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# Pseudoproggression and Pseudoresponse: Imaging Challenges in the Assessment of Posttreatment Glioma.

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### Abstract

**SUMMARY:** The current standard of care for newly diagnosed cases of high-grade glioma is surgical resection followed by RT with concurrent chemotherapy. The most widely used criteria for assessing treatment response are based on a 2D measurement of the enhancing area on MR imaging known as the Macdonald Criteria. Recently, nontumoral increases (pseudoproggression) and decreases (pseudoresponse) in enhancement have been found, and these can confuse outcome evaluation. Here we review pseudoproggression and pseudoresponse and describe how better understanding of these phenomena can aid interpretation.

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