Suppl. Table S2. One-way ANOVA analysis of caspases-3/7 activities in the treated A-431 and HaCaT cells

Tukey's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Significance	Adjusted P Value
A-431 cells				
Co vs. DMSO	1079	-1302758 to 1304916	ns	>0.9999
Co vs. EM	2071	-1062508 to 1066650	ns	>0.9999
Co vs. PPT	-1441661	-2506240 to -377082	*	0.0146
Co vs. nPPT	-1491709	-2556288 to -427130	*	0.0126
Co vs. ETP	-1185470	-2250049 to -120891	*	0.0329
DMSO vs. EM	992.0	-1302845 to 1304829	ns	>0.9999
DMSO vs. PPT	-1442740	-2746577 to -138903	*	0.0337
DMSO vs. nPPT	-1492788	-2796625 to -188951	*	0.0294
DMSO vs. ETP	-1186549	-2490386 to 117288	ns	0.0710
EM vs. PPT	-1443732	-2508311 to -379153	*	0.0145
EM vs. nPPT	-1493780	-2558359 to -429201	*	0.0125
EM vs. ETP	-1187541	-2252120 to -122962	*	0.0326
PPT vs. nPPT	-50048	-1114627 to 1014531	ns	>0.9999
PPT vs. ETP	256191	-808388 to 1320770	ns	0.8909
nPPT vs. ETP	306239	-758340 to 1370818	ns	0.8099
HaCaT cells				
Co vs. DMSO	1774	-256613 to 260161	ns	>0.9999
Co vs. EM	1496	-209476 to 212468	ns	>0.9999
Co vs. PPT	-809131	-1020103 to -598159	***	0.0001
Co vs. nPPT	-834549	-1045521 to -623577	****	<0.0001
Co vs. ETP	-542495	-753467 to -331523	***	0.0008
DMSO vs. EM	-278.0	-258665 to 258109	ns	>0.9999
DMSO vs. PPT	-810905	-1069292 to -552518	***	0.0003
DMSO vs. nPPT	-836323	-1094710 to -577936	***	0.0003
DMSO vs. ETP	-544269	-802656 to -285882	**	0.0020
EM vs. PPT	-810627	-1021599 to -599655	***	0.0001
EM vs. nPPT	-836045	-1047017 to -625073	****	<0.0001
EM vs. ETP	-543991	-754963 to -333019	***	0.0008
PPT vs. nPPT	-25418	-236390 to 185554	ns	0.9931
PPT vs. ETP	266636	55664 to 477608	*	0.0196
nPPT vs. ETP	292054	81082 to 503026	*	0.0133

Abbreviations: PPT (podophyllotoxin), nPPT (PPT-loaded nanosized micelles), ETP (etoposide), DMSO (dimethyl sulfoxide, vehicle), EM (empty micelles), Co (control, untreated cells); 95% CI – confidence interval

Suppl. Table S3. One-way ANOVA analysis of ROS generation in treated A-431 and HaCaT cells

