

Immunity, immunotherapy and immunomodulators – Their mechanism in modifying drug & disease response

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Immunity refers to the resistance offered by an individual to the occurrence and spread of disease. It is a defensive mechanism developed to protect the body from invasion of foreign substances or pathogens and thus provide resistance. Immunotherapy is the treatment of disease by inducing, enhancing or suppressing an immune response. Immunomodulators modify immune responses and include a diverse array of recombinant, synthetic and natural preparations. Immunomodulators are classified as immunosuppressants (inhibit the immune response and are used in organ transplantations and autoimmune diseases, eg: cyclosporine, azathioprine prednisolone, muromonab CD3, etc.), immunostimulants (increase the immune response and are used in AIDS and cancers, eg: vaccines, cytokines, macokine, imiquimod, etc.) and tolerogens (induce tolerance and makes the tissue non-responsive to antigens, eg: recombinant fusion proten molecules, anti CD50 MAB, soluble HLA, etc). Thus immune systems can be modulated by different ways with the use of exogenous or endogenous bioactive agents which utilize cell-to-cell signaling in order to reach homeostasis within an organism's innate cellular defences.

Biography

Anupama Koneru is the Vice-Principal of Sultan-ul-uloom College of Pharmacy, Hyderabad, Andhra Pradesh, India. She has an academic and administrative experience of over 15 years and is a university Gold medalist in her graduation. She has published 16 articles in various national and international peer reviewed journals and presented 18 papers in various conferences, viz., Indian Pharmaceutical Congresses, National Conferences of Association of Pharmacy Teachers of India (APTICON), National Conferences of Indian Pharmacological Society, National AYUSH Conferences, etc. She had received best paper presentation awards. She was also awarded 'Best power point Presentation by a Pharmacy Teacher' jointly by Association of Pharmacy Teachers of India and Pharmainfo.net.

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