



# Reumatología Clínica

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## PCOVID18 - Does Biological Therapy Protect against Severe COVID-19?

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## Resumen

**Objectives:** To estimate COVID-19 infection incidence rate with severe affectation (requiring hospitalization) in patients with biological treatment due to rheumatoid arthritis (RA), psoriatic arthritis (PsA), spondyloarthritis (SpA), psoriasis (Ps), and inflammatory bowel disease (IBD) and compare it with incidence rate in the general population.

**Methods:** Retrospective observational study based on information provided by two administrative databases. One of these two databases contains information on all patients seen in our hospital and diagnosed with COVID-19 infection between March 4<sup>th</sup> 2020 and April 26<sup>th</sup> 2020. The other database contains data from patients seen at Rheumatology, Dermatology and Digestive Departments in our hospital who are currently receiving biological therapy. We calculated the crude and age and sex adjusted incidence in both groups. To compare both groups we calculated the Incidence Rate Ratio.

**Results:** There was a total of 2,182 patients with COVID-19 requiring hospitalization. Four patients out of a total of 797 patients receiving biological therapy had contracted COVID-19 and required hospital care. Crude incidence rate of COVID-19 requiring hospital care among the general population was 1.41%, and it was 0.50% among the group receiving biological therapy. Rates adjusted by age and sex in the biological group was 0.45% (95%CI 0.11-4.13). The IRR of the group receiving biological therapy compared to the general population was 0.39 (95%CI 0.14-1, p = 0.049).

**Conclusions:** Findings suggest that prior use of biological therapy does not associate with severe manifestations of COVID-19, and it is likely to have a protective effect against them when compared to the general population.