Tukey's multiple comparisons test	Mean Diff.	95% CI of diff.	Significant	Summary
A-431 cells				
Co vs. DMSO	-17.00	-152.8 to 118.8	No	ns
Co vs. EM	-57.00	-192.8 to 78.76	No	ns
Co vs. PPT	-443.8	-579.5 to -308.0	Yes	****
Co vs. nPPT	**-195.0**	**-330.8 to -59.24**	**Yes**	**
Co vs. ETP	-982.7	-1140 to -825.6	Yes	****
Co vs. H_2O_2	-4850	-4986 to -4714	Yes	****
DMSO vs. EM	-40.00	-175.8 to 95.76	No	ns
DMSO vs. PPT	-426.8	-562.5 to -291.0	Yes	****
DMSO vs. nPPT	-178.0	-313.8 to -42.24	Yes	**
DMSO vs. ETP	-965.7	-1123 to -808.6	Yes	****
DMSO vs. H_2O_2	-4833	-4969 to -4697	Yes	****
EM vs. PPT	-386.8	-522.5 to -251.0	Yes	****
EM vs. nPPT	-138.0	-273.8 to -2.235	Yes	*
EM vs. ETP	-925.7	-1083 to -768.6	Yes	****
EM vs. H_2O_2	-4793	-4929 to -4657	Yes	****
PPT vs. nPPT	248.8	113.0 to 384.5	Yes	****
PPT vs. ETP	-539.0	-696.2 to -381.8	Yes	****
PPT vs. H_2O_2	-4406	-4542 to -4270	Yes	****
nPPT vs. ETP	-787.7	-944.9 to -630.6	Yes	****
nPPT vs. H_2O_2	-4655	-4791 to -4519	Yes	****
ETP vs. H_2O_2	-3867	-4024 to -3710	Yes	****
HaCaT cells				
Co vs. DMSO	-0.5000	-136.3 to 135.3	No	ns
Co vs. EM	-7.250	-143.0 to 128.5	No	ns
Co vs. PPT	-150.8	-286.5 to -14.99	Yes	*
Co vs. nPPT	**-44.75**	**-180.5 to 91.01**	**No**	**ns**
Co vs. ETP	-426.0	-583.2 to -268.8	Yes	****
Co vs. H_2O_2	-4839	-4974 to -4703	Yes	****
DMSO vs. EM	-6.750	-142.5 to 129.0	No	ns
DMSO vs. PPT	-150.3	-286.0 to -14.49	Yes	*
DMSO vs. nPPT	-44.25	-180.0 to 91.51	No	ns
DMSO vs. ETP	-425.5	-582.7 to -268.3	Yes	****
DMSO vs. H_2O_2	-4838	-4974 to -4702	Yes	****
EM vs. PPT	-143.5	-279.3 to -7.735	Yes	*
EM vs. nPPT	-37.50	-173.3 to 98.26	No	ns
EM vs. ETP	-418.7	-575.9 to -261.6	Yes	****
EM vs. H_2O_2	-4831	-4967 to -4695	Yes	****
PPT vs. nPPT	106.0	-29.76 to 241.8	No	ns
PPT vs. ETP	-275.3	-432.4 to -118.1	Yes	****
PPT vs. H_2O_2	-4688	-4824 to -4552	Yes	****
nPPT vs. ETP	-381.2	-538.4 to -224.1	Yes	****
nPPT vs. H_2O_2	-4794	-4930 to -4658	Yes	****
ETP vs. H_2O_2	-4413	-4570 to -4255	Yes	****

Abbreviations: PPT (podophyllotoxin), nPPT (PPT-loaded nanosized micelles), ETP (etoposide), DMSO (dimethyl sulfoxide, vehicle), EM (empty micelles), Co (control, untreated cells); 95% CI – confidence interval

Suppl. Table S4. Comparison of cell percentage in the different phases of the cell cycle within each of the treated A-431 and HaCaT cell lines (FACS analysis) – One-way ANOVA.

Tukey's multiple comparisons test	Mean Diff.	95% CI of diff.	Significance	Adjusted P Value
HaCaT, 40h				
Control vs. DMSO	0.003900	-0.04480 to 0.05260	ns	0.9992
Control vs. EM	-0.003400	-0.05210 to 0.04530	ns	0.9995
Control vs. PPT	-0.2269	-0.2756 to -0.1782	****	< 0.0001
Control vs. nPPT	-0.1501	-0.1988 to -0.1014	****	< 0.0001
DMSO vs. EM	-0.007300	-0.05600 to 0.04140	ns	0.9910
DMSO vs. PPT	-0.2308	-0.2795 to -0.1821	****	< 0.0001
DMSO vs. nPPT	-0.1540	-0.2027 to -0.1053	****	< 0.0001
EM vs. PPT	-0.2235	-0.2722 to -0.1748	****	< 0.0001
EM vs. nPPT	-0.1467	-0.1954 to -0.09800	****	< 0.0001
PPT vs. nPPT	0.07677	0.02806 to 0.1255	**	0.0011
A-431, 40h				
Control vs. DMSO	-0.01195	-0.05413 to 0.03023	ns	0.9122
Control vs. EM	-0.007875	-0.05005 to 0.03430	ns	0.9795
Control vs. PPT	-0.1710	-0.2132 to -0.1288	****	< 0.0001
Control vs. nPPT	-0.006575	-0.04875 to 0.03560	ns	0.9895
DMSO vs. EM	0.004075	-0.03810 to 0.04625	ns	0.9983
DMSO vs. PPT	-0.1590	-0.2012 to -0.1168	****	< 0.0001
DMSO vs. nPPT	0.005375	-0.03680 to 0.04755	ns	0.9951
EM vs. PPT	-0.1631	-0.2053 to -0.1209	****	< 0.0001
EM vs. nPPT	0.0013	-0.04088 to 0.04348	ns	> 0.9999
PPT vs. nPPT	0.1644	0.1222 to 0.2066	****	< 0.0001

