## **Overview of Dendritic Cell Vaccines as Effective Approaches in Cancer Immunotherapy**

Hajir A Al Saihati, Ph D\*

## ABSTRACT

Immunity is the outcome of a complicated interaction among the passive immune system (antigen-agnostic) in addition to the active immune system (antigen-specific) (which is antigen-specific). Non-clonal recognition receptors, such as NOD-like receptors (NLRs), lectins, Toll-like receptors (TLRs), and helicases, are used via passive immune system's molecules and cells. The active immune system's B cells and T cells utilize clonal receptors to identify antigens or their generated peptides in a very precise manner.

Ralph Steinman has the Nobel prize for the innovation of Dendritic Cells (DC), an occasional cell kind which is one of the vital cellular sensors of microbes. The DCs are related to their micro-environment via a prosperity of molecular antennae which permit them to arrest attacking microorganisms in addition to convey the resultant data to lymphocytes. Therefore, DCs offer a vital connection among the primary and secondary immune responses.

Bahrain Med Bull 2021; 43 (4): 737 - 746

\* Assistant Professor
College of Applied Medical Sciences
Clinical Laboratory Sciences Department, University of Hafr Albatin
Saudi Arabia. E-mail: hajirsh@uhb.edu.sa