

# Integrating AI and Human