Supplementary Table 1

**Time to readmission – Cox regression models**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Unadjusted** |  | **Adjusted** | |  | | |
|  |  | **HR (95% CI)** | **p-value** | **HR (95% CI)** | | **p-value** | | |
| Sex | Male | 1.21 (1.14 - 1.29) | <0.001 | 1.04 (0.97 - 1.11) | | 0.277 | | |
|  | Female |  |  |  | |  | | |
| Age in years | 18–29 |  |  |  | |  | | |
|  | 30–44 | 0.82 (0.74–0.92) | <0.001 | 0.78 (0.69–0.87) | | <0.001 | | |
|  | 45–64 | 0.68 (0.62–0.75) | <0.001 | 0.67 (0.59–0.75) | | <0.001 | | |
|  | 65–74 | 0.68 (0.60–0.75) | <0.001 | 0.69 (0.60–0.79) | | <0.001 | | |
|  | 75+ | 0.81 (0.73–0.91) | <0.001 | 0.85 (0.73–0.99) | | 0.034 | | |
| Education | ≤9 years |  |  |  | |  | | |
|  | >9, ≤12 years | 0.96 (0.89–1.03) | 0.278 | 1.00 (0.93–1.08) | | 0.961 | | |
|  | >12 years | 0.86 (0.79–0.93) | <0.001 | 0.98 (0.90–1.07) | | 0.597 | | |
|  | Missing | 0.90 (0.64–1.27) | 0.551 | 0.89 (0.63–1.27) | | 0.522 | | |
| Marital status | Divorced | 1.31 (1.20–1.42) | <0.001 | 1.13 (1.03–1.23) | | 0.007 | | |
|  | Married/Cohabiting |  |  |  | |  | | |
|  | Widowed | 1.22 (1.09–1.36) | 0.001 | 1.02 (0.90–1.15) | | 0.744 | | |
|  | Unmarried | 1.25 (1.16–1.34) | <0.001 | 1.01 (0.93–1.10) | | 0.872 | | |
| Working | Yes |  |  |  | |  | | |
|  | No | 1.34 (1.26–1.42) | <0.001 | 1.10 (1.02–1.18) | | 0.016 | | |
| Psychotic symptoms during depression that were used as indication diagnoses for ECT | No |  |  |  | |  | | |
|  | Yes | 0.80 (0.74–0.86) | <0.001 | 0.92 (0.84–1.00) | | 0.045 | | |
| PTSD before ECT | No |  |  |  | |  | | |
|  | Yes | 1.98 (1.68–2.32) | <0.001 | 1.04 (0.88–1.24) | | 0.618 | | |
| ADHD before ECT | No |  |  |  | |  | | |
|  | Yes | 1.86 (1.60–2.16) | <0.001 | 1.02 (0.84–1.23) | | 0.850 | | |
| Anxiety disorder before ECT | No |  |  |  | |  | | |
|  | Yes | 1.67 (1.56–1.78) | <0.001 | 1.12 (1.04–1.21) | | 0.002 | | |
| Obsessive-compulsive disorder before ECT | No |  |  |  | |  | | |
|  | Yes | 1.46 (1.23–1.72) | <0.001 | 0.97 (0.81–1.16) | | 0.723 | | |
| Autism before ECT | No |  |  |  | |  | | |
|  | Yes | 2.06 (1.67–2.54) | <0.001 | 1.14 (0.91–1.42) | | 0.264 | | |
| Personality disorder before ECT | No |  |  |  | |  | | |
|  | Yes | 2.17 (1.98–2.38) | <0.001 | 1.05 (0.93–1.18) | | 0.441 | | |
| Substance use disorder before ECT | No |  |  |  | |  | | |
|  | Yes | 1.67 (1.55–1.80) | <0.001 | 1.03 (0.95–1.13) | | 0.462 | | |
| Earlier suicide attempts | No |  |  |  | |  | | |
|  | Yes | 1.57 (1.46–1.68) | <0.001 | 1.02 (0.94–1.11) | | 0.596 | | |
| Number of psychiatric inpatient periods before ECT | 0 |  |  |  | |  | | |
