Figure 13

A TREMORS

B WIRE MANOEUVRE
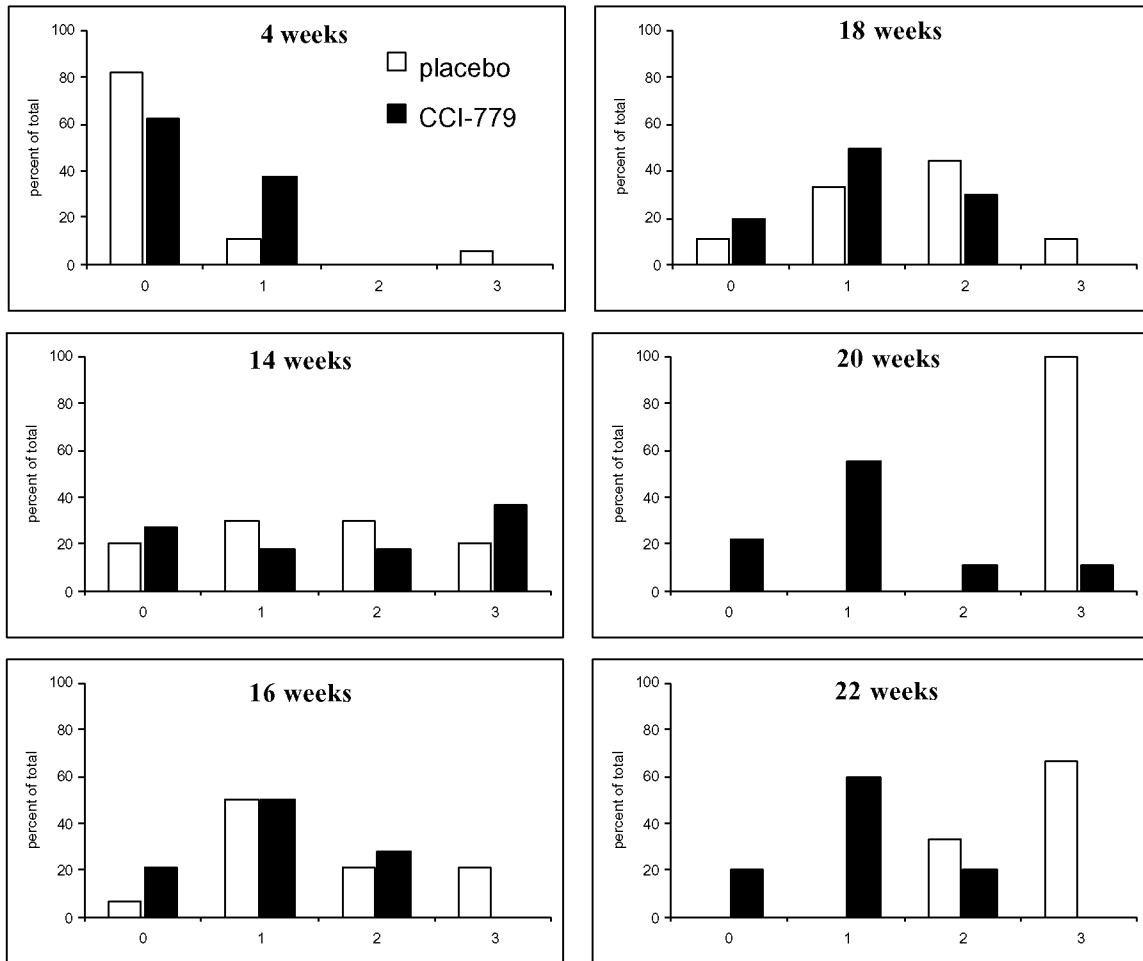
C GRIP STRENGTH
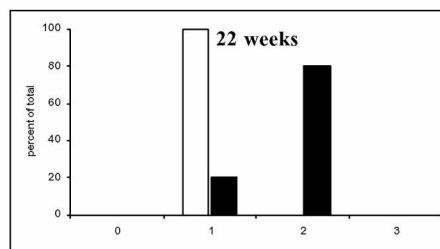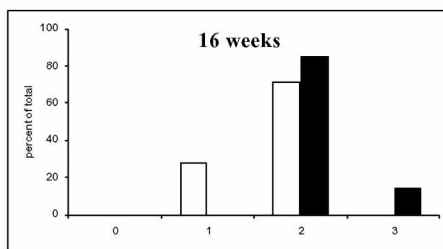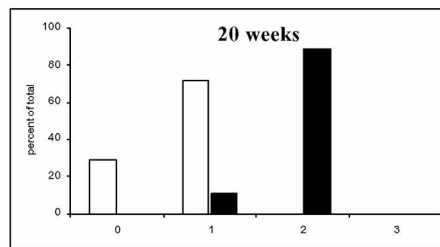
Supplementary figure 13

