

Supplementary information

Table S1. The 26 m7G-related regulators used in this study.

m7G-related regulators	Ref
CYFIP2, DCP2, DCPS, EIF3D, EIF4E, EIF4E1B, EIF4E2, EIF4E3, EIF4G3, GEMIN5, IFIT5, LARP1, LSM1, METTL1, NCBP1, NCBP2, NUDT1, NUDT10, NUDT11, NUDT16, NUDT16L1, NUDT4, NUDT5, NUDT7, SNUPN, WDR4	1. Chen Z, Zhang Z, Ding W, Zhang JH, Tan ZL, Mei YR, et al. Expression and Potential Biomarkers of Regulators for M7G RNA Modification in Gliomas. <i>Frontiers in neurology</i>. 2022;13:886246,doi.org/10.3389/fneur.2022.886246. 2. Lu F, Gao J, Hou Y, Cao K, Xia Y, Chen Z, et al. Construction of a Novel Prognostic Model in Lung Adenocarcinoma Based on 7-Methylguanosine-Related Gene Signatures. <i>Frontiers in oncology</i>. 2022;12:876360,doi.org/10.3389/fonc.2022.876360.

Table S2. The primer sequences used in this research.

Gene	Forward	Reverse
h-EIF4E2	ACAACAAGTTCGACGCTTTGA	TCTCTTGCTACTGCTCTGATTCT
h-EIF4E3	AAGGGTGGCGTATGGAAGATG AAAG	CGGTCCCGAACACTGACACTAA C
h-EIF4G3	CCTAGAGCTACCATCCCGAAC	GGGCCACTATGACGGTACTG
h-EIF3D	GTGGAGGACGACATGGATAAG	GTGCTCACAACGGACAATAAG
h-WDR4	CGTCTACTCCTTTTCGGTGCTG	GCAGTGAGGATGAAGCGGTCA T
h-NUDT16	TACGCCATACTGATGCAGA	GTCCTCTAGGCTTCTGTCCT
h-NUDT16L1	ACCCTCCTCTTGACGTCTCAT CAC	ATCCTCCACCCACACATCCCAT C
h-SNUPN	CTCCCGAAAGCCTGTGTGATG TG	GCTGTAGTGGGTCTGTTTGTGG TAG
h- β actin	GAGAAAATCTGGCACCCACACC	GGATAGCACAGCCTGGATAGCA A

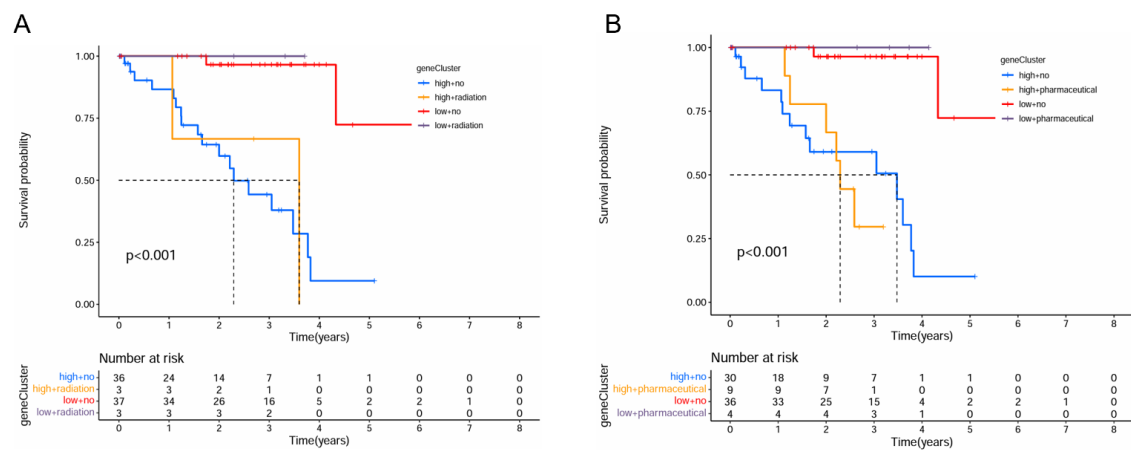


Figure S1. Survival curves after grouping by treatment and risk. (A) Survival curves after grouping by radiotherapy and risk. **(B)** Survival curves after grouping by chemotherapy and risk.

