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Updated Response Assessment in Neuro-Oncology (RANO) for Gliomas

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Abstract

Purpose of review: The response assessment in Neuro-Oncology (RANO) criteria and its versions were developed by expert opinion consensus to standardize response evaluation in glioma clinical trials. New patient-based data informed the development of updated response assessment criteria, RANO 2.0.

Recent findings: In a recent study of patients with glioblastoma, the post-radiation brain MRI was a superior baseline MRI compared to the pretreatment MRI, and confirmation scans were only beneficial within the first 12 weeks of completion of radiation in newly diagnosed disease. Nonenhancing disease evaluation did not improve the correlation between progression-free survival and overall survival in newly diagnosed and recurrent settings. RANO 2.0 recommends a single common response criteria for high- and low-grade gliomas, regardless of the treatment modality being evaluated. It also provides guidance on the evaluation of nonenhancing tumors and tumors with both enhancing and nonenhancing components.

Keywords: Glioblastoma; Isocitrate dehydrogenase-mutant glioma; RANO; RANO 2.0..

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