

## Summary

Inflammatory bowel diseases (IBD) can be treated with biological therapies. One of them, called vedolizumab, is used for patients who do not respond to others treatments. It is a monoclonal humanized antibody, which targets  $\alpha4\beta7$  integrin, expressed on diverse cells types in particular on the lymphocytes T membrane. This interaction limits the inflammatory reaction.

The  $\alpha4\beta7$  integrin saturation rate in addition to the conventional vedolizumab through level measurement would allowed a better adjustment of the injection doses and intervals. A new panel of flow cytometry will be create to determinate the saturation of  $\alpha4\beta7$  integrin. To reach this objective, EDTA blood is used. Collecting only one tube would simplify the nurse work and the follow up of IBD patients under vedolizumab. Therefore, the serum and the plasma concentration of vedolizumab were compared in the present study.

### *Key words*

Biological therapies, vedolizumab, monoclonal humanized antibody,  $\alpha4\beta7$  integrin, residual rate, flow cytometry.