***Supplementary Figure Legend***

**Supplementary Figure S1.** **Effects of combination treatment of both bortezomib and oHSV on cancer cell killing.** The indicated cells pretreated with/without Nec-1(100 uM) for 30 minutes **(A)** or transduced with non-targeting shRNA/RIP1 shRNA **(B)** or pretreated with/without JNK inhibitor (SP0600125, 10uM) for 30 minutes **(C)** were treated with bortezomib for 16 hours prior to oHSV infection. Cell viability was measured 3 days after treatment with oHSV via MTT assay. Data were shown as the percentage of cell killing relative to untreated controls. Predicted additive % cytotoxicity is represented by a dashed line; Data points represent the mean, and error bars indicate ± SD for each group.

**Supplementary Figure S2.** **Necrostatin-1 (Nec-1) treatment and RIPK1 knock down did not reduce the bortezomib-induced increase in virus replication.** U251T3 cells pretreated with/without Nec-1(100 uM) for 30 minutes **(A)** or transduced with non-targeting shRNA/RIP1 shRNA **(B)** were treated with 12 nM bortezomib for 16 hours prior to 34.5ENVE infection (MOI = 0.01). Both cells and media were harvested 72 hours after viral infection and viral titers were determined by standard plaque assay. Data points represent the mean, and error bars indicate ± SD for each group.

**Supplementary Figure S3.** **Single treatment with bortezomib or oHSV enhances NK cell mediated glioma killing. A-B**) U251T3-mCherry+ cells were treated with bortezomib (12nM) for 16 hours or oHSV (0.01MOI) for 2 hours. Bortezomib or unbound virus was washed out and cells were then overlaid with/without primary human NK cells. Twenty-four hours later, cells were harvested and stained with a Live/Dead Fixable Aqua Dead Cell staining solution. **A)** Representative quadrant plots of Live/Dead cells and viral GFP after gating on mCherry positive cells. **B)**  The mean % positive number of dead cells following co-culture with primary NK cells (after mCherry+ gating). Errors bars represent ± SD for each group.

**Supplementary Figure S4.** **Combination treatment with bortezomib and oHSV enhance mice survival *in vivo*.**  Female FVB/N mice (6–8-week-old; The Jackson Laboratory) bearing intracranial DB7 tumors were treated with bortezomib (0.8 mg/kg) intraperitoneally twice a week for the duration of the study, and with oHSV (1 x 105 pfu) on day 13 post tumor implantation. Mice were monitored for survival as per our IACUC protocol. Data shown are Kaplan Meier survival curves of animals in each group over a period of 60 days after treatment (N=9/each group).