**Supplementary Table 1. Comorbidity definitions according to ICD-10 codes**

|  |  |
| --- | --- |
| **Disease** | **ICD-10 codes** |
| Atrial fibrillation | I48 |
| Type 2 diabetes mellitus | E11-14 |
| Cancer | C00-C99 |
| End stage renal disease | N185-001, N185-002 |
| Dialysis | Z49 |
| hemodialysis | O701x, O702x, O703x, O704x, O705x |
| Peritoneal dialysis | O706x, O707x, O708x |
| Hypertension | I10-I13, I15 |
| Chronic kidney disease | N18 |
| Heart failure | I50 |
| Stable angina | I20.1, I20.8. I20.9 |
| Unstable angina | I20.0 |
| Myocardial infarction  | 'I21','I22' |
| Procedure code related to acute myocardial infarction | HA670, HA680, HA681, HA682, M6551, M6552,M6561, M6562, M6563, M6564, M6571, M6572, M6633, M6634,\ O1641, O1642, O1647, OA641, OA642, OA647 |
| Peripheral artery disease | I70.1-I70.9 |
| Stroke | I60-66, G45 |
| BRAIN IMAGING | HE101, HE201, HE501, HE102, HE502, HE135, HE235, HE535, HE136, HE236, HE301, HE302, HF101, HF201, HF102, HF202, HF103, HF203, HF104, HF105, HF305HF106, HF306, HF107, HA441, HA451, HA461, HA471, HA851, HA601, HA602, HA603, HA604, HA605 |
| Hemorrhagic stroke | I60-I62 |
| Ischemic stroke | I63-I64 |
| Transient ischemic stroke | G45 |
| Systemic embolism | I74 |

**Supplementary Table 2** Operational definitions of study outcomes

|  |  |  |
| --- | --- | --- |
| **Event** | **Criteria** | **Code or definition** |
| Myocardial infarction | Diagnosis | Acute myocardial infarction (I21) |
| Procedure code related to acute myocardial infarction | Coronary angiography (HA670), aortocoronary venous bypass graft angiography (HA680, HA681, HA682), percutaneous transluminal coronary angioplasty (M6551, M6552), percutaneous transcatheter placement of intracoronary stent (M6561, M6562, M6563, M6564), percutaneous transluminal coronary atherectomy (M6571, M6572), mechanical thrombectomy (M6633), percutaneous thrombus removal (M6634), vascular bypass operation (O1641, O1642, O1647, OA641, OA642, OA647) |
| Type of visit | Claims related to admission |
| Ischemic stroke | Diagnosis | Cerebral infarction (I63); stroke, not specified as hemorrhage or infarction (I64); |
| Code related to brain imaging | Brain MRI (HE101, HE201, HE501), hippocampus MRI (HE102, HE502), brain MRA (HE135, HE235, HE535), neck MRA (HE136, HE236), MRI-guided intervention (HE301, HE302), MRI-diffusion (HF101, HF201), MRI-perfusion (HF102, HF202), MRI-spectroscopy (HF103, HF203), MRI-cine (HF104), MRI-dynamic (HF105, HF305), MRI-dual-contrast (HF106, HF306), MRI-functional (HF107), limited CT (HA441), brain CT (HA451, HA461, HA471), CT-guided intervention (HA851), vertebral angiography (HA601), common carotid angiography (HA602), external carotid angiography (HA603), internal carotid angiography (HA604), vessel angiography (HA605) |
| Type of visit | Claims related to admission |
| Cardiovascular mortality | Cause of death | I00–I99 (Diseases of the circulatory system) |
| Hospitalization for heart failure | Diagnosis | Heart failure (I50) |
|  | Type of visit | Claims related to admission |

**Supplementary Figure legends**

Supplementary Figure 1. Subgroup analyses of major adverse cardiovascular events according to baseline characteristics in patients who received SGLT2 inhibitors and those who did not

Supplementary Figure 2. Subgroup analyses of cardiovascular mortality according to baseline characteristics in patients who received SGLT2 inhibitors and those who did not

Supplementary Figure 3. Subgroup analyses of hospitalization for heart failure according to baseline characteristics in patients who received SGLT2 inhibitors and those who did not

Supplementary Figure 4. Subgroup analyses of all-cause mortality according to baseline characteristics in patients who received SGLT2 inhibitors and those who did not

Supplementary Figure 1. Subgroup analyses of major adverse cardiovascular events according to baseline characteristics in patients who received SGLT2 inhibitors and those who did not



Supplementary Figure 2. Subgroup analyses of cardiovascular mortality according to baseline characteristics in patients who received SGLT2 inhibitors and those who did not



Supplementary Figure 3. Subgroup analyses of hospitalization for heart failure according to baseline characteristics in patients who received SGLT2 inhibitors and those who did not



Supplementary Figure 4. Subgroup analyses of all-cause mortality according to baseline characteristics in patients who received SGLT2 inhibitors and those who did not

