Medulloblastoma Immunotherapy

Medulloblastoma Immunotherapy has emerged as another promising avenue in medulloblastoma treatment, whereby adoptive cellular therapy and checkpoint inhibition are the frontrunners of a vast array of diverse immunotherapeutic strategies in preclinical and clinical testing. Understanding the tumor microenvironment of medulloblastoma and the interactions between different cell types could provide valuable insights into mechanisms of resistance and potentially lead to new targeted therapies. Furthermore, the deepened understanding of the cells of origin giving rise to distinct medulloblastoma subtypes—most likely coinciding with CSCs driving tumor recurrence—potentially allows for the development of therapies to eradicate these cells specifically or even early, presymptomatic detection and interventions. Future medulloblastoma research will profile personalized treatments for each individual patient based on molecular risk stratification of the disease with the hope of improving survival and reducing relapses [1)]

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Rechberger JS, Toll SA, Vanbilloen WJF, Daniels DJ, Khatua S. Exploring the Molecular Complexity of Medulloblastoma: Implications for Diagnosis and Treatment. Diagnostics (Basel). 2023 Jul 18;13(14):2398. doi: 10.3390/diagnostics13142398. PMID: 37510143; PMCID: PMC10378552.