



**FIG S4. Experimental design of GH evaluation in immunocompromised mouse models of invasive aspergillosis.** (A) Neutrophil depletion model: mice were rendered neutropenic by intraperitoneal injection of 200  $\mu$ g anti-Ly6G antibody starting 24 h prior to infection, and every 48 h thereafter. Mice were then intratracheally infected with  $5 \times 10^6$  *A. fumigatus* conidia with, or without GHs and survival was monitored. (B) Leukopenia model: mice were rendered leukopenic by subcutaneous injection with 250 mg of cortisone acetate per kg of body weight 48 h prior to infection and at 72 h after infection; and by intraperitoneal injection with 250 mg cyclophosphamide per kg 48 h prior to infection and 200 mg at 72 h after infection. Mice were intratracheally infected with  $5 \times 10^3$  *A. fumigatus* conidia with and without GHs and pulmonary fungal burden was measured at 96 h. (C) Sph3<sub>h</sub>-posaconazole combination studies: mice were rendered neutropenic as in a.). Mice were intratracheally infected with  $5 \times 10^3$  *A. fumigatus* conidia co-administered with or without single dose of 500  $\mu$ g Sph3<sub>h</sub> then treated by oral gavage with 2.5 mg/kg posaconazole every 12 h and pulmonary fungal burden was measured 48 h after infection.