

Supplementary Information: Polymeric micelles for the enhanced deposition of hydrophobic drugs into ocular tissues, without plasma exposure

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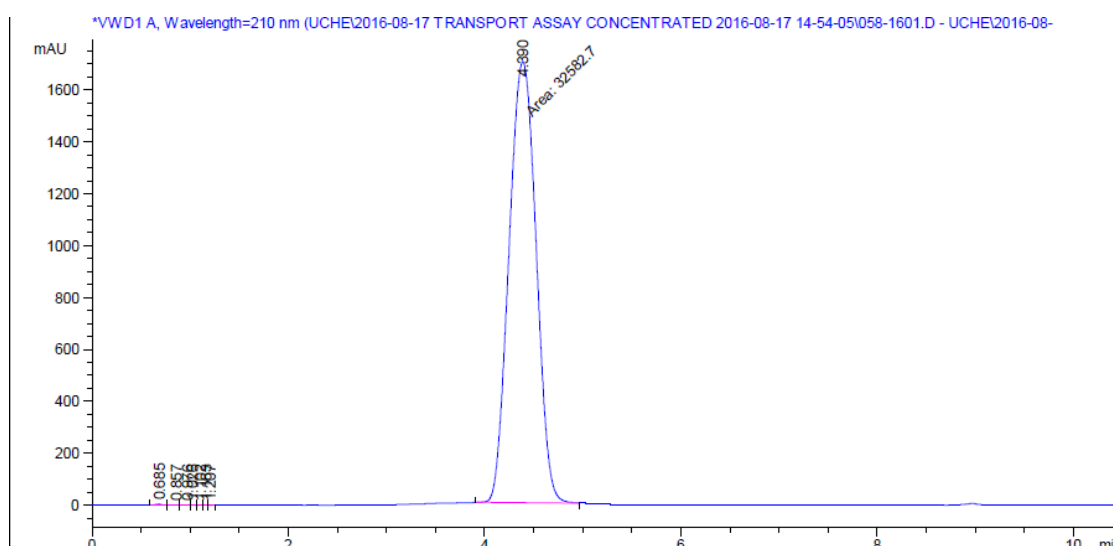


Figure 1. HPLC Chromatogram of CsA (1.25 mg mL⁻¹).

Table S1. Preparation of CSA working standard solutions.

Code	Dilutions			Final concentration
	Take amount (μL)	From	Add methanol (μL)	CSA (ng/mL)
WS14	200	CsA STD	0	1,000,000
WS13	100	WS14	100	500000
WS12	80	WS13	120	200000
WS11	100	WS12	100	100000
WS10	100	WS11	100	50000
WS9	100	WS10	100	25000
WS8	100	WS9	100	12500
WS7	100	WS8	100	6250
WS6	100	WS7	100	3125
WS5	100	WS6	100	1562.50
WS4	100	WS5	100	781.25
WS3	100	WS4	100	390.63
WS2	100	WS3	100	195.31
WS1	100	WS2	100	97.67

Code	Dilutions			Final concentration
	Take amount (μ L)	From	Add methanol (μ L)	CSA (ng/mL)
WS0	100	WS1	100	48.83

Table S2. Preparation CSA calibration standards.

Sample Number	Spike volume (μ L)	From	Final concentration (ng/mL)
Std S14	1	WS14	10000
Std S13	1	WS13	5000
Std S12	1	WS12	2000
Std S11	1	WS11	1000
Std S10	1	WS10	500
Std S9	1	WS9	250
Std S8	1	WS8	125
Std S7	1	WS7	62.5
Std S6	1	WS6	31.25
Std S5	1	WS5	15.63
Std S4	1	WS4	7.81
Std S3	1	WS3	3.91
Std S2	1	WS2	1.95
Std S1	1	WS1	0.97
Std S0	1	WS0	0.49

Table S3. Ion channel detector setting for the LC-MS/MS analysis of CsA.

Ion Channels	Precursor Ion \rightarrow Product Ion	MS1/MS2 resolution	Dwell	Fragmentator (V)	Collision Exit Potential (V)	Cell Acceleration Voltage (V)
CSA	1224.9 \rightarrow 1112.7	widest/widest	370	350	70	1
CSA-d12	1236.9 \rightarrow 1124.2	widest/widest	250	350	75	1

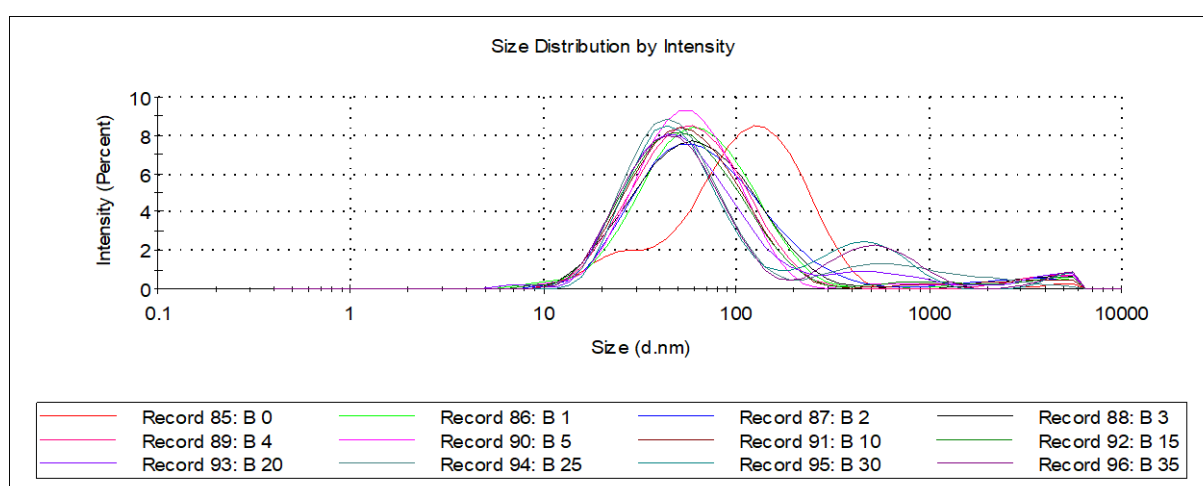


Figure S2. Particle size distribution following the application of increasing high pressure homogenisation cycles B0 (before high pressure homogenisation) – B35 (after 35 cycles). Above 15 cycles a second larger peak appears. High pressure homogenisation was thus limited to 15 cycles in Method II.