

Supplementary Figure S6. The expression level of proliferation associated genes in HSCs and the biological characteristics of JS1 cells in the condition of slightly DNA damage. (A) The expression levels of Cdkn2a and Cdkn1a in primary HSCs isolated from the young (2m) and aged (24m) mice with DDC diet was quantified by quantitative Real-time PCR (n=6, \*\* p < 0.01). (B) JS1 cells were pretreated with 0.1  $\mu$ M, 0.2  $\mu$ M or 0.5  $\mu$ M etoposide for 24 hours, then washed with fresh medium and continue to culture for 24 hours, the supernatant was collected as OC conditional medium. OCs were cultured in the conditional medium for 24 hours, the CCK-8 test was performed (n=6, \*\* p< 0.01). (C) JS1 cells were treated with 0.5  $\mu$ M etoposide for 24 hours, the morphology of these cells was shown (Scare bar=200  $\mu$ m).