We compared differences among the different IMIDs and between the different immunosuppressive treatments through non-parametric test (p<0.05)

Results: Regarding demographic characteristics of patients, older patients (>56 years) and female sex were factors which were associated with low titles of serum antibodies.

Anti-spike IgG antibodies were present in an 86% of the IMIDs patients and in 100% healthy controls with significant different IgG titre (median [IQR]: 51[11-184] vs 700[440-940]; p=0.0001.

The differences between [median (IQR)] serum antibody levels were statistically different between IMID types: 3.6[1-136] in RA vs 94[24-181] in SpA vs 82[187-204] in IBD vs 133[61-204] in IJA vs 13[1.5-31.8] in the rest; p<0.04. Remarkably, patients with IBD who had the highest antibodies titles were the youngest compared with the other patients.

Target of the therapy played also an important role in serum antibody levels being these: 3.6 [0-7.51] in RTX patients vs 156 [45-204] in TNFi vs 40 [18-58] in JAKi patients; p<0.0001. In those patients who the last infusion of rituximab was, at least, one year before vaccination presented CD19+ B cells detected by flow cytometry and anti-spike IgG antibodies as well.

Cell-mediated responses to SARS-CoV-2 were positive in 33% of IMID patients, in 34% in TNFi patients and in 15% in JAKi patients.

Conclusion: For the first time we found that in IMIDs immunosuppressive treatments (and not the type of IMID) are the main determinant of the antibody response to SARS-CoV-2. We could also confirm the known association between RTX and the best antibody response after vaccination.

Disclosure of Interests: ANA MARTINEZ-FEITO: None declared, PILAR NOZAL: None declared, MARIA NOVELLA-NAVARRO: None declared, ELISA FERNANDEZ-FERNANDEZ: None declared, LUCIA DEL PINO MOLINA: None declared, MILAGROS CASAS TEMPRANO: None declared, MARIA DOLORES MARTIN ARRANZ: None declared, ALEJANDRO BALSA: Speakers bureau: Pfizer, LILY, GALAP, BMS, SANDOZ, NORDEG, GIL, ROCHE, UCB, Consultant: Pfizer, LILY, GALAP, BMS, SANDOZ, NORDEG, SANOFI, UCB, Grant/research support from: Pfizer, BMS, NORDEG, GIL, ROCHE, UCB, CHAMADA PLASENCIA Grant/research support from: Abbvie, Pfizer, UCB, SANOD, SANOFI, BIOWEG, LILY, ROICO and NOVARTIS.

Disclosure of Interests: None declared


Achy-Breaky vessels.