

·神经外科诊疗新技术快报·

肽-药物偶联物重编程胶质母细胞瘤相关巨噬细胞： 化疗-免疫治疗增敏的新策略

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【参 考 文 献】

- [1] OSTROM Q T, PRICE M, NEFF C, et al. CBTRUS Statistical Report: Primary Brain and Other Central Nervous System Tumors Diagnosed in the United States in 2015-2019 [J]. *Neuro Oncol*, 2022, 24(Suppl 5): v1-v95.
- [2] SICA A, SCHIOPPA T, MANTOVANI A, et al. Tumour-associated macrophages are a distinct M2 polarised population promoting tumour progression: potential targets of anti-cancer therapy [J]. *Eur J Cancer*, 2006, 42(6): 717-727.
- [3] LI Z, JIANG S, WANG J, et al. Peptide-drug conjugates repolarize glioblastoma-associated macrophages to resensitize chemio-immunotherapy of glioblastoma [J]. *Sci Adv*, 2025, 11(3): eadr8841.
- [4] ZONOUZ A M, RAHBARDAR M G, ALIBOLANDI M. Exosome-based platforms for treatment of multiple sclerosis [J]. *Brain Res Bull*, 2025, 222: 111256.
- [5] ZHENG C, ZHANG W, GONG X, et al. Chemical conjugation mitigates immunotoxicity of chemotherapy via reducing receptor-mediated drug leakage from lipid nanoparticles [J]. *Sci Adv*, 2024, 10(23): eadk9996.
- [6] HSIAO K Y, MIZZEN C A. Histone H4 deacetylation facilitates 53BP1 DNA damage signaling and double-strand break repair [J]. *J Mol Cell Biol*, 2013, 5(3): 157-165.
- [7] VAQUERO A, STERNGLANZ R, REINBERG D. NAD⁺-dependent deacetylation of H4 lysine 16 by class III HDACs [J]. *Oncogene*, 2007, 26(37): 5505-5520.
- [8] HSU W W, WU B, LIU W R. Sirtuins 1 and 2 Are Universal Histone Deacetylases [J]. *ACS Chem Biol*, 2016, 11(3): 792-799.
- [9] GIBBONS R J, PICKETTS D J, VILLARD L, et al. Mutations in a putative global transcriptional regulator cause X-linked mental retardation with alpha-thalassemia (ATR-X syndrome) [J]. *Cell*, 1995, 80(6): 837-845.
- [10] MALGULWAR P B, DANUSSI C, DHARMAIAH S, et al. Sirtuin 2 inhibition modulates chromatin landscapes genome-wide to induce senescence in ATRX-deficient malignant glioma [J]. *Neuro Oncol*, 2024, 26(1): 55-67.