# Supplementary Material

**Association of Alzheimer's Disease with COVID-19 Susceptibility and Severe Complications: A Nationwide Cohort Study**

## Supplementary Methods

*Definition of covariates*

The presence of comorbidities (hypertension, diabetes mellitus, atrial fibrillation, heart failure, coronary artery disease, asthma, chronic kidney disease, and malignancy) was determined using the health claims data in the NHIS database until undergoing real-time reverse transcription polymerase chain reaction test for coronavirus disease 2019. Hypertension and diabetes mellitus were identified if participants received antihypertensive or antidiabetic agents with the corresponding diagnostic codes (hypertension, I10-15; diabetes mellitus, E11-14) [1]. Coronary artery disease, and chronic kidney disease were determined by the presence of ICD-10 codes (coronary artery disease, I20-I25; chronic kidney disease, N03, N05, N165, N18-9, N250, I12-3, Z490, Z491-2, Z940, Z992, E102, E112, E132, E142, or T861) [2, 3]. Heart failure was determined if participants had the diagnostic code more than once (I110, I130, I132, I255, I42, I429, I43, I50, I501, I509) [4]. Atrial fibrillation was evaluated by at least two different days of outpatient hospital visits or the first admission with the ICD-10 code (I48) [5]. Asthma was defined by the presence of relevant diagnostic codes (J45 and J46) as the primary diagnosis two times or more [6]. Malignancy was defined as having at least two outpatient visits or one admission with a specific cancer diagnostic code (C00–C97) with a special registration code for cancer (V027, V193-4) [7].

## REFERENCES

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