Complete response after one cycle of temozolomide in an elderly patient with glioblastoma and poor performance status

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Abstract There is no standard of care for elderly patients with glioblastoma (GBM) and poor performance status. A 79-year-old woman with GBM, aphasia, and hemiplegia achieved a complete response after only one cycle of temozolomide (TMZ) (150 mg/m²/day over 5 days). Genomic profiling of the tumor demonstrated loss of chromosome 10 and MDM2 amplification, which are predictive of poor outcome. The MGMT promoter was methylated, and it is likely that this at least partially explains the exquisite chemosensitivity in our patient. This unusual case report suggests that TMZ warrants further investigation in elderly patients with poor performance status.

Keywords Glioblastoma - Elderly - Temozolomide - CGH array - MGMT