

FIGURE S1

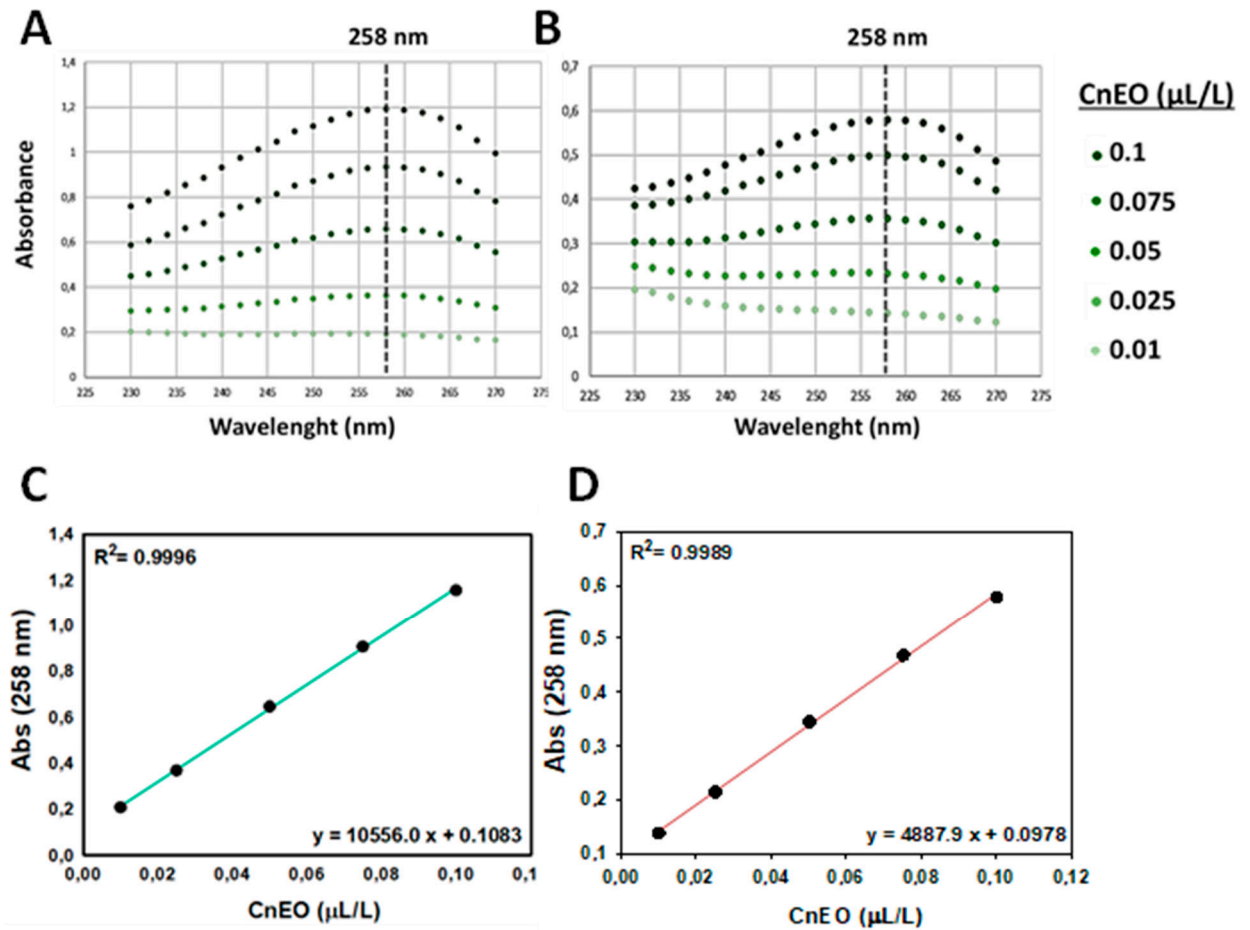


Figure S1. (A) UV-Vis scanning of CnEO (230-270 nm). A stable and intense peak at 258 nm was observed. (B-C) Calibration curve of CnEO (0.01-0.1 μL/L) in (B) 20% EtOH in PBS 10 mM (pH 7.4) or (C) 20% EtOH Ac-AcH 10 mM (pH 5.0).

