

Therapeutic strategies for erectile dysfunction with emphasis on recent approaches in nanomedicine

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Abstract

This review addressed erectile dysfunction, regarding pathophysiology and therapeutic strategies. The line of treatment includes phosphodiesterase type-5 inhibitors and other types of therapy like topical and stem-cell transplant. Scientific literature was assessed to investigate the impact of nanotechnology on erectile dysfunction therapy. Various nanotechnology approaches were applied, like vesicular systems, lipid-based carriers, nanocrystals, dendrimers, liquid crystalline systems and nanoemulsions. Smart nano-systems can alter the landscape of the modern pharmaceutical industry by re-investigation of pharmaceutically suboptimal but biologically active entities for treatment of erectile dysfunction which were previously considered undeveloped.

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