

Figure 2	Variable analyzed	Groups compared	Test	n (per group)	Mean ± SEM	Test statistic (df)	P value
2a	Cell viability (%)	UT vs Normalized light signal	One-way ANOVA	6 (3 plates x 3 wells)	111 ± 5.13	F (5, 30) = 2.819	P = 0.0334
					109 ± 5.32		
					89.5 ± 7.03		
					117 ± 6.69		
2b	Cell viability (%)	UT vs Polymersomes without light UT vs Polymersomes with light UT vs DMSO	One-way ANOVA	6 (3 plates x 3 wells)	108 ± 7.02	F (12, 64) = 15.28	<b>P &lt; 0.0001****</b>
					110 ± 4.57		
					109 ± 5.73		
					115 ± 8.62		
					118 ± 4.05		
					102 ± 3.75		
					110 ± 4.80		
					100 ± 3.72		
4c left	Inhibition response (%)	Interaction Polymersomes (without or with) Light intensity (8% or 12%)	Two-way ANOVA	16-31	115 ± 4.18	F(1, 86) = 1.453	P = 0.2314
					104 ± 4.91		
					99.4 ± 2.16		
					71.7 ± 1.74		
4c left	Inhibition response (%)	Interaction Polymersomes (without or with) Light intensity (8% or 12%)	Two-way ANOVA	16-31	52.0 ± 6.94	F(1, 86) = 30.60	<b>P &lt; 0.0001****</b>
					8% without: -0.166 ± 1.60		
					12% without: 3.27 ± 0.948		
					8% with: 12.7 ± 2.60		
4c left	Inhibition response (%)	Interaction Polymersomes (without or with) Light intensity (8% or 12%)	Two-way ANOVA	16-31	12% with : 23.4 ± 6.10	F(1,86) = 5.548	<b>P = 0.0208*</b>
Figure 3	Variable analyzed	Groups compared	Test	n (per group)	Mean ± SEM	Test statistic (df)	P value
3b left	IBA1 48h relative weighted intensity polymersomes	Medium vs Polymersomes	Unpaired two-tailed t-test	5 ; 5	1.16 ± 0.0753	t = 1.610, df = 8	P = 0.1461
3b right	GFAP 48h relative weighted intensity polymersomes	Medium vs Polymersomes	Unpaired two-tailed t-test	3 ; 5	1.46 ± 0.167	U = 3	P = 0.2500
					1.41 ± 0.0222		
3c left	IBA1 3W relative weighted intensity polymersomes	Medium vs Polymersomes	Unpaired two-tailed t-test	5 ; 3	1.21 ± 0.208	t = 1.976, df = 6	P = 0.0955
					1.05 ± 0.0156		
3c right	GFAP 3W relative weighted intensity polymersomes	Medium vs Polymersomes	Unpaired two-tailed t-test	5 ; 4	1.01 ± 0.0104	t = 0.7491, df = 7	P = 0.4782
					1.20 ± 0.665		
Figure S2	Variable analyzed	Groups compared	Test	n (per group)	1.27 ± 0.0775	U = 59666	<b>P &lt; 0.0001****</b>
					8.37 ± 0.161		
S2c left	Diameter (µm)	Without vs With CNQX	Unpaired two-tailed t-test	372 ; 86	7.62 ± 0.156		
S2d right	Release time (s)	Without vs With CNQX	Unpaired two-tailed t-test	41 ; 52	6.39 ± 0.904	U = 865	P = 0.1192
					8.12 ± 0.904		
Figure S3	Variable analyzed	Groups compared	Test	n (per group)	Mean ± SEM	Test statistic (df)	P value
S3c left	Peak Area (mV.ms)	Base vs Post	Paired two-tailed t-test	16	-9.31 ± 2.20	W = 22	P = 0.5877
					-9.08 ± 2.06		
S3c right	Peak Area (mV.ms)	Base vs Post	Paired two-tailed t-test	31	-6.03 ± 0.456	W = 250	<b>P = 0.0088**</b>
					-5.90 ± 0.455		

S3d	Peak Area (mV.ms)	Base vs Post	Paired two-tailed t-test	13	-3.23 ± 0.443 -3.20 ± 0.455	W = -1	P > 0.9999
S3e	Peak Area (mV.ms)	Base vs Post	Paired two-tailed t-test	26	-3.25 ± 0.263 -2.88 ± 0.258	W = 309	<b>P &lt; 0.0001****</b>
S3f	Peak Area (mV.ms)	Base vs Post	Paired two-tailed t-test	26	-4.39 ± 0.231 -4.22 ± 0.224	W = 257	<b>P = 0.0006****</b>
<b>Figure S4</b>	<b>Variable analyzed</b>	<b>Groups compared</b>	<b>Test</b>	<b>n (per group)</b>	<b>Mean ± SEM</b>	<b>Test statistic (df)</b>	<b>P value</b>
S4c	Peak Area (mV.ms)	Base vs Post	Paired two-tailed t-test	12	-7.56 ± 0.946 -6.99 ± 1.07	W = 78	<b>P = 0.0005****</b>
S4d	Peak Area (mV.ms)	Base vs Post	Paired two-tailed t-test	15	-4.02 ± 0.171 -3.80 ± 0.204	W = 86	<b>P = 0.0125*</b>
S4e	Peak Area (mV.ms)	Base vs Post	Paired two-tailed t-test	27	-5.37 ± 1.17 -5.26 ± 1.13	W = 185	P = 0.0172