

SUPPORTING INFORMATION

Polymeric Prodrugs Targeting Polyamine Metabolism Inhibit Zika Virus Replication

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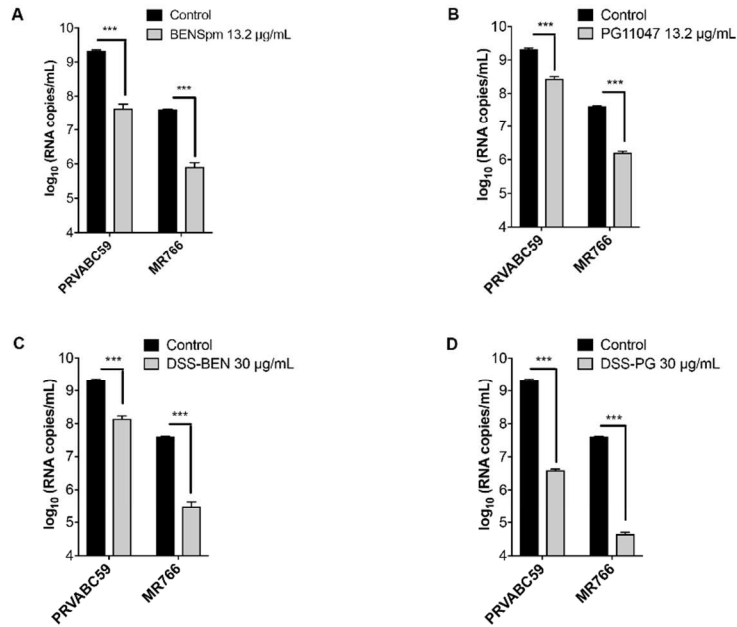


Figure S1. Antiviral effects of polyamine drugs treatment on Zika viral RNA loads in SNB-19 cells. Human glioblastoma (SNB-19) cells were treated with (A) BENSpm (13.2 µg/mL), (B) PG11047 (13.2 µg/mL), (C) DSS-BEN (30 µg/mL), or (D) DSS-PG (30 µg/mL) compounds for 16 h and infected with ZIKV at 0.2 MOI for 48 h. Viral RNA were extracted from the culture supernatants and quantified using qRT-PCR. One-way ANOVA is used to calculate the statistical significance and *** indicate $p = 0.001$ ($p < 0.05$).

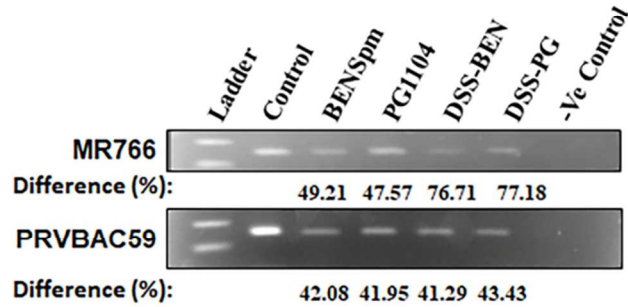


Figure S2. Polyamine prodrugs targets synthesis of negative-sense RNA strand during Zika virus replication. Vero cells were either treated with the BENSpm (13.2 μ g/ml) or PG11047 (13.2 μ g/ml) or with the DSS-BEN (30 μ g/ml) or with the DSS-PG (30 μ g/ml) or untreated for 16 h. These cells were further infected with ZIKV either African strain (MR766) or with the Asian strain (PRVABC59) at a MOI of 1 for 16 h. The total RNA was extracted from the polyamine drugs treated-infected and untreated-infected cells and subjected to semi-quantitative RT-PCR assay for the quantification of negative-sense ZIKV RNA. The band intensities were quantified using ImageJ software and presented as in the differences (%) for negative-sense RNA compared to untreated-infected controls.