

## **Search for genomic biomarkers for vitamin D response in patients with Covid-19 and IBD**

Vitamin D3 (Vit.D) and its metabolites directly regulate gene expression and activity of the immune system. In diseases with chronic inflammation, such as Inflammatory Bowel Disease (IBD), patients have reduced levels of Vit.D. Recently, Vit. D deficiency has been linked to SARS-CoV-2 positivity. However, there are no data on the genomic response to Vit.D and the severity of SARS-CoV-2 infection in patients with IBD. Our objectives are to evaluate, through a transcriptomic approach, the relationship between the levels of Vit.D in serum, the genomic response to Vit.D reflected by the biomarkers present in the extracellular vesicles of the serum and the positivity to SARS-CoV-2 during the follow-up of patients with IBD and recent Covid-19. This study, for which sample collection is ongoing, will provide the biological background on the hitherto widely discussed effect of Vitamin D in the host response to SARS-CoV-2 in patients with IBD to offer customized therapy based on Vit.D.

### **References:**

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