Supplementary Figure 1

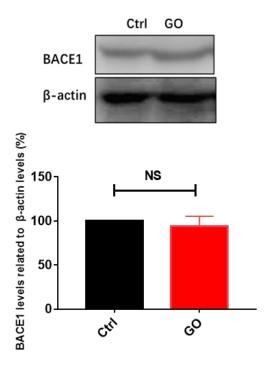


Fig S1 Western blot results and statistical results of BACE1 and β -actin. SHSY5-APP were treated with PBS or 60 μ g/mL GO for 24 h. Data are presented as the mean \pm SEM, NS = no significant difference.

Supplementary Figure 2

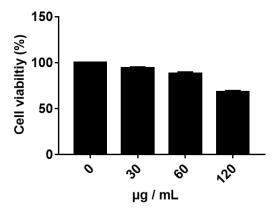


Fig S2 Cell viability of SHSY5-APP cells. Cell viability was determined using the CCK8 assay. SHSY5-APP were treated with 0, 30, 60 and 120 μ g/mL GO for 24 h.

Supplementary Figure 3

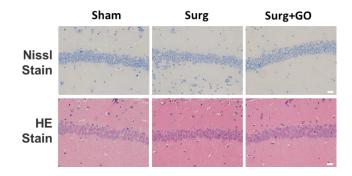


Fig S3 Nissl and HE staining of hippocampus. Sham or surgery mice pre-treated with normal saline solution or 2 μ L GO. 24 hours after surgery, mice were sacrificed and brain were taken. Scale bar = 20 μ m.

Supplementary Figure 4

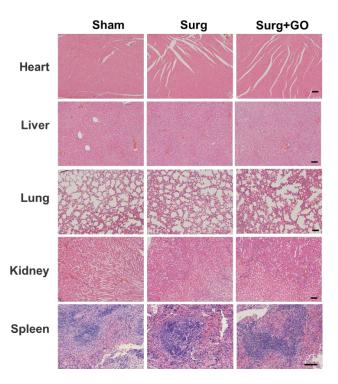


Fig S4 HE staining of peripheral organs. Sham or surgery mice pre-treated with normal saline solution or 2 μ L GO intracerebrally. 24 hours after surgery, mice were sacrificed and the main peripheral organs were taken. Scale bar = 100 μ m.

Supplementary Figure 5

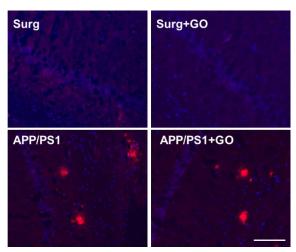


Fig S5 Immunofluorescence of A β plaque. 10 months old surgery mice or 7 months old APP/PS1 mice were treated with normal saline solution or 2 μ L GO. 24 hours after surgery, mice were sacrificed and brain were taken. Brain sections were immunostained with the anti-A β antibody and the nuclei were stained with Hoechst. Scale bars = 100 μ m.