Abbreviations: PPT (podophyllotoxin), nPPT (PPT-loaded nanosized micelles), ETP (etoposide), DMSO (dimethyl sulfoxide, vehicle), EM (empty micelles), Co (control, untreated cells); 95% CI – confidence interval

Suppl. Table S5. Comparison of the cell percentage in different phases of the cell cycle between treated HaCaT and A-431 cells (FACS analysis) – Two-way ANOVA.

Sidak's multiple comparisons test	Mean Diff.	95% CI of diff.	Significance	Adjusted P Value
A-431, 40h vs. HaCaT, 40h				
Control G1	2.923	-4.560 to 10.41	ns	0.9832
Control S	-0.9367	-8.420 to 6.547	ns	> 0.9999
Control G2	-0.3700	-7.853 to 7.113	ns	> 0.9999
DMSO G1	2.523	-4.960 to 10.01	ns	0.9960
DMSO S	-3.720	-11.20 to 3.763	ns	0.8862
DMSO G2	0.8800	-6.603 to 8.363	ns	> 0.9999
EM G1	7.117	-0.3668 to 14.60	ns	0.0754
EM S	-8.560	-16.04 to -1.077	*	0.0137
EM G2	0.2633	-7.220 to 7.747	ns	> 0.9999
PPT G1	2.170	-5.313 to 9.653	ns	0.9992
PPT S	2.047	-5.437 to 9.530	ns	0.9996
PPT G2	-3.187	-10.67 to 4.297	ns	0.9642
nPPT G1	21.90	14.42 to 29.38	****	< 0.0001
nPPT S	-10.88	-18.36 to -3.397	***	0.0006
nPPT G2	-7.820	-15.30 to -0.3365	*	0.0338

Abbreviations: PPT (podophyllotoxin), nPPT (PPT-loaded nanosized micelles), ETP (etoposide), DMSO (dimethyl sulfoxide, vehicle), EM (empty micelles), Co (control, untreated cells); 95% CI – confidence interval

Suppl. Table S6. Comparison - G2/M vs. G0/G1 phase ratio in treated A-431 and HaCaT cells (FACS analysis) – Two-way ANOVA.

Sidak's multiple comparisons test	Mean Diff.	95% CI of diff.	Significance	Adjusted P Value
A-431, 40h vs. HaCaT, 40h				
Control	-0.005708	-0.04690 to 0.03549	ns	0.9977
DMSO	0.01014	-0.03105 to 0.05134	ns	0.9688
EM	-0.001233	-0.04243 to 0.03996	ns	> 0.9999
PPT	-0.0616	-0.1028 to -0.02040	**	0.0017
nPPT	-0.1492	-0.1904 to -0.1080	****	< 0.0001

Abbreviations: PPT (podophyllotoxin), nPPT (PPT-loaded nanosized micelles), ETP (etoposide), DMSO (dimethyl sulfoxide, vehicle), EM (empty micelles), Co (control, untreated cells); 95% CI – confidence interval