

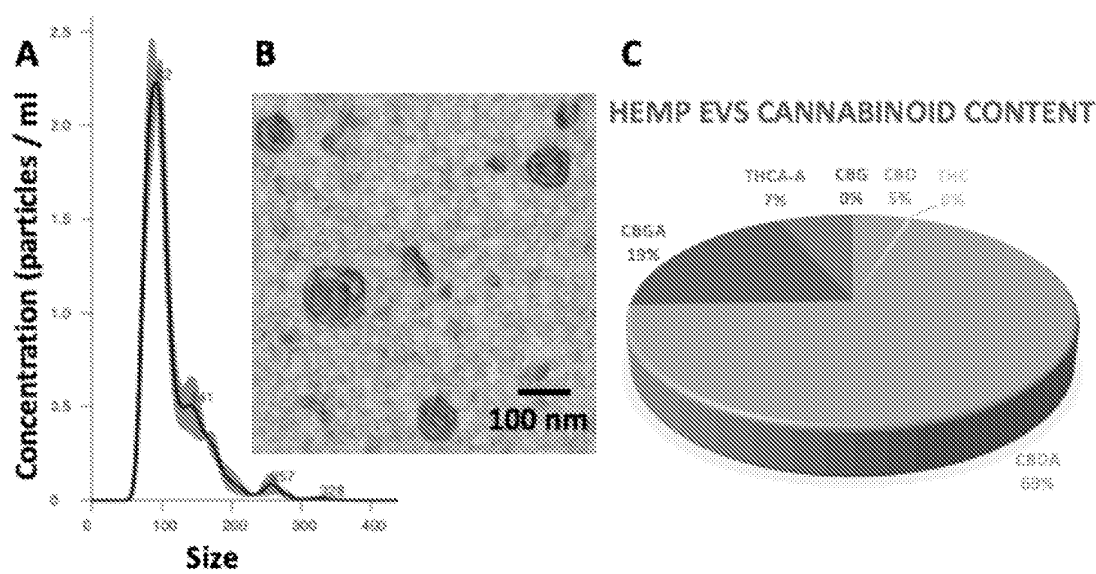


Figure 1: Hemp EVs characterization: A) EVs size distribution as determined by NTA. B) TEM picture of hemp EVs. C) Major cannabinoid content of hemp EVs based on LC-MS/MS analysis.

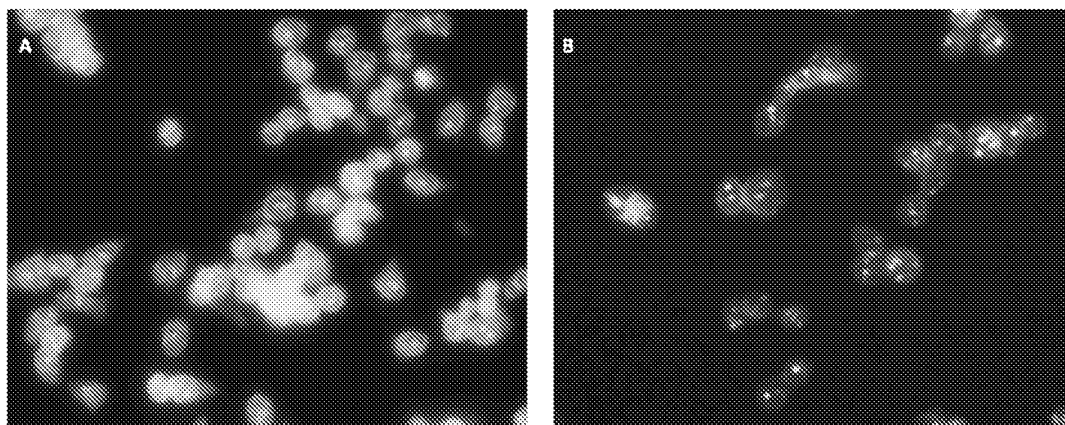


Figure 2: Tumor cells (Human GBM L0) staining with free SYTOTM RNASSelectTM dye (A) versus uptaking SYTOTM RNASSelectTM stained hemp EVs (B) after 3 hours of incubation.

