**Supplementary Table 2: Association of relapses to baclofen treatment among incident and prevalent MS individuals.**

| Incident MS | E | PT | M1 HR | 95% CI | M2 HR | 95% CI | M3 HR | 95% CI | M4 HR | 95% CI | M5 HR | 95% CI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Relapses** | | | | | | | | | | | | |
| No relapses | 7 | 609 | 1.00 | | 1.00 | | 1.00 | | 1.00 | | 1.00 | |
| 1 relapse | 56 | 4396 | 0.94 | 0.43,2.07 | 1.22 | 0.46,3.22 | 2.13 | 0.21,21.10 | 1.10 | 0.41,2.94 | 1.12 | 0.42,2.99 |
| 2 relapses | 23 | 2054 | 0.98 | 0.41,2.31 | 1.35 | 0.49,3.74 | 2.52 | 0.25,24.87 | 1.09 | 0.38,3.10 | 1.10 | 0.39,3.15 |
| **Age at MS onset** | 82 | 6669 | | | 1.00 | 0.97,1.03 | 1.03 | 0.98,1.09 | 0.99 | 0.96,1.03 | 1.00 | 0.96,1.04 |
| **EDSS at study entry** | | | | | | | | | | | | |
| EDSS 0-2.5 | 22 | 2963 | | | | | 1.00 | | | | | |
| EDSS 3-5.5 | 12 | 617 | | | | | 2.11 | 0.99,4.49 | | | | |
| EDSS 6+ | 1 | 35 | | | | | 1.98 | 0.21,18.59 | | | | |
| **DMT use** | | | | | | | | | | | | |
| No DMT | 3 | 659 | | | | | | | 1.00 | | 1.00 | |
| Moderately effective DMT | 63 | 5275 | | | | | | | 2.70 | 0.83,8.79 | 2.77 | 0.82,9.33 |
| Highly effective DMT | 8 | 493 | | | | | | | 4.90 | 1.25,19.17 | 4.95 | 1.22,20.14 |

Individuals with incident MS diagnosed with RRMS with relapses (N=1146). Association of relapses at study entry to baclofen treatment. Model 1 adjusted for age, county of residence at MS diagnosis, and highest attained education. Model 2-5 additionally adjusted for number of years from MS onset to diagnosis and calendar year of MS diagnosis. Model 5 additionally adjusted for time with MS as an additional timescale. Disease modifying treatments are time-dependent variables. Note: varying number of individuals in each model due to missing values; Model 1 N=1146; Model 2 N=1077; Model 3 N=568; Model 4-5 N=908. Abbreviations: CI= confidence interval; DMT=disease modifying therapy; E=number of events; EDSS=Expanded Disability Severity Scale; HR=hazard ratio; M=model; PT=person-time. Reference category indicated by a hazard ratio of 1.00 with no confidence interval.

| Prevalent MS | E | PT | M1 HR | 95% CI | M2 HR | 95% CI | M3 HR | 95% CI | M4 HR | 95% CI | M5 HR | 95% CI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Relapses** | | | | | | | | | | | | |
| No relapse | 11 | 516 | 1.00 | | 1.00 | | 1.00 | | 1.00 | | 1.00 | |
| 1 relapse | 114 | 8053 | 0.75 | 0.40,1.41 | 0.77 | 0.41,1.44 | 1.25 | 0.30,5.23 | 0.88 | 0.44,1.75 | 0.90 | 0.45,1.79 |
| 2 relapses | 33 | 2578 | 0.70 | 0.35,1.40 | 0.71 | 0.36,1.42 | 1.20 | 0.28,5.15 | 0.81 | 0.38,1.71 | 0.82 | 0.39,1.74 |
| 3 relapses | 24 | 1552 | 0.83 | 0.40,1.72 | 0.85 | 0.41,1.76 | 1.03 | 0.23,4.63 | 0.88 | 0.40,1.93 | 0.89 | 0.40,1.96 |
| 4+ relapses | 35 | 2445 | 0.79 | 0.40,1.58 | 0.80 | 0.40,1.58 | 1.44 | 0.34,6.13 | 0.90 | 0.43,1.91 | 0.92 | 0.43,1.94 |
| **Age at MS diagnosis** | 217 | 15144 | | | 0.99 | 0.95,1.04 | 0.99 | 0.94,1.05 | 0.99 | 0.95,1.04 | 1.05 | 0.94,1.18 |
| **EDSS at study entry** | | | | | | | | | | | | |
| EDSS 0-2.5 | 84 | 7629 | | | | | 1.00 | | | | | |
| EDSS 3-5.5 | 43 | 2402 | | | | | 1.61 | 1.10,2.35 | | | | |
| EDSS 6+ | 11 | 155 | | | | | 6.54 | 3.44,12.45 | | | | |
| **DMT use** | | | | | | | | | | | | |
| No DMT | 16 | 1852 | | | | | | | 1.00 | | 1.00 | |
| Moderately effective DMT | 183 | 11890 | | | | | | | 1.86 | 1.08,3.22 | 1.85 | 1.07,3.21 |
| Highly effective DMT | 5 | 240 | | | | | | | 2.81 | 1.00,7.88 | 2.77 | 0.99,7.79 |

Individuals with prevalent MS diagnosed with RRMS with relapses (N=1890). Association of relapses at study entry to baclofen treatment. Model 1 adjusted for age, county of residence at MS diagnosis, and highest attained education. Model 2-5 additionally adjusted for number of years from MS onset to diagnosis and calendar year of MS diagnosis. Model 5 additionally adjusted for time with MS as an additional timescale. Disease modifying treatments are time-dependent variables. Note: varying number of individuals in each model due to missing values. Model 1,2 N=1890, Model 3 N=1268 Models 4-5 N=1745. Abbreviations: CI= confidence interval; DMT=disease modifying therapy; E=number of events; EDSS=Expanded Disability Severity Scale; HR=hazard ratio; M=model; PT=person-time. Reference category indicated by a hazard ratio of 1.00 with no confidence interval.