

**Supplementary Table 14. Time persistence effect on any hepatobiliary events development following zoster vaccination**

Time (yr)	Events, n (%)	aHR (95% CI)	
		Model 1 <sup>a)</sup>	Model 2 <sup>b)</sup>
< 1			
Unvaccinated	25,783 (3.53)	1.0 (reference)	1.0 (reference)
Vaccinated	22,932 (3.14)	0.89 (0.87 to 0.90) <sup>c)</sup>	0.88 (0.86 to 0.89) <sup>c)</sup>
1–2			
Unvaccinated	24,497 (3.35)	1.0 (reference)	1.0 (reference)
Vaccinated	20,876 (2.86)	0.85 (0.83 to 0.86) <sup>c)</sup>	0.84 (0.83 to 0.86) <sup>c)</sup>
2–4			
Unvaccinated	35,253 (4.82)	1.0 (reference)	1.0 (reference)
Vaccinated	28,636 (3.92)	0.84 (0.83 to 0.86) <sup>c)</sup>	0.85 (0.83 to 0.86) <sup>c)</sup>
4–6			
Unvaccinated	17,790 (2.43)	1.0 (reference)	1.0 (reference)
Vaccinated	13,769 (1.18)	0.89 (0.87 to 0.91) <sup>c)</sup>	0.88 (0.86 to 0.90) <sup>c)</sup>
6–8			
Unvaccinated	4,545 (0.62)	1.0 (reference)	1.0 (reference)
Vaccinated	3,435 (0.47)	0.94 (0.90 to 0.99) <sup>c)</sup>	0.90 (0.86 to 0.94) <sup>c)</sup>
≥ 8			
Unvaccinated	139 (0.02)	1.0 (reference)	1.0 (reference)
Vaccinated	116 (0.02)	1.12 (0.87 to 1.44)	1.08 (0.84 to 1.39)

aHR, adjusted hazard ratio; CI, confidence interval.

<sup>a)</sup>Models 1: adjusted for age (50–54, 55–59, 60–64, and ≥ 65 years) and sex.

<sup>b)</sup>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  $\geq 5$  days per week); aerobic physical activity (sufficient and insufficient); and history of medication use for coronary artery disease, diabetes mellitus, dyslipidemia, and hypertension.

<sup>c)</sup>Significant differences ( $p < 0.05$ ).