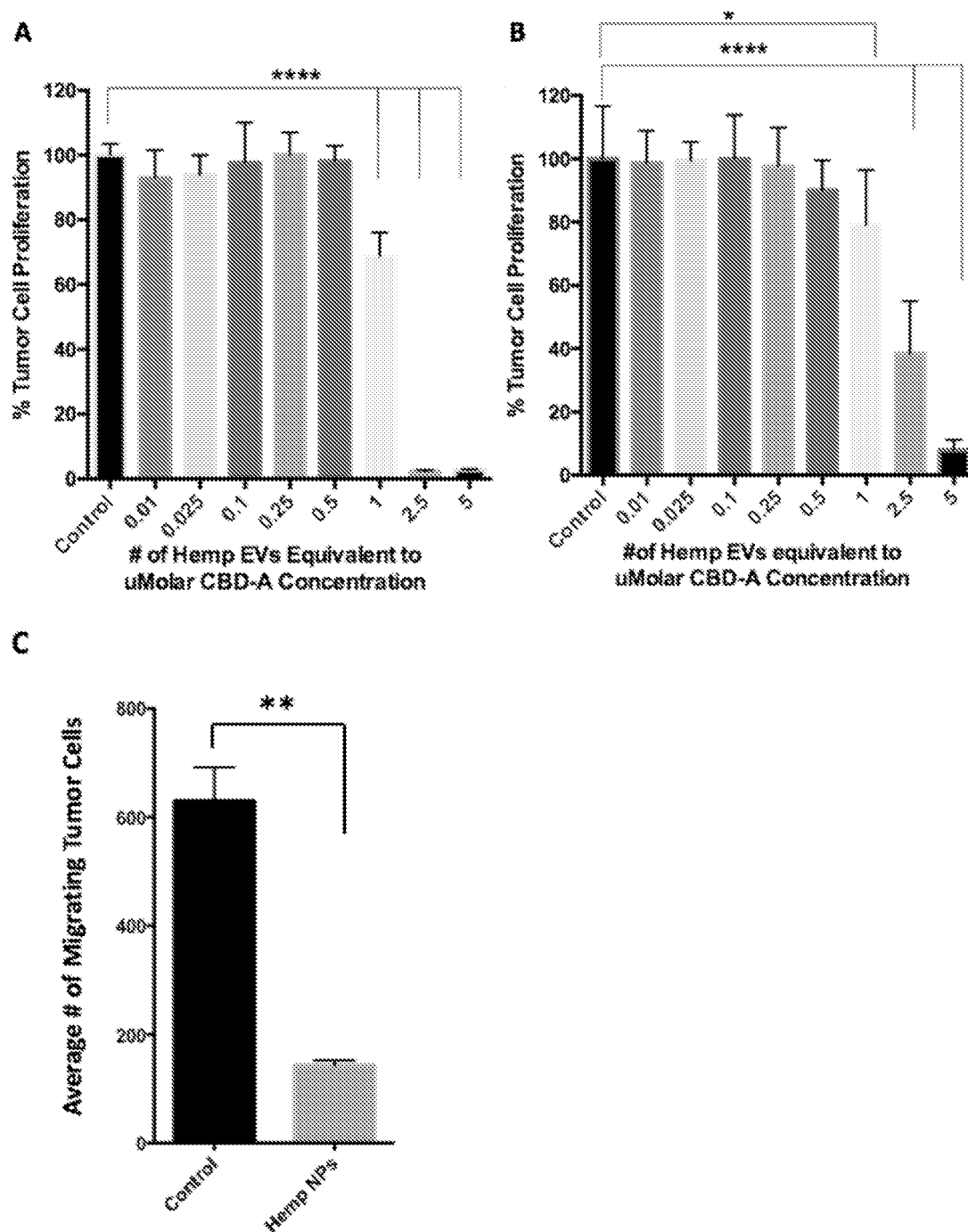


Figure 3: *In vitro* anti-proliferative [at different concentrations, 7 days] effects of hemp EVs on A) mouse KR158 vs (B) human L0 GBM lines and (C) and anti-migration [at 1 μ M for 24 hours] effects of hemp NPs on human L0 GBM line in culture. * $P < 0.05$, ** $P = 0.001$, **** $P < 0.0001$.

