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73. Immanuel SRC, Ghanate AD, Parmar DS, Marriage F, Panchagnula V, et al. Integrative analysis of rewired central metabolism in temozolomide resistant cells. *Biochem Biophys Res Commun* 2018;495:2010-6.
  74. Suwala AK, Koch K, Rios DH, Aretz P, Uhlmann C, et al. Inhibition of Wnt/beta-catenin signaling downregulates expression of aldehyde dehydrogenase isoform 3A1 (ALDH3A1) to reduce resistance against temozolomide in glioblastoma in vitro. *Oncotarget* 2018;9:22703-16.
  75. Calvert AE, Chalastanis A, Wu Y, Hurley LA, Kouri FM, et al. Cancer-associated IDH1 promotes growth and resistance to targeted therapies in the absence of mutation. *Cell Rep* 2017;19:1858-73.
  76. Beig N, Patel J, Prasanna P, Hill V, Gupta A, et al. Radiogenomic analysis of hypoxia pathway is predictive of overall survival in Glioblastoma. *Sci Rep* 2018;8:7.
  77. Agrawal R, Pandey P, Jha P, Dwivedi V, Sarkar C, et al. Hypoxic signature of microRNAs in glioblastoma: insights from small RNA deep sequencing. *BMC Genomics* 2014;15:686.
  78. Giovannetti E, Erozcenci A, Smit J, Danesi R, Peters GJ. Molecular mechanisms underlying the role of microRNAs (miRNAs) in anticancer drug resistance and implications for clinical practice. *Crit Rev Oncol Hematol* 2012;81:103-22.
  79. Tabet A, Jensen MP, Parkins CC, Patil PG, Watts C, et al. Designing next-generation local drug delivery vehicles for glioblastoma adjuvant chemotherapy: lessons from the clinic. *Adv Healthc Mater* 2019;8:e1801391.
  80. Ius T, Cesselli D, Isola M, Toniato G, Pauletto G, et al. Combining clinical and molecular data to predict the benefits of carmustine wafers in newly diagnosed high-grade gliomas. *Curr Treat Options Neurol* 2018;20:3.
  81. Sippl C, Ketter R, Bohr L, Kim YJ, List M, et al. miRNA-181d expression significantly affects treatment responses to carmustine wafer implantation. *Neurosurgery* 2019;85:147-55.
  82. Zhang L, Yang H, Zhang W, Liang Z, Huang Q, et al. Clk1-regulated aerobic glycolysis is involved in glioma chemoresistance. *J Neurochem* 2017;142:574-88.
  83. Meco D, Di Francesco AM, Melotti L, Ruggiero A, Riccardi R. Ectopic nerve growth factor prevents proliferation in glioma cells by senescence induction. *J Cell Physiol* 2019;234:6820-30.
  84. Persaud SD, Park SW, Ishigami-Yuasa M, Koyano-Nakagawa N, Kagechika H, et al. All trans-retinoic acid analogs promote cancer cell apoptosis through non-genomic Crabp1 mediating ERK1/2 phosphorylation. *Sci Rep* 2016;6:27678.
  85. Ikemori RY, Machado CM, Furuzawa KM, Nonogaki S, Osinaga E, et al. Galectin-3 up-regulation in hypoxic and nutrient deprived microenvironments promotes cell survival. *PLoS One* 2014;9:e111592.
  86. Khalil AA. Biomarker discovery: a proteomic approach for brain cancer profiling. *Cancer Sci* 2007;98:201-13.