

Role of immune checkpoint regulators in inflammatory skin diseases

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Antragsstellende

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Zusammenfassung

The suppression of negative immune checkpoint regulators (NCRs) has recently been demonstrated to be highly effective in the therapy of malignant diseases. However, this therapeutic breakthrough is also associated with adverse effects in the form of auto immune reactions, where the majority of patients suffer from dermatological autoimmune inflammatory disorders. These observations clearly indicate a link between inflammatory skin diseases and immune regulation by NCRs.

In this project we will reveal the molecular and functional mechanisms and signalling pathways of V-domain Ig Suppressor of T-Cell activation (VISTA), a recently discovered NCR. Moreover, we will analyse the potential cross-talk with other members of the NCR family, such as PD-1 and CTLA-4. Elucidating the mechanisms of immune checkpoint stimulation is an important step in the discovery of new therapeutic strategies in the treatment of bullous pemphigoid, and other autoimmune diseases of the skin.
