

Nanomedicine

Nanomedicine is defined as the application of nanotechnology to medicine, which is used in the process of diagnosing, preventing and treating human diseases. The emergence of new and better nanoscale structured materials has shown a great increase in biomedicine, where they provide optimized solutions to traditional problems. In fact, one of the main limitations of current pharmaceuticals is the inability to deliver the drug to the specific site, cell, tissue or organ, of therapeutic



need. Biocompatible nanocarriers for therapeutic agents have surged as nanomedicine response to the required need of specific drug delivery at the site of disease, thus reducing off-target effect and consequent side and toxic effects. Targeted drug delivery may be attained via passive or active mechanisms. The passive strategy takes advantage of differences in physiological conditions between healthy and diseased tissues.

