**Methods of *in vitro* NSCs culture**

C17.2 mouse neural stem cell lines (ATCC) was maintained with DMEM basal medium (Thermo Fisher, US) supplemented with 10% FBS. Cells was seed in the 24-well plate added with round 12mm diameter cover slips. BrdU (10μM, 10mM stock dissolved in DMSO) was added to the cells for 6 hours. Then the chemicals including CORT (10μM), TMZ (5μM), Cyc-B (5μM) and 666-15 ()5μM were incubated with the cells for 24 hours. Cells were fixed with 4% PFA and IF was performed by labelling primary antibodies (Rat-BrdU, Rabbit-MCM2) as well as the secondary antibodies with nuclear labelling with DPAI. Confocal microscope (Zeiss, LSM800) was used for capture image. BrdU+ cells percentage in all DAPI labelled cells as well as the BrdU+ cells in all MCM2+ cells were recorded for reflecting the cell growth and cell proliferation speed, respectively (Supplementary Figure). Fiji software was used for cell counting analysis.

**Supplementary figure legends**

**Sfig1: The effects of TMZ, Cyc-B and 666-15 to cultural NSCs. a:** Confocal image to show the positive pattern of the BrdU (Gray) and nuclear labelling (DAPI, Blue). **b:** Statistical analysis of the BrdU+ percentage in all DPAI+ cells (unpaired students’ t-test, p<0.01). **c:** Confocal image to show the positive pattern of MCM2 (Green), BrdU (Red) co-labelled with DAPI (Bule) in cultural NSCs. d: Statistical analysis to show the different BrdU+ percentarge in all MCM2+ cells (one-way ANOVA, Tukey’s post-hoc test, \*\*p<0.01, \*\*\*p<0.001).