|  | 1–3 | 1.04 (0.95–1.15) | 0.387 | 0.99 (0.90–1.10) | | 0.902 | | |
|  | 4–5 | 1.59 (1.41–1.79) | <0.001 | 1.43 (1.26–1.63) | | <0.001 | | |
|  | 6–10 | 1.95 (1.74–2.18) | <0.001 | 1.64 (1.44–1.87) | | <0.001 | | |
|  | 11–20 | 2.74 (2.40–3.14) | <0.001 | 2.11 (1.79–2.47) | | <0.001 | | |
|  | 21–30 | 3.54 (2.95–4.25) | <0.001 | 2.50 (2.02–3.10) | | <0.001 | | |
|  | 31–140 | 4.44 (3.71–5.31) | <0.001 | 2.98 (2.38–3.74) | | <0.001 | | |
| Electrode placement | Unilateral |  |  |  | |  | | |
|  | Bitemporal/bilateral | 0.94 (0.84–1.04) | 0.237 | 0.99 (0.88–1.11) | | 0.896 | | |
|  | Missing | 1.02 (0.91–1.14) | 0.782 | 0.88 (0.77–1.01) | | 0.067 | | |
| Pulse width (ms) | 0.25–0.47 |  |  |  | |  | | |
|  | 0.50–1.10 | 0.89 (0.82–0.98) | 0.012 | 0.97 (0.88–1.07) | | 0.529 | | |
|  | Missing | 0.91 (0.83–1.00) | 0.061 | 0.82 (0.54–1.26) | | 0.367 | | |
| Frequency (Hz) | 10–65 |  |  |  | |  | | |
|  | 70–140 | 0.96 (0.89–1.04) | 0.300 | 1.01 (0.93–1.10) | | 0.834 | | |
|  | Missing | 0.98 (0.91–1.06) | 0.604 | 1.26 (0.78–2.02) | | 0.341 | | |
| Duration (s) | 1.5–7.4 |  |  |  | |  | | |
|  | 7.5–8.0 | 0.96 (0.89–1.03) | 0.289 | 0.97 (0.90–1.05) | | 0.487 | | |
|  | Missing | 0.98 (0.91–1.05) | 0.532 | 0.79 (0.47–1.32) | | 0.364 | | |
| Electric current (mA) | 500–830 |  |  |  | |  | | |
|  | 850–940 | 1.01 (0.93–1.08) | 0.875 | 0.96 (0.89–1.04) | | 0.348 | | |
|  | Missing | 1.00 (0.93–1.08) | 0.928 | 1.17 (0.75–1.83) | | 0.492 | | |
| CGI-S | Normal/borderline/mildly ill /moderately ill |  |  |  | |  | | |
|  | Markedly | 0.94 (0.87–1.02) | 0.136 | 1.05 (0.97–1.15) | | 0.220 | | |
|  | Severely ill/Among the most ill patients | 0.92 (0.84–1.01) | 0.074 | 1.14 (1.03–1.26) | | 0.008 | | |
|  | Missing | 1.11 (0.99–1.24) | 0.076 | 1.15 (1.01–1.30) | | 0.029 | | |
| CGI-I | Not assessed | 1.29 (1.04–1.61) | 0.023 | 1.00 (0.80–1.25) | | 0.986 | | |
|  | Very much improved |  |  |  | |  | | |
|  | Much improved | 1.21 (1.12–1.32) | <0.001 | 1.08 (0.99–1.17) | | 0.082 | | |
|  | Minimally improved/unchanged/ worse | 1.62 (1.47–1.78) | <0.001 | 1.24 (1.12–1.38) | | <0.001 | | |
|  | Missing | 1.39 (1.26–1.53) | <0.001 | 1.20 (1.07–1.36) | | 0.003 | | |
| Continuation ECT | No |  |  |  | |  | | |
|  | Yes | 0.77 (0.69–0.86) | <0.001 | 0.75 (0.67–0.84) | | <0.001 | | |
| Number of ECT sessions in the treatment series | 1–5 |  |  |  | |  | | |
|  | 6–9 | 0.90 (0.83–0.97) | 0.006 | 1.04 (0.96–1.13) | | 0.293 | | |
|  | 10–53 | 0.94 (0.86–1.03) | 0.216 | 1.00 (0.91–1.11) | | 0.938 | | |
| Modified Antidepressant Treatment History Form score | 0–1 |  |  |  | |  | | |
|  | 2–4 | 1.21 (1.10–1.34) | <0.001 | 1.11 (1.00–1.23) | | 0.047 | | |
