



Clinical Effect and Immunologic Response after Dendritic Cell-Based Immunotherapy

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Message from the Guest Editors

Dear Colleagues,

This special issue aims to focus on the progress of immune monitoring methodology and clinical investigation using dendritic cell (DC)-based cancer immunotherapy including precision medicine. The standardized protocol for manufacturing a dendritic cell vaccine, the selection of tumor-associated antigens (TAAs), and the process for application of dendritic and related cells will also be covered in this issue.

A DC vaccine containing TAAs produced under an optimized manufacturing protocol is a potentially promising cell-based cancer immunotherapy to induce acquired immunity. Antigen-presenting ability in an *in vitro* cytotoxic T lymphocyte (CTLs) assay with TAAs is one of the main issues encountered when using DC-based vaccines in patients with cancer. Tetramer analysis and enzyme-linked immunosorbent spot (ELISpot) assays have been performed as immune monitoring for TAAs-specific CTLs; however, sensitivity and specificity remain issues to be solved. A useful approach to detect TAA-specific CTLs would be expected using genomic medicine with single cell sequencing technology.





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Message from the Editor-in-Chief

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