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Corrigendum

Glutamate Receptors in Extinction and Extinction-Based Therapies for Psychiatric Illness

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In Table 2 of this article, the authors have corrected the data in the *Effect* column relating to Mao *et al* (2006), Mao *et al* (2008), and Lin *et al* (2009) references. The revised table is shown below.

TABLE 2 Studies Employing NMDA Receptor Agonists or Other Positive Modulators

Species	Test	Drug type	Drug, dose	Locus	Time of admin.	Effect	Reference
Rat	FC-cue-FPS	Partial ag.	DCS, 3.25 - 30mg/kg	Sys.	Pre-ext	Facilitated ext ret.	Walker et al. (2002)
			DCS, 10 μg/side	BLA	Pre-ext	Same as systemic	
		Antag. + partial ag.	(±)HA-966, 6 mg/kg + DCS, 15 mg/kg	Sys.	Pre-ext	Co-admin of antag. blocked DCS effect	
Rat	FC-cue-freezing	Partial ag.	DCS, 2.5-10 mg/kg	Sys.	Pre-or post-ext up to 2 hrs	Facilitated ext ret.	Ledgerwood et al. (2003)
			DCS, 10 μg/side	BLA	Immed. post-ext	Same as systemic	
Rat	FC-cue-freezing	Partial ag.	DCS, 15 mg/kg	Sys.	Immed. post-ext	Facilitated ext ret.; impaired reinst.	Ledgerwood et al. (2004)
Rat	FC-cue-freezing	Partial ag.	DCS, 15 mg/kg	Sys.	Immed. post-ext	Generalized ext: DCS + ext to Cue 1 facilitated ext ret. to Cue 1 and Cue 2	Ledgerwood et al.(2005)
Rat	FC-cue-freezing	Partial ag.	DCS, 15 mg/kg	Sys.	Immed. post-ext	Facilitated ext; tolerance to DCS after multiple admins; tolrance dissipated over time	Parnas et al. (2005)
Rat	FC-cue-FPS	Partial ag.	DCS, 15 mg/kg	Sys.	Pre-ext	Facilitated ext ret.; effect blocked by MAPK or PI3K antagonist, transciptional inhibitor, or protein synthesis inhibitor	Yang and Lu (2005)
Rat	FC-cue-CER	Partial ag.	DCS, 15 or 30 mg/kg	Sys.	Pre-ext	Facilitated ext; intact renewal	Woods and Bouton (2006)
Rat	FC-cue-freezing	Partial ag.	DCS, 15 mg/kg	Sys.	Pre-ext	Facilitated ext ret.	Lee et al. (2006)
			DCS, 10 μg/side	BLA	Pre-ext	Same as systemic	
Rat	FC-cue-FPS	Partial ag.	DCS, 10 μg/side	BLA	Pre-ext	Facilitated ext ret. and reversed fear conditioning-induced increase in BLA cell surface GluR1 expression.	Mao et al. (2006)
Mouse	Inhib. avoidance	Partial ag.	DCS 15 mg/kg	Sys. x 15 d	Pre-ext	Facilitated ext. in low or intermed. anxious mice but not in high anxious	Tomilenko et al. (2007)
Rat	FC-cue-freezing	Partial ag.	DCS, 15 mg/kg	Sys.	Immed. post-ext	Facilitated ext. ret.; effect blocked by prior daily x14 d admin of DCS or imipramine	Werner-Seidler and Richardson (2007)
Rat	FC-cue-freezing	Partial ag.	DCS, 15 mg/kg	Sys.	Immed. post-ext	Facilated ext ret. but only in rats showing some within-sess ext	Weber et al. (2007)
Rat	FC-cue-FPS	Partial ag.	DCS, 15 mg/kg	Sys.	Pre-ext	Reversed disruption of ext ret. by glucocorticoid antag.	Yang and Lu (2007)
			DCS, 5 mg/kg	Sys.	Pre-ext	Facilitated ext. ret: synergistic effect with low dose glucocorticoid	
Rat	CTA	Partial ag.	Muscimol, 0.05 μg/side + DCS, 20 μg/side	BLA	Pre-ext	Blocked impairment of ext ret. by muscimol, a GABA(A) receptor agonist	Akirav (2007)
Rat	FC-cue-FPS	Partial ag.	DCS, 10 μg/side	BLA	Pre-ext	Facilitated ext ret. and reversed fear conditioning-induced increase in BLA cell surface GluR1 expression; blocked reinst.	Mao et al. (2008)
Rat	FC-cue-freezing, CER	Partial ag.	DCS 15, or 30 mg/kg	Sys.	Pre-ext	Facilitated ext ret. but only in rats showing some within-sess ext; intact renewal	Bouton et al. (2008)
Rat	FC-cue-FPS	Partial ag.	DCS, 15 mg/kg	Sys.	Pre-ext	Facilitated 1st but not 2nd ext unless 2nd ext involved a different cue	Langton and Richardson (2008)
Mouse	FC-cue-freezing	Partial ag.	DCS, 5,15, 30 mg/kg	Sys.	Pre-ext	Facilitated ext retention in C57BL/6J but not 129S1 mice	Hefner et al. (2008)