|  | 5–8 | 1.43 (1.30–1.58) | <0.001 | 1.13 (1.01–1.25) | | 0.027 | | |
|  | 9–26 | 1.64 (1.47–1.82) | <0.001 | 1.19 (1.06–1.34) | | 0.004 | | |
| Lamotrigine within 100 days after ECT | No |  |  |  | |  | | |
|  | Yes | 1.20 (1.08–1.33) | 0.001 | 0.97 (0.87–1.08) | | 0.595 | | |
| Valproate within 100 days after ECT | No |  |  |  |  | | |  | |
|  | Yes | 1.69 (1.39–2.04) | <0.001 | 1.17 (0.96–1.43) | | | 0.111 | |
| Benzodiazepines within 100 days after ECT | No |  |  |  | | |  | |
|  | Yes | 1.51 (1.42–1.61) | <0.001 | 1.34 (1.26–1.43) | | | <0.001 | |
| Other antiepileptic medication within 100 days after ECT | No |  |  |  | | |  | |
|  | Yes | 1.43 (1.29–1.57) | <0.001 | 1.03 (0.93–1.13) | | | 0.629 | |
| Anxiolytics within 100 days after ECT | No |  |  |  | | |  | |
|  | Yes | 1.34 (1.27–1.43) | <0.001 | 1.19 (1.11–1.27) | | | <0.001 | |
| Quetiapine within 100 days after ECT | No |  |  |  | | |  | |
|  | Yes | 1.09 (1.01–1.19) | 0.028 | 0.96 (0.89–1.04) | | | 0.354 | |
| Antipsychotic medication within 100 days after ECT | No |  |  |  | | |  | |  | |
|  | Yes | 1.19 (1.12–1.27) | <0.001 | 1.12 (1.04–1.19) | | | 0.002 | |
| Stimulants within 100 days after ECT | No |  |  |  | | |  | |
|  | Yes | 1.62 (1.37–1.90) | <0.001 | 1.03 (0.84–1.26) | | | 0.769 | |
| Antidepressants within 100 days after ECT | No |  |  |  | | |  | |
|  | Yes | 0.82 (0.74–0.90) | <0.001 | 0.86 (0.77–0.95) | | | 0.003 | |
| Lithium within 100 days after ECT | No |  |  |  | | |  | |
|  | Yes | 0.96 (0.86–1.06) | 0.404 | 0.84 (0.75–0.93) | | | 0.001 | |

Data are n (%), ADHD, attention-deficit hyperactivity disorder; CGI, clinical global impression - severity scale; CGI-I, clinical global impression – improvement scale; ECT, electroconvulsive therapy; PTSD, post-traumatic stress disorder

Supplementary Table 2 **Patient cohort characteristics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **No lithium** | **Lithium** | **p-value from χ2-tests** |
| Sex | Male | 2752 (41.0) | 238 (37.3) | 0.076 |
|  | Female | 3960 (59.0) | 400 (62.7) |  |
| Age (years) | 18–29 | 814 (12.1) | 89 (13.9) | <0.001 |
|  | 30–44 | 1308 (19.5) | 168 (26.3) |  |
|  | 45–64 | 2267 (33.8) | 214 (33.5) |  |
|  | 65–74 | 1237 (18.4) | 98 (15.4) |  |
|  | 75+ | 1086 (16.2) | 69 (10.8) |  |
| Education (years) | ≤9 years | 1742 (26.0) | 130 (20.4) | 0.003 |
|  | >9, ≤12 years | 3032 (45.2) | 291 (45.6) |  |
|  | >12 years | 1882 (28.0) | 214 (33.5) |  |
|  | Missing | 56 (0.8) | 3 (0.5) |  |
| Marital status | Divorced | 2419 (36.0) | 218 (34.2) | 0.113 |
|  | Married/cohabiting | 1272 (19.0) | 128 (20.1) |  |
|  | Widowed | 596 (8.9) | 42 (6.6) |  |
