materials

MDPI

Supplementary Materials: Liposomes Composed by Membrane Lipid Extracts from Macrophage Cell Line as a Delivery of the Trypanocidal N, N′-Squaramide 17 towards *Trypanosoma cruzi*

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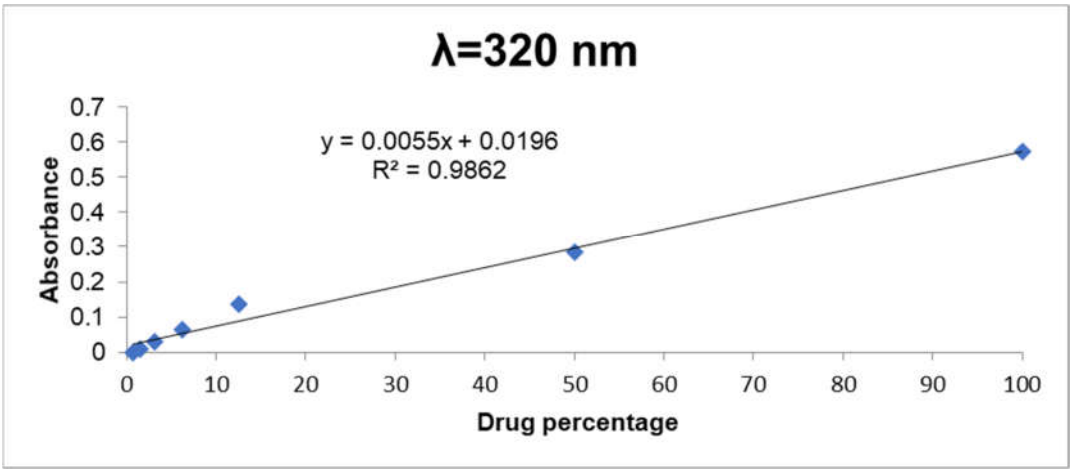


Figure S1. Calibration curve for *N, N′*-Squaramide 17 in different concentrations for percentage.

Table S1. The entrapment efficiency of *N, N′*-Squaramide 17 was measured using a biophotometer by the absorbance of the drug at 320 nm. The experiments were performed in triplicate.

% Entrapment efficiency nanostructures-λ = 320 nm	
1	75.71
2	72.07
3	72.35
Average	73.35
Standard deviation	2.05

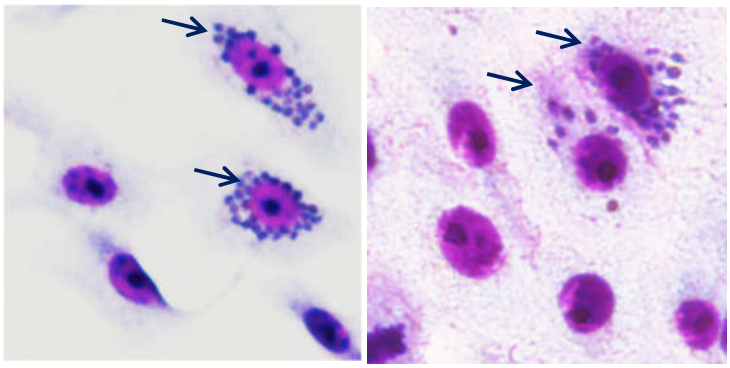
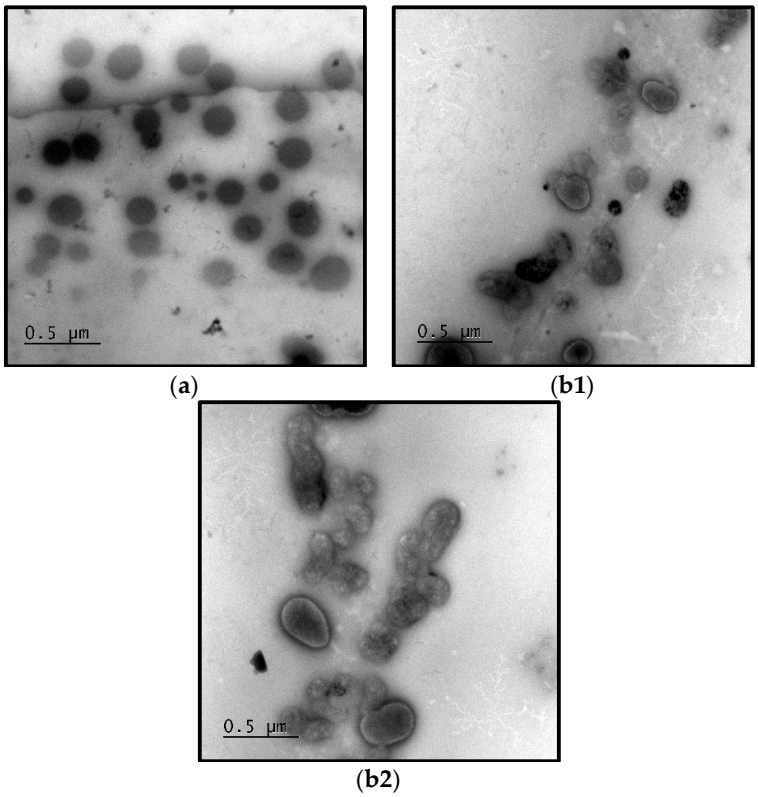