CCI-779 improves behaviour and motor performance in HD mouse model. (open bars- placebo; black bars- CCI-779 treated). **A-C.** Behavioural tests in HD transgenic mice (N-terminal 1-171 of huntingtin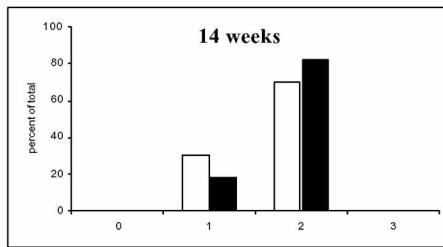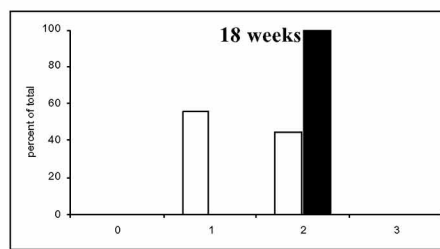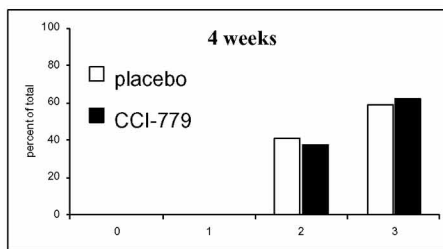 with 82 glutamine repeats)[16] aged 4 weeks (prior to treatment) (n_{CCI} = 16, $n_{placebo}$ = 17), and after treatment at 14 weeks (n_{CCI} = 11, $n_{placebo}$ = 10), 16 weeks (n_{CCI} = 14, $n_{placebo}$ = 14), 18 weeks (n_{CCI} = 10, $n_{placebo}$ = 9), 20 weeks (n_{CCI} = 9, $n_{placebo}$ = 7), 22 weeks (n_{CCI} = 5, $n_{placebo}$ = 6). We assessed the overall effect of CCI-779 using data from all timepoints assayed after starting treatment using a logistic regression approach (see methods). The control and treated groups were compared for each specific timepoint using Mann-Whitney U tests. **A.** Effect of CCI-779 on the tremors. 0 = no tremors, 1 = mild tremors, 2 = marked tremors. Overall effect with data from all timepoints p = 0.0006, Odds ratio=0.21 (95% confidence interval 0.098-0.45). $p_{4\ weeks}$ >0.77, $p_{14\ weeks}$ = 0.20, $p_{16\ weeks}$ = 0.01, $p_{18\ weeks}$ = 0.08, $p_{20\ weeks}$ = 0.14, $p_{22\ weeks}$ = 0.07. **B.** Effect of CCI-779 on wire manoeuvre. 0 = active grip with hind legs; 1 = difficulty grasping with hind legs; 2 = unable to grasp with hind legs; 3 = unable to lift hind legs, falls within 10 seconds; 4 = falls immediately. Overall effect with data from all timepoints p = 0.02 Odds ratio = 0.51 (0.29-0.92); $p_{4\ weeks}$ = 0.39, $p_{14\ weeks}$ = 0.55, $p_{16\ weeks}$ = 0.29, $p_{18\ weeks}$ = 0.40, $p_{20\ weeks}$ = 0.003, $p_{22\ weeks}$ = 0.008. **C.** Effect of CCI-779 on grip strength. 0 = no grip strength; 1 = slight grip, semi- effective; 2 = moderate grip, effective; 3 = active grip, effective. Overall effect with data from all timepoints p < 0.0001, Odds ratio = 12.73 (4.35-37.2); $p_{4\ weeks}$ =0.85, $p_{14\ weeks}$ = 0.6472, $p_{16\ weeks}$ = 0.1827, $p_{18\ weeks}$ = 0.0412, $p_{20\ weeks}$ = 0.0021, $p_{22\ weeks}$ = 0.0285.