Rat	FC-cue-FPS	Partial ag.	DCS, 20 mg/kg	Sys.	Pre-ext	Facilitated ext ret. and reversed fear conditioning-induced increase in BLA AMPA/NMDA receptor ratio; effects prevented by endocytosis blocker	Lin et al. (2009)
Mouse	FC-cue-freezing	Partial ag.	DCS, 30 mg/kg	Sys.	Pre-ext	Facilitated ext ret.; impaired reinst.; no effect on 2nd ext	Yamada et al. (2009)
Rat	CPA (morphine W/D)	Partial ag.	DCS, 15 mg/kg	Sys.	Pre-ext	Facilitated ext ret.	Myers and Carlezon (2010)
Rat	FC-cue, ctx-freezing	Pos. mod. via ↑ D-serine	Mutation in catabolic enzyme for D-serine	Sys.	Constitutive	NE on FC; facilitated ext of freezing to context but not cue	Labrie et al. (2009)
Rat	Inhib. avoidance	Partial ag.	Spermidine, 2 nmol	Hipp.	Post-ext	Drug admin. immed but not 6 hrs post-ext facilitated ext ret; effect blocked by co-admin of NR2B antag.	Gomes et al. (in press)
Rat	Bar press for food	Partial ag.	DCS, 3 mg/kg	Sys.	Pre-ext	Impaired within-sess ext.; no drug-free post-test; prob. perf. effect	Port and Seybold (1998)
Rat	Cocaine cond. PP	Partial ag.	DCS, 15 mg/kg	Sys. x 9 d	Post-ext	Facilitated ext if given immed. but not 4 hrs post-ext; blocked relapse at 2 wks (longest interval tested)	Botreau et al. (2006)
			DCS, 10 μg/side	BLA x 3 d	Post-ext	Same as systemic	
Mouse	Cocaine cond. PP	Partial ag.	DCS, 15 mg/kg	Sys.	Pre-ext	May have facilitated ext. and blocked spontaneous recovery; NE on cocaine reinst.	Kelley et al. (2007)
Rat	Amphet. PP	Partial ag.	DCS, 10 μg/side	d. hipp.	Pre-ext	Facilitated ext ret. but also facilitated reacq.	Sakurai et al. (2007)
Rat	Run maze for food	Partial ag.	DCS, 15 mg/kg	Sys.	Immed. post-ext	Facilitated ext	Gabriele and Packard (2007)
Rat	Ethanol IVSA	Partial ag.	DCS, 5 mg/kg	Sys. x 12 d	Pre-ext	Facilitated ext retention 1 day after last ext. session drug free	Vengeliene et al. (2008)
Mouse	Bar press for food	Partial ag.	DCS, 15, 30 mg/kg	Sys. X 8 d or 10 d	Immed. post-ext	Facilitated ext.; efficacy of DCS dependent on interval between ext sessions	Shaw et al. (2009)
Rat	Cocaine cond. PP	Partial ag.	DCS, 15 mg/kg	Sys.	Immed. post-ext	Facilitated ext across days; blocked relapse	Paolone et al. (2009)
Rat	Cocaine IVSA	Agonist	D-serine, 100 mg/kg	Sys.	Pre- or post-ext	NE on ext rate; attenuated cocaine- but not sucrose-induced reinst.	Kelamangalath et al. (2009)
Mouse	Ethanol PP	Partial ag.	DCS, 15-60 mg/kg	Sys. x 12 d	Pre-ext	NE on ext rate; impaired reacq	Groblewski et al. (2009)
Mouse	Cocaine cond. PP	Partial ag.	DCS, 15, 30 mg/kg	Sys. x 8 d	Immed. post-ext	Facilitated ext; 30 mg/kg DCS relapse at 2 weeks compared to saline or 15 mg/kg DCS	Thanos et al. (2009)
Rat	Cocaine IVSA	Partial ag.	DCS, 30 mg/kg	Sys.	Pre or post-ext	Facilitated ext when given immed but not 6 hrs post-ext; retarded reacq	Nic Dhonnchadha et al. (2009)
Monkey	Cocaine IVSA	Partial ag.	DCS, 10 mg/kg	Sys.	Pre-ext	NE on ext; retarded reacq.	

Abbreviations: admin, administration; ag, agonist; amphet, amphetamine; antag, antagonist; BLA, basolateral amygdala; cond, conditioned; CPA, conditioned place aversion; CTA, conditioned taste aversion; ctx, context; d, dorsal; dep, dependent; ext, extinction; FC, fear conditioning; FPS, fear-potentiated startle; hipp, hippocampus; immed, immediate; inhib, inhibitory; IVSA, intravenous self-administration; mod, modulation, mPFC, medial prefrontal cortex; NE, no effect; perf, performance; poss, possible; prob, probable; PP, place preference; pos, positive; reacq, reacquisition; reinst, reinstatement; ret, retention; sess, session; sys, systemic; vmPFC, ventromedial prefrontal cortex; W/D, withdrawal.