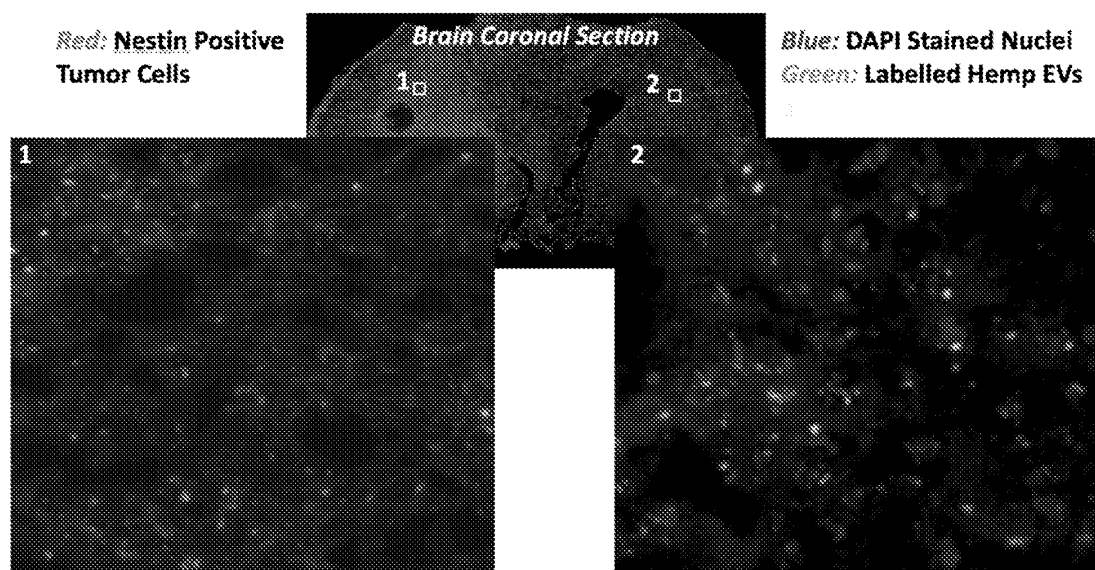


Figure 4: Intranasal delivery of SYTOTM RNASelectTM stained hemp NPs into a mouse brain. 1 & 2 are respectively showing hemp NPs distribution in tumor [1] vs non-tumor [2] areas of a coronal brain section.

