**Supplementary Table S1**. Several different characteristics of MS patients

| № | Sex | Age (years) | MS subtypes | Clinical activity* | MRI activity ξ | Disease Duration (months) | EDSS$^{\beta}$ | IgG CSF (mg/dL) | IgG serum (mg/dL | IgG oligoclonal bands (OCB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | F | 59 | RR** | YES | NO | 4 | 3.0 | 7.5 | 1660 | Identical bands in CSF and in serum |
| 2 | F | 28 | RR | NO | NO | 2 | 3.0 | 3.4 | 1010 | OCB only in CSF |
| 3 | M | 36 | RR | YES | NO | 1 | 1.5 | 5.0 | 995 | OCB only in CSF |
| 4 | F | 26 | RR | NO | NO | 5 | 3.0 | 1.9 | 1184 | OCB only in CSF |
| 5 | M | 49 | RR | YES | YES | 24 | 4.0 | 6.0 | 1189 | OCB only in CSF |
| 6 | F | 20 | RR | YES | YES | 18 | 3.0 | 13.6 | 1450 | OCB only in CSF |
| 7 | M | 46 | PP* | NO | NO | 3 | 3.0 | 6.4 | 1060 | OCB only in CSF |
| 8 | M | 51 | PP | YES | YES | 10 | 3.5 | 11.4 | 1190 | OCB only in CSF |
| 9 | F | 31 | RR | YES | YES | 2 | 2.5 | 2.2 | 787 | No OCB bands |
| 10 | F | 26 | RR | YES | YES | 48 | 2.0 | 9.0 | 1260 | OCB only in CSF |
| 11 | F | 43 | RR | YES | YES | 12 | 4.0 | 3.2 | 1290 | OCB only in CSF |
| 12 | F | 45 | RR | YES | YES | 15 | 3.0 | 2.4 | 1490 | No OCB bands |
| 13 | M | 30 | PP | YES | YES | 14 | 3.0 | 7.0 | 1160 | OCB only in CSF |
| 14 | F | 60 | PP | YES | NO | 36 | 2.0 | 11.3 | 1080 | OCB only in CSF |
| 15 | F | 29 | RR | NO | YES | 7.2 | 3.0 | 2.5 | 1000 | OCB only in CSF |
| 16 | F | 41 | RR | YES | NO | 5 | 2.5 | 4.6 | 1140 | No OCB bands |
| 17 | M | 43 | RR | YES | YES | 3 | 0.5 | 5.5 | 1070 | OCB only in CSF |
| 18 | F | 44 | RR | YES | NO | 1 | 1.0 | 5.5 | 1082 | OCB only in CSF |
| 19 | F | 21 | RR | YES | YES | 3 | 2.5 | 3.7 | 883 | OCB only in CSF |
| 20 | F | 21 | RR | YES | YES | 3 | 2.5 | 3.7 | 883 | OCB only in CSF |
| 21 | M | 32 | RR | NO | NO | 6 | 1.0 | 2.56 | 597 | OCB only in CSF |
| 22 | F | 40 | RR | YES | YES | 7 | 6.5 | 5.5 | 1076 | OCB only in CSF |
| 23 | F | 34 | RR | NO | NO | 1 | 1.0 | 4.36 | 1030 | OCB only in CSF |
| 24 | F | 52 | RR | NO | NO | 11 | 1.5 | 9.08 | 1080 | OCB only in CSF |
| 25 | F | 58 | PP | NO | NO | 24 | 4.5 | 5.1 | 961 | OCB only in CSF |
| 26 | F | 52 | RR | YES | NO | 4 | 3.5 | 2.71 | 810 | OCB only in CSF |
| 27 | M | 45 | RR | NO | YES | 3 | 0 | 5.9 | 844 | OCB only in CSF |
| 28 | F | 21 | RR | YES | YES | 3 | 2.5 | 3.7 | 883 | OCB only in CSF |
| Average values | 20 F 8 M | 38.7± 12.3 | 23 RR 5 PP | 19 YES 9 NO | 15 YES 13 NO | 10.8± 11.3 | 2.6± 1.3 | 5.5±3.0 | 1076.6± 224.6 | 25 Yes and 3 No |

*Clinical activity corresponds to the presence of relapse at the time of sampling

**Relapsing–remitting (RR) and primary progressive (PP) MS

$^{\xi}$MRI activity = presence or absence gadolinium enhancing lesions at MRI examination

$^{\beta}$Kurtzke's expanded disability status scale (EDSS)