

**Elbelt U et al. Efficacy of Temozolomide Therapy in Patients With Aggressive Pituitary Adenomas and Carcinomas-A German Survey. J Clin Endocrinol Metab. 2020;105(3):e660-75. doi: 10.1210/clinem/dgz211.**

**CONTEXT:** Despite growing evidence that temozolomide (TMZ) therapy is effective for the treatment of aggressive pituitary tumors (APTs) or carcinomas (PCs), individual therapy decisions remain challenging.

**OBJECTIVE:** We therefore aimed to report on clinical characteristics leading to initiation of TMZ therapy and to add evidence on TMZ long-term effectiveness.

**DESIGN AND SUBJECTS:** Retrospective survey on TMZ treatment in patients with APTs or PCs. TMZ therapy was initiated in 47 patients (22 females) with APTs (n = 34) or PCs (n = 13). Mean age at diagnosis was 45 ± 15 years. The immunohistochemical subtypes were corticotroph (n = 20), lactotroph (n = 18), and nonfunctioning (n = 9) tumors. TMZ therapy started 8 years after initial diagnosis using a standard regimen (median 6 cycles) for the majority of patients.

**RESULTS:** Long-term radiological response to TMZ after a median follow-up of 32 months with 4 patients still on TMZ therapy was tumor regression for 9 (20%), stable disease for 8 (17%), and tumor progression for 29 patients (63%) (outcome data available for 46 patients). Progression occurred 16 months after initiation of TMZ. Median estimated progression-free survival was 23 months. Disease stabilization and median progression-free survival did not differ between patients with APTs or PCs. Predictors of tumor response were not identified. Overall, TMZ was well tolerated.

**CONCLUSION:** We performed a nationwide survey on TMZ therapy in patients with APTs and PCs. While early response rates to TMZ are promising, long-term outcome is less favorable. Prolonged TMZ administration should be considered. We were not able to confirm previously reported predictors of tumor response to TMZ.