

# New Possibilities in HIV Treatment Using Gene Therapy

Recent research findings from the Temple/Drexel  
Comprehensive NeuroHIV Center (CNHC)

## What did they study?

- Taking HIV medication controls HIV but does not cure it. A tool called CRISPR-Cas9 has been used to alter the genes of HIV proteins. This is important because if infection can be stopped, it could possibly cure HIV.
- But other things in the body make similar proteins, so the gene editing tools need to recognize the HIV protein genes correctly in order for the cure to work.
- For this study, researchers studied whether newer Cas9 editing tools are better to potentially treat HIV.



## How did they study it?

- Looked at various proteins that may be useful for HIV gene editing.



- Did an experiment to understand how well each gene editing tool did at recognizing the HIV genes.

## What did they find?

- 10 different Cas9 editing tools were found.
- Some newer proteins were more useful for HIV editing than those currently used in gene editing technology.

## What does it mean?

- Researchers should think about using these newer proteins for HIV gene editing research because it may lead to a future cure for HIV.



Comprehensive NeuroHIV Center

Visit us at  
[linktr.ee/neurohiv](https://linktr.ee/neurohiv)  
Email us at  
[neurohiv@temple.edu](mailto:neurohiv@temple.edu)

