Sensitivity analysis (1 to 4)	Justification
1. Incident hepatobiliary diseases in herpes zoster vaccinated and non-vaccinated individuals	- Matching covariates were selected 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); and 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. - Adjusting covariates were selected 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 [18.5–23.0 kg/m^2], overweight [23.0–25.0 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, 60–90, 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.
2. Subgroup analysis of the risk of various hepatobiliary diseases following herpes zoster vaccination	- To investigate the probability of developing hepatobiliary diseases following herpes zoster vaccination. - Various hepatobiliary diseases: 1. Hepatic failure 2. Inflammatory liver disease 3. Liver cirrhosis 4. Chronic hepatitis 5. Cholecystitis, cholangitis 6. Cholelithiasis 7. Acute pancreatitis 8. Other diseases of the gallbladder and other diseases of the pancreas
3. Stratification analysis of the risk of hepatobiliary disease development following herpes zoster vaccination	- To investigate potential unintended mediation effects based on sex, age, residential region, household income, Charlson comorbidity index, body mass index, smoking status, alcohol consumption, aerobic physical activity, use of medications for coronary artery disease, diabetes, hyperlipidemia, and hypertension, as well as zoster diagnosis after vaccination.
4. Temporal attenuation effect of hepatobiliary disease development following herpes zoster vaccination	- To assess the time-dependent attenuation effect on the development of hepatobiliary diseases after herpes zoster vaccination.

Supplementary Figure 1. Sensitivity analyses and justification.

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