

Ketamine for Depression: Where Do We Go from Here?

Supplemental Information

Table S1. Antidepressant responses to ketamine and saline at 72h post-infusion: risk reduction data for the five controlled trials in MDD and BD conducted to date.

	Diagnosis	N	Ketamine response rate at 72 h post-infusion (n responders, n non-responders)	Saline response rate at 72 h post-infusion (n responders, n non-responders)	ARR (95% CI)	NNT (95% CI)
Berman <i>et al.</i> (2000) (1)	MDD	8	0.50 (4, 4)	0.13 (1, 7)	38% (-4-79%)	3 (1-∞)
Zarate <i>et al.</i> (2006) (2)	MDD	17	0.35 (6, 11)	0.14 (2, 12)	21% (-8-50%)	5 (2-∞)
Valentine <i>et al.</i> (2011) (3)	MDD	10	0.30 (3, 7)	0.10 (1, 9)	20% (-14-54%)	5 (2-∞)
DiazGranados <i>et al.</i> (2010) (4)	BD	17	0.24 (4, 13)	0.00 (0, 16)	24% (2-45%)	4 (2-51)
Zarate <i>et al.</i> (2012) (5)	BD	14	0.14 (2, 12)	0.00 (0, 12)	14% (-7-36%)	7 (3-∞)

ARR, absolute risk reduction; BD, bipolar disorder; CI, confidence interval; MDD, major depressive disorder; NNT, number needed to treat.

N represents the numbers of patients who received ketamine and/or placebo. Responders were patients who had a >50% reduction in scores on at least one depression measure at 72 h post-infusion.

Supplemental References

1. Berman RM, Cappiello A, Anand A, Oren DA, Heninger GR, Charney DS, *et al.* (2000): Antidepressant effects of ketamine in depressed patients. *Biol Psychiatry* 47:351-354.
2. Zarate CA, Jr., Singh JB, Carlson PJ, Brutsche NE, Ameli R, Luckenbaugh DA, *et al.* (2006): A randomized trial of an N-methyl-D-aspartate antagonist in treatment-resistant major depression. *Arch Gen Psychiatry* 63:856-864.
3. Valentine GW, Mason GF, Gomez R, Fasula M, Watzl J, Pittman B, *et al.* (2011): The antidepressant effect of ketamine is not associated with changes in occipital amino acid neurotransmitter content as measured by [(1)H]-MRS. *Psychiatry Res Neuroimaging* 191:122-127.
4. DiazGranados N, Ibrahim L, Brutsche NE, Newberg A, Kronstein P, Khalife S, *et al.* (2010): A randomized add-on trial of an N-methyl-D-aspartate antagonist in treatment-resistant bipolar depression. *Arch Gen Psychiatry* 67:793-802.
5. Zarate CA, Brutsche NE, Ibrahim L, Franco-Chaves J, DiazGranados N, Cravchik A, *et al.* (2012): Replication of ketamine's antidepressant efficacy in bipolar depression: A randomized controlled add-on trial. *Biol Psychiatry* in press.