**Appendix Table D123. Treatment discontinuation due to specific adverse effects with topiramate vs. placebo, pooled with random effects model results from individual randomized controlled clinical trials**

| **Adverse Effect Leading to Treatment Discontinuation** | **Author, Year** | **Events/**  **Randomized with Drug** | **Events/**  **Randomized with Placebo** | **Relative Risk**  **(95% CI)** | **Relative Risk**  **Weight**  **(Inverse Variance)** | **Absolute Risk Difference**  **(95% CI)** | **Absolute Risk Difference**  **Weight**  **(Inverse Variance)** | **Arcsine Transformed Risk Difference**  **(95% CI)** | **Arcsine Transformed Risk Difference**  **Weight** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Cognitive difficulties | Lainez, 200735 | 28/391 | 8/383 | 3.4  (1.6 to 7.4) | 56.75 | 0.05  (0.02 to 0.08) | 49.71 | 0.13  (0.06 to 0.20) | 40.3 |
| Cognitive difficulties | Mei, 200424 | 7/58 | 0/57 | 14.7  (0.9 to 252.3) | 23.12 | 0.12  (0.03 to 0.21) | 29.13 | 0.36  (0.17 to 0.54) | 33.48 |
| Cognitive difficulties | Mei, 200628 | 0/30 | 1/20 | 0.2  (0.0 to 5.3) | 20.13 | -0.05  (-0.17 to 0.07) | 21.16 | -0.23  (-0.51 to 0.06) | 26.21 |
| Cognitive difficulties | Pooled | 35/479 | 9/460 | 2.8  (0.5 to 15.3) | 100 | 0.05  (-0.02 to 0.12) | 100 | 0.11  (-0.13 to 0.35) | 100 |
| Difficulty with memory | Adelman, 200840 | 9/514 | 1/202 | 3.5  (0.4 to 27.6) | 59.83 | 0.01  (0.00 to 0.03) | 96.19 | 0.05  (-0.03 to 0.13) | 62.52 |
| Difficulty with memory | Mei, 200628 | 0/30 | 1/20 | 0.2  (0.0 to 5.3) | 40.17 | -0.05  (-0.17 to 0.07) | 3.81 | -0.23  (-0.51 to 0.06) | 37.48 |
| Difficulty with memory | Pooled | 9/544 | 2/222 | 1.2  (0.1 to 16.3) | 100 | 0.01  (-0.01 to 0.03) | 100 | -0.05  (-0.32 to 0.21) | 100 |
| Dizziness | Lainez, 200735 | 8/391 | 6/383 | 1.3  (0.5 to 3.7) | 69.8 | 0.01  (-0.01 to 0.02) | 74.65 | 0.02  (-0.05 to 0.09) | 58.46 |
| Dizziness | Mei, 200628 | 0/30 | 2/20 | 0.1  (0.0 to 2.7) | 30.2 | -0.10  (-0.25 to 0.05) | 25.35 | -0.32  (-0.61 to -0.04) | 41.54 |
| Dizziness | Pooled | 8/421 | 8/403 | 0.7  (0.1 to 5.1) | 100 | -0.02  (-0.11 to 0.07) | 100 | -0.12  (-0.45 to 0.21) | 100 |
| Fatigue | Lainez, 200735 | 18/391 | 3/383 | 5.9  (1.7 to 19.8) | 66.18 | 0.04  (0.02 to 0.06) | 96.3 | 0.13  (0.06 to 0.20) | 84 |
| Fatigue | Mei, 200628 | 1/30 | 1/20 | 0.7  (0.0 to 10.1) | 33.82 | -0.02  (-0.13 to 0.10) | 3.7 | -0.04  (-0.33 to 0.24) | 16 |
| **Fatigue** | **Pooled** | **19/421** | **4/403** | **2.8**  **(0.4 to 21.2)** | **100** | **0.04**  **(0.01 to 0.06)** | **100** | **0.1**  **(0.1 to 0.22)** | **100** |
| Insomnia | Lainez, 200735 | 13/391 | 4/383 | 3.2  (1.0 to 9.7) | 66.18 | 0.02  (0.00 to 0.04) | 83.59 | 0.08  (0.01 to 0.15) | 60.4 |
| Insomnia | Mei, 200628 | 0/30 | 1/20 | 0.2  (0.0 to 5.3) | 33.82 | -0.05  (-0.17 to 0.07) | 16.41 | -0.23  (-0.51 to 0.06) | 39.6 |
| Insomnia | Pooled | 13/421 | 5/403 | 1.3  (0.1 to 15.1) | 100 | 0.01  (-0.04 to 0.06) | 100 | -0.04  (-0.33 to 0.25) | 100 |
