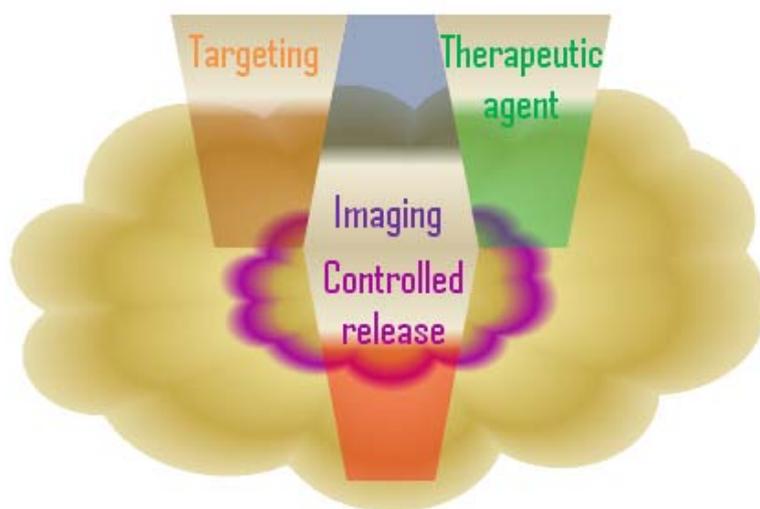


Nanotechnology in Anticancer Research



Cancer nanotechnology is a rapidly growing field that contributes remarkably to cancer treatments by developing novel therapeutic and diagnostic strategies. Materials at a nanometer scale are engineered as platforms for effective targeted delivery of drugs, and imaging agents that overcome many biological and biophysical barriers.

The examples of cancer-related nanomodalities include liposomes, polymeric micelles, polymer-drug conjugates,

carbon nanotubes, dendrimers, inorganic particulates such as quantum dots, paramagnetic nanoparticles, contrast agents for magnetic resonance imaging, etc.

Materials at a nanoscale have several advantages compared to small molecule-based therapy such as higher payload capacity, prolonged blood circulation times, reduced toxicity to healthy tissues, and improved anti-tumor efficiency.

The scope of “Nanotechnology in Anticancer Research” symposium is to provide most up-to-date development of novel nanotechnology-based approaches towards cancer treatment to the nanotechnology-field scientific community. Special emphasis will be given to integrated nanotherapeutic systems (including theranostic nanomedicine) and multifunctional designs with cancer targeting, imaging and controlled release properties.

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