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Development and Evaluation of Nanoparticles -Based Drug Delivery Systems for Targeted Cancer Therapy

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Abstract: It is believed that drug delivery systems based on nanoparticles (DDS) hold potential for the treatment of cancer. Compared to the traditional DDS, the nanoparticle-based DDS is more effective by: 1) prolonging the half-life of proteins and medications that are susceptible 2) Making hydrophobic medications more soluble

3) making it possible to distribute medications at the sick spot in a targeted and controlled manner... The creation of DDS based on nanoparticles using chitosan, silica, and poly(lactic-co-glycolic acid) is the main focus of this paper. They describe how they are made and how they are used to treat cancer. The present constraints and future directions of the DDS based on nanoparticles are examined.

Keywords: Drug resistance, cancer, biomarkers, nanotechnology, nanoformulation, and nanoimaging

