# Catanionic vesicles charged with chloroaluminium phthalocyanine for topical photodynamic therapy: *In vitro* phototoxicity on human oral carcinoma and melanoma cell lines

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## Characterization of TriCat non-loaded vesicles



Figure S1. TEM snapshot and size distribution of catanionic vesicles of TriCat prepared at 25°C (1 x 10<sup>-4</sup>M).

## Photocytotoxicity assays: Values of toxicity

Following tables give exact values of mean and SEM obtained from cytotoxicity assays performed on B16-F10 and OSCC under several light doses.

## B16-F10

Cells pre-incubated with TriCat/CIAIPc vesicles

Light dose (J cm <sup>-2</sup> )	0.5	1.0	2.5	5.0	10	15
Cell viability (%)	65.76	41.77	27.27	14.08	7.56	1.94
SEM of cell viability (%)	1.06	9.57	7.25	5.38	2.83	0.17



Figure SI.2. Histogram presenting viability rates of B16-F10 under light irradiation. after pre-incubation with TriCat/CIAIPc vesicles.

#### OSCC

Cells pre-incubated with TriCat/CIAIPc vesicles

Light dose (J cm <sup>-2</sup> )	0.5	1.0	2.5	5.0	10	15
Cell viability (%)	50.20	62.06	33.80	18.17	10.21	5.73
SEM of cell viability (%)	2.77	0.98	4.40	4.57	0.64	1.00



Figure SI.3. Histogram presenting viability rates of OSCC under light irradiation. after pre-incubation with TriCat/CIAIPc vesicles.

#### Photocytotoxicity assays: Statistical analysis

Statistical analysis was performed using Prism 4.0® (GraphPad Software) by one-way ANOVA and Tukey test. All data were expressed as the mean  $\pm$  SEM of three independent experiments, obtained on samples provided by independent sources. Statistical significance for this study was considered at p < 0.05.

**B16-F10** Table Analyzed Results for B16-F10 One-way analysis of variance

P value	P<0.0001			
P value summary	***			
Are means signif. different? (P < 0.05)	Yes			
Number of groups	7			
F	48.23			
R squared	0.9539			
ANOVA Table	SS	Df	MS	
Treatment (between columns)	22600	6	3767	
Residual (within columns)	1094	14	78.11	
Total	23700	20		
Tukey's Multiple Comparison Test	Mean Diff.	Q	P value	95% CI of diff
CT vs 0.5	34.24	6.710	P < 0.01	9.599 to 58.88
CT vs 1.0	58.23	11.41	P < 0.001	33.59 to 82.87
CT vs 2.5	72.73	14.25	P < 0.001	48.09 to 97.37
CT vs 5.0	85.92	16.84	P < 0.001	61.28 to 110.6
CT vs 10	92.44	18.12	P < 0.001	67.80 to 117.1
CT vs 15	98.06	19.22	P < 0.001	73.42 to 122.7
0.5 vs 1.0	23.99	4.701	P > 0.05	-0.6512 to 48.63
0.5 vs 2.5	38.49	7.543	P < 0.01	13.85 to 63.13
0.5 vs 5.0	51.68	10.13	P < 0.001	27.04 to 76.32
0.5 vs 10	58.20	11.40	P < 0.001	33.56 to 82.84
0.5 vs 15	63.82	12.51	P < 0.001	39.18 to 88.46
1.0 vs 2.5	14.50	2.842	P > 0.05	-10.14 to 39.14
1.0 vs 5.0	27.69	5.427	P < 0.05	3.052 to 52.33
1.0 vs 10	34.21	6.704	P < 0.01	9.565 to 58.85
1.0 vs 15	39.83	7.806	P < 0.01	15.19 to 64.47
2.5 vs 5.0	13.19	2.586	P > 0.05	-11.45 to 37.83
2.5 vs 10	19.71	3.862	P > 0.05	-4.935 to 44.35
2.5 vs 15	25.33	4.965	P < 0.05	0.6921 to 49.97
5.0 vs 10	6.513	1.276	P > 0.05	-18.13 to 31.15
5.0 vs 15	12.14	2.379	P > 0.05	-12.50 to 36.78
10 vs 15	5.627	1.103	P > 0.05	-19.01 to 30.27

OSCC	
Table Analyzed	
Results for OSCC	
One-way analysis of variance	
P value	P<0.0001
P value summary	***
Are means signif. different? (P < 0.05)	Yes
Number of groups	7

F	157.0			
R squared	0.9854			
		<b></b>	MC	
	55	ar	MS	
Treatment (between columns)	20300	6	3384	
Residual (within columns)	301.7	14	21.55	
Total	20600	20		
Tukey's Multiple Comparison Test	Mean Diff.	q	P value	95% CI of diff
CT vs 0.5	49.80	18.58	P < 0.001	36.86 to 62.74
CT vs 1.0	37.94	14.16	P < 0.001	25.00 to 50.88
CT vs 2.5	66.20	24.70	P < 0.001	53.26 to 79.14
CT vs 5.0	81.83	30.53	P < 0.001	68.89 to 94.78
CT vs 10	89.79	33.50	P < 0.001	76.84 to 102.7
CT vs 15	94.27	35.17	P < 0.001	81.32 to 107.2
0.5 vs 1.0	-11.86	4.425	P > 0.05	-24.80 to 1.082
0.5 vs 2.5	16.40	6.119	P < 0.01	3.458 to 29.34
0.5 vs 5.0	32.03	11.95	P < 0.001	19.09 to 44.98
0.5 vs 10	39.99	14.92	P < 0.001	27.04 to 52.93
0.5 vs 15	44.47	16.59	P < 0.001	31.52 to 57.41
1.0 vs 2.5	28.26	10.54	P < 0.001	15.32 to 41.20
1.0 vs 5.0	43.89	16.38	P < 0.001	30.95 to 56.84
1.0 vs 10	51.85	19.35	P < 0.001	38.90 to 64.79
1.0 vs 15	56.33	21.02	P < 0.001	43.38 to 69.27
2.5 vs 5.0	15.63	5.833	P < 0.05	2.691 to 28.58
2.5 vs 10	23.59	8.801	P < 0.001	10.64 to 36.53
2.5 vs 15	28.07	10.47	P < 0.001	15.12 to 41.01
5.0 vs 10	7.953	2.968	P > 0.05	-4.989 to 20.90
5.0 vs 15	12.43	4.639	P > 0.05	-0.5086 to 25.38
10 vs 15	4.480	1.672	P > 0.05	-8.462 to 17.42