FIG. 5A

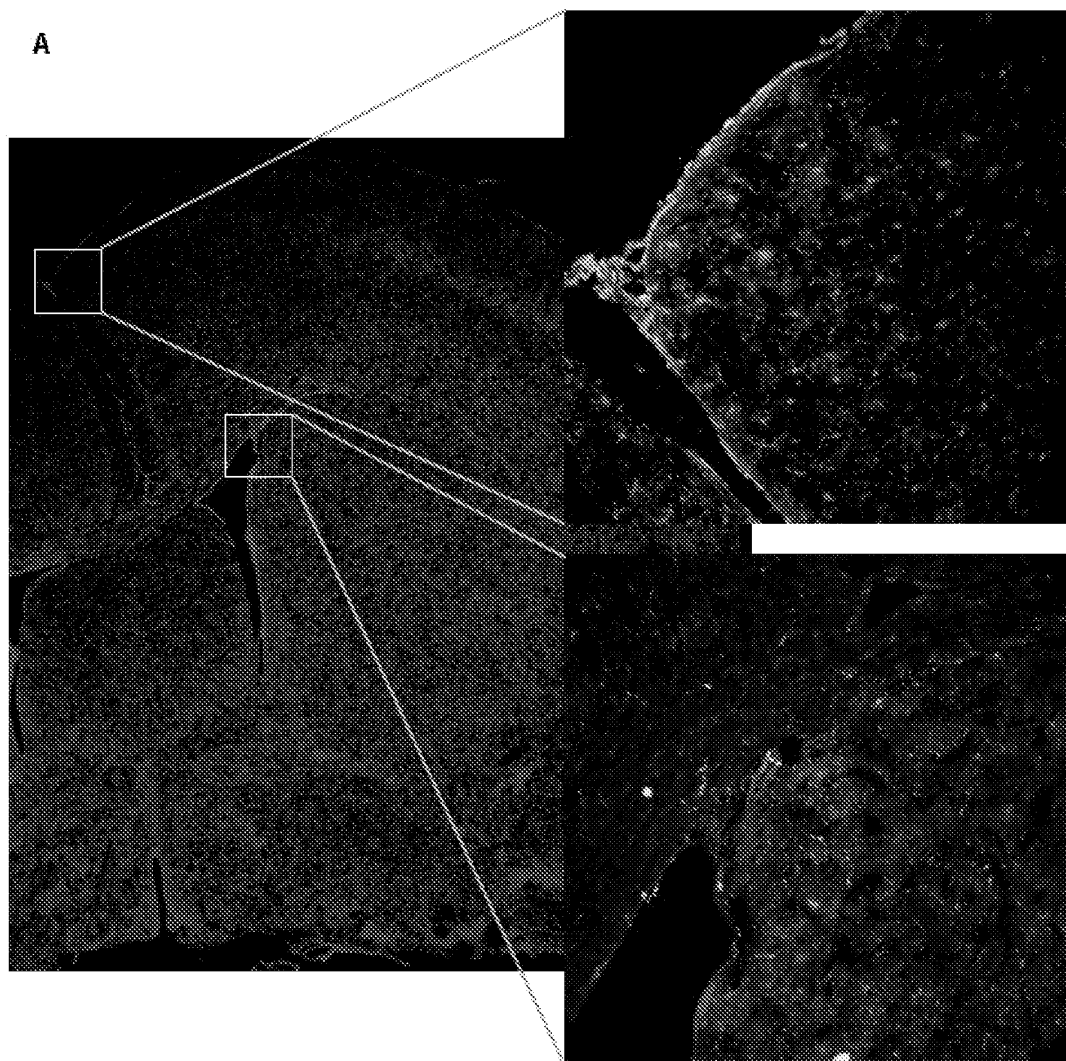


FIG. 5B

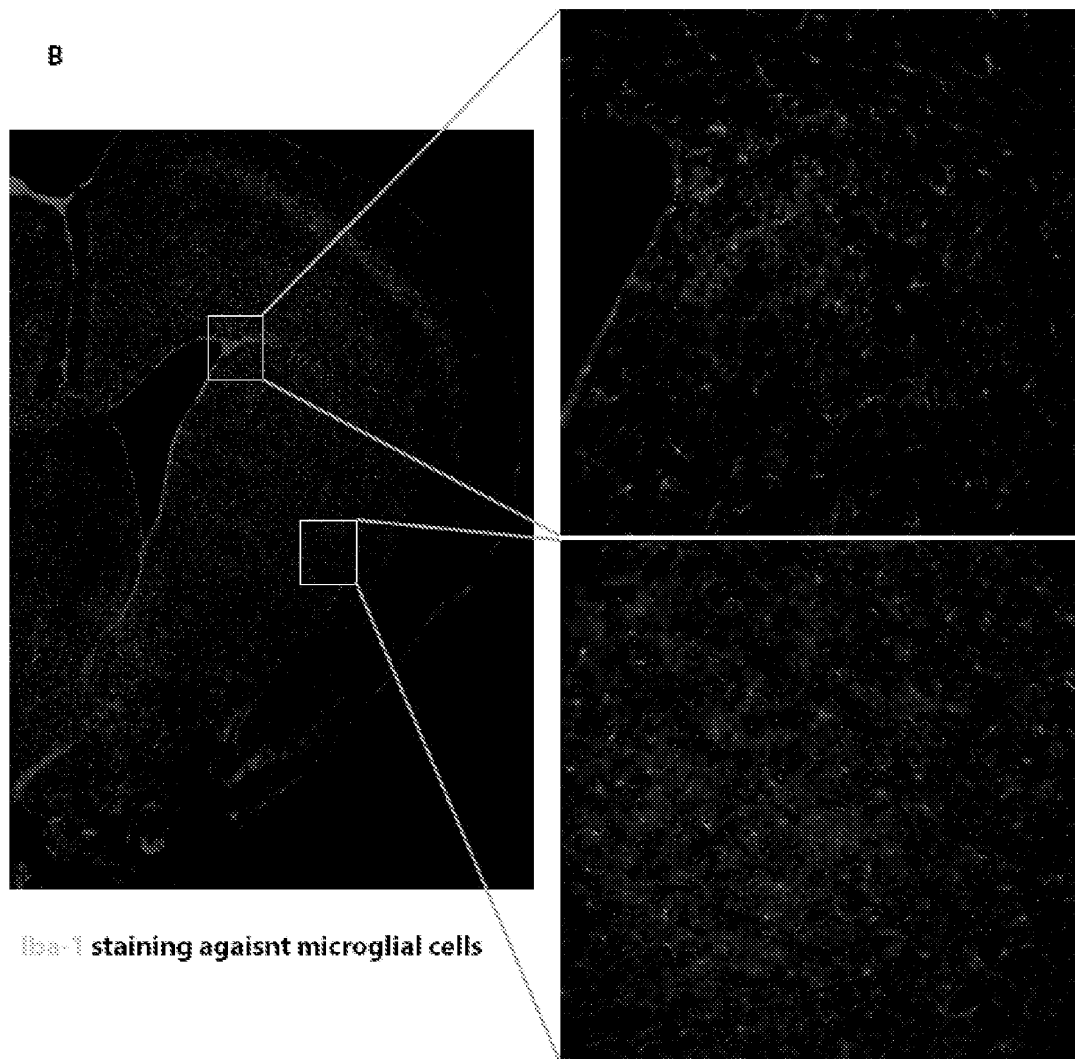


Figure 5: Microglial cell immunostaining in control **(A)** vs hemp NPs treated **(B)** mouse brain. Hemp NP treatment changes the morphology and density of microglial cells in the brain.

