.85)[e]	0.82 (0.81 to 0.84)[e]
Smoker				
Unvaccinated	7,774 (3.44)	1.93	1.0 (reference)	1.0 (reference)
Vaccinated	5,987 (2.60)	1.65	0.80 (0.78 to 0.83)[e]	0.79 (0.77 to 0.82)[e]
Alcohol consumption (day per week)				
< 1				
Unvaccinated	10,261 (2.53)	2.55	1.0 (reference)	1.0 (reference)
Vaccinated	7,352 (1.82)	2.02	0.76 (0.74 to 0.78)[e]	0.76 (0.73 to 0.78)[e]
1–4				
Unvaccinated	12,860 (4.11)	3.20	1.0 (reference)	1.0 (reference)
Vaccinated	10,745 (3.42)	2.95	0.86 (0.84 to 0.89)[e]	0.86 (0.84 to 0.88)[e]
≥ 5				
Unvaccinated	644 (5.34)	0.16	1.0 (reference)	1.0 (reference)
Vaccinated	502 (3.80)	0.14	0.76 (0.68 to 0.85)[e]	0.75 (0.67 to 0.85)[e]
Physical activity				
Insufficient physical activity				
Unvaccinated	18,467 (3.29)	4.59	1.0 (reference)	1.0 (reference)
Vaccinated	14,263 (2.57)	3.92	0.82 (0.80 to 0.84)[e]	0.81 (0.79 to 0.83)[e]
Sufficient physical activity				
Unvaccinated	5,298 (3.11)	1.32	1.0 (reference)	1.0 (reference)
Vaccinated	4,336 (2.47)	1.19	0.84 (0.80 to 0.87)[e]	0.83 (0.79 to 0.86)[e]
Medication use for coronary artery disease				
No				
Unvaccinated	22,875 (3.25)	5.69	1.0 (reference)	1.0 (reference)
Vaccinated	17,891 (2.54)	4.92	0.82 (0.80 to 0.84)[e]	0.81 (0.80 to 0.83)[e]
Yes				
Unvaccinated	890 (3.40)	0.22	1.0 (reference)	1.0 (reference)
Vaccinated	708 (2.74)	0.19	0.84 (0.76 to 0.93)[e]	0.84 (0.76 to 0.93)[e]
Medication use for hypertension				
No				
Unvaccinated	15,336 (3.15)	3.81	1.0 (reference)	1.0 (reference)
Vaccinated	11,802 (2.47)	3.24	0.83 (0.81 to 0.85)[e]	0.82 (0.80 to 0.84)[e]
Yes				
Unvaccinated	8,429 (3.45)	2.10	1.0 (reference)	1.0 (reference)
Vaccinated	6,797 (2.69)	1.87	0.80 (0.77 to 0.83)[e]	0.80 (0.77 to 0.82)[e]

Supplementary Table 9. Continued

Chronic hepatitis	Events, n (%)	Incidence rate[b]	aHR (95% CI)	
			Model 1[c]	Model 2[d]
Medication use for diabetes				
No				
Unvaccinated	20,609 (3.25)	5.13	1.0 (reference)	1.0 (reference)
Vaccinated	15,926 (2.54)	4.38	0.82 (0.81 to 0.84)[e]	0.81 (0.80 to 0.83)[e]
Yes				
Unvaccinated	3,156 (3.49)	0.78	1.0 (reference)	1.0 (reference)
Vaccinated	3,038 (2.72)	0.83	0.81 (0.77 to 0.85)[e]	0.81 (0.77 to 0.85)[e]
Medication use for hyperlipidemia				
No				
Unvaccinated	20,084 (3.21)	5.00	1.0 (reference)	1.0 (reference)
Vaccinated	15,561 (2.51)	4.28	0.83 (0.81 to 0.84)[e]	0.82 (0.80 to 0.84)[e]
Yes				
Unvaccinated	3,681 (3.49)	0.92	1.0 (reference)	1.0 (reference)
Vaccinated	3,038 (2.72)	0.83	0.78 (0.75 to 0.82)[e]	0.78 (0.74 to 0.82)[e]

aHR, adjusted hazard ratio; CI, confidence interval.

[a]Non-smoker indicates individuals who do not currently smoke.

[b]Incidence rate expressed as per 1,000 person-years.

[c]Models 1: adjusted for age (50–54, 55–59, 60-64, and ≥ 65 years) and sex.

[d]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 kg/m^2], normal [18.5–22.9 kg/m^2], overweight [23.0–24.9 kg/m^2], and obese [≥ 25.0 kg/m^2]); blood pressure (systolic blood pressure < 140 mmHg and diastolic blood pressure < 90 mmHg and systolic blood pressure ≥ 140 mmHg or diastolic blood pressure ≥ 90 mmHg); fasting blood glucose (< 100 and ≥ 100 mg/dL); glomerular filtration rate (< 60, 60–89, and ≥ 90 mL/min/1.73 m^2); smoking status (non-, ex-, and current smoker); alcohol consumption (drinks; < 1, 1–2, 3–4, 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.

[e]Significant differences ($p < 0.05$).