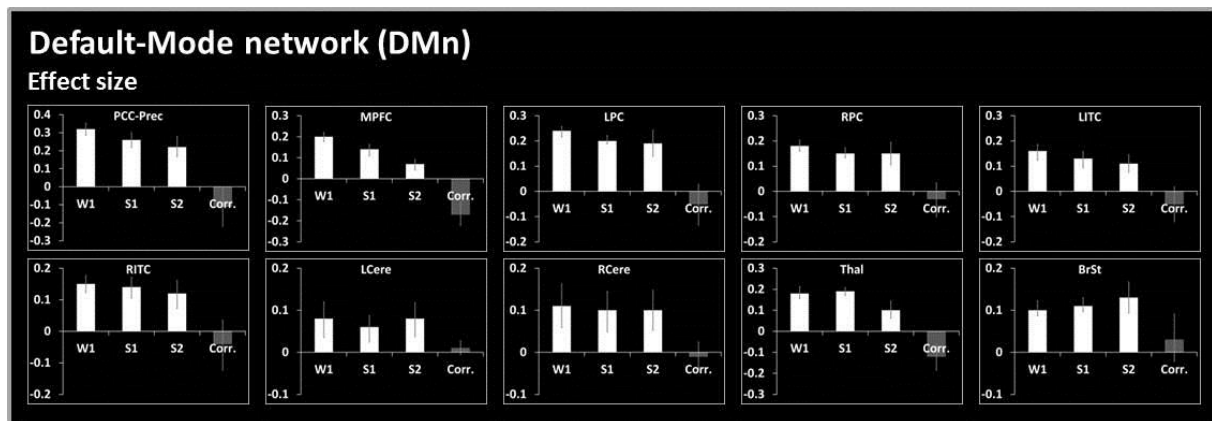


## Supplemental Digital Content 4: Effect sizes

Effect size within each of the pre-defined regions of interest for each studied network across experimental conditions and for the correlation analysis.

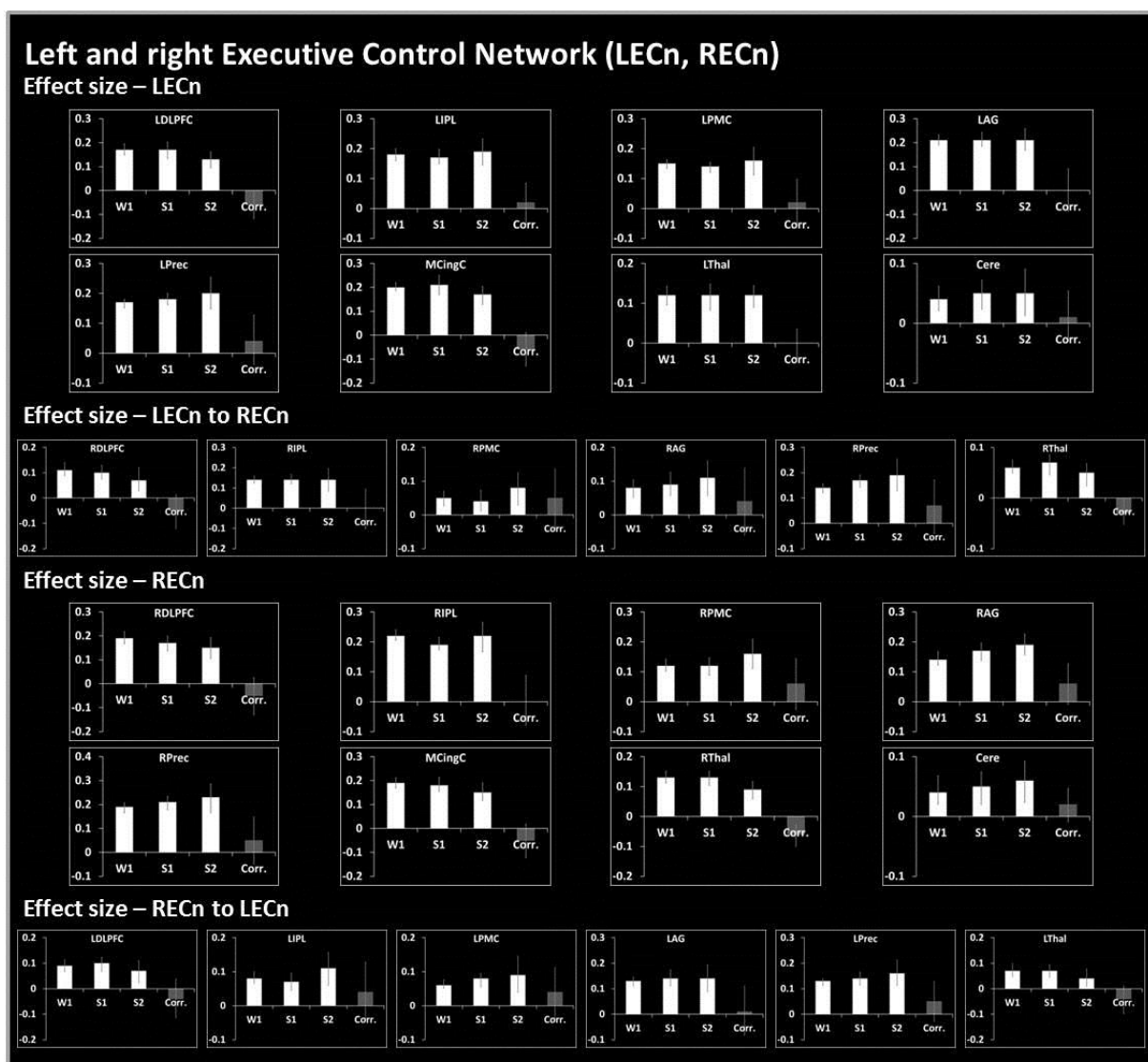
**Legend of Figure 1:** Effect size  $\beta$  and 95% CI (error bars) within each of the pre-defined Default Mode network (DMn) regions of interest across experimental conditions and for the correlation analysis. BrSt = brainstem; Corr. = correlation between depth of ketamine sedation and connectivity of concerned region with remaining network; L = left; LCere/RCere = left and right cerebellum; LITC/RITC = left and right inferior temporal cortex; LPC/RPC = left and right lateral parietal cortex; MPFC = medial prefrontal cortex; PCC-Prec = posterior cingulate/precuneus; R = right; S1 = light sedation; S2 = deep sedation; Thal = thalamus; W1 = wake state.

