

Supplemental Tables

Supplemental Table S1. Antidepressant-like effects induced by ketamine or letrozole in adult male and female rats. This table represents the two-way ANOVAs analyses ($F(DF_n, DF_d)$, p value for data represented in Fig. 2 (Study I) and 3 (Study II). Green-shadow boxes represent statistically significant comparisons.

Study I: Sex differences in the antidepressant-like effects of ketamine			
Fig. 2A. 30 min FST	Sex	Treatment (Sal vs. Ket)	Sex x Treatment
Immobility (s)	$F(1,28) = 3.68; p = 0.065$	$F(1,28) = 0.34; p = 0.565$	$F(1,28) = 2.03; p = 0.165$
Climbing (s)	$F(1,28) = 5.19; \#p = 0.031$	$F(1,28) = 0.01; p = 0.970$	$F(1,28) = 1.64; p = 0.211$
Swimming (s)	$F(1,28) = 0.15; p = 0.704$	$F(1,28) = 4.14; p = 0.052$	$F(1,28) = 1.53; p = 0.226$
Fig. 2B. 1 d FST	Sex	Treatment (Sal vs. Ket)	Sex x Treatment
Immobility (s)	$F(1,27) = 0.26; p = 0.614$	$F(1,27) = 6.34; p = 0.018$	$F(1,27) = 6.09; p = 0.020$
Climbing (s)	$F(1,27) = 0.22; p = 0.642$	$F(1,27) = 2.58; p = 0.120$	$F(1,27) = 5.58; p = 0.026$
Swimming (s)	$F(1,27) = 0.33; p = 0.569$	$F(1,27) = 5.77; p = 0.023$	$F(1,27) = 1.57; p = 0.221$
Fig. 2C. 3 d NSF	Sex	Treatment (Sal vs. Ket)	Sex x Treatment
Feeding time (s)	$F(1,28) = 0.30; p = 0.587$	$F(1,28) = 0.48; p = 0.492$	$F(1,28) = 0.03; p = 0.856$
Distance (cm)	$F(1,26) = 6.76; \#p = 0.015$	$F(1,26) = 0.13; p = 0.720$	$F(1,26) = 0.37; p = 0.550$
Fig. 2D. 6-7 d SP	Sex	Treatment (Sal vs. Ket)	Sex x Treatment
Intake (g/kg)	$F(1,28) = 46.07; \###p < 0.001$	$F(1,28) = 0.20; p = 0.654$	$F(1,28) = 3.40; p = 0.076$
Preference (%)	$F(1,28) = 0.09; p = 0.767$	$F(1,28) = 1.55; p = 0.224$	$F(1,28) = 1.33; p = 0.259$
Study II: Sex differences in the antidepressant-like effects of letrozole			
Fig. 3A. 1 h ELISA	Sex	Pre-treatment (Veh vs. LTZ)	Sex x Pre-treatment
Testosterone (ng/ml)	$F(1,20) = 10.81; \###p = 0.004$	$F(1,20) = 0.04; p = 0.835$	$F(1,20) = 1.43; p = 0.247$
Fig. 3B. 1 h FST	Sex	Pre-treatment (Veh vs. LTZ)	Sex x Pre-treatment
Immobility (s)	$F(1,28) = 25.36; \###p < 0.001$	$F(1,28) = 0.06; p = 0.801$	$F(1,28) = 4.52; p = 0.043$
Climbing (s)	$F(1,28) = 21.28; \###p < 0.001$	$F(1,28) = 0.09; p = 0.763$	$F(1,28) = 1.69; p = 0.212$
Swimming (s)	$F(1,28) = 1.32; p = 0.261$	$F(1,28) = 0.06; p = 0.811$	$F(1,28) = 8.17; p = 0.008$
Fig. 3C. 1 d FST	Sex	Pre-treatment (Veh vs. LTZ)	Sex x Pre-treatment
Immobility (s)	$F(1,28) = 10.59; \###p = 0.003$	$F(1,28) = 0.58; p = 0.454$	$F(1,28) = 0.17; p = 0.682$
Climbing (s)	$F(1,28) = 12.82; \###p = 0.001$	$F(1,28) = 0.66; p = 0.425$	$F(1,28) = 0.09; p = 0.766$
Swimming (s)	$F(1,28) = 0.30; p = 0.590$	$F(1,28) = 0.01; p = 0.979$	$F(1,28) = 0.29; p = 0.595$

