

Advancements in Gene Therapy for Hemophilia

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Abstract. This article explores the latest advancements in gene therapy for treating hemophilia. The focus is on novel vectors and delivery mechanisms that improve the efficacy and safety of treatments. By reviewing recent clinical trials and preclinical research, the authors provide insights into current challenges and future directions. The potential for gene therapy to provide long-term solutions for hemophilia patients is discussed, highlighting the promise of these innovative approaches in reducing bleeding episodes and improving the quality of life.

Keywords: Gene Therapy, Hemophilia, Clinical Trials, Vectors, Genetic Disorders

Introduction

Gene therapy offers groundbreaking potential for treating hemophilia by directly addressing the genetic causes of the disorder. Recent advancements in vector design and delivery methods have significantly enhanced the outcomes of gene therapy, offering new hope to patients. This article reviews the latest developments in the field, focusing on clinical trial data and preclinical studies. The discussion includes an analysis of current challenges, such as immune responses and vector persistence, and explores future research directions.

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