**Figure 1:**



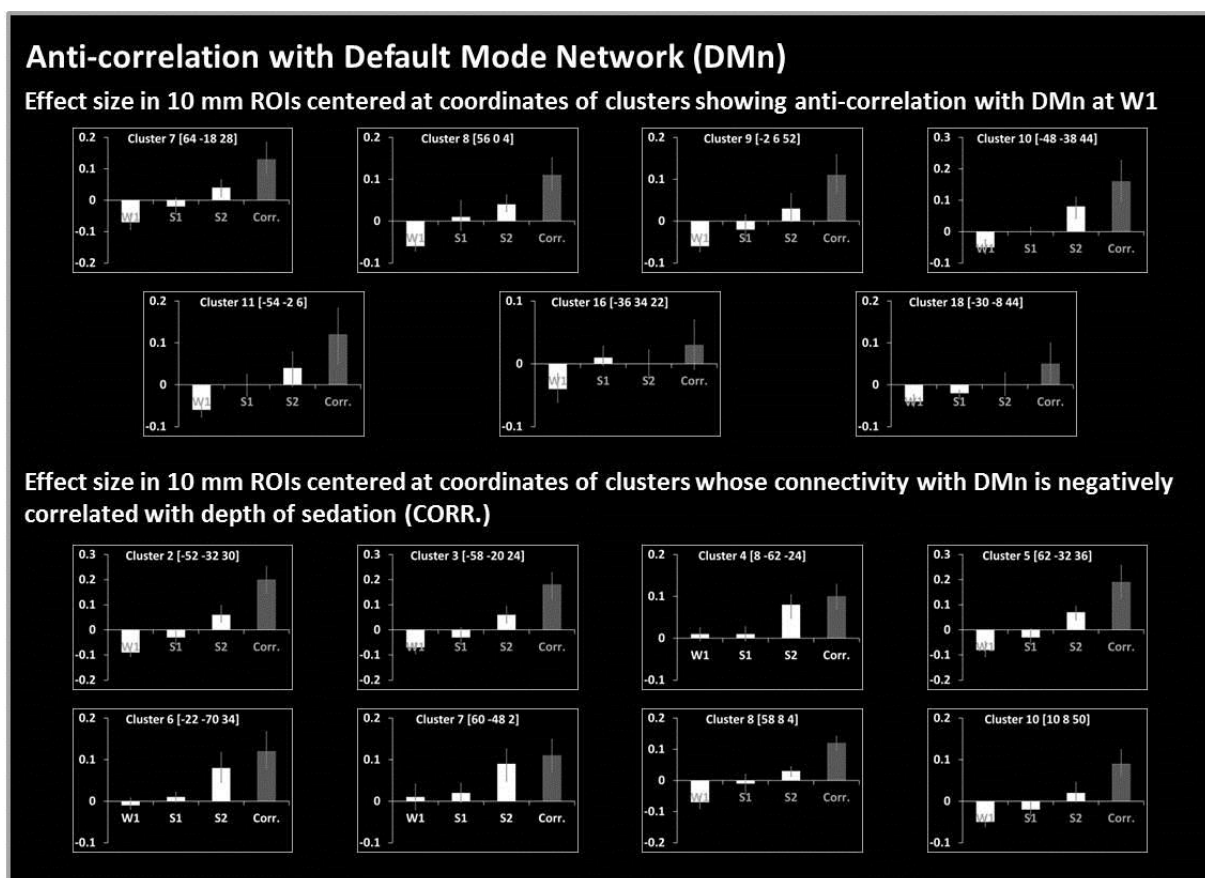
**Legend of Figure 2:** Effect size  $\beta$  and 95% CI (error bars) within each of the pre-defined left and right Executive Control network (LECN, RECN) regions of interest across experimental conditions and for the correlation analysis (Corr.). Effect size is shown within each network individually (Effect size - LECN, Effect size - RECN), and between networks (Effect size – LECN to RECN, Effect size – RECN to RECN). BrSt = brainstem; Cere = cerebellum; Corr. = correlation between depth of ketamine sedation and connectivity of concerned region with remaining network; L = left; LAG/RAG = left and right angular gyrus; LDLPFC/RDLPFC = left and right dorsolateral prefrontal cortex; LIPL/RIPL = left and right inferior parietal lobule; LPMC/RPMC = left and right premotor cortex; LPrec/RPrec = left and right precuneus; LThal/RThal = left and right thalamus; MCingC = midcingulate cortex, R = right; S1 = light sedation; S2 = deep sedation; W1 = wake state.

