**Appendix Table D22. Quality of life in randomized controlled clinical trials that examined efficacy of topiramate for migraine prevention in adults**

| **Reference**  **Risk of Bias** | **Definition of the Outcome** | **Daily Dose** | **Subjects in Active**  **[Control] Groups** | **Mean [Standard Deviation] with Drug** | **Mean [Standard Deviation] with Placebo** | **Cohen Mean Difference**  **(95% CI)** | **Mean Difference**  **(95% CI)** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Silberstein, 200941 Risk of bias Low** | **Mean change from baseline in the headache index (The headache index was calculated as the sum of the product of daily average headache severity multiplied by headache duration for the day, divided by the number of days in the specified period)** | **100 mg/day** | **165 [163]** | **-0.3 [0.3]** | **-0.2 [0.4]** | **-0.3 (-0.5 to -0.1)** | **-0.1 (-0.2 to 0.0)** |
| Mean change from baseline in the in the MSQ (Migraine Specific Questionnaire)scores: Emotional function domain | 100 mg/day | 165 [163] | -26.3 [27.8] | -21.0 [30.2] | -0.2 (-0.4 to 0.0) | -5.3 (-11.6 to 1.0) |
| Mean change from baseline in the in the MSQ (Migraine Specific Questionnaire) scores: Role Function Preventive domain | 100 mg/day | 165 [163] | -16.1 [21.5] | -12.6 [21.0] | -0.2 (-0.4 to 0.1) | -3.5 (-8.1 to 1.1) |
| Mean change from baseline in the in the MSQ (Migraine Specific Questionnaire) scores: Role Function Restrictive domain | 100 mg/day | 165 [163] | -23.7 [23.1] | -18.8 [22.6] | -0.2 (-0.4 to 0.0) | -4.9 (-9.8 to 0.0) |
| Mean change from baseline in the MIDAS (Migraine Disability Assessment) score | 100 mg/day | 165 [163] | -31.4 [53.8] | -21.0 [52.2] | -0.2 (-0.4 to 0.0) | -10.4  (-21.9 to 1.1) |
| **Diener, 200738 Risk of bias Medium** | **Mean change in HIT-6 (Headache Impact Test) questionnaire in the last 4 weeks of double-blind phase compared to open-label baseline** | **100mg/day** | **255 [259]** |  |  |  | **-1.9 (-3.4 to -0.4)** |
| Mean change in SF-12 mental component score in the last 4 weeks of double-blind phase compared to open-label baseline | 100mg/day | 255 [259] |  |  |  | -1.2 (-3.4 to 1.0) |
| Mean change in SF-12 physical health | 100mg/day | 255 [259] | -1.7 | -3.1 | NS |  |
| **MIDAS score change at end-point** | **50 to 200mg/day** | **32 [27]** | **-26.0 [61.0]** | **3.0 [21.0]** | **-0.6 (-1.1 to -0.1)** | **-29.0**  **(-51.6 to -6.4)** |
| Brandes, 200630 Risk of bias Medium | MSQ (Migraine Specific Questionnaire: scored from 0 to 100 with higher scores indicating better functioning)-emotional function: at end of study | 50mg/day | 117 [114] | 77.6 [22.71] | 74.1 [21.35] | 0.2 (-0.1 to 0.4) | 3.5 (-2.2 to 9.2) |
| **MSQ (Migraine Specific Questionnaire: scored from 0 to 100 with higher scores indicating better functioning)-emotional function: at end of study** | **100 mg/day** | **120 [114]** | **82.9 [23.00]** | **74.1 [21.35]** | **0.4 (0.1 to 0.7)** | **8.8 (3.1 to 14.5)** |
| **MSQ (Migraine Specific Questionnaire: scored from 0 to 100 with higher scores indicating better functioning)-emotional function: at end of study** | **200mg/day** | **117 [114]** | **82.7 [22.71]** | **74.1 [21.35]** | **0.4 (0.1 to 0.7)** | **8.6 (2.9 to 14.3)** |
| MSQ (Migraine Specific Questionnaire: scored from 0 to 100 with higher scores indicating better functioning)-role function: prevention: at end of study | 50mg/day | 117 [114] | 82.6 [18.39] | 80.8 [17.08] | 0.1 (-0.2 to 0.4) | 1.8 (-2.8 to 6.4) |
| **MSQ (Migraine Specific Questionnaire: scored from 0 to 100 with higher scores indicating better functioning)-role function: prevention: at end of study** | **100 mg/day** | **120 [114]** | **85.5 [18.62]** | **80.8 [17.08]** | **0.3 (0.0 to 0.5)** | **4.7 (0.1 to 9.3)** |
| **MSQ (Migraine Specific Questionnaire: scored from 0 to 100 with higher scores indicating better functioning)-role function: prevention: at end of study** | **200mg/day** | **117 [114]** | **87.2 [18.39]** | **80.8 [17.08]** | **0.4 (0.1 to 0.6)** | **6.4 (1.8 to 11.0)** |
| MSQ (Migraine Specific Questionnaire: scored from 0 to 100 with higher scores indicating better functioning)-role function: restrictive: at end of study | 50mg/day | 117 [114] | 71.9 [20.55] | 67.2 [19.22] | 0.2 (0.0 to 0.5) | 4.7 (-0.4 to 9.8) |
| **MSQ (Migraine Specific Questionnaire: scored from 0 to 100 with higher scores indicating better functioning)-role function: restrictive: at end of study** | **100 mg/day** | **120 [114]** | **75.8 [20.81]** | **67.2 [19.22]** | **0.4 (0.2 to 0.7)** | **8.6 (3.5 to 13.7)** |
| **MSQ (Migraine Specific Questionnaire: scored from 0 to 100 with higher scores indicating better functioning)-role function: restrictive: at end of study** | **200mg/day** | **117 [114]** | **77.9 [18.39]** | **67.2 [17.08]** | **0.6 (0.3 to 0.9)** | **10.7 (6.1 to 15.3)** |
| **Silberstein, 200627 Risk of bias Medium** | **MSQ role function: prevention domain score at end point** | **100 mg/day** | **125 [115]** | **88.3 [15.7]** | **80.6 [16.1]** | **0.5 (0.2 to 0.7)** | **7.7 (3.7 to 11.7)** |
| MSQ role function: prevention domain score at end point | 200mg/day | 112 [115] | 84.4 [18.0] | 80.6 [16.1] | 0.2 (0.0 to 0.5) | 3.8 (-0.6 to 8.2) |
| MSQ role function: prevention domain score at end point | 50mg/day | 117 [115] | 84.3 [16.2] | 80.6 [16.1] | 0.2 (0.0 to 0.5) | 3.7 (-0.5 to 7.9) |
| MSQ role function: restrictive domain score at end point | 100 mg/day | 125 [115] | 77.2 [19.0] | 65.8 [19.3] | 0.6 (0.3 to 0.9) | 11.4 (6.5 to 16.3) |
| **MSQ role function: restrictive domain score at end point** | **200mg/day** | **112 [115]** | **75.8 [21.2]** | **65.8 [19.3]** | **0.5 (0.2 to 0.8)** | **10.0 (4.7 to 15.3)** |
| **MSQ role function: restrictive domain score at end point** | **50mg/day** | **117 [115]** | **72.2 [19.5]** | **65.8 [19.3]** | **0.3 (0.1 to 0.6)** | **6.4 (1.4 to 11.4)** |
| **MSQ role function: emotional function score at end point** | **100 mg/day** | **125 [115]** | **84.4 [21.2]** | **72.9 [21.4]** | **0.5 (0.3 to 0.8)** | **11.5 (6.1 to 16.9)** |
| **MSQ role function: emotional function score at end point** | **200mg/day** | **112 [115]** | **81.2 [23.3]** | **72.9 [21.4]** | **0.4 (0.1 to 0.6)** | **8.3 (2.5 to 14.1)** |
| **MSQ role function: emotional function score at end point** | **50mg/day** | **117 [115]** | **78.5 [21.6]** | **72.9 [21.4]** | **0.3 (0.0 to 0.5)** | **5.6 (0.1 to 11.1)** |
| **Diamond, 200526 Risk of bias Low** | **MSQ: Emotional domain: endpoint score** | **100 mg/day** | **384 [372]** | **82.5 [21.6]** | **73.5 [21.2]** | **0.4 (0.3 to 0.6)** | **9.0 (6.0 to 12.0)** |
| **MSQ: Prevention domain: endpoint score** | **100 mg/day** | **384 [372]** | **85.5 [17.6]** | **79.9 [17.4]** | **0.3 (0.2 to 0.5)** | **5.6 (3.1 to 8.1)** |
| **MSQ: Restriction domain: endpoint score** | **100 mg/day** | **384 [372]** | **75.4 [21.6]** | **66.5 [19.3]** | **0.4 (0.3 to 0.6)** | **8.9 (6.0 to 11.8)** |

Bold = significant at 95% confidence limit when 95% CI of mean difference estimates do not include 0; SF-12 = Short Form 12-Item Health Survey; CI = confidence interval