

**S1 Table. Clinical characteristics at baseline in BP-treated patients stratified by disease cohort**

| <b>Characteristics</b>                                 | <b>MS<br/>(n =147)</b> | <b>RA<br/>(n =229)</b> | <b>IBD<br/>(n=184)</b> |
|--|------------------------|------------------------|------------------------|
| Disease duration, median (IQR), years                  | 0.85 (2.28)            | 3.17 (7.58)            | 3.69 (10.37)           |
| Family history of the same disease, n (%)              | 7 (4.76)               | 41 (17.9)              | 33 (17.9)              |
| Vaccines during the last year, n (%)                   | 7 (4.76)               | 84 (36.68)             | 28 (15.21)             |
|  |                        |                        |                        |
| Disease type, n (%)                                    |                        |                        |                        |
| CIS  | 45 (30.6)              | -                      | -                      |
| RRMS   | 101 (68.7)             | -                      | -                      |
| Secondary progressive                                  | 1 (0.7)                | -                      | -                      |
| EDSS, median (IQR)                                     | 1.75 (1.00)            | -                      | -                      |
| Number of relapses in the last two years, median (IQR) | 1.00 (1.00)            | -                      | -                      |
|  |                        |                        |                        |
| Disease type, n (%)                                    |                        |                        |                        |
| Crohn's disease  | -                      | -                      | 148 (80.4)             |
| Ulcerative colitis                                     | -                      | -                      | 36 (19.6)              |
| Mayo score, median (IQR)                               | -                      | -                      | 6.00 (5.00)            |
| Harvey-Bradshaw Index, median (IQR)                    | -                      | -                      | 5.00 (5.00)            |
|  |                        |                        |                        |
| Disease location, n (%)                                |                        |                        |                        |
| Colonic  | -                      | -                      | 27 (18.4)              |
| Ileal  | -                      | -                      | 66 (44.9)              |
| Ileocolonic  | -                      | -                      | 53 (36.1)              |
| Isolated Upper Disease                                 | -                      | -                      | 1 (0.6)                |
|  |                        |                        |                        |
| Disease behavior, n (%)                                |                        |                        |                        |
| Non-stricturing, non-penetrating                       | -                      | -                      | 68 (46.3)              |
| Penetrating  | -                      | -                      | 28 (19.0)              |
| Stricturing  | -                      | -                      | 51 (34.7)              |
| RF positivity, n (%)                                   | -                      | 149 (68.0)             | -                      |
| ACPA positivity, n (%)                                 | -                      | 152 (70.0)             | -                      |
| DAS28, median (IQR)                                    | -                      | 4.55 (1.68)            | -                      |

BP, Biopharmaceutical product; MS, multiple sclerosis; RA, rheumatoid arthritis; IBD, inflammatory bowel disease; IQR, interquartile range; CIS, clinically isolated syndrome; RRMS, relapsing remitting multiple sclerosis; EDSS, expanded disability status scale; RF, rheumatoid factor; ACPA, anti-citrullinated peptide antibodies; DAS28, disease activity score 28.