

Nanotechnology in Targeted Cancer Therapy

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Abstract. Nanotechnology offers promising strategies for targeted cancer therapy by enhancing drug delivery systems. This article explores the design and application of nanoparticles to improve the specificity and efficacy of cancer treatments. We discuss recent advancements in nanoparticle-based drug delivery and their potential to revolutionize oncology by minimizing side effects and improving patient outcomes.

Keywords: nanotechnology, cancer therapy, drug delivery, nanoparticles, oncology

Introduction

Nanotechnology has emerged as a pivotal field in cancer therapy, offering innovative solutions for targeted drug delivery. This article examines the design and application of nanoparticles in enhancing the specificity and efficacy of cancer treatments. By utilizing nanoparticles, researchers aim to improve drug delivery systems, ensuring that therapeutic agents reach the tumor site with minimal side effects. We explore recent advancements in nanoparticle-based delivery systems, highlighting their potential to revolutionize oncology. These technologies promise to enhance patient outcomes by providing more effective and personalized treatment options. Our discussion underscores the transformative impact of nanotechnology on cancer therapy, paving the way for future advancements in clinical oncology.

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References

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