

**Tumor response criteria for hepatocellular carcinoma treated by transarterial chemoembolization  
- a radiologist's point-of-view**

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**Abstract**

Hepatocellular carcinoma is a common malignancy which, in specific stages, benefits from transarterial chemoembolization. The survival of treated patients depends on the accurate interpretation of follow-up studies after the procedure, with focus on the early detection of residual tumor or tumor recurrence. Dynamical contrast enhanced CT and MRI are sensitive methods in evaluating tumor response, although diffusion weighted imaging and other new modalities can improve the diagnostic role of these tests. A strong knowledge of common and rare imaging signs of neoplastic tissue in a chemoembolized nodule can lead to a prompt and effective complementary treatment. Some lesions related to the endovascular intervention mimic tumor behavior and should always be sought and correctly identified, in order to avoid unnecessary treatment and impacts in the patient's quality of life.

**Key words:** Transarterial chemoembolization, tumor response criteria, hepatocellular carcinoma, medical imaging, imaging signs, pseudolesions

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