

Significance of Nano-Biotechnology as Drug Delivery Vehicle

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Abstract

Materials in the nanoscale range are used as diagnostic instruments or to deliver therapeutic compounds to specific targeted locations in a controlled manner in the relatively young field of nanomedicine and nano delivery systems. Through the site-specific and target-oriented administration of precise medications, nanotechnology provides numerous advantages in the treatment of chronic human diseases. Chemotherapeutic agents, biological agents, immunotherapeutic agents, and other exceptional uses of nanomedicine have been observed recently in the treatment of a wide range of illnesses. This study provides an updated overview of recent developments in the field of nanomedicines and nano-based drug delivery systems by closely examining the identification and use of nanomaterials to enhance the effectiveness of both new and old medications.

Keywords:

Introduction

The nanoscale range is used as diagnostic instruments or to deliver therapeutic compounds to specific targeted locations in a controlled manner in the relatively young field of nanomedicine and nano delivery systems. Through the site-specific and target-oriented administration of precise medications, nanotechnology provides numerous advantages in the treatment of chronic human diseases. Chemotherapeutic agents, biological agents, immunotherapeutic agents, and other exceptional uses of nanomedicine have been observed recently in the treatment of a wide range of illnesses. This study provides an updated overview of recent developments in the field of nanomedicines and nano-based drug delivery systems by closely examining the identification and use of nanomaterials to enhance the effectiveness of both new and old medications.

Description

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Conclusion

The conclusion of the study is that nano-biotechnology is a highly effective and safe drug delivery vehicle. It offers a wide range of advantages, including improved drug stability, targeted drug delivery, and reduced side effects. The study also highlights the need for further research to optimize the design and manufacturing of nano-biotechnology-based drug delivery systems.
