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Nano Medicine – A Short Paper

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Abstract

In this paper, we will review the use of Nanotechnology in Medical Science and its advantages. In today's world, Nanotechnology plays a vital role in treatment of various incurable diseases. Hence, in this paper we will discuss various needs of Nano medicines in field of Medical Science.

Keywords: Nanotech; Nanobots; genetic analysis.

1. The Promise of NanoMedicine

The ultimate promise of NanoMedicine is the eradication of disease. To accomplish this goal requires the convergence of nanotechnology and biotechnology. In turn, NanoMedicine is the convergence of many disciplines: biology, chemistry, physics, engineering and material science.

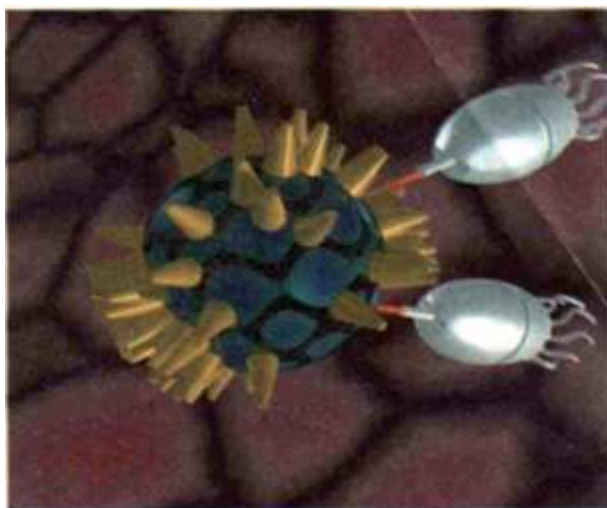


Fig. 1 Two Medical Nanobots in a pulmonary alveola killing a virus using nanolasers

2. The eradication of disease involves three sub-goals

- 1) Using Nano-robots, Nano-machines or other methods at the molecular level to search and destroy disease-causing cells
- 2) Same as above for the purposes of repairing damaged cells
- 3) Using pumps or similar technology at the molecular scale as a means of drug delivery

Nanotechnology involves the creation and use of materials and devices at the level of molecules and atoms. As life itself creates and uses molecular materials and devices, nanoscience will provide great insights in life science concepts, such as how molecular materials self-assemble, self-regulate, and self-destroy. NanoMedicine eventually will infiltrate virtually every field of medicine, if not every realm of human endeavor. NanoMedicine may be defined as the monitoring, repair, construction and control of human biological systems at the molecular level, using engineered Nano devices and nanostructures.

3. Conclusion

This paper provides the short review of NanoMedicine usage in treatment of cancer and other diseases. Nanotechnology can be so effective in finding ways to tackle and cure incurable danger diseases.

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