|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pt. num. | Age (y) | Sex | Disease duration (y) | Pt. type | Last prior DMT | Time since previous DMT (m) | EDSS 0m | EDSS 3.5m | EDSS 6m | EDSS 12m | Relapses within 1y prior to DMF | Relapses 1y since DMF initiation | MRI activity 1y+ |
| 1 | 53 | F | 17.5 | 2nd | Betaferon  (adv. evt) | 1 | 5 | 6.5 | 6.5 | 6.5 | 0 | 0 | no |
| 2 | 50 | F | 15.5 | 2nd | Copaxone  (adv.evt) | 5 | 1.5 | 1.5 | - | - | 0 | - | - |
| 3 | 29 | M | 6 | 2nd | Fingolimod  (adv.evt) | 2 | 0 | 1.5 | - | - | 1 | - | - |
| 4 | 34 | F | 5.5 | 2nd | Fingolimod  (adv. evt) | 8 | 1 | 1 | 4 | - | 0 | 2 | - |
| 5 | 53 | F | 21 | 2nd | Betaferon  (adv. evt.) | 192 | 3 | 1.5 | 3 | 4 | 0 | 0 | no |
| 6 | 21 | M | 8 | 2nd | Avonex  (adv. evt.) | 1 | 0 | 1 | 1 | 1 | 0 | 0 | no |
| 7 | 44 | M | 8 | 2nd | Avonex  (activity) | 1 | 1 | 1 | 1 | 1 | 0 | 0 | no |
| 8 | 36 | F | 1.7 | 2nd | Avonex  (adv. evt.) | 13 | 0 | 1.5 | 1 | 1.5 | 0 | 0 | yes |
| 9 | 63 | M | 9 | 2nd | Avonex  (activity) | 1 | 4 | 3.5 | 4 | 2.5 | 0 | 0 | no |
| 10 | 29 | F | 10 | 2nd | Fingolimod  (activity) | 20 | 0 | 1 | 0 | 3 | 2 | 0 | no |
| 11 | 23 | M | 3.08 | 2nd | Betaferon  (activity) | 2 | 2 | 1 | - | 0 | 0 | 0 | yes |
| 12 | 29 | M | 3 | 2nd | Betaferon  (adv. evt.) | 1 | 0 | 0 | 0 | 0 | 0 | 0 | no |
| 13 | 45 | M | 13.08 | 2nd | Avonex  (activity) | 1 | 6 | 6 | 6.5 | 6.5 | 1 | 0 | no |
| 14 | 30 | F | 7.3 | 2nd | Betaferon  (prefer.) | 2 | 1 | 0 | - | - | 0 | 1 | yes |
| 15 | 36 | F | 1.92 | 2nd | Avonex  (activity) | 1 | 1.5 | 1.5 | 1 | 2 | 0 | 0 | yes |
| 16 | 54 | F | 23.5 | 2nd | Avonex  (activity) | 1 | 5 | 5 | 4.5 | 4.5 | 0 | 0 | no |
| 17 | 66 | F | 22.6 | 2nd | Rebif  (activity) | 1 | 6 | 6.5 | 6.5 | 6.5 | 0 | 0 | no |
| 18 | 26 | F | 5.42 | 2nd | Avonex  (activity) | 1 | 0 | 0 | 1 | 0 | 0 | 0 | no |
| 19 | 48 | F | 2.67 | 2nd | Fingolimod  (activity) | 1 | 3.5 | 3 | 3 | 3.5 | 1 | 2 | no |
| 20 | 42 | F | 8.17 | 2nd | Avonex  (Activity) | 1 | 2 | 1 | 1.5 | 1.5 | 1 | 0 | - |
| 21 | 55 | F | 10 | 2nd | Rebif  (adv. evt.) | 1.5 | 2 | 3 | 2.5 | 2 | 1 | 0 | no |
| 22 | 35 | F | 0.17 | 1st | - | - | 5 | 3.5 | 3 | 3 | 1 | 0 | no |
| 23 | 63 | F | 18.58 | 1st | - | - | 5 | 4 | 3 | 3 | 1 | 0 | no |
| 24 | 36 | F | 12.58 | 1st | - | - | 1 | 1 | 0 | - | 1 | 0 | no |
| 25 | 35 | F | 0.042 | 1st | - | - | 1 | 2 | 1 | 1 | 1 | 0 | no |
| 26 | 47 | M | 2.92 | 1st | - | - | 2.5 | 4 | - | 2 | 0 | 0 | no |
| 27 | 52 | F | 1.83 | 1st | - | - | 2 | 2 | 2 | 1 | 0 | 0 | no |
| 28 | 24 | M | 0.41 | 1st | - | - | 1 | 0 | 1 | 1 | 1 | 0 | no |
| 29 | 24 | F | 0.6 | 1st | - | - | 3 | 1.5 | 2 | 2 | 1 | 0 | no |
