

MCM6

Minichromosome maintenance proteins (MCMs) play an essential role in DNA replication and other cellular activities.

The long term risk of tumor recurrence is higher in adamantine epithelioma (AE) than squamous papillary tumor (SP) and it is associated with MCM6 and DNA topoisomerase II alpha expression ¹⁾.

MCM6 protein expression in craniopharyngiomas are related to the prognosis of tumor and thus may be useful in predicting the risk of tumor relapse ²⁾.

In a study, Cai et al., analyzed the relationship between MCM mRNA expression and clinical parameters in 325 gliomas, and found that MCM6 presented high expression and was associated with poor survival. Immunohistochemistry analysis of an independent dataset of 423 glioma tissues confirmed the overexpression of MCM6 protein, especially in glioblastomas (GBMs) with shorter overall survival (OS). Importantly, a combination of MCM6 overexpression with IDH1 mutation further improved the prediction of the prognosis of GBMs. Patients with IDH1 mutation and low MCM6 expression exhibited the longest survival, whereas those with high MCM6 expression and wild-type IDH1 showed the shortest. Collectively, the observation indicates that MCM6 is a biomarker for predicting poor prognosis of the patients with glioma ³⁾.

¹⁾

Xu J, Zhang S, You C, Huang S, Cai B, Wang X. Expression of human MCM6 and DNA Topo II alpha in craniopharyngiomas and its correlation with recurrence of the tumor. J Neurooncol. 2007 Jun;83(2):183-9. Epub 2007 Apr 5. PubMed PMID: 17410335.

²⁾

Xu JG, You C, Wang XJ, Shuai KG, Wang XS. [Expression of minichromosome maintenance protein 6 in craniopharyngioma and its correlation with prognosis]. Sichuan Da Xue Xue Bao Yi Xue Ban. 2007 Jan;38(1):64-7. Chinese. PubMed PMID: 17294730.

³⁾

Cai HQ, Cheng ZJ, Zhang HP, Wang PF, Zhang Y, Hao JJ, Wang MR, Wan JH. Overexpression of MCM6 predicts poor survival in patients with glioma. Hum Pathol. 2018 May 9. pii: S0046-8177(18)30154-0. doi: 10.1016/j.humpath.2018.04.024. [Epub ahead of print] PubMed PMID: 29753008.

From:

<https://neurosurgerywiki.com/wiki/> - Neurosurgery Wiki

Permanent link:

<https://neurosurgerywiki.com/wiki/doku.php?id=mcm6>

Last update: **2024/06/07 02:49**

