## Supplemental information

FIG. S1. Virucidal activities of pre-washed MNP-virus-drug complexes. HIV-Luc was pre-incubated with the indicated level of drug based on Table 1 values for 1 h at 37 °C prior to 5 min incubation with MNPs. The resulting mixtures were extensively washed to remove unbound drug prior to HeLa-T4 cell infection. Note that the highest attainable NVP dose was 250x EC<sub>95</sub>. \*, P < 0.01; \*\*, P < 0.001 as compared to the no drug control (Student's t-test).

FIG. S2. EVG requires internalization to reveal its PAE. Activated PBMC pretreated with the indicated levels of EVG or TDF were washed, or washed and treated with trypsin for 10 min at 37 °C (and then re-washed) prior to virus infection. Normalized levels of HIV-Luc infectivities are expressed as percent of non-drug treated control samples. HIV-Luc was pseudotyped with VSV-G in this experiment to sidestep the loss of the CD4 receptor by trypsinization.