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Magnetic Nanoparticles for Cancer Therapy

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Abstract : Nanoparticles played important role in the biomedicine. New advanced methods having great potential apllication in the diagnosis and therapy of cancer. Now a day's magnetic nanoparticles used in cancer therapy. Cancer is the major disease causes death. Magnetic nanoparticles show response to the magnetic field on the basis of this property they are used in cancer therapy. Cancer treated with hyperthermia by using magnetic nanoparticles it is unconventional but more safe and effective method. Magnetic nanoparticles prepared by using different innovative techniques that makes particles in uniform size and desired effect. Magnetic nanoparticles already used as contrast media in magnetic resonance imaging. A magnetic nanoparticle has been great potential application in cancer diagnosis and treatment as well as in gene therapy. In this review we will discuss the progress in cancer therapy based on magnetic nanoparticles, mainly including magnetic hyperthermia, synthesis and characterization of magnetic nanoparticles, mechanism of magnetic nanoparticles and application of magnetic nanoparticles.

Keywords : magnetic nanoparticles, synthesis, characterization, cancer therapy, hyperthermia, application
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