**Supplementary Table S1**. Baseline patient characteristics in RF4 in accordance with each TNF inhibitor.

Baseline characteristics were compared between RA patients treated with each TNF inhibitor.

Continuous data were analysed using the Kruskal-Wallis test, and categorical data were analysed using the chi-squared test.

|  |  |
| --- | --- |
|  | RF4 (166-7555 IU/mL) |
|  | ADA(n=29) | ETN(n=48) | GLM(n=53) | IFX(n=23) | CZP(n=24) | p value |
| Age, mean (S.D.), years | 60.6 (12.9) | 62.7 (17.4) | 65.2 (14.0) | 53.4 (17.3) | 63.2 (16.3) | 0.055 |
| Sex; female, n (%) | 20 (69.0) | 39 (71.3) | 44 (83.0) | 16 (69.6) | 19 (79.2) | 0.59 |
| BMI, mean (S.D.), kg/m2 | 23.0 (3.7) | 21.6 (3.1) | 22.8 (3.5) | 22.6 (4.3) | 23.1 (3.2) | 0.55 |
| Disease duration, median (IQR) | 6.6 (1.0-15) | 9.3 (4.2-17) | 7.7 (2.4-15) | 3.7 (0.9-14) | 5.0 (1.4-15) | 0.36 |
| RF titre, median (IQR), IU/mL | 220 (195-378) | 361 (200-665) | 325 (226-686) | 270 (199-397) | 403 (319-864) | 0.041\* |
| ACPA positive, n (%) | 29 (100) | 41 (85.4) | 49 (92.5) | 22 (95.7) | 21 (87.5) | 0.19 |
| ACPA titre, median (IQR), U/mL | 107 (34-192) | 175 (58-302) | 175 (35-317) | 144 (16-302) | 346 (109-500) | 0.11 |
| bDMARDs naïve, n (%) | 14 (58.3) | 26 (54.2) | 22 (41.5) | 15 (65.2) | 12 (50.0) | 0.40 |
| MTX use, n (%) | 24 (82.8) | 25 (52.1) | 33 (62.3) | 23 (100) | 16 (66.7) | 0.0017\*\* |
| MTX dose, median (IQR), mg/wk | 10 (8.5-12) | 8.0 (6.0-12) | 6.0 (6.0-9.0) | 9.0 (7.5-10) | 8.0 (6.0-12) | 0.018\* |
| PSL use n (%) | 9 (31.0) | 21 (43.8) | 22 (41.5) | 10 (43.5) | 8 (33.3) | 0.76 |
| PSL dose, median (IQR), mg/day | 5.0 (2.8-9.5) | 5.0 (3.0-7.8) | 5.0 (3.0-7.1) | 5.0 (2.5-7.9) | 7.5 (3.5-10) | 0.62 |
| csDMARDs use, n (%) | 2 (6.9) | 18 (37.5) | 15 (28.3) | 4 (17.4) | 4 (16.7) | 0.025\* |
| DAS28-ESR, median (IQR) | 4.4 (3.6-5.4) | 4.6 (3.8-5.4) | 4.7 (3.8-5.5) | 4.6 (3.9-5.8) | 5.3 (3.9-6.0) | 0.35 |
| HAQ, median (IQR) | 0.8 (0.3-1.5) | 1.0 (0.5-1.9) | 1.1 (0.8-1.6) | 0.9 (0.4-2.1) | 1.5 (1.0-2.2) | 0.061 |

ACPA: anti-cyclic citrullinated peptide antibody; bDMARDs: biological disease-modifying antirheumatic drugs; BMI: body mass index; csDMARDs: conventional synthetic disease-modifying antirheumatic drugs (bucillamine, iguratimod, leflunomide, salazosulfapyridine, tacrolimus); DAS28-ESR: disease activity score in 28 joints using erythrocyte sedimentation rate; HAQ: health assessment questionnaire; IQR: inter quartile range; MTX: methotrexate; PSL: prednisolone; RF: rheumatoid factor; SD: standard deviation.

\* p < 0.05 \*\* p < 0.01