

Supplementary Material for
Optimizing clozapine for chemogenetic neuromodulation of
somatosensory cortex

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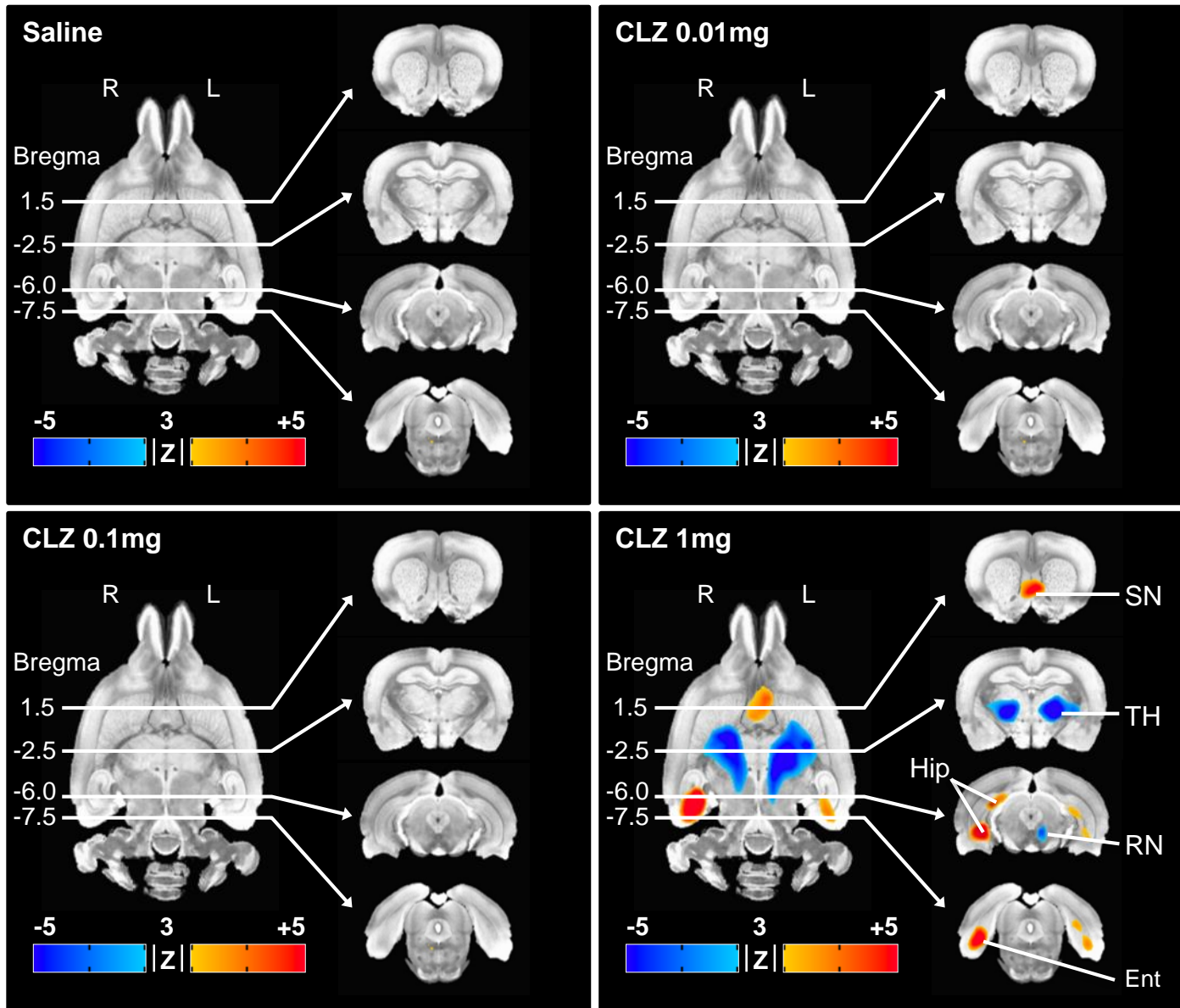
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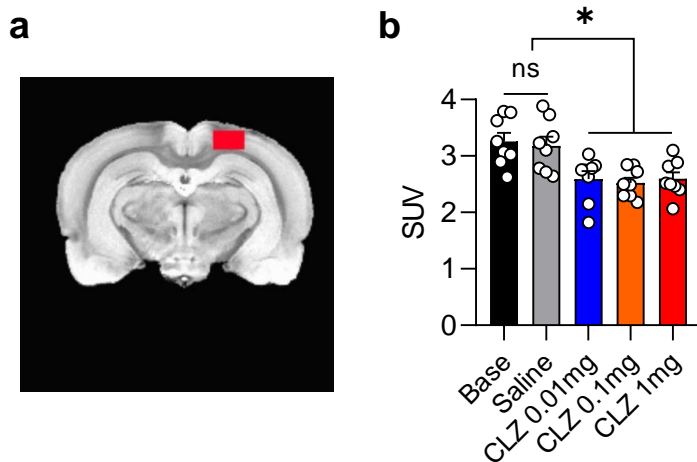
Supplementary Figs. S1 to S3