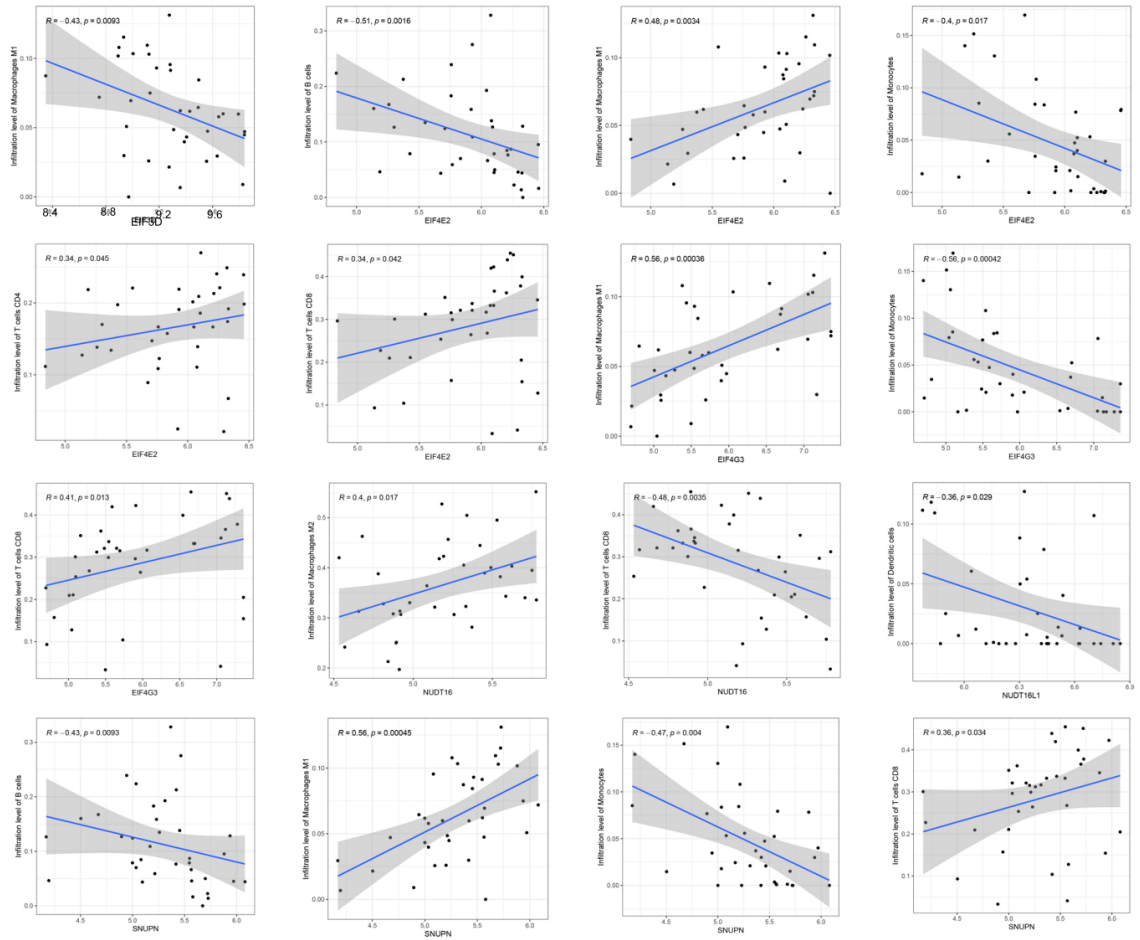


Figure S2. Correlation analysis of the relationship between m7G regulators and immune cell infiltration. The figures showed that EIF3D, EIF4E2, EIF4G3, NUDT16 and SNUPN were significantly correlated with monocytes/macrophages. EIF4E2, EIF4G3, NUDT16 and SNUPN were correlated with CD8 T cells. EIF4E2 and SNUPN were correlated with B cells. EIF4E2 was positively correlated with CD4 T cells. NUDT16L1 was negatively correlated with DC cells.