



Supplemental Digital Content Fig. S4. Excitation of CaMKIIa⁺ neurons in the parabrachial nucleus region with high-dose dexmedetomidine anesthesia caused minor decreases in theta, alpha, and beta oscillations and increased gamma oscillations. (A) Example spectrograms show the spectral power for 0-60 Hz over time in the prefrontal EEG following intraperitoneal injection of saline (*top*) or CNO (*bottom*) in the same rat (same rat as fig. 4A in the main text). (B) Summary of power differences between conditions over time shows minor decreases in mean theta, alpha, and beta power for clozapine-N-oxide experiments relative to saline experiments. Gamma power, on the other hand, increased with clozapine-N-oxide experiments. Time points where the CIs (shaded regions) do not overlap with zero show statistically significant differences with 99% confidence. Time periods that show statistically significant differences with 99% confidence are indicated by black bars above or below the dashed zero line, representing lower power in the clozapine-N-oxide or saline conditions, respectively. (A) and (B) have the same time axes.