

## Special Issue

# Mechanisms and Means of Immune Modulation in Innate and Adaptive Immunity

### Message from the Guest Editors

Modulation of acquired immunity has garnered significant attention and is on the verge of becoming a mainstay treatment in cancer immunotherapy. While in the latter, therapeutic targeting of immune checkpoints aims to augment immune responses, in autoimmunity the same pathways need to be targeted in opposite direction to restrain an over-excited immune response. Since tumor-mediated immune escape partly involves suppression of innate immune sensing, innate immune checkpoints may also serve as potential targets for cancer immunotherapy. Likewise, aberrant activation and regulation of innate immune checkpoints, such as the NOD-like receptor family pyrin domain containing 3 (NLRP3) inflammasome, may have important roles in the initiation and maintenance of autoimmune diseases. Notwithstanding its clinical success, a significant number of patients on checkpoint inhibitors develop immune-related adverse events (irAEs) affecting a wide variety of organs. Our overall understanding of how modulation of immune checkpoints might impact balances in the immune system is therefore of fundamental importance for the development of new therapeutic modalities.

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