Supplementary Table S2: Multivariable Cox proportional hazards regression on the association between childhood and adolescence factors and multiple sclerosis – complete case analysis for the total sample and stratified by sex

| | Multivariable Cox proportional Hazards Model ^a (n = 75247; 310 participants with and 74937 participants without an MS ^b diagnosis) | | Multivariable Cox proportional Hazards Model – Women ^a (n = 41296; 228 women with and 41068 women without an MS ^b | | Multivariable Cox proportional Hazards Model – Men ^a (n = 33951, 82 men with and 33869 men without an MS ^b diagnosis) | |
|---|---|----------------------------|--|----------------------------|--|----------------------------|
| 3 7 • 11 | TTDb | 050/ CTh | | agnosis) | TTDb | 050/ CTh |
| Variable | HRb | 95% CI ^b | HRb | 95% CI ^b | HRb | 95% CI ^b |
| Sex Female | $\mathbf{p}_{\alpha}\mathbf{f}$ | | | | | |
| Male | <i>Ref.</i> 0.43 | 0.33 - 0.56 | | | | |
| Number of siblings | 0.43 | 0.33 – 0.30 | | | | |
| Only child | Ref. | | Ref. | | Ref. | |
| 1-2 sibling(s) | кеј. 1.16 | 0.85 - 1.58 | 1.07 | 0.75 - 1.53 | 1.47 | 0.75 - 2.89 |
| ≥3 siblings | 1.10 | 0.83 - 1.58 0.70 - 1.57 | 1.10 | 0.73 - 1.33 0.69 - 1.73 | 0.94 | 0.73 - 2.89 0.39 - 2.27 |
| Premature birth | 1.03 | 0.70 - 1.37 | 1.10 | 0.09 - 1.73 | 0.54 | 0.39 - 2.21 |
| (>4 weeks before due date) | | | | | | |
| No | Ref. | | Ref. | | Ref. | |
| Yes | 1.10 | 0.62 - 1.96 | 0.95 | 0.48 - 1.86 | 1.83 | 0.58 - 5.80 |
| Cesarean section | 1.10 | 0.02 - 1.70 | 0.73 | 0.40 - 1.00 | 1.03 | 0.36 – 3.60 |
| No | Ref. | | Ref. | | Ref. | |
| Yes | 1.23 | 0.77 - 1.97 | 1.27 | 0.73 - 2.21 | 1.14 | 0.48 - 2.68 |
| Birth weight | 1.23 | 0.77 - 1.57 | 1.27 | 0.73 - 2.21 | 1.17 | 0.40 – 2.00 |
| Low | 1.15 | 0.80 - 1.65 | 1.24 | 0.84 - 1.83 | 0.78 | 0.29 - 2.12 |
| Average | Ref. | 0.00 - 1.03 | Ref. | 0.04 – 1.03 | Ref. | 0.27 - 2.12 |
| High | 1.06 | 0.75 - 1.49 | 1.09 | 0.72 - 1.67 | 0.99 | 0.56 - 1.75 |
| Ever breastfed | 1.00 | 0.75 1.17 | 1.07 | 0.72 1.07 | 0.77 | 0.00 1.75 |
| No | Ref. | | Ref. | | Ref. | |
| Yes, ≤4 months | 1.08 | 0.82 - 1.43 | 1.25 | 0.92 - 1.69 | 0.71 | 0.38 - 1.30 |
| Yes, >4 months | 0.99 | 0.73 - 1.34 | 0.90 | 0.63 - 1.30 | 1.06 | 0.58 - 1.91 |
| Contact with pets and/or | | | | | -100 | |
| livestock during childhood | | | | | | |
| No | Ref. | | Ref. | | Ref. | |
| Yes | 1.06 | 0.85 - 1.33 | 1.00 | 0.77 - 1.30 | 1.30 | 0.84 - 2.02 |
| Attended daycare | | | | | | |
| No | Ref. | | Ref. | | Ref. | |
| Yes, 1 st attendance at age 3-6 | 0.91 | 0.68 - 1.22 | 0.84 | 0.60 - 1.19 | 1.13 | 0.63 - 2.03 |
| years | | | | | | |
| Yes, 1 st attendance at age 1-<3 | 0.84 | 0.57 - 1.25 | 0.89 | 0.56 - 1.41 | 0.78 | 0.36 - 1.68 |
| year(s) | | | | | | |
| Yes, 1 st attendance at age <1 | 0.85 | 0.52 - 1.38 | 0.97 | 0.58 - 1.65 | 0.36 | 0.08 - 1.58 |
| year | | | | | | |
| Weight at the age of 10 years | | | | | | |
| compared to peers | | | | | | |
| Lower | 0.89 | 0.67 - 1.18 | 0.80 | 0.56 - 1.13 | 1.13 | 0.67 - 1.92 |
| Average | Ref. | | Ref. | | Ref. | |
| Higher | 1.01 | 0.73 - 1.40 | 0.95 | 0.65 - 1.38 | 1.18 | 0.62 - 2.25 |
| BMI ^b at the age of 18 years | | | | | | |
| (kg/m²) | | | | | | |
| Underweight (<18.5) | 1.23 | 0.89 - 1.70 | 1.16 | 0.81 - 1.66 | 2.09 | 1.01 - 4.33 |
| Normal weight (18.5 - <25) | Ref. | | Ref. | | Ref. | |
| Overweight (25 - <30) | 1.93 | 1.35 - 2.75 | 2.37 | 1.57 - 3.58 | 1.21 | 0.60 - 2.45 |
| Obesity (≥30) | 3.02 | 1.70 - 5.39 | 2.91 | 1.42 - 5.93 | 3.41 | 1.26 - 9.24 |
| Childhood Trauma ^c (per 5 units) | 0.94 | 0.75 - 1.18 | 0.91 | 0.70 - 1.18 | 1.05 | 0.65 - 1.70 |

^aAdjusted for education and migration status, stratified by birth year (categorized as: <1955, 1955-1964, 1965-1974, 1975-1984, ≥1985)

^bMS = Multiple Sclerosis, HR = Hazard Ratio, CI = Confidence Interval, BMI = Body Mass Index

^cAssessed with the Childhood Trauma Screener (5 – 25 points)