Supplemental Table S2. Antidepressant-like effects of ketamine in letrozole pre-treated male and female rats. This table represents the three or two-way ANOVAs analyses ($F(DFn, DFd)$), p value for data represented in Fig. 4 and 5 (Study III). Green-shadow boxes represent statistically significant comparisons.

Study III: Antidepressant-like effects of ketamine in letrozole pre-treated male and female rats			
Fig. 4A. 30 min FST	Sex	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)
Immobility (s)	$F(1,49) = 16.23$; ### $p < 0.001$	$F(1,49) = 9.57$; $p = 0.003$	$F(1,49) = 5.93$; $p = 0.019$
Climbing (s)	$F(1,49) = 17.06$; ### $p < 0.001$	$F(1,49) = 6.52$; $p = 0.014$	$F(1,49) = 3.19$; $p = 0.080$
Swimming (s)	$F(1,49) = 1.20$; $p = 0.279$	$F(1,49) = 11.09$; $p = 0.002$	$F(1,49) = 12.90$; $p < 0.001$
Fig. 4B. 1 d FST	Sex	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)
Immobility (s)	$F(1,49) = 12.96$; ### $p < 0.001$	$F(1,49) = 1.02$; $p = 0.318$	$F(1,49) = 12.83$; $p < 0.001$
Climbing (s)	$F(1,49) = 11.52$; ## $p = 0.001$	$F(1,49) = 0.83$; $p = 0.366$	$F(1,49) = 10.25$; $p = 0.002$
Swimming (s)	$F(1,49) = 0.59$; $p = 0.447$	$F(1,49) = 0.15$; $p = 0.696$	$F(1,49) = 1.71$; $p = 0.197$
Fig. 4C. 3 d NSF	Sex	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)
Feeding time (s)	$F(1,49) = 0.16$; $p = 0.688$	$F(1,49) = 0.52$; $p = 0.472$	$F(1,49) = 5.19$; $p = 0.027$
Distance (cm)	$F(1,47) = 10.08$; ## $p = 0.003$	$F(1,47) = 1.51$; $p = 0.225$	$F(1,47) = 0.19$; $p = 0.665$
Fig. 4D. 6-7 d SP	Sex	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)
Intake (g/kg)	$F(1,13) = 23.55$; ### $p < 0.001$	$F(1,13) = 1.9$; $p = 0.190$	$F(1,13) = 2.0$; $p = 0.182$
Preference (%)	$F(1,13) = 0.53$; $p = 0.480$	$F(1,13) = 0.60$; $p = 0.454$	$F(1,13) = 0.03$; $p = 0.869$
Fig. 5A. 65 d FST	Sex	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)
Immobility (s)	$F(1,44) = 7.25$; ## $p = 0.010$	$F(1,44) = 4.07$; $p = 0.049$	$F(1,44) = 4.97$; $p = 0.031$
Climbing (s)	$F(1,44) = 6.76$; # $p = 0.013$	$F(1,44) = 3.70$; $p = 0.061$	$F(1,44) = 4.35$; $p = 0.043$
Swimming (s)	$F(1,44) = 1.11$; $p = 0.301$	$F(1,44) = 0.75$; $p = 0.392$	$F(1,44) = 1.18$; $p = 0.283$
Study III: Antidepressant-like effects of ketamine in letrozole pre-treated male rats			
Fig. 4A. 30 min FST	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)	Pre-treatment x Treatment
Immobility (s)	$F(1,24) = 5.37$; $p = 0.029$	$F(1,24) = 12.06$; $p = 0.002$	$F(1,24) = 5.24$; $p = 0.031$
Climbing (s)	$F(1,24) = 4.42$; $p = 0.043$	$F(1,24) = 9.16$; $p = 0.006$	$F(1,24) = 3.43$; $p = 0.076$
Fig. 4B. 1 d FST	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)	Pre-treatment x Treatment
Immobility (s)	$F(1,24) = 0.61$; $p = 0.441$	$F(1,24) = 21.71$; $p < 0.001$	$F(1,24) = 0.32$; $p = 0.574$
Climbing (s)	$F(1,24) = 0.56$; $p = 0.463$	$F(1,24) = 16.59$; $p < 0.001$	$F(1,24) = 0.78$; $p = 0.385$
Fig. 4C. 3 d NSF	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)	Pre-treatment x Treatment
Distance (cm)	$F(1,22) = 1.70$; $p = 0.205$	$F(1,22) = 0.82$; $p = 0.374$	$F(1,22) = 0.09$; $p = 0.769$
Fig. 4D. 6-7 d SP	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)	Pre-treatment x Treatment
Intake (g/kg)	$F(1,7) = 0.27$; $p = 0.621$	$F(1,7) = 0.00$; $p > 0.999$	$F(1,7) = 0.03$; $p = 0.864$

