**Supplementary Method**

Data on highest achieved educational level was obtained from the Population’s Education register. Educational level was categorised into three groups (low, middle and high). In the DNPR we identified patients diagnosed with coronary heart disease (ICD-8: 410–414; ICD-10: I20–I25), hypertension (ICD-8: 400–404; ICD-10: I10–I15), diabetes (ICD-8: 250; ICD-10: E10–E14; anatomical therapeutic chemical (ATC) classification: A10), obesity (ICD-8: 277.9; ICD-10: E65–E68; ATC: A08A) or alcohol misuse (ICD-8: 303; ICD-10: F10) at study entry. Information on prescription use of antidiabetics or antiemetics (ATC: A10) was obtained from the Danish National Prescription Registry using information from the year before study entry.

**Supplementary Results – ECT and incident stroke**

When analyses were additionally restrictd to 30 days, there were 186 cases of first-onset stroke, of which 3 occurred in the group of patients treated with ECT. The unadjusted risk of stroke during the first 30 days after ECT was 1.97 (95% CI 0.68–6.77); HR adjusted = 1.75 (95% CI 0.55–5.52). When analyses were restricted to 180 days, 697 events of first-time strokes occurred, of which 18 were in the group treated with ECT. Unadjusted risk of first-onset stroke during 180 days post-ECT was 1.49 (95% CI 0.93–2.38); HR adjusted- = 1.18 (95% CI 0.74–1.89).

When analyses were additionally restricted to 30 days, there were 609 cases of recurrent stroke, of which 3 occurred in the group of patients treated with ECT. The risk of reoccurrence during the first 30 days after ECT was HR = 1.11 (95% CI 0.35–3.48); HR adjusted = 1.10 (95% CI 0.33–3.45). When analyses were restricted to 180 days, there were 1260 events of recurrent strokes, of which 6 occurred in the ECT group. Risk of recurrence during 180 days post-ECT was HR=0.52 (95% CI 0.23–1.17); HR adjusted = 0.50 (95% CI 0.22–1.12).

**Supplementary Table 1** Electroconvulsive Therapy (ECT) and later stroke in patients with affective disorders

|  | Patients without history of stroke | Patients with previous stroke |
| --- | --- | --- |
| Total number | Number treated with ECT | Number with incident stroke | Total number | Number treated with ECT | Number with recurrence |
|  | 162 595 | 5781 (3.6) | 3665 (2.3) | 11 939 | 228 (1.9) | 2330 (19.5) |
| Gender |
|  Men | 60 591 | 2294 (3.8) Ref | 1510 (2.5) Ref | 5584 | 115 (2.1)Ref | 1114 (20.0) Ref |
|  Women | 102 004 | 3487 (2.4)\* | 2155 (2.1)\* | 6355 | 113 (1.2)\* | 1216 (19.1)\* |
| Age at baseline (years) |
|  10–49 | 98 314 | 2652 (2.7) Ref | 624 (0.6) Ref | 810 | 24 (3.0) Ref | 133 (16.4) Ref |
|  50–69 | 33 549 | 1976 (5.9)\* | 1143 (3.4)\* | 3207 | 84 (2.6)\* | 803 (25.0)\* |
|  70–108 | 30 732 | 1153 (3.8)\* | 1898 (6.2)\* | 7922 | 120 (1.5)\* | 1399 (17.6) |
| Educational status |
|  Basic | 68 661 | 1895 (2.8) Ref | 1606 (2.3) Ref | 5256 | 106 (2.0) Ref | 1006 (19.1) Ref |
|  Middle | 58 202 | 2409 (4.1)\* | 1294 (2.2) | 4021 | 74 (1.8) | 851 (21.1) |
|  High | 23 139 | 1196 (5.2)\* | 427 (1.9)\* | 1257 | 36 (2.9)\* | 257 (20.5) |
|  Unknown | 12 593 | 286 (2.2) | 338 (2.7) | 1405 | 12 (0.9) | 216 (15.4)\* |
| Affective disorder |
|  Manic single episode | 1722 | 81 (4.7) | 45 (2.6) | 75 | 2 (2.7) | 12 (16.0) |
|  Bipolar disorder | 7468 | 398 (5.7)\* | 99 (1.3)\* | 172 | 13 (7.6)\* | 29 (16.9) |
|  Mild or moderate depression | 129 704 | 2814 (2.2) Ref | 3078 (2.4) Ref | 8529 | 159 (1.9) Ref | 1820 (21.3) Ref |
|  Severe depression | 17 260 | 2404 (13.9)\* | 318 (1.8)\* | 2719 | 50 (1.8) | 387 (14.2)\* |
|  Persistent or unspecified | 6441 | 89 (1.3) | 125 (1.9)\* | 444 | 4 (0.9) | 82 (18.5) |
| Comorbid hypertension |
|  No | 155 790 | 5532 (3.6) Ref | 3.266 (2.1) Ref | 10 078 | 191 (1.9) Ref | 1198 (19.8) Ref |
|  Yes | 6805 | 249 (3.7) | 439 (6.5)\* | 1861 | 37 (1.9) | 338 (18.2) |
| Comorbid heart disease |
|  No | 158 094 | 5665 (3.6) Ref | 3400 (2.2) Ref | 10 669 | 212 (2.0) Ref | 2106 (19.7) Ref |
|  Yes | 4501 | 116 (2.6) | 265 (5.9)\* | 1270 | 16 (1.3) | 224 (17.6)\* |
| Comorbid diabetes |
|  No | 158 570 | 5461 (3.6) Ref | 3230 (2.1) Ref | 10 106 | 197 (2.0) Ref | 2108 (19.9) Ref |
|  Yes | 10 025 | 320 (3.2) | 435 (4.3)\* | 1833 | 31 (1.7) | 322 (17.6) |
| Comorbid obesity |
|  No | 157 843 | 5653 (3.6) Ref | 3586 (2.3) Ref | 11 736 | 225 (1.9) Ref | 2292 (19.5) Ref |
|  Yes | 4752 | 128 (2.7) | 79 (1.7)\* | 203 | 3 (1.5) | 38 (18.7) |
| Comorbid alcohol abuse |
|  No | 147 522 | 5371 (3.6) Ref | 3198 (2.2) Ref | 11 037 | 210 (1.9) Ref | 2168 (19.6) Ref |
|  Yes | 15 073 | 410 (2.7) | 467 (3.1) | 902 | 18 (2.0) | 162 (18.0) |
| Stroke sub type |
|  Hemorrhagic  | - | - | - | 999 | 13 (1.3) | 211 (21.1) |
|  Ischemic | - | - | - | 9412 | 174 (1.8) Ref | 1913 (20.0) Ref |
|  TIA | - | - | - | 1354 | 41 (3.0)\* | 206 (15.2)\* |
| Number of previous events |
|  1 | - | - | - | 8725 | 181 (2.1) Ref | 1638 (18.8) Ref |
|  2 | - | - | - | 2149 | 31 (1.4)\* | 429 (2.0)\* |
|  3+ | - | - | - | 1065 | 16 (1.5) | 263 (24.7)\* |
| Time since first event |
|  <1 year | - | - | - | 4244 | 77 (1.8) Ref | 1285 (30.3) Ref |
|  1–3 years | - | - | - | 1740 | 46 (2.6)\* | 259 (14.3)\* |
|  3+ years | - | - | - | 5955 | 105 (1.8) | 786 (13.2)\* |

Numbers represents count data with percentages between parentheses.

\*<0.05 marked category *v.* reference (ref); - = Not applicable.