**Figure 1- source data 1**

**Figure 1B.** Kruskal-Wallis non-parametric ANOVA: X2 (9, n = 157) = 100.862, P < 0.0001; Post-hoc test compared to Control, n = 12; 1h ITI-CTA, n = 10, P < 0.0001; 2h ITI-CTA, n = 32, P < 0.0001; 3h ITI-CTA, n = 18, P < 0.0001; 4h ITI-CTA, n = 10, P = 0.004; 5h ITI-CTA, n = 21, P < 0.001; 6h ITI-CTA, n = 10, P = 0.007; 7h ITI-CTA, n = 11, P = 0.038; 8h ITI-CTA, n = 27, P = 0.029; 20h ITI-CTA, n = 6, P = 0.942.

**Figure 1B.** Cluster Analysis: Cluster1; 1h, 2h, and 3h ITI-CTAs, cluster size: 43.2%. Cluster2: 4h to 8h ITI-CTAs, cluster size: 56.8%. Mann-Whitney test between two clusters, U = 446.00, Z = -8.188, P < 0.0001.

**Figure 1C.** Friedman's non-parametric repeated measures ANOVA: interaction between tests 1, 2, 3, and 4; X2 (3, n = 139) = 221.859, P < 0.0001; test1 to test2, X2 = 4.785, P < 0.0001; test2 to test3, X2 = 5.134, P < 0.001; test3 to test4, X2 = 3.995, P < 0.001. Kruskal-Wallis ANOVA on test4; X2 (7, n = 139) = 68.212, P < 0.0001. Post-hoc test compared to 1h ITI-CTA; 2h ITI-CTA, P = 0.433; 3h ITI-CTA, P = 0.439; 4h ITI-CTA, P = 0.003; 5h ITI-CTA, P = 0.001; 6h ITI-CTA, P = 0.001; 7h ITI-CTA, P < 0.0001; 8h ITI-CTA, P < 0.0001. Kruskal-Wallis ANOVA on test7; X2 (2, n = 30) = 0.601, P = 0.740.

**Figure 1E.** Kruskal-Wallis non-parametric ANOVA: X2 (5, n = 48) = 33.186, P < 0.0001; Post-hoc test compared to Control, n = 8; 1h ITI-CTA, n = 8, P < 0.0001; 2h ITI-CTA, n = 8, P < 0.0001; 3h ITI-CTA, n = 8, P = 0.001; 4h ITI-CTA, n = 8, P = 0.027; 5h ITI-CTA, n = 21, P = 0.668;

**Figure 1F**. Independent samples t-test: CTA, n = 5; reverse conditioning, n = 7; T (6.101) = 6.757, P = 0.0004.