

Symposium: Neue Therapeutische Konzepte in der Dermatologie

Interleukin-31 – Neues Target in der Dermatotherapien

*Prof. Dr. med. Jens Malte Baron,
Hautklinik der Medizinischen Fakultät der RWTH, Aachen*

Cytokines are key to control cellular communication. Interleukin-31 (IL-31) was recently discovered as a new member of the IL-6 family of cytokines. IL-31 signals through a heterodimeric receptor composed of OSMR and IL-31RA, a complex that stimulates the JAK-STAT, the RAS/ERK and the PI3K/AKT signal transduction pathways. The available data suggests that IL-31 is important for both innate and adaptive immunity in tissues that are in close contact with the environment, i.e. the skin, the airways and the lung, and the lining of the intestine. Enhanced expression of IL-31 is associated with a number of diseases, including pruritic diseases such as atopic dermatitis, but also in allergy and inflammatory bowel disease. In these tissues IL-31 coordinates the interaction of different immune cells, including T-cells, mast cells, and eosinophils, with epithelial cells. The findings available suggest that IL-31 might be an interesting target for directed drug therapy.

