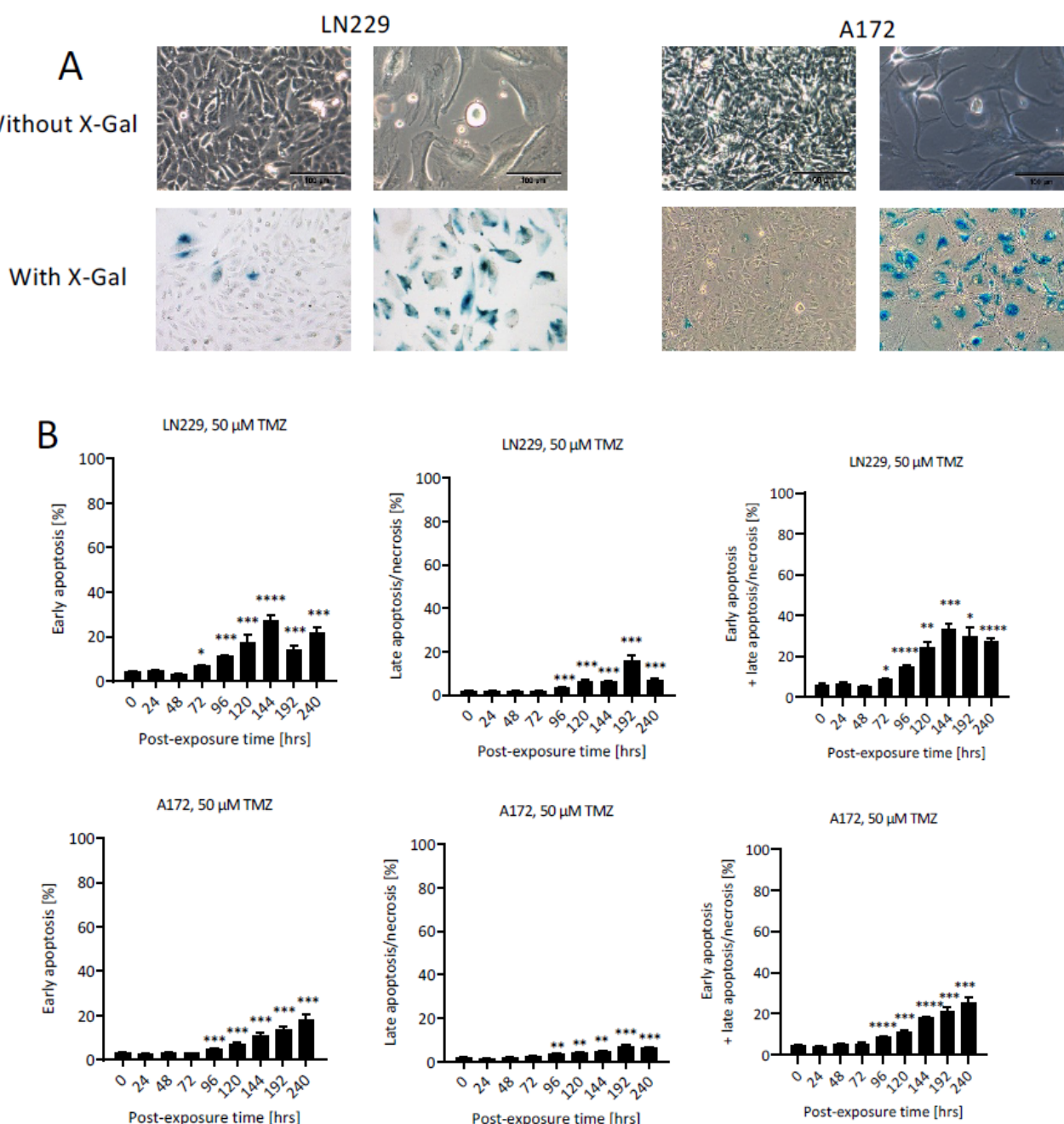
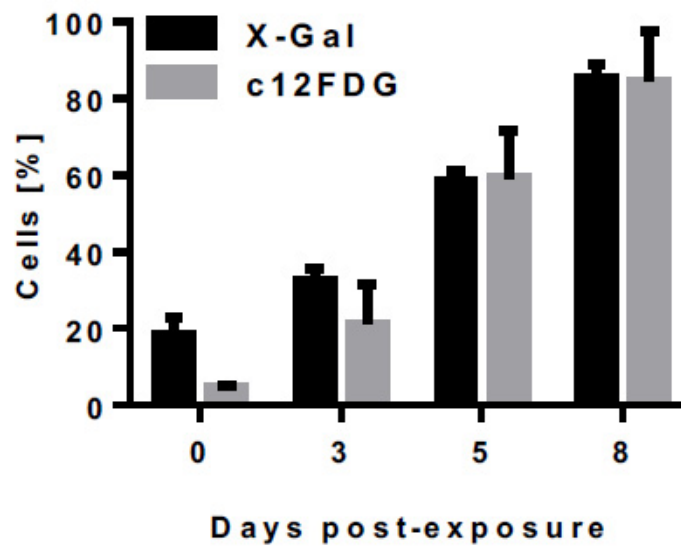


# Supplementary Materials: Senescence Is the Main Trait Induced by Temozolomide in Glioblastoma Cells

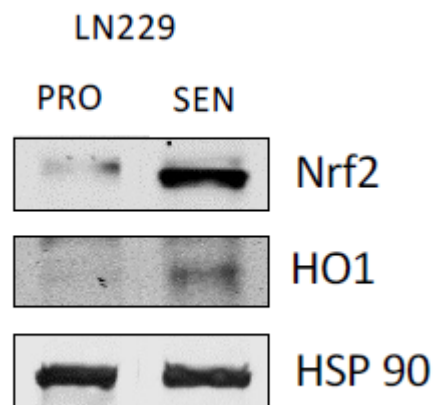
Lea Beltzig, Christian Schwarzenbach, Petra Leukel, Katrin B. M. Frauenknecht, Clemens Sommer, Alessandro Tancredi, Monika E. Hegi, Markus Christmann and Bernd Kaina\*



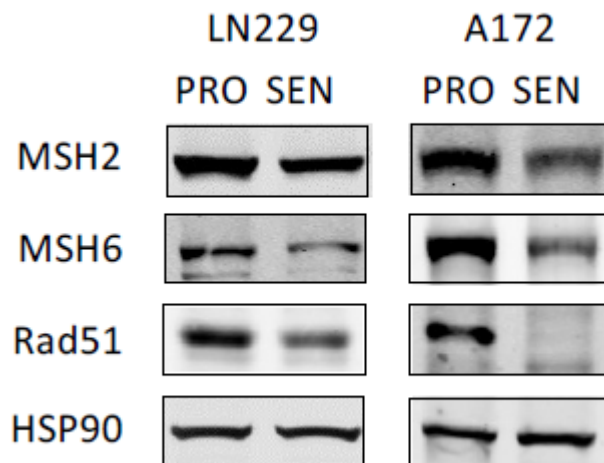
**Figure S1.** Induction of senescence and cell death following TMZ treatment. (A) Representative images of proliferating and senescent LN229 and A172 cells with and without X-gal staining. (B) Quantification of early apoptosis, late apoptosis/necrosis and total cell death following treatment of LN229 and A172 cells with 50  $\mu$ M TMZ. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ ; \*\*\*\*  $p < 0.0001$ .



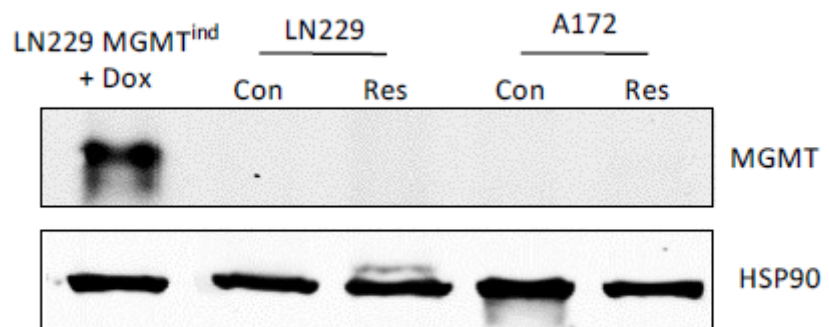
**Figure S2.** Comparison of x-gal staining with manual analysis using microscopy and flow cytometric analysis following C12FDG staining.



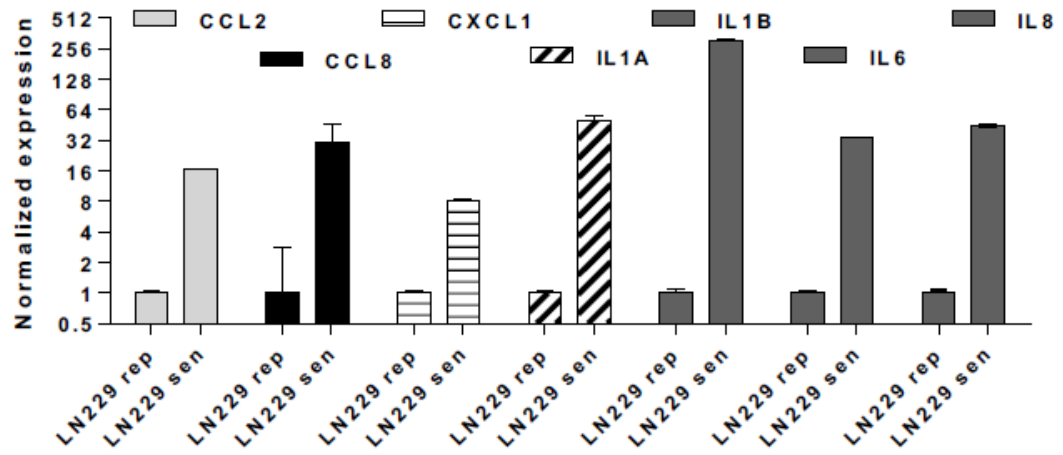
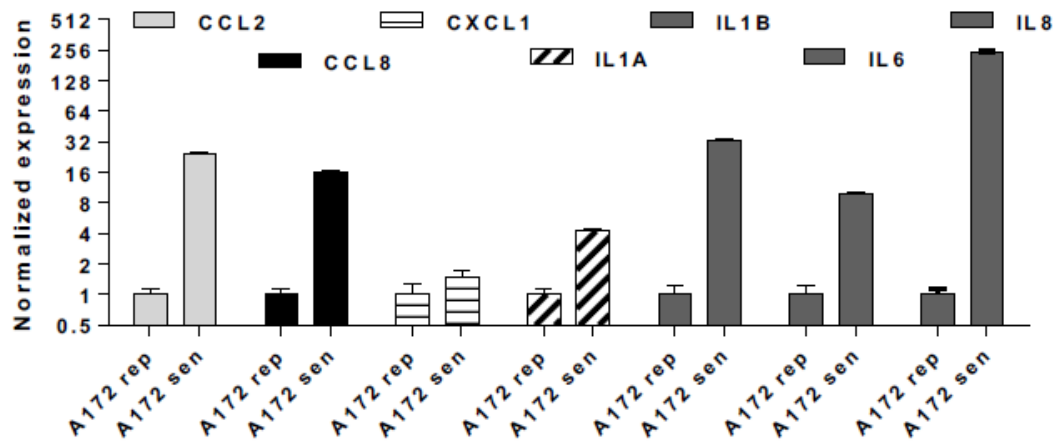
**Figure S3.** WB analysis of proliferating (PRO) and senescent (SEN) LN229 and A172 cells showing increased ROS markers NRF2 and hemoxygenase 1. HSP90 served as loading control.



**Figure S4.** Senescent (SEN) cells show reduced DNA repair markers compared to proliferating (PRO) cells.



**Figure S5.** TMZ resistance is not due to upregulation of MGMT. WB analysis of resistant and parental non-resistant LN229 and A172 cells, which do not display MGMT protein. Dox treated MGMTind cells served as positive control.

**A****B**

**Figure S6.** Comparison of expression of SAIP markers in the proliferating and TMZ-induced senescent cell population. (A), LN229; (B) A172 cells. Quantitative RT-PCR analysis.