|  | Unmarried | 2425 (36.1) | 250 (39.2) |  |
| Working | Yes | 3357 (50.0) | 360 (56.4) | 0.002 |
|  | No | 3355 (50.0) | 278 (43.6) |  |
| PTSD before ECT | No | 6530 (97.3) | 618 (96.9) | 0.618 |
|  | Yes | 182 (2.7) | 20 (3.1) |  |
| ADHD before ECT | No | 6494 (96.8) | 610 (95.6) | 0.157 |
|  | Yes | 218 (3.2) | 28 (4.4) |  |
| Anxiety disorder before ECT | No | 4782 (71.2) | 460 (72.1) | 0.682 |
|  | Yes | 1930 (28.8) | 178 (27.9) |  |
| Obsessive-compulsive disorder before ECT | No | 6532 (97.3) | 615 (96.4) | 0.217 |
|  | Yes | 180 (2.7) | 23 (3.6) |  |
| Autism before ECT | No | 6607 (98.4) | 621 (97.3) | 0.055 |
|  | Yes | 105 (1.6) | 17 (2.7) |  |
| Personality disorder before ECT | No | 6094 (90.8) | 573 (89.8) | 0.457 |
|  | Yes | 618 (9.2) | 65 (10.2) |  |
| Substance use disorder before ECT | No | 5551 (82.7) | 525 (82.3) | 0.834 |
|  | Yes | 1161 (17.3) | 113 (17.7) |  |
| Earlier suicide attempts | No | 5247 (78.2) | 449 (70.4) | <0.001 |
|  | Yes | 1465 (21.8) | 189 (29.6) |  |
| Number of psychiatric inpatient periods before ECT | 0 | 1049 (15.6) | 54 ( 8.5) | <0.001 |
|  | 1–3 | 3353 (50.0) | 271 (42.5) |  |
|  | 4–5 | 785 (11.7) | 96 (15.0) |  |
|  | 6–10 | 845 (12.6) | 109 (17.1) |  |
|  | 11–20 | 379 ( 5.6) | 66 (10.3) |  |
|  | 21–30 | 148 ( 2.2) | 22 ( 3.4) |  |
|  | 31–140 | 153 ( 2.3) | 20 ( 3.1) |  |
| Psychotic symptoms during depression that were used as indication diagnoses for ECT | No | 5160 (76.9) | 511 (80.1) | 0.072 |
|  | Yes | 1552 (23.1) | 127 (19.9) |  |
| Electrode placement | Unilateral | 5674 (84.5) | 510 (79.9) | 0.001 |
|  | Bitemporal/bilateral | 590 (8.8) | 60 (9.4) |  |
|  | Missing | 448 (6.7) | 68 (10.7) |  |
| Pulse width (ms) | 0.25–0.47 | 938 (14.0) | 72 (11.3) | 0.083 |
|  | 0.50–1.10 | 3931 (58.6) | 399 (62.5) |  |
|  | Missing | 1843 (27.5) | 167 (26.2) |  |
| Frequency (Hz) | 10–65 | 2009 (29.9) | 197 (30.9) | 0.842 |
|  | 70–140 | 2833 (42.2) | 269 (42.2) |  |
|  | Missing | 1870 (27.9) | 172 (27.0) |  |
| Duration (s) | 1.5–7.4 | 2386 (35.5) | 245 (38.4) | 0.356 |
|  | 7.5–8.0 | 2427 (36.2) | 220 (34.5) |  |
|  | Missing | 1899 (28.3) | 173 (27.1) |  |
| Electric current (mA) | 500–830 | 2769 (41.3) | 270 (42.3) | 0.672 |
|  | 850–940 | 2054 (30.6) | 199 (31.2) |  |
|  | Missing | 1889 (28.1) | 169 (26.5) |  |
| CGI-S | Normal/borderline/mildly ill /moderately ill | 1278 (19.0) | 114 (17.9) | 0.023 |
|  | Markedly | 2928 (43.6) | 313 (49.1) |  |
|  | Severely ill/Among the most ill patients | 1817 (27.1) | 142 (22.3) |  |
|  | Missing | 689 (10.3) | 69 (10.8) |  |
| CGI-I | Not assessed | 1634 (24.3) | 129 (20.2) | 0.024 |
