**eTable 1A:** Sensitivity analyses using between-individual analyses for the outcome of suicide and within-individual analyses for the outcome of self-harm.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **(1) Bipolar disorder  diagnosed twice\*** | | **(2) No psychiatric  comorbidity\*** | | **(3) Mono- treatment only 3\*** | | **(4a) Bipolar disorder  type I only\*** | | | **(4b) Bipolar disorder  type II only\*** | |
|  |  | n | Basic adjusted  Hazard ratio (95% CI) | n | Basic adjusted  Hazard ratio (95% CI) | n | Basic adjusted  Hazard ratio (95% CI) | n | Basic adjusted  Hazard ratio (95% CI) | | n | Basic adjusted  Hazard ratio (95% CI) |
|  |  |  |  |  |  |  |  |  |  | |  |  |
| **Suicide - between individual** | | |  |  |  |  |  |  |  | |  |  |
|  | Lithium | 65 | **0.36 (0.28-0.48) \*\*\*** | 18 | **0.39 (0.23-0.65) \*\*\*** | 56 | **0.40 (0.30-0.53) \*\*\*** | 12 | **0.44 (0.24-0.82) \*\*** | | 27 | **0.36 (0.24-0.55) \*\*\*** |
|  | No treatment | 306 | 1 [ref] | 91 | 1 [ref] | 359 | 1 [ref] | 77 | 1 [ref] | | 158 | 1 [ref] |
|  |  |  |  |  |  |  |  |  |  | |  |  |
|  | Valproate | 23 | 0.66 (0.43-1.01) | 3 | 0.99 (0.45-2.19) | 14 | 0.83 (0.48-1.42) | <3 | N/A | | 7 | 0.80 (0.37-1.73) |
|  | No treatment | 306 | 1 [ref] | 91 | 1 [ref] | 359 | 1 [ref] | 77 | 1 [ref] | | 158 | 1 [ref] |
|  |  |  |  |  |  |  |  |  |  | |  |  |
|  | Other mood stabilizers | 64 | 0.84 (0.64-1.11) | 16 | 1.12 (0.63-1.96) | 41 | 0.94 (0.68-1.31) | 10 | 1.13 (0.58-2.23) | | 26 | 0.74 (0.48-1.14) |
|  | No treatment | 306 | 1 [ref] | 91 | 1 [ref] | 359 | 1 [ref] | 77 | 1 [ref] | | 158 | 1 [ref] |
|  |  |  |  |  |  |  |  |  |  |  | |  |
|  | Antipsychotics | 112 | 1.16 (0.93-1.46) | 25 | **1.70 (1.04-2.77) \*** | 75 | **1.82 (1.40-2.36) \*\*\*** | 16 | 0.83 (0.47-1.48) | 40 | | 1.19 (0.82-1.72) |
|  | No treatment | 306 | 1 [ref] | 91 | 1 [ref] | 359 | 1 [ref] | 77 | 1 [ref] | 158 | | 1 [ref] |
|  |  |  |  |  |  |  |  |  |  |  | |  |
| **Self-harm - within individual** | | |  |  |  |  |  |  |  |  | |  |
|  | Lithium | 469 | 0.83 (0.67-1.02) | 49 | 0.89 (0.28-2.80) | 287 | **0.78 (0.62-0.99) \*** | 45 | **0.74 (0.61-0.91) \*\*** | 172 | | **0.74 (0.61-0.91) \*\*** |
|  | No treatment | 1 393 | 1 [ref] | 113 | 1 [ref] | 1 615 | 1 [ref] | 404 | 1 [ref] | 706 | | 1 [ref] |
|  |  |  |  |  |  |  |  |  |  |  | |  |
|  | Valproate | 167 | 0.87 (0.63-1.18) | <3 | N/A | 84 | 1.11 (0.75-1.64) | 14 | 0.79 (0.59-1.07) | 61 | | 0.79 (0.59-1.07) |
|  | No treatment | 1 393 | 1 [ref] | 113 | 1 [ref] | 1 615 | 1 [ref] | 404 | 1 [ref] | 706 | | 1 [ref] |
|  |  |  |  |  |  |  |  |  |  |  | |  |
|  | Other mood stabilizers | 443 | 0.98 (0.79-1.22) | 31 | 1.50 (0.50-4.51) | 235 | 0.95 (0.74-1.22) | 58 | 0.93 (0.76-1.15) | 178 | | 0.93 (0.76-1.15) |
|  | No treatment | 1 393 | 1 [ref] | 113 | 1 [ref] | 1 615 | 1 [ref] | 404 | 1 [ref] | 706 | | 1 [ref] |
|  |  |  |  |  |  |  |  |  |  |  | |  |
|  | Antipsychotics | 662 | 0.99 (0.83-1.19) | 46 | 1.48 (0.58-3.78) | 365 | 1.14 (0.93-1.39) | 88 | 0.99 (0.83-1.18) | 284 | | 0.99 (0.83-1.18) |
|  | No treatment | 1 393 | 1 [ref] | 113 | 1 [ref] | 1 615 | 1 [ref] | 404 | 1 [ref] | 706 | | 1 [ref] |

\* Following sensitivity analyses were conducted: *Sensitivity analysis 1*: only persons who had been diagnosed with bipolar disorder during psychiatric hospital contact at least twice were included in the analysis. This was done to test the reliability of the measure. *Sensitivity analysis 2*: The study sample was restricted to persons with no psychiatric comorbidity. Psychiatric comorbidity was defined as a diagnosis of ADHD (ICD-8:308.01, ICD-10: F90, F98.8), anxieties (ICD-8: 300.0-300.2, ICD-10: F40, F41), autism (ICD-8: 299.00-299.03, ICD-10: F84.0, F84.1, F84.5), depression (ICD-8: 296.09, 296.29, 298.09, 300.49, ICD-10: F32-33), neurotic disorders incl. OCD (ICD-8:300, ICD-10: F40-42), personality disorders incl. borderline (ICD-8: 300.19, 301.49, 301.59, 301.79, 301.84, ICD-10: F60), PTSD (ICD-8:309.81, ICD-10: F43.1), schizophrenia spectrum disorders (ICD-8: 295, 297, 298.29, 298.39, 298.89, 301.09, 301.29, 301.83, ICD-10: F20-25), and substance use disorder (ICD-8: 291, 303, 304, ICD-10: F10-19), either as a main or supplementary diagnoses. This was done to reduce the influence of other disorders. *Sensitivity analysis 3a and 3b*: The sample was restricted persons who had been diagnosed with either bipolar disorder type 1 (3a) or type 2 (3b), to account for different patterns in the illness. All models were adjusted for sex, calendar period, and age group.

p-values: \*\*\*: p < 0.001, \*\*: p < 0.01: \*: p<0.0