|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Response, cell type** | **GABA antagonist oder** | **Con vs GZ (p < 0.01)** | **Con vs CGP (p < 0.01)** | **GZ vs CGP (p < 0.01)** |
| EPSP amplitude,  L2 SC | Con -> GZ -> GZ + CGP | 3/5 (60.0%) | 5/5 (100.0%) | 2/5 (40.0%) |
| EPSP halfwidth,  L2 SC | Con -> GZ -> GZ + CGP | 2/3 (66.7%) | 3/3 (100.0%) | 2/3 (66.7%) |
| IPSP amplitude,  L2 SC | Con -> GZ -> GZ + CGP | 2/3 (66.7%) | 2/3 (66.7%) | 1/3 (33.3%) |
| EPSP amplitude,  L2 PC | Con -> GZ -> GZ + CGP | 1/3 (33.3%) | 3/3 (100.0%) | 3/3 (100.0%) |
| EPSP halfwidth,  L2 PC | Con -> GZ -> GZ + CGP | 4/4 (100.0%) | 4/4 (100.0%) | 1/4 (25.0%) |
| IPSP amplitude,  L2 PC | Con -> GZ -> GZ + CGP | 2/5 (40.0%) | 4/5 (80.0%) | 3/5 (60.0%) |

**Figure 6 – source data 2: Summary of posthoc pairwise comparisons of membrane potential responses after application of GABA receptor antagonists**

Posthoc pairwise comparisons were performed for each cell for each membrane response characteristic where a Friedman test revealed a significant effect of GABA receptor antagonists (cf. Figure 6, Supplement 1). Data is only shown for neurons with a significant result from a Friedman test. Responses were grouped by sweep of optical stimulus (30-50 sweeps per cell) and compared across conditions using a paired Wilcoxon rank sum test. All possible comparisons were included; control (Con) vs Gabazine (GZ), control vs CGP55485 (CGP), and Gabazine vs Gabazine + CGP55485. Table shows the proportion of layer 2 stellate (SC) and pyramidal cells (PC) where there was a significant effect (p < 0.01) of drug on EPSP amplitude, EPSP halfwidth, or IPSP amplitude after adjustment of p-values for multiple comparisons. Data is shown for neurons where Gabazine was applied before CGP55485.