**Figure 2:**



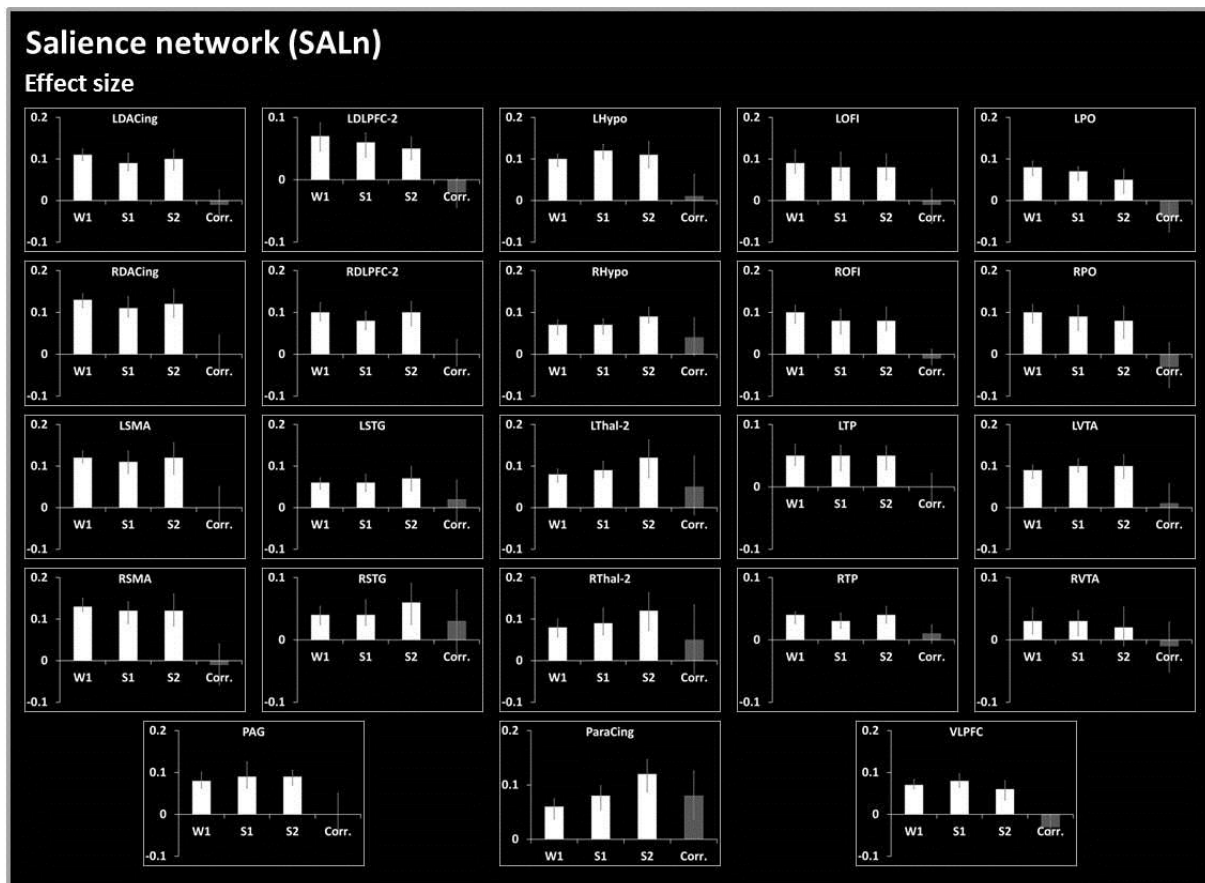
**Legend of Figure 3:** Effect size  $\beta$  and 95% CI (error bars) within 10 mm regions of interest (ROIs) centered at coordinates of clusters showing anti-correlation with Default Mode network (DMn) during the wake state (W1) and for the correlation analysis. The same effect size is given for 10 mm ROIs centered at coordinates of clusters whose connectivity with DMn is negatively correlated with depth of sedation. Montreal Neurological Institute x, y and z coordinates of all those clusters are given between brackets. For each analysis (W1, S1, S2, or CORR.), clusters are numbered according to the number of voxels they contain, in descending order, and taking account of the two-sided nature of cluster analysis (positive and negative clusters). Corr. = correlation between depth of ketamine sedation and connectivity of concerned region with remaining network; S1 = light sedation; S2 = deep sedation; W1 = wake state.

**Figure 3:**



**Legend of Figure 4:** Effect size  $\beta$  and 95% CI (error bars) within each of the pre-defined Salience network (SALn) regions of interest across experimental conditions and for the correlation analysis (Corr.). Corr. = correlation between depth of ketamine sedation and connectivity of concerned region with remaining network; L = left; LDACing/RDACing = left and right dorsal anterior cingulate; LDLPFC-2/RDLPFC-2 = left and right dorsolateral prefrontal cortex; LHypo/RHypo = left and right hypothalamus; LOFI/ROFI = left and right orbital frontoinsula; LPO/RPO = left and right parietal operculum; LSMA/RSMA = left and right supplementary motor area; LSTG/RSTG = left and right superior temporal gyrus; Lthal-2/Rthal-2 = left and right thalamus; LTP/RTP = left and right temporal pole; LVTA/RVTA = left and right ventral tegmental area; PAG = periaqueducal grey; ParaCing = paracingulate; R = right; S1 = light sedation; S2 = deep sedation; VLPFC = ventrolateral prefrontal cortex; W1 = wake state.

**Figure 4:**



**Legend of Figure 5:** Effect size  $\beta$  and 95% CI (error bars) within each of the pre-defined Auditory (AUDn), Visual (VISn), and Sensorimotor (SMn) network regions of interest across experimental conditions and for the correlation analysis (Corr.). ACingC = anterior cingulate cortex; Corr. = correlation between depth of ketamine sedation and connectivity of concerned region with remaining network; L = left; LAVC/RAVC = left and right associative visual cortex; LPCG/RPCG = left and right precentral gyrus; LPrMC/RPrMC = left and right primary motor cortex; LPVC/RPVC = left and right primary visual cortex; LSTTG/RSTTG = left and right superior transverse temporal gyrus; LSVC/RSVC = left and right secondary visual cortex; LVC/RVC = left and right visual cortex; R = right; S1 = light sedation; S2 = deep sedation; SMA = supplementary motor area; W1 = wake state.

**Figure 5:**

