

Supplementary materials:

Table S1. Calibration standard preparation.

	Blank	Std 1	Std 2	Std 3	Std 4	Std 5	Std 6	
CBD	0	0.50	2.0	5.0	10	25	50	ng/mL
7-COOH-CBD	0	5.0	20	50	100	250	500	ng/mL
Plasma	500	450	480	450	480	450	450	μL
SF1	-	-	-	-	-	-	50	μL
SF2	-	-	-	-	20	50	-	μL
SF3	-	-	20	50	-	-	-	μL
SF4	-	50	-	-	-	-	-	μL

Table S2. Validation standard preparation.

	Val 1	Val 2	Val 3	Val 4	
CBD	0.50	1.5	15	50	ng/mL
7-COOH-CBD	5.0	15	150	500	ng/mL
Plasma	450	485	470	450	μL
SF1	-	-	-	50	μL
SF2	-	-	30	-	μL
SF3	-	15			μL
SF4	50	-	-	-	μL

Table S3. Quality control (QC) sample preparation.

	QC1	QC2	QC3	
CBD	1.5	15	50	ng/mL
7-COOH-CBD	15	150	500	ng/mL
Plasma	485	470	450	μL
SF1	-	-	50	μL
SF2	-	30	-	μL
SF3	15	-	-	μL

Table S4. Linearity.

	Linear regression model	r ²	r	Residual sum of square
CBD	y = 0.004757 + 1.006x	0.9987	0.9994	30.63
7-COOH-CBD	y = 1.505 + 0.9717 x	0.9985	0.9992	3509

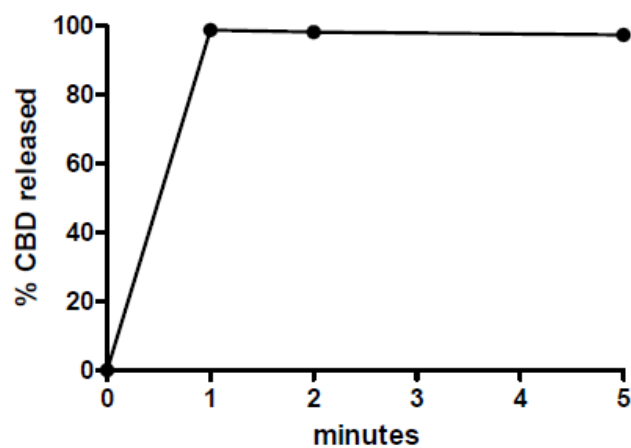


Figure S1. *In vitro* drug release of CBD within the CBD: HP- β -CD spray-dried complex in sink conditions; medium at pH 6.8 + 1% SLS; 37 °C, Withdrawals at 1, 2 and 5 minutes were filtered through PTFE 0.2 μ m prior to HPLC analysis via validated method (n = 2).