Supplementary Figure 1. FDG-microPET image after administration of saline and different dose of CLZ.



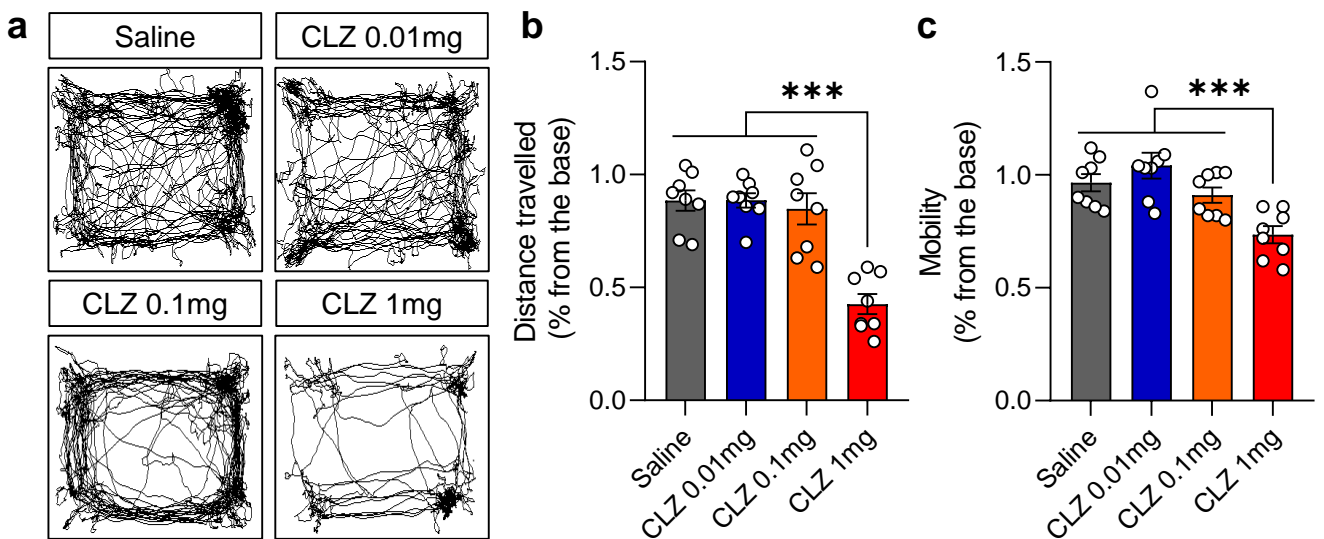
FDG-microPET image after different dose of CLZ and saline in wild rat. (N = 8; 3dClustSim, AFNI, $\alpha = 0.05$, $p < 0.01$, $k < 39$). CLZ, clozapine; L, left; R, right; SN, septal nucleus; TH, thalamus; RN, red nucleus; Hip, hippocampus; Ent, entorhinal cortex

Supplementary Figure 2. Comparison of SUV in somatosensory cortex with different dose of CLZ –induced chemogenetic neuromodulation.



(a) Coronal image of a rat brain indicating the region of interest for SUV analysis (red box). (b) SUV for regional glucose metabolism in somatosensory cortex after CLZ-ChemoNM. (N = 8; 1-way ANOVA with Tukey`s multiple comparisons, * $p < 0.05$).

Supplementary Figure 3. Locomotor behavioral changes after CLZ-ChemoNM



(a) Representative traces of locomotor activity in open field test after CLZ-ChemoNM
(b) Total distance travel and (c) mobility 30 minute after administration of CLZ or saline in open field test during 30 minutes (N = 8; 1-way ANOVA with Tukey`s multiple comparisons, $*p < 0.05$).