Retraction: Unexpected mutations after CRISPR-Cas9 editing in vivo

Kellie A Schaefer, Wen-Hsuan Wu, Diana F Colgan, Stephen H Tsang, Alexander G Bassuk & Vinit B Mahajan *Nat. Methods* 14, 547–548 (2017); published online 30 May 2017; updated online 14 June 2017; corrected online 25 July 2017; retracted 30 March 2018

This paper is being retracted because the genomic variants observed by the authors in two CRISPR-treated mice cannot be conclusively attributed to CRISPR-Cas9. The paper was a peer-reviewed Correspondence in the journal. The authors made their observation as part of their work on correction of a gene involved in blindness. The authors used mice of the inbred FVB/NJ strain from the JAX genetic quality control program that were purchased within months of each other and that were not bred in the authors' laboratory. The assumption was that this design was sufficient to control for genetic variation in an inbred strain. Since publication of the work, however, it has been brought to the journal's and the authors' attention that without parental controls or more analysis of genetic background, it is not certain that the variants reported are due to CRISPR treatment (https://doi.org/10.1038/nmeth.4559, https://doi.org/10.1038/nmeth.4553, https://doi.org/10.1038/nmeth.4551, https://doi.org/10.1038/nmeth.4554). The study is therefore being retracted to maintain the accuracy of the scientific record.

S.H.T. and W.-H.W. agree with the retraction. K.A.S., D.F.C., A.G.B. and V.B.M. do not agree with the retraction. All authors note that there is very little whole-genome sequencing data on the effects of CRISPR treatment *in vivo*. The question of whether CRISPR has effects on the *in vivo* genome will require further study; the authors are carrying out follow-up studies using whole-genome sequencing.

Corrigendum: RNA-protein interaction detection in living cells

Muthukumar Ramanathan, Karim Majzoub, Deepti S Rao, Poornima H Neela, Brian J Zarnegar, Smarajit Mondal, Julien G Roth, Hui Gai, Joanna R Kovalski, Zurab Siprashvili, Theo D Palmer, Jan E Carette & Paul A Khavari *Nat. Methods* 15, 207–212 (2018); published online 5 February 2018; corrected after print 20 April 2018

In the version of this Article originally published, an amino acid substitution introduced into the *B. subtilis* biotin ligase sequence was incorrectly written as R142G. The correct mutation is R124G. This error has been corrected in the HTML and PDF versions of the paper.

Corrigendum: CIRCLE-seq: a highly sensitive *in vitro* screen for genome-wide CRISPR-Cas9 nuclease off-targets

Shengdar Q Tsai, Nhu T Nguyen, Jose Malagon-Lopez, Ved V Topkar, Martin J Aryee & J Keith Joung *Nat. Methods* 14, 607–614 (2017); published online 1 May 2017; corrected after print 20 April 2018

In the version of this Article originally published, the wrong $Protocol\ Exchange\ DOI\ and\ link\ (10.1038/protex.2017.047)$ were included in ref. 40. The URL in the reference should have been http://dx.doi.org/10.1038/protex.2017.147. This error has been corrected in the HTML and PDF versions of the paper.