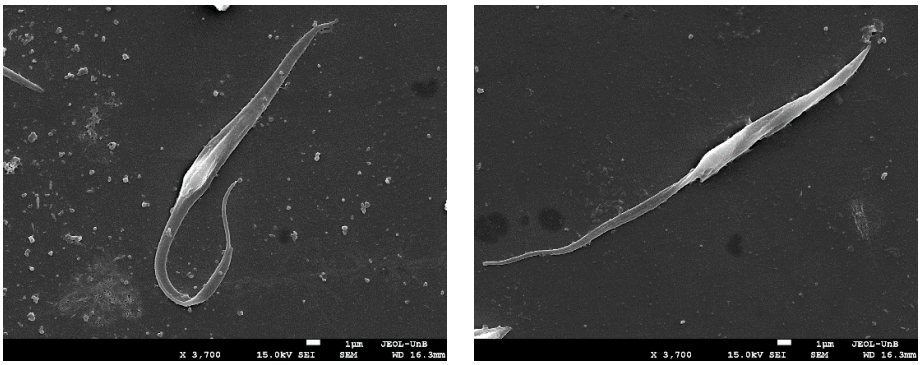
Figure S2. Vero cells infected with *T. cruzi* (arrows). Cells were panoptic-stained.



(**a**) (**b1**)

(**b2**)

Figure S3. Morphological characteristics of nanostructures analyzed by transmission electron microscopy (TEM). (**a**) Mimetic lipid membranes containing *N*, *N*′-Squaramide 17 (MLS) and (**b1**, **b2**) Empty mimetic lipid membranes (MLV).



(**a1**) (**a2**)

