# Cedrelone

The anticancer potential of Cedrelone was examined against temozolomide-resistant glioma cells.

The proliferation rate of malignant glioma cells was assessed by CCK-8 cell counting assay. Autophagy was detected by electron microscopy. Apoptotic cell death was revealed by propidium iodide (PI) staining. Cell cycle analysis was performed by flow cytometry. Protein expression was determined by immuno blotting.

The results showed that Cedrelone could considerably inhibit the proliferation of glioma cells. The anticancer activity of Cedrelone against the U87 malignant glioma cells was found to be due to induction of apoptosis. The Cedrelone-triggered apoptosis was also linked with alteration in the apoptosis-related protein expression. It also caused increase of reactive oxygen species (ROS) and decline of mitochondrial membrane potential (MMP). Additionally, Cedrelone could also trigger G2/M cell cycle arrest of U87 cells. Furthermore, it was found that Cedrelone could inhibit the ERK/MAPK signalling pathway in the temozolomide-resistant malignant glioma cells.

These results indicate that Cedrelone could inhibit the growth of temozolomide-resistant malignant glioma in vitro and may be used for the development of chemotherapy against this disease [1)].

1)
Cao Y, Zhang L, Wang Y. Antitumor activity of Cedrelone in temozolomide-resistant human glioma cells is accompanied by mitochondrial mediated apoptosis, inhibition of angiogenesis, cell cycle disruption and modulation of ERK/MAPK signalling pathway. J BUON. 2019 May-Jun;24(3):1204-1209. PubMed PMID: 31424680.