FIGURE S2

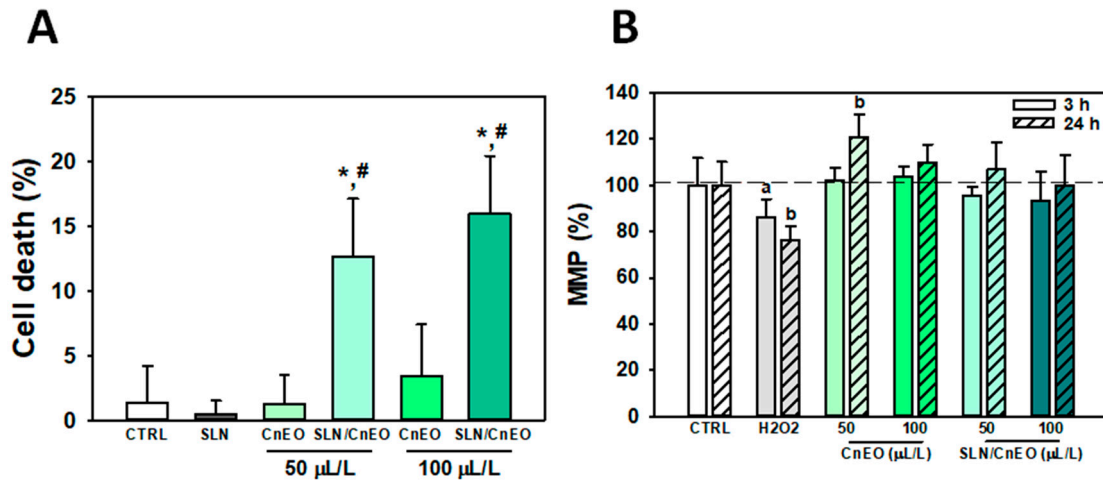


Figure S2. Encapsulation of CnEO increases A549 cell death and cell migration inhibition. (A) Cells were incubated with 0.1% ethanol (Control), empty SLN (0.8 mg MM/ml), CnEO or SLN/CnEO (50 and 100 $\mu\text{L/L}$ CnEO) for 24 h, and cell death was assessed by trypan blue staining. (*) $p < 0.05$ vs. Control; (#) $p < 0.05$ vs. equivalent concentration of free CnEO. (B) Cells were incubated with 0.1% EtOH (Control), 0.5 mM H₂O₂ (positive control), or 1.0 mM SLN/CnEO (50, 100, and 200 $\mu\text{L/L}$ CnEO) for 3 or 24 h and then stained with rhodamine-123. Data are expressed as percentage MMP loss compared with control cells. Results are normalized to living cells and data are presented as means \pm SD (n=4). (a) $p < 0.05$ vs. Control (3 h); (b) $p < 0.05$ vs. Control (24 h).

TABLE S1

Table S1. IC50 values of eight different essential oils on A549 and HCT-116 cells

Number	Essential Oil	IC50 ($\mu\text{L/L}$)	
		A549	HCT-116
1	<i>L. alba (linalool)</i>	> 500	400 \pm 24
2	<i>L. alba (dihydrocarvone)</i>	275 \pm 26	145 \pm 31
3	<i>Clinopodium nepeta (L)</i> <i>Kuntze</i>	205 \pm 11	200 \pm 28
4	<i>Eucalyptus globulus</i>	> 500	~500
5	<i>Mentha piperita</i>	> 500	> 500
6	<i>Origanum \times paniculatum</i>	> 500	> 500
7	<i>Mentha arvensis</i>	> 500	> 500
8	<i>Rosmarinus officinalis</i>	> 500	> 500

Dose–response curves were obtained by nonlinear regression and the IC50 values calculated. Data are means \pm SD. Each experiment was carried out in triplicate.