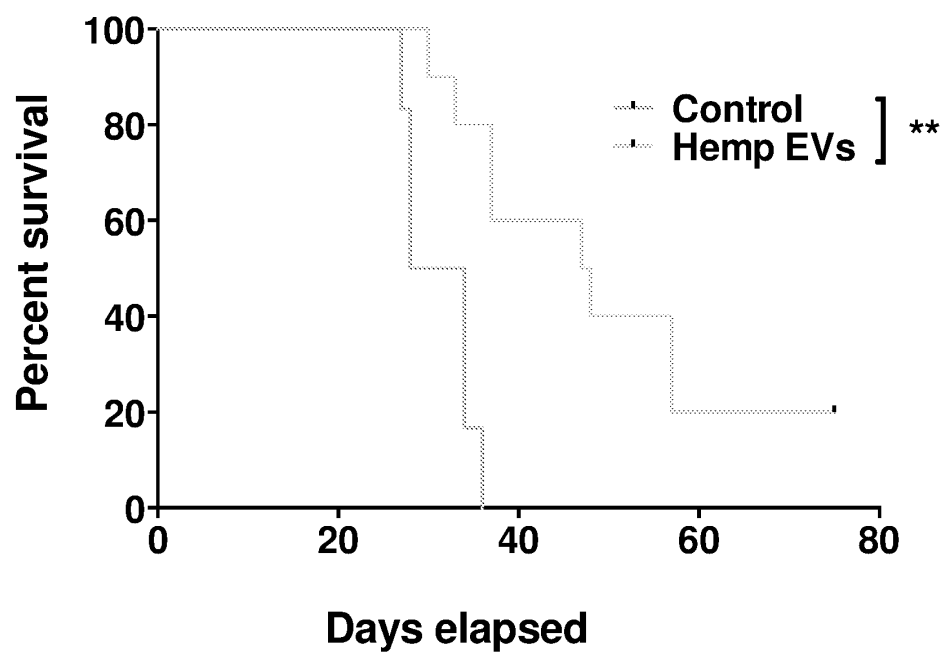


Figure 6: Effect of hemp NPs treatment on survival of KR158 glioma-bearing mice. Hemp NPs treatment increased median survival (Log-rank test, $**P=0.0016$, 31 days [control] vs 47.5 days [Hemp NPs]).

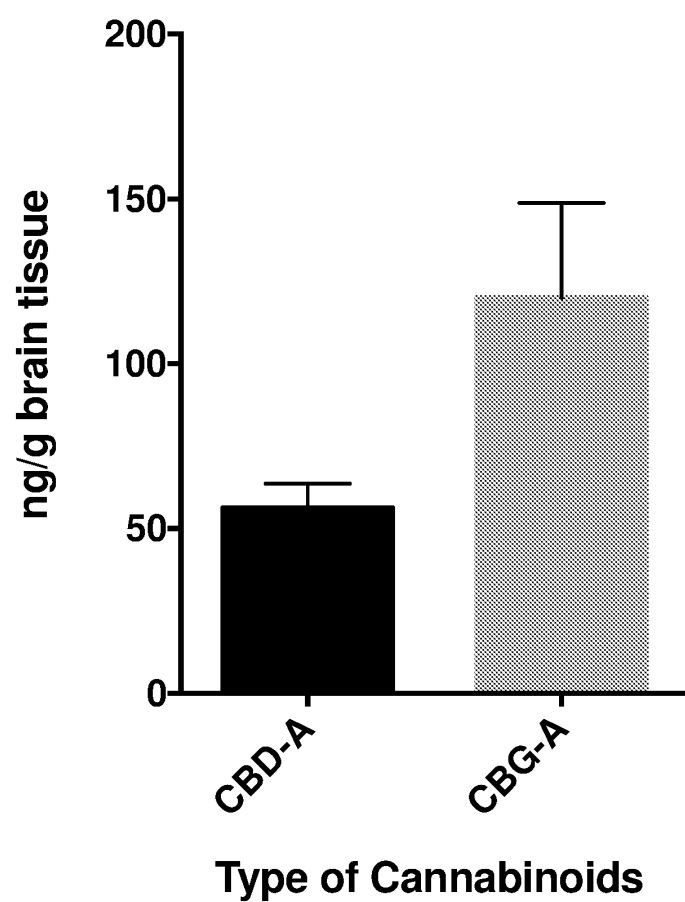


Figure 7: Hemp NPs treatment leads to accumulation of substantial amount of CBD-A and CBG-A in brain tissue.

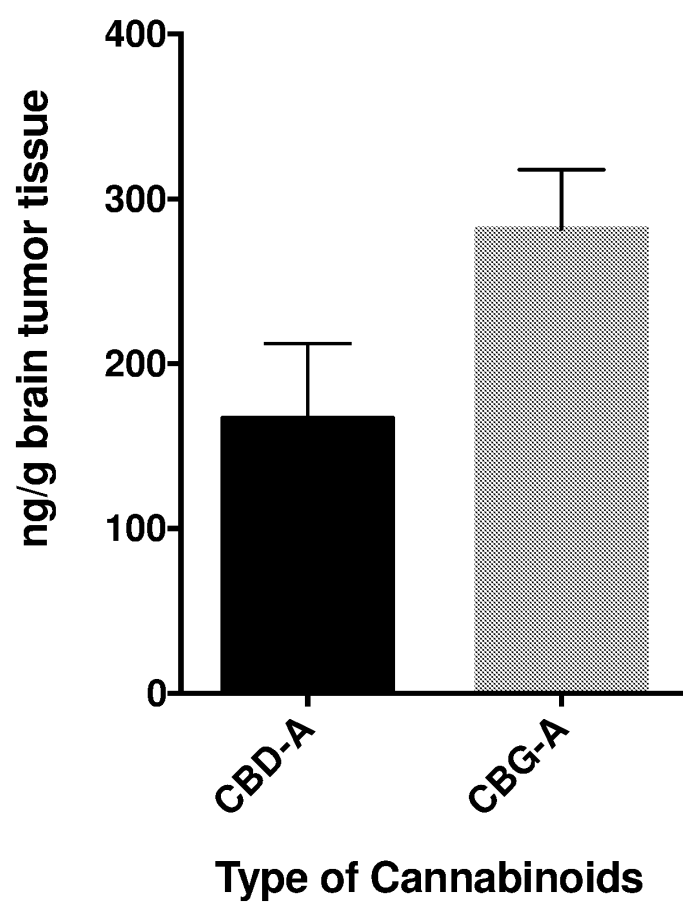


Figure 8: Hemp NPs treatment leads to accumulation of substantial amount of CBD-A and CBG-A in brain tumor tissue.

