



Aplicaciones clínicas de la herramienta CRISPR-Cas [

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text (article)

Analítica

The development of genome editing technologies has opened up the possibility of directly targeting and modifying genomic sequences in almost all types of eukaryotic cells. Genome editing has expanded our ability to elucidate the contribution of genetics to disease by promoting the creation of more precise cellular and animal models of disease processes and has begun to show its potential in a variety of fields, ranging from basic research to applied and biomedical biotechnology. Among these technologies, the use of clustered regularly spaced short palindromic repeats have greatly accelerated the progress of gene editing from concept to clinical practice, further generating interest due not only to its precision and efficiency, but also to the speed and costs required for its implementation compared to other genomic editing methods. This review presents information collected from indexed publications in the PubMed database that were found by using keywords associated with the technology and filtered to retain only those with evidence of clinically relevant advances that demonstrate some of the applications that this technology has in research, prognosis, and treatment of genetic, cardiovascular, and viral diseases, among others; this with the aim of show the current situation of advances in clinical applications of the CRISPR-Cas tool and further encourage research in this technology, which, as evidenced throughout this review, has a great versatility and a wide range of applications, which offers an enormous opportunity in the field of genomic medicine but which, in turn, requires greater support in its research to improve the technology and bring it even closer to consolidating clinical applications of safe, reliable and consistent use

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