# Article information:

Genome-editing prodrug: Targeted delivery and conditional stabilization of CRISPR-Cas9 for precision therapy of inflammatory disease | Science Advances
<https://www.science.org/doi/full/10.1126/sciadv.abj0624>

# Article summary:

1. This article presents a CRISPR-Cas9 prodrug nanosystem (NanoProCas9) for the precision therapy of inflammatory bowel disease.

2. NanoProCas9 combines targeted delivery and conditional activation of CRISPR-Cas9, enabling the targeted delivery of dsCas9 plasmid into inflammatory lesions.

3. The proposed “genome-editing prodrug” provides a proof-of-concept example to precisely regulate CRISPR-Cas9 functions by particular pathological stimuli in vivo.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

This article is written in an objective manner and provides a detailed description of the proposed NanoProCas9 system for precision therapy of inflammatory bowel disease. The authors provide evidence to support their claims, such as citing previous studies on light regulation strategies and chemical control strategies for modulating Cas9 functions. They also discuss potential risks associated with the use of this system, such as off-target activity at the tissue level and leakage of cargoes during delivery processes. However, there are some points that could be further explored in future research, such as exploring possible counterarguments or providing more evidence for the claims made in the article. Additionally, it would be beneficial to include more information about potential applications of this system beyond inflammatory bowel disease, as well as any potential limitations or drawbacks associated with its use.

# Topics for further research:

* Cas9 off-target activity
* Cargo leakage during delivery
* Light regulation strategies for Cas9
* Chemical control strategies for Cas9
* Applications of NanoProCas9 system
* Limitations of NanoProCas9 system

# Report location:

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