

Niharika

Metro college of health sciences & research
India

Targeted drug delivery systems to cancer: concepts, events, and biological processes involved in drug targeting.

Abstract:

The magic bullet theory brought out by Paul Ehrlich has been developed by nanomedicine. By directly delivering the drug moiety to the targeted body area (organ, cellular, and subcellular level of a particular tissue), targeted drug delivery reduces the amount of drugs needed for therapeutic efficacy while overcoming the general toxic effect of conventional drug delivery. In order to accomplish this goal, the idea of the magic bullet developed and encouraged research for over a century, which resulted in the development of many nanoscale devices that make up modern nanomedicine. Many carrier systems, including as polymers, cellular/subcellular systems, and colloidal (vesicular and multiparticulate) carriers, are being employed and studied. The aim of presentation will to addresses the need for and advantages of targeting, with its basic principles, strategies, and carrier systems.

Biography

Niharika is an Associate Professor at Metro College of Health Sciences and Research in Greater Noida, Uttar Pradesh, India. She holds a Ph.D. and M.Pharm in Pharmaceutics and has nine years of teaching and research experience in Diploma, Bachelor's, and Postgraduate programs. Dr. Niharika has numerous notable publications in SCI and Scopus international journals. During her Ph.D., her work on "Design and Characterization of Acrylic Pressure Sensitive Adhesive-Based Transdermal Therapeutic System" earned her recognition from the Department of Polymer Sciences at IIT Kharagpur. Her research interests include Transdermal Drug Delivery, Gastroretentive Drug Delivery, Polymer Science, and Targeted Drug Delivery.