|  | Very much improved | 162 (2.4) | 11 (1.7) |  |
|  | Much improved | 2767 (41.2) | 278 (43.6) |  |
|  | Minimally improved/unchanged/ worse | 1106 (16.5) | 98 (15.4) |  |
|  | Missing | 1043 (15.5) | 122 (19.1) |  |
| Continuation ECT | No | 6114 (91.1) | 557 (87.3) | 0.002 |
|  | Yes | 598 (8.9) | 81 (12.7) |  |
| Number of ECT sessions in the treatment series | 1–5 | 1297 (19.3) | 120 (18.8) | <0.001 |
|  | 6–9 | 3960 (59.0) | 337 (52.8) |  |
|  | 10–53 | 1455 (21.7) | 181 (28.4) |  |
| Modified Antidepressant Treatment History Form score | 0–1 | 1130 (16.8) | 49 (7.7) | <0.001 |
|  | 2–4 | 1869 (27.8) | 142 (22.3) |  |
|  | 5–8 | 2368 (35.3) | 279 (43.7) |  |
|  | 9–26 | 1345 (20.0) | 168 (26.3) |  |
| Lamotrigine within 100 days after ECT | No | 6188 (92.2) | 548 (85.9) | <0.001 |
|  | Yes | 524 (7.8) | 90 (14.1) |  |
| Valproate within 100 days after ECT | No | 6589 (98.2) | 619 (97.0) | 0.063 |
|  | Yes | 123 (1.8) | 19 (3.0) |  |
| Benzodiazepines within 100 days after ECT | No | 3739 (55.7) | 338 (53.0) | 0.199 |
|  | Yes | 2973 (44.3) | 300 (47.0) |  |
| Other antiepileptic medication within 100 days after ECT | No | 6098 (90.9) | 573 (89.8) | 0.426 |
|  | Yes | 614 (9.1) | 65 (10.2) |  |
| Anxiolytics within 100 days after ECT | No | 4021 (59.9) | 374 (58.6) | 0.554 |
|  | Yes | 2691 (40.1) | 264 (41.4) |  |
| Quetiapine within 100 days after ECT | No | 5665 (84.4) | 491 (77.0) | <0.001 |
|  | Yes | 1047 (15.6) | 147 (23.0) |  |
| Antipsychotic medication within 100 days after ECT | No | 4419 (65.8) | 387 (60.7) | 0.010 |
|  | Yes | 2293 (34.2) | 251 (39.3) |  |
| Stimulants within 100 days after ECT | No | 6526 (97.2) | 614 (96.2) | 0.190 |
|  | Yes | 186 ( 2.8) | 24 (3.8) |  |
| Antidepressants within 100 days after ECT | No | 644 ( 9.6) | 114 (17.9) | <0.001 |
|  | Yes | 6068 (90.4) | 524 (82.1) |  |

Data are n (%), ADHD, attention-deficit hyperactivity disorder; CGI, clinical global impression - severity scale; CGI-I, clinical global impression – improvement scale; ECT, electroconvulsive therapy; PTSD, post-traumatic stress disorder.

Supplementary Table 3 **Type of suicide attempt according to ICD-10 by lithium usage**

|  |  |  |
| --- | --- | --- |
| Cause of suicide attempt | Patients without lithium | Patients with lithium |
| Poisoning | 1276 (87.1) | 166 (87.8) |
| Hanging, strangulation, and suffocation | 39 (2.7) | 4 (2.1) |
| Drowning and submersion | 13 (0.9) | 0 (0.0) |
| Firearm | 2 (0.1) | 0 (0.0) |
| Sharp objects | 91 (6.2) | 12 (6.3) |
| Falling | 16 (1.1) | 2 (1.1) |
| Other types of suicide attempt | 28 (1.9) | 5 (2.6) |

Data are n (%). Fisher’s exact test: 0.889.

