New biomarker for CED research
Oncostatin M (OSM), a member of the IL-6 cytokine family, plays a role in various homeostatic and pathophysiological processes. OSM promotes tissue repair and remodeling, but also regulates growth of different cancer cells. Upregulation of OSM promotes skin and lung inflammation, atherosclerosis as well as several forms of cancer.

Patients with inflammatory bowel diseases (IBD) are often being treated with anti-TNF-alpha therapy. However, 40% of patients don’t respond to TNF-alpha inhibitors at all (primary non-response) or develop therapeutic resistance over time (secondary non-response).

Besides its other functions, OSM and its receptor OSMR are also implicated in maintaining inflammation in the gut. Both are upregulated in the mucosa of IBD patients and influence especially the later stages of the inflammatory response. In addition, high levels of OSM before anti-TNF-alpha therapy correlate with an increased risk of primary non-response. The amount of OSM in the gut therefore seems to be a predictive biomarker of anti-TNF treatment failure in IBD patients, and could be used as a diagnostic tool for early stratification of patients expected to benefit from treatment.

Literature: