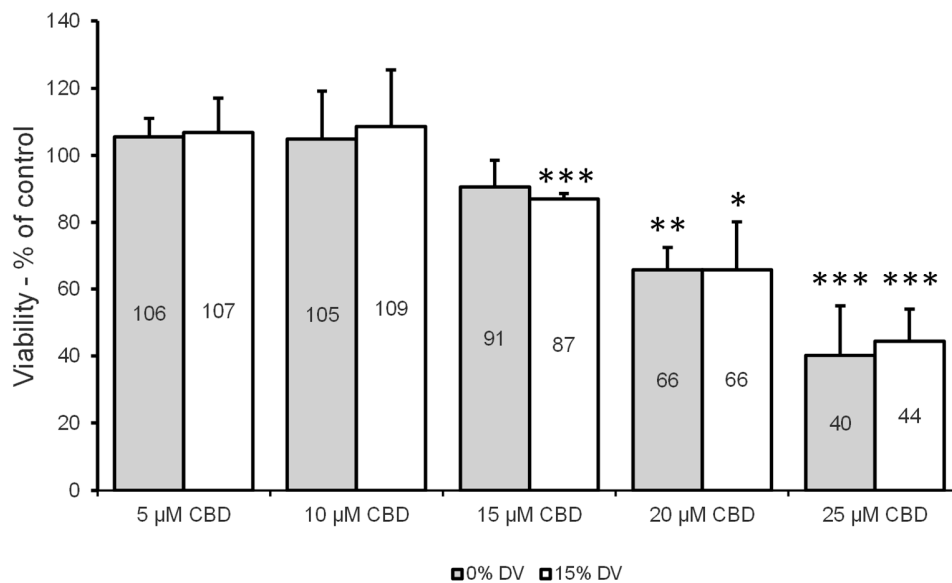
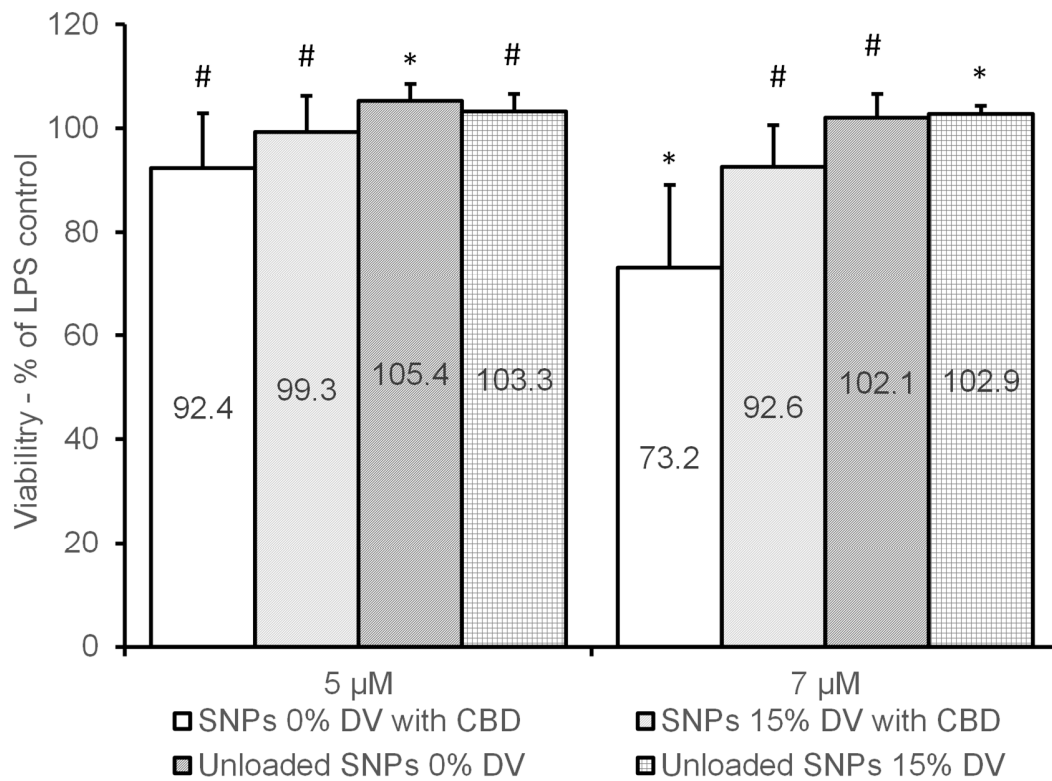


**Figure S1:** Time dependent CBD release from SNPs in growth medium. One sample at each time point was analyzed, without and with stirring. CBD-loaded SNPs 15% DV. Expected CBD concentration in case of total release of SNPs-loaded CBD–2.3 µg/ml.

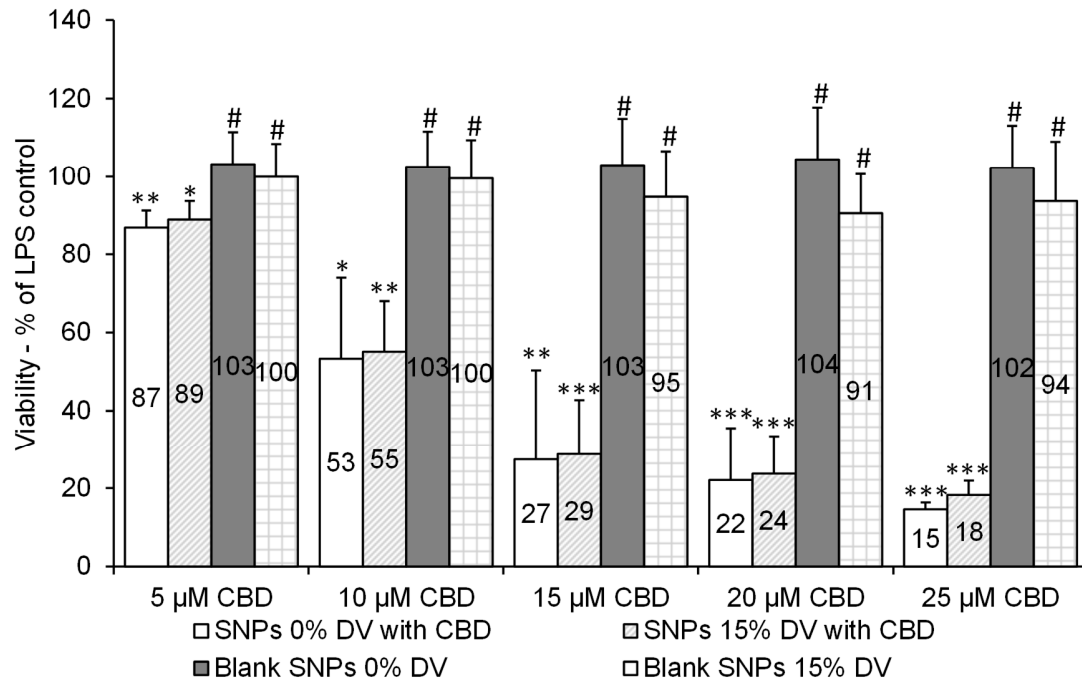


**Figure S2:** BV2 cells viability 22 h after treatment with CBD-loaded SNPs (two formulations and various CBD concentrations) in normal growth conditions. Mean ( $\pm$ SD) of three independent experiments (n = 30 for control (not presented); n = 15 for each CBD-loaded SNPs group).

\*— $p < 0.01$  against untreated control; \*\*— $p < 0.002$  against untreated control; \*\*\*— $p < 0.0009$  against untreated control.



**Figure S3:** BV2 cells viability 22 h after treatment with CBD-loaded and unloaded SNPs (two formulations)—medium with 1% FCS and LPS (7 ng/ mL). Mean (SD) of three independent experiments ( $n = 6$  for control, LPS control (not presented) and unloaded SNPs;  $n = 9$  for CBD-loaded SNPs). \*— $p < 0.05$  against LPS control; #—nonsignificant against LPS control.



**Figure S4:** BV2 cells viability 22 h after treatment with CBD-loaded and unloaded (blank) SNPs (two formulations)—medium with 1% FCS and LPS (7 ng/ mL). Mean ( $\pm$ SD) of three independent experiments ( $n = 18$  for control and LPS control;  $n = 9$  for each treatment group). \*— $p < 0.02$  against LPS control; \*\*— $p < 0.006$  against LPS control; \*\*\*— $p < 0.0009$  against LPS control; #—nonsignificant against LPS control.