Supplementary Table 4 **Diagnosis at readmission**

|  |  |  |
| --- | --- | --- |
| **ICD-10-SE** | **No lithium** | **Lithium** |
| F0 | 66 (1.7) | 2 (0.5) |
| F1 | 223 (5.8) | 20 (5.5) |
| F2 | 161 (4.2) | 19 (5.2) |
| F30-F31.2 | 22 (0.6) | 4 (1.1) |
| F31.3-F39 | 2564 (66.8) | 262 (71.8) |
| F4 | 538 (14.0) | 27 (7.4) |
| F5 | 13 (0.3) | 2 (0.5) |
| F6 | 151 (3.9) | 17 (4.7) |
| F7 | 4 (0.1) | 1 (0.3) |
| F8 | 39 (1.0) | 7 (1.9) |
| F90-F98 | 39 (1.0) | 4 (1.1) |
| F99 | 18 (0.5) | 0 (0.0) |

F0 = Organic, including symptomatic, mental disorders, F1 = Mental and behavioural disorders due to psychoactive substance use, F2 = Schizophrenia, schizotypal and delusional disorders, F30-F31.2 = Manic episode, bipolar affective disorder, current episodes hypomanic, bipolar affective disorder, current episode manic without psychotic symptoms, and bipolar affective disorder, current episode manic with psychotic symptoms, F31.3-F39 = Other bipolar episode, Depressive episode, Recurrent depressive disorder, Persistent mood [affective] disorders, Other mood [affective] disorders, and Unspecified mood [affective] disorder, F4 = Neurotic, stress-related and somatoform disorders, F5 = Behavioural syndromes associated with physiological disturbances and physical factors, F6 = Disorders of adult personality and behaviour, F7 = Mental retardation, F8 = Disorders of psychological development, F90-F98 = Behavioural and emotional disorders with onset usually occurring in childhood and adolescence, F99 = Unspecified mental disorder

Supplementary Table 5 **Time to suicide – Cox regression models**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | **Unadjusted** |  | **Adjusted** |  |
|  |  | **HR (95% CI)** | **p-value** | **HR (95% CI)** | **p-value** |
| Sex | Male |  |  |  |  |
|  | Female | 0.55 (0.32–0.93) | 0.026 | 0.47 (0.27–0.83) | 0.010 |
| Age in years | 18–29 |  |  |  |  |
|  | 30–44 | 0.95 (0.40–2.26) | 0.901 | 0.99 (0.39–2.54) | 0.986 |
|  | 45–64 | 0.76 (0.34–1.72) | 0.516 | 0.72 (0.27–1.93) | 0.514 |
|  | 65–74 | 0.62 (0.24–1.60) | 0.318 | 0.58 (0.17–1.97) | 0.386 |
|  | 75+ | 0.34 (0.10–1.13) | 0.078 | 0.23 (0.05–1.12) | 0.068 |
| Marital status | Divorced |  |  |  |  |
|  | Married/Cohabiting | 2.08 (0.96–4.49) | 0.062 | 1.56 (0.69–3.50) | 0.283 |
|  | Widowed | 2.02 (0.77–5.32) | 0.154 | 4.27 (1.43–12.70) | 0.009 |
|  | Unmarried | 2.03 (1.03–3.98) | 0.040 | 1.38 (0.64–2.97) | 0.407 |
| Working | Yes | 1.15 (0.68–1.94) | 0.603 | 1.47 (0.80–2.72) | 0.216 |
|  | No |  |  |  |  |
| Psychotic symptoms during depression that were used as indication diagnoses for ECT | No |  |  |  |  |