Figure 9

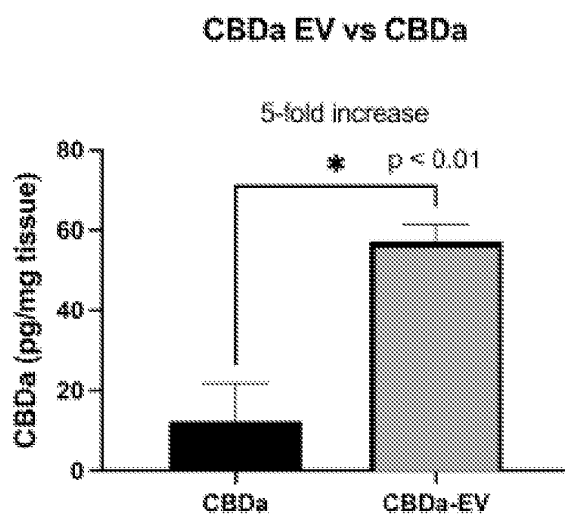


Figure 10

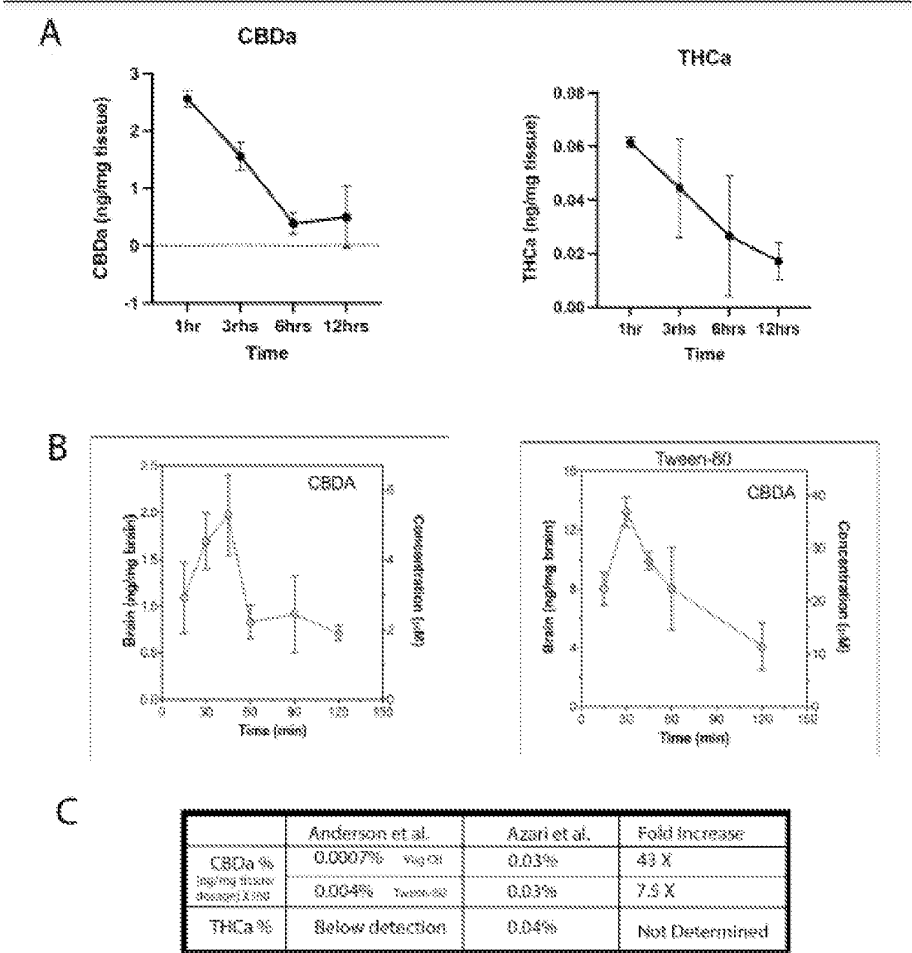


Figure 11

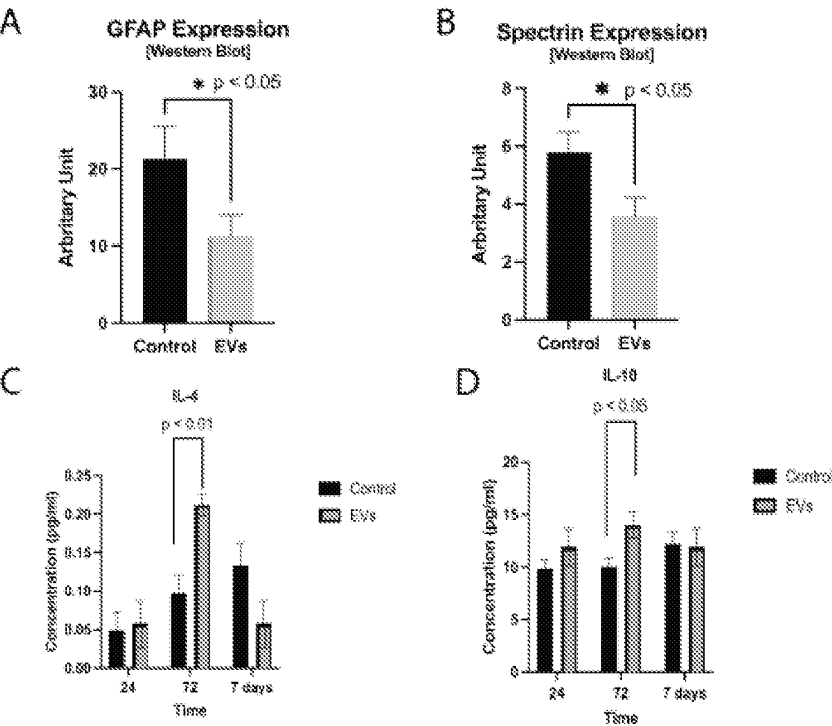