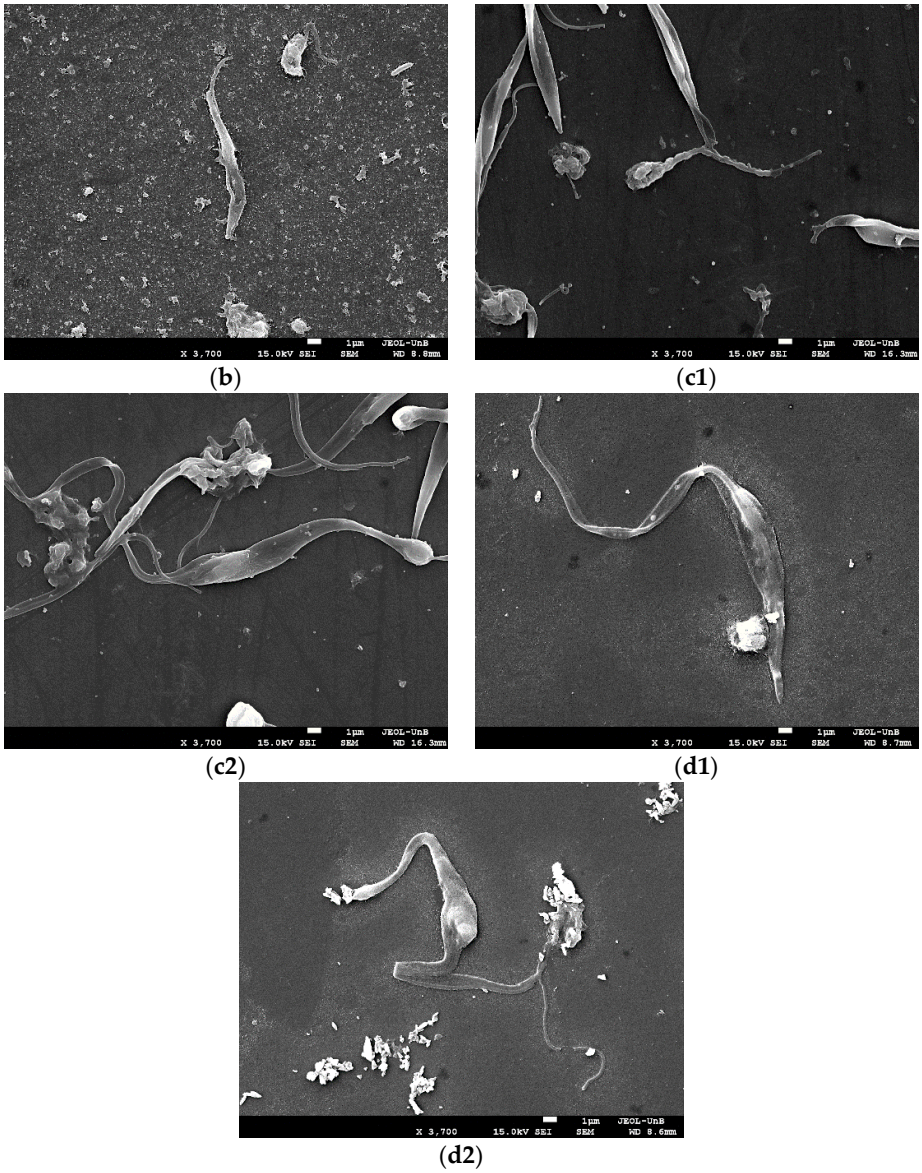


Figure S4. Morphological alterations in T. cruzi after compound treatment analyzed by SEM. Epimastigotes treated with Benznidazole at 7.91 μM (BZ); *N, N′*-Squaramide 17 at 6.56 μM (S) and Mimetic lipid membranes containing *N, N′*-Squaramide 17 at 7.93 μM (MLS) for 72 h. (**a1**, **a2**) Control (without treatment); (**b**) BZ; (**c1**, **c2**) S; and (**d1**, **d2**) MLS.

Table S2. Hydrodynamic diameter and polydispersity index of the different nanostructures evaluated after one and ten days of their production under different pHs.

Nanostructure (Conditions)	Day 1*			Day 10*		
	Hydrodynamic Diameter (nm)	Polydispersity Index (PdI)	Zeta Potential (mV)	Hydrodynamic Diameter (nm)	Polydispersity Index (PdI)	Zeta Potential (mV)
MLS	196.2 ± 11.0	0.418 ± 0.086	−61.43 ± 2.30	126.5 ± 0.7	0,292 ± 0.029	−58.0 ± 3.89
MLV	203.1 ± 8.5	0.428 ± 0.092	−12.93 ± 1.21	360.0 ± 87.2	0.424 ± 0.091	−14.4 ± 3.32

*The data refer to the means of three separate experiments (mean ± standard deviation) measured by DLS. Empty Mimetic Lipid Membranes (MLV) and Mimetic Membrane Membranes with *N, N'*-Squaramide 17 (MLS).