|  | Yes | 0.44 (0.20–0.98) | 0.043 | 0.60 (0.25–1.43) | 0.252 |
| PTSD before ECT | No |  |  |  |  |
|  | Yes | 1.96 (0.48–8.05) | 0.352 | 1.02 (0.23–4.48) | 0.975 |
| ADHD before ECT | No |  |  |  |  |
|  | Yes | 1.54 (0.38–6.33) | 0.548 | 0.69 (0.14–3.45) | 0.651 |
| Anxiety disorder before ECT | No |  |  |  |  |
|  | Yes | 1.06 (0.58–1.95) | 0.846 | 0.74 (0.37–1.49) | 0.394 |
| Obsessive-compulsive disorder before ECT | No |  |  |  |  |
|  | Yes | 1.56 (0.38–6.41) | 0.536 | 1.02 (0.22–4.61) | 0.984 |
| Autism before ECT | No |  |  |  |  |
|  | Yes | 1.73 (0.24–12.50) | 0.586 | 1.04 (0.12–8.86) | 0.974 |
| Personality disorder before ECT | No |  |  |  |  |
|  | Yes | 2.12 (0.96–4.70) | 0.064 | 1.07 (0.40–2.81) | 0.898 |
| Substance use disorder before ECT | No |  |  |  |  |
|  | Yes | 3.19 (1.83–5.56) | 0.000 | 2.07 (1.03–4.15) | 0.040 |
| Earlier suicide attempts | No |  |  |  |  |
|  | Yes | 3.22 (1.90–5.48) | 0.000 | 2.65 (1.41–5.00) | 0.003 |
| Number of psychiatric inpatient periods before ECT | 0 |  |  |  |  |
|  | 1–3 | 1.01 (0.46–2.23) | 0.974 | 0.85 (0.37–1.95) | 0.704 |
|  | 4–5 | 1.26 (0.46–3.47) | 0.657 | 0.73 (0.24–2.29) | 0.595 |
|  | 6–10 | 1.10 (0.38–3.18) | 0.858 | 0.49 (0.14–1.71) | 0.262 |
|  | 11–20 | 2.96 (1.02–8.57) | 0.045 | 0.95 (0.24–3.72) | 0.946 |
|  | 21–30 | 1.51 (0.19–12.10) | 0.699 | 0.36 (0.03–3.86) | 0.401 |
|  | 31–140 | 1.80 (0.22–14.50) | 0.580 | 0.49 (0.04–5.65) | 0.568 |
| Electrode placement | Unilateral |  |  |  |  |
|  | Bitemporal/bilateral | 0.80 (0.29–2.22) | 0.669 | 1.08 (0.37–3.17) | 0.891 |
|  | Missing | 1.11 (0.44–2.80) | 0.828 | 0.79 (0.26–2.41) | 0.678 |
| Pulse width (ms) | 0.25–0.47 |  |  |  |  |
|  | 0.50–1.10 | 1.99 (0.71–5.61) | 0.192 | 2.07 (0.70–6.09) | 0.189 |
|  | Missing | 1.84 (0.62–5.48) | 0.272 | 4.71 (0.02–1 180.00) | 0.582 |
| Frequency (Hz) | 10–65 |  |  |  |  |
|  | 70–140 | 0.63 (0.34–1.18) | 0.148 | 0.72 (0.35–1.48) | 0.375 |
|  | Missing | 0.77 (0.40–1.48) | 0.433 | 0.06 (0.00–13.60) | 0.307 |
| Duration (s) | 1.5–7.4 |  |  |  |  |
|  | 7.5–8.0 | 1.54 (0.80–3.00) | 0.200 | 1.74 (0.87–3.45) | 0.116 |
|  | Missing | 1.46 (0.73–2.92) | 0.281 | 4.30 (0.09–202.00) | 0.458 |
| Electric current (mA) | 500–830 |  |  |  |  |
|  | 850–940 | 1.51 (0.79–2.88) | 0.209 | 1.28 (0.62–2.64) | 0.497 |
|  | Missing | 1.40 (0.73–2.66) | 0.310 | 2.44 (0.06–99.40) | 0.638 |
| CGI-S | Normal/borderline/mildly ill /moderately ill |  |  |  |  |
|  | Markedly | 1.11 (0.55–2.23) | 0.767 | 1.33 (0.64–2.76) | 0.440 |