| 30 | 24 | M | 4 | 1st | - | - | 1 | 1 | 0 | 0 | 0 | 0 | yes |
| 31 | 36 | F | 2.25 | 1st | - | - | 1 | 1 | 2 | 0 | 0 | 0 | no |
| 32 | 44 | M | 0.25 | 1st | - | - | 4 | 4 | 3.5 | 3 | 1 | 0 | no |
| 33 | 26 | F | 0.5 | 1st | - | - | 4 | 4 | 4.5 | 6 | 1 | 1 | yes |
| 34 | 32 | M | 0.25 | 1st | **-** | - | 5 | 3 | 3 | - | 2 | 0 | no |
| 35 | 23 | M | 0.17 | 1st | **-** | - | 1 | 0 | 0 | 0 | 1 | 0 | no |
| 36 | 24 | M | 0.083 | 1st | **-** | - | 2 | 1 | 1 | 1 | 1 | 0 | no |
| 37 | 27 | F | 0.083 | 1st | **-** | - | 0 | 1 | 0 | 0 | 1 | 1 | no |
| 38 | 35 | M | 0.29 | 1st | **-** | - | 2.5 | 2 | 1 | 1 | 1 | 0 | no |
| 39 | 39 | F | 0.67 | 1st | **-** | - | 1 | 1 | 0 | 0 | 1 | 0 | no |
| 40 | 23 | F | 0.42 | 1st | **-** | - | 4 | 2 | 3.5 | 3.5 | 1 | 0 | yes |
| 41 | 24 | F | 0.18 | 1st | **-** | - | 1 | 1.5 | 0 | 2.5 | 1 | 0 | no |
| 42 | 27 | F | 0.27 | 1st | **-** | - | 0 | - | 0 | 1 | 0 | 0 | no |
| 43 | 67 | F | 0.33 | 1st | **-** | - | 5.5 | 5 | 5 | 5 | 1 | 1 | no |
| Mean All | 38±2 (35) | 28F  15M | 5.8±1 (2.9) |  |  |  | 2.26±0.3 | 2.18±0.3 | 2.17±0.3  p=0.09 | 2.22±0.3 | 0.58± 0.09 (25) | 0.2±0.08 (8) **p=0.00**42 | 32no/  7 yes |
| Mean 1st line | 34.9±2.7 (34) | 14F  8M | 2.1±1 (0.37) |  |  |  | 2.39±0.4 | 2.12±0.3 | 1.69±0.3  **p**=**0.003** | 1.8±0.4  p=0.06 | 0.82±0.11 (18) | 0.14±0.07 (3) **p=0.0003** | 19no/ 3yes |
| Mean 2nd line | 41.2±2.9  (42) | 14F  7M | 9.7±1.5  (8.0) |  |  | 12.3 (1) | 2.12±0.4 | 2.24±0.5 | 2.76±0.5  p=0.07 | 2.71±0.5 | 0.33±0.13 (7) | 0.26±0.14 (5) ns | 13no/ 4yes |
| P-value 1st vs 2nd line | ns |  | **<0.0001** |  |  |  | ns |  |  |  | **0.035** | ns |  |

**Table e-1- Full demographic and clinical data of patients**.

Pt. num.-patient number; vs – versus; adv.evt – adverse events; activity – evidence of disease activity/worsening; prefer.- preference of oral instead of injective drug. – not relevant/not available.

MRI activity – presence of new lesions/gadolinium enhanced/enlarged lesions on MRI scan after 1y therapy, compared to MRI before DMF initiation. Reason for stop of previous DMT prior to DMF is presented in parenthesis (adverse event, evidence of disease activity/worsening, preference of oral instead of injective drug). Data presented as mean +SEM. Median age, median time since last DMT and median disease duration presented in parenthesis. Disease duration calculated from time of MS diagnosis. EDSS P-value at any time point compared to baseline (0m) calculated by Wilcoxon signed rank test. P-value for relapses prior to DMF compared to relapses after DMF calculated by Wilcoxon signed rank test. P-value between '1st' and '2nd line' patients calculated by Mann Whitney test.