Fig. 5A. 65 d FST	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)	Pre-treatment x Treatment
Immobility (s)	$F(1,24) = 0.19; p = 0.671$	$F(1,24) = 10.61; p = 0.003$	$F(1,24) = 0.01; p = 0.950$
Climbing (s)	$F(1,24) = 0.17; p = 0.678$	$F(1,24) = 10.24; p = 0.004$	$F(1,24) = 0.01; p = 0.927$
Study III: Antidepressant-like effects of ketamine in letrozole pre-treated female rats			
Fig. 4A. 30 min FST	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)	Pre-treatment x Treatment
Immobility (s)	$F(1,25) = 4.16; p = 0.052$	$F(1,25) = 0.11; p = 0.743$	$F(1,25) = 2.44; p = 0.131$
Climbing (s)	$F(1,25) = 2.10; p = 0.159$	$F(1,25) = 0.75; p = 0.394$	$F(1,25) = 0.89; p = 0.355$
Fig. 4B. 1 d FST	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)	Pre-treatment x Treatment
Immobility (s)	$F(1,25) = 8.37; p = 0.008$	$F(1,25) = 0.23; p = 0.638$	$F(1,25) = 0.40; p = 0.533$
Climbing (s)	$F(1,25) = 9.44; p = 0.005$	$F(1,25) = 0.46; p = 0.502$	$F(1,25) = 0.02; p = 0.903$
Fig. 4C. 3 d NSF	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)	Pre-treatment x Treatment
Distance (cm)	$F(1,25) = 0.12; p = 0.730$	$F(1,25) = 0.16; p = 0.692$	$F(1,25) = 0.01; p = 0.989$
Fig. 4D. 6-7 d SP	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)	Pre-treatment x Treatment
Intake (g/kg)	$F(1,6) = 1.56; p = 0.258$	$F(1,6) = 2.49; p = 0.166$	$F(1,6) = 0.02; p = 0.899$
Fig. 5A. 65 d FST	Pre-treatment (Veh vs. LTZ)	Treatment (Sal vs. Ket)	Pre-treatment x Treatment
Immobility (s)	$F(1,20) = 5.62; p = 0.028$	$F(1,20) = 0.01; p = 0.960$	$F(1,20) = 0.85; p = 0.367$
Climbing (s)	$F(1,20) = 4.962; p = 0.038$	$F(1,20) = 0.01; p = 0.951$	$F(1,20) = 0.78; p = 0.387$