

‘Genetic crapshoot’: Two studies suggest clinical use of CRISPR hampered by off-target editing

The version of CRISPR whose selling point has been its precision suffers, ironically, from the same shortcoming that has dogged other forms of the genome editor — that it makes a lot of unintended, off-target DNA changes. In two studies published [February 28], [one](#) in mice embryos and [one](#) in rice plants, scientists find that this “base editing,” a form of CRISPR [invented](#) in 2016, can cause hundreds of unintended mutations, potentially making its clinical use a genetic crapshoot.

Fears about off-target mutations from CRISPR have waxed and waned even as clinical development of CRISPR [marches on.]

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[T]he latest research is being received cautiously. “I really like these studies and think they advance the field,” said biochemist David Liu of Harvard University, who invented base editing three years ago. They show that there are reliable ways to detect off-target editing, he said, and should light a fire under scientists to figure out ways to minimize it.

But details of the mouse study, in particular, “make me suspect that this is a worst-case scenario,” Liu said. He welcomed that, however, saying it suggests the outer limits of base editors’ flaws.

Read full, original post: [CRISPR base editing, known for precision, hits a snag with off-target mutations](#)