

CRISPR prime editing: Broad Institute biochemist David Liu discusses pros, cons and off-target effects

STAT invited readers to submit questions to [biochemist David] Liu on the new [CRISPR prime] technology. He also received some questions directly. From his perch at the Broad Institute of MIT and Harvard, Liu answered:

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Zoe A.: Can you please compare the pros and cons of prime editing versus base editing?

...

[Liu:] We directly compared prime editors and base editors in our study, and found that current base editors can offer higher editing efficiency and fewer indel byproducts than prime editors, while prime editors offer more targeting flexibility and greater editing precision.

...

Anonymous: Are unintended on- and off-target effects likely to be more or less of an issue with the new method compared with other methods?

[Liu:] We show in our study a side-by-side comparison of off-target editing between Cas9 nuclease and prime editing at known Cas9 off-target sites, with the result that prime editing is far less prone to off-target editing at known Cas9 off-target sites. Of course, these observations do not necessarily mean that prime editors will not have their own off-target activities, and additional studies are needed to study this possibility.

Read full, original post: [You had questions for David Liu about CRISPR, prime editing, and advice to young scientists. He has answers](#)