|  | Severely ill/Among the most ill patients | 0.92 (0.42–2.03) | 0.838 | 1.35 (0.58–3.16) | 0.483 |
|  | Missing | 0.52 (0.14–1.86) | 0.312 | 0.41 (0.11–1.58) | 0.196 |
| CGI-I | Not assessed | 1.67 (0.21–13.40) | 0.629 | 2.10 (0.25–17.60) | 0.495 |
|  | Very much improved |  |  |  |  |
|  | Much improved | 1.82 (0.81–4.06) | 0.146 | 1.43 (0.62–3.31) | 0.400 |
|  | Minimally improved/unchanged/ worse | 2.33 (0.92–5.91) | 0.074 | 1.59 (0.58–4.31) | 0.366 |
|  | Missing | 2.78 (1.16–6.63) | 0.022 | 2.93 (1.05–8.13) | 0.039 |
| Continuation ECT | No |  |  |  |  |
|  | Yes | 1.03 (0.44–2.41) | 0.942 | 1.30 (0.54–3.10) | 0.560 |
| Number of ECT sessions in the treatment series | 1–5 |  |  |  |  |
|  | 6–9 | 0.90 (0.45–1.79) | 0.766 | 1.05 (0.51–2.14) | 0.901 |
|  | 10–53 | 0.98 (0.44–2.18) | 0.956 | 0.89 (0.38–2.07) | 0.789 |
| Modified Antidepressant Treatment History Form score | 0–1 |  |  |  |  |
|  | 2–4 | 0.57 (0.24–1.33) | 0.193 | 0.63 (0.26–1.52) | 0.303 |
|  | 5–8 | 0.93 (0.45–1.94) | 0.844 | 0.97 (0.43–2.16) | 0.937 |
|  | 9–26 | 1.30 (0.60–2.84) | 0.509 | 1.21 (0.50–2.94) | 0.666 |
| Lamotrigine within 100 days after ECT | No |  |  |  |  |
|  | Yes | 1.15 (0.46–2.88) | 0.766 | 0.99 (0.38–2.57) | 0.985 |
| Valproate within 100 days after ECT | No |  |  |  |  |
|  | Yes | 1.19 (0.17–8.61) | 0.863 | 0.85 (0.11–6.38) | 0.871 |
| Benzodiazepines within 100 days after ECT | No |  |  |  |  |
|  | Yes | 1.29 (0.77–2.19) | 0.336 | 1.32 (0.75–2.34) | 0.335 |
| Other antiepileptic medication within 100 days after ECT | No |  |  |  |  |
|  | Yes | 1.40 (0.60–3.27) | 0.436 | 0.96 (0.39–2.34) | 0.925 |
| Anxiolytics within 100 days after ECT | No |  |  |  |  |
|  | Yes | 1.49 (0.88–2.52) | 0.138 | 1.17 (0.66–2.08) | 0.586 |
| Quetiapine within 100 days after ECT | No |  |  |  |  |
|  | Yes | 0.64 (0.28–1.49) | 0.302 | 0.53 (0.22–1.27) | 0.154 |
| Antipsychotic medication within 100 days after ECT | No |  |  |  |  |
|  | Yes | 0.91 (0.51–1.61) | 0.743 | 0.98 (0.53–1.81) | 0.943 |
| Stimulants within 100 days after ECT | No |  |  |  |  |
|  | Yes | 2.48 (0.78–7.96) | 0.126 | 1.40 (0.37–5.32) | 0.617 |
| Antidepressants within 100 days after ECT | No |  |  |  |  |
|  | Yes | 1.07 (0.43–2.69) | 0.881 | 1.29 (0.48–3.46) | 0.610 |

Data are n (%), ADHD, attention-deficit hyperactivity disorder; CGI, clinical global impression - severity scale; CGI-I, clinical global impression – improvement scale; ECT, electroconvulsive therapy; PTSD, post-traumatic stress disorder. Lithium within 100 days and education were not included due to no suicides in subgroups. None of the lithium users committed suicide.