Figure 12

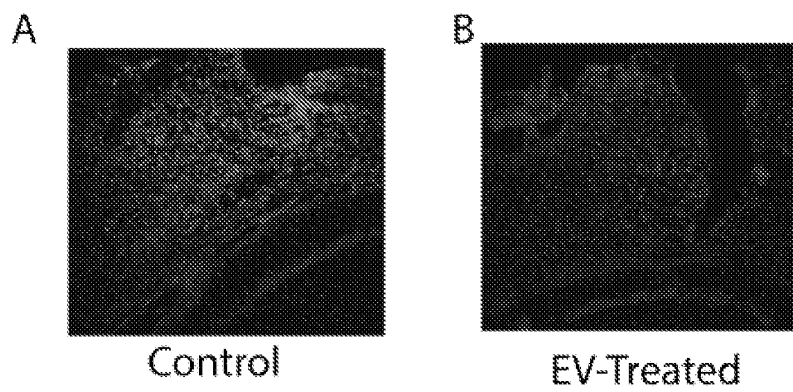


Figure 13

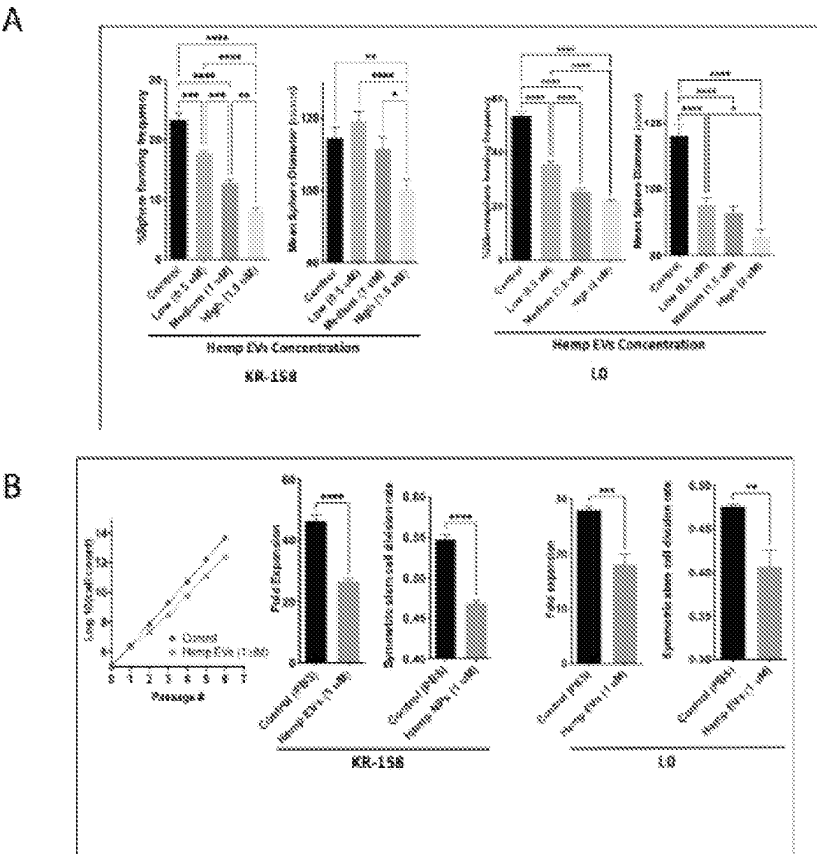


Figure 14

