

Special Issue

Advances in Dendritic Cell-Based Immunotherapy of Cancer

Message from the Guest Editors

Dendritic cells (DCs) have been extensively studied since their description in 1973 by Ralph Steinman and Zanvil Cohn. Since then, DCs have been recognized as playing a key role in mediating the innate and inducing the acquired (specific) immune responses. They are the most potent antigen-presenting cells (APCs), capable of activating both naive and memory immune responses. DCs have a superior capacity to acquire and process antigens for presentation to T cells and express high levels of costimulatory or coinhibitory molecules that determine immune activation by initiating a cascade of cellular immune responses, or anergy.

Over the past two decades, DCs have been used in clinical settings against various types of cancer. The use of dendritic cells (DCs) for tumor immunotherapy empowers patients' own immune effector cells to eliminate tumor cells. The aim of this Special Issue is to provide insights into some of these important aspects related to the use of DCs in cancer immunotherapy and suggest new approaches that may be key for achieving effective and durable anticancer immune responses with better clinical outcomes in patients.

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