Corrections & amendments

Author Correction: Schizophrenia risk from complex variation of complement component 4

 Check for updates

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Figure 7d and Supplementary Fig. 10 of this Article reported experiments on synaptic refinement in the mouse lateral geniculate nucleus (LGN). We identified an error in the description of this experiment in the figure legends and text; the error does not affect the results or conclusions. The text and figure legends described comparisons of *C4*-mutant mice to wild-type littermate controls; the data analysis in fact drew upon two litters from het × het crosses and three additional knockout (KO) and wild-type animals (total $n = 17$ animals; wild-type $n = 5$, het $n = 7$, KO $n = 5$), as in the following Table 1.

Animals were age-matched, and images from animals were analysed blind to genotype. The data and quantification/barplots in the original paper correspond to these animals and are thus unchanged.

Table 1 | Corrected listing of animals analyzed by type

Litter	Cross	Number of animals analysed		
		WT	Het	KO
1	Het × het	2	2	1
2	Het × het	2	5	2
3	KO × KO	0	0	2
4	WT × WT	1	0	0
Total *n* per genotype		5	7	5

We correct the descriptions of these experiments as follows:

In the main text, fifth paragraph of subsection "C4 in the central nervous system," the third sentence originally reading "We found that in mice deficient in *C4* (ref. 36), C3 immunostaining in the dLGN was greatly reduced compared to wild-type littermates (Fig. 7a, b)…," the text "wild-type littermates" should instead have read "age-matched wild-type controls." In the sixth paragraph of the same subsection, the second sentence originally reading "Mice lacking functional *C4* exhibited greater overlap between RGC inputs from the two eyes ($P < 0.001$) than wild-type littermate controls," the text "wild-type littermate controls" should have read "wild-type controls."

In the Fig. 7a caption originally reading "**a**, Representative confocal images of immunohistochemistry for C3 in the P5 dLGN showed reduced C3 deposition in the dLGN of $C4^{-/-}$ mice compared to wild-type (WT) littermates," the text "wild-type (WT) littermates" should instead have read "age-matched wild-type (WT) mice." In the Fig. 7c caption originally reading "**c**, Co-localization analysis revealed a reduction in the fraction of VGLUT2$^+$ puncta that were C3$^+$ in *C4*-deficient mice relative to their WT littermates," the text "their WT littermates" should have read "age-matched WT mice." In the third sentence of the Fig. 7d caption originally reading "The overlapping area is significantly increased in $C4^{-/-}$ mice ($n = 6$ mice per group…" the text "$n = 6$ mice per group" should instead have read "$n = 17$ animals total; wild-type $n = 5$, het $n = 7$, KO $n = 5$." In the sixth sentence of the Fig. 7d caption, in the text originally reading "Compared to their wild-type littermates, *C4*-deficient mice exhibited lower *R* value variance, indicating defects in synaptic refinement ($n = 6$ mice per group," the text "their wild-type littermates" should have read "age-matched WT mice," while "$n = 6$ mice per group" should have read "$n = 17$ animals total; wild-type $n = 5$, het $n = 7$, KO $n = 5$."
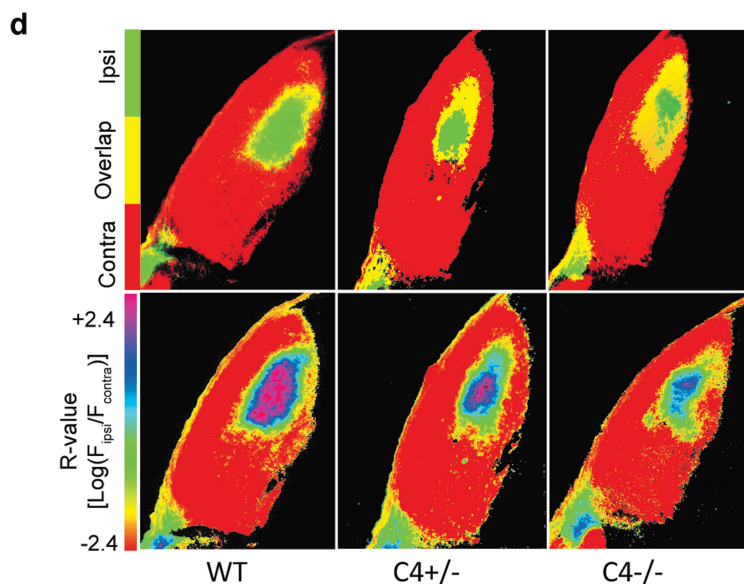

Fig. 1 | Replacement panel of original Fig. 7d.

In Extended Data Fig. 10 with the title originally reading "Mouse *C4* genes and additional analyses of the dLGN eye segregation phenotype in *C4* mutant mice and wild-type and heterozygous littermate controls" the latter portion should have read "...*C4* mutant, wild-type and heterozygous mice." In the Extended Data Fig. 10e caption appearing originally as "**e**, Quantification of the percentage of total dLGN area receiving both contralateral and ipsilateral projections shows a significant increase in $C4^{-/-}$ compared to wild-type littermates (ANOVA, $n = 5$ mice per group," the text "wild-type littermates" should have read "age-matched wild-type mice," while "$n = 5$ mice per group" should have read "$n = 17$ mice; wild-type $n = 5$, het $n = 7$, KO $n = 5$." Similarly, in the Extended Data Fig. 7g caption originally reading "**g**, Quantification of dLGN area receiving ipsilateral innervation showed a significant increase in ipsilateral territory in the $C4^{-/-}$ mice compared to wild-type littermates (AVOVA, $n = 5$ mice per group," the text "wild-type littermates" should have read "wild-type mice" and "$n = 5$ mice per group" should have read "$n = 17$ mice total; wild-type $n = 5$, het $n = 7$, KO $n = 5$."

Also, in the original Fig. 7d, which showed example images from individual animals, an image of a wild-type animal from a different experiment was utilized in the lower left panel. That image is consistent with the retinogeniculate refinement pattern for wild-type mice in our experiments, but it had been prepared for and used in a previous publication[1] by team members and was not attributed to that publication or experiment here. We have replaced it with an image from the experiment in this study as Fig. 1.

None of these corrections affect the results and conclusions of the original paper.

1. Bialas, A. R. & Stevens, B. TGF-β signaling regulates neuronal C1q expression and developmental synaptic refinement. *Nat. Neurosci.* **16**, 1773–1782 (2013); retracted https://doi.org/10.1038/s41593-021-00877-7 (2021).