| Language problems | Adelman, 200840 | 10/514 | 1/202 | 3.9  (0.5 to 30.5) | 67.97 | 0.02  (0.00 to 0.03) | 98.27 | 0.07  (-0.01 to 0.15) | 76.93 |
| Language problems | Mei, 200628 | 2/30 | 0/20 | 3.4  (0.2 to 67.0) | 32.03 | 0.07  (-0.05 to 0.18) | 1.73 | 0.26  (-0.02 to 0.54) | 23.07 |
| Language problems | Pooled | 12/544 | 1/222 | 3.7  (0.7 to 20.3) | 100 | 0.02  (0.00 to 0.03) | 100 | 0.12  (-0.04 to 0.27) | 100 |
| Paresthesia | Lainez, 200735 | 31/391 | 3/383 | 10.1  (3.1 to 32.8) | 74.85 | 0.07  (0.04 to 0.10) | 85.36 | 0.20  (0.13 to 0.27) | 75.34 |
| Paresthesia | Mei, 200424 | 5/58 | 0/57 | 10.8  (0.6 to 191.2) | 12.56 | 0.09  (0.01 to 0.16) | 11.18 | 0.30  (0.12 to 0.48) | 17.11 |
| Paresthesia | Mei, 200628 | 4/30 | 0/20 | 6.1  (0.3 to 107.4) | 12.59 | 0.13  (-0.01 to 0.27) | 3.46 | 0.37  (0.09 to 0.66) | 7.55 |
| **Paresthesia** | **Pooled** | **40/479** | **3/460** | **9.6**  **(3.5 to 26.5)** | **100** | **0.08**  **(0.05 to 0.10)** | **100** | **0.23**  **(0.15 to 0.31)** | **100** |
| Somnolence | Adelman, 200840 | 10/514 | 4/202 | 1.0  (0.3 to 3.1) | 81.03 | 0.00  (-0.02 to 0.02) | 86.81 | 0.01  (-0.08 to 0.09) | 83.43 |
| Somnolence | Mei, 200424 | 2/58 | 1/57 | 2.0  (0.2 to 21.1) | 18.97 | 0.02  (-0.04 to 0.08) | 13.19 | 0.05  (-0.13 to 0.24) | 16.57 |
| Somnolence | Pooled | 12/572 | 5/259 | 1.1  (0.4 to 3.2) | 100 | 0.00  (-0.02 to 0.02) | 100 | 0.01  (-0.06 to 0.09) | 100 |
| Taste perversion | Adelman, 200840 | 6/514 | 0/202 | 5.1  (0.3 to 90.5) | 36.48 | 0.01  (0.00 to 0.02) | 93.08 | 0.11  (0.03 to 0.19) | 78.03 |
| Taste perversion | Mei, 200424 | 1/58 | 0/57 | 2.9  (0.1 to 70.9) | 29.76 | 0.02  (-0.03 to 0.06) | 5.96 | 0.13  (-0.05 to 0.31) | 15.5 |
| Taste perversion | Mei, 200628 | 2/30 | 0/20 | 3.4  (0.2 to 67.0) | 33.76 | 0.07  (-0.05 to 0.18) | 0.97 | 0.26  (-0.02 to 0.54) | 6.47 |
| Taste perversion | Pooled | 9/602 | 0/279 | 3.8  (0.7 to 21.4) | 100 | 0.01  (0.00 to 0.02) | 100 | 0.12  (0.05 to 0.19) | 100 |

| **Heterogeneity Statistics** | **Degree of Freedom** | **P Value**  **Relative Risk** | **I Squared**  **Relative Risk** | **P Value**  **Absolute Risk Difference** | **I Squared**  **Absolute Risk Difference** | **P Value**  **Arcsine Transformed Risk Difference** | **I Squared**  **Arcsine Transformed Risk Difference** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Any cognitive symptom | 2 | 0.15 | 48.10% | 0.08 | 61.30% | 0.003 | 83.10% |
| Difficulty with memory | 1 | 0.15 | 51.10% | 0.31 | 4.70% | 0.07 | 70.40% |
| Dizziness | 1 | 0.16 | 49.20% | 0.16 | 49.00% | 0.02 | 80.80% |
| Fatigue | 1 | 0.12 | 51% | 0.40 | 0.00% | 0.30 | 23% |
| Insomnia | 1 | 0.12 | 58.50% | 0.24 | 28.70% | 0.04 | 76.40% |
| Language problems | 1 | 0.94 | 0.00% | 0.38 | 0.00% | 0.21 | 36.40% |
| Paresthesia | 2 | 0.95 | 0.00% | 0.67 | 0.00% | 0.33 | 11.00% |
| Somnolence | 1 | 0.61 | 0.00% | 0.59 | 0.00% | 0.63 | 0.00% |
| Taste perversion | 2 | 0.97 | 0.00% | 0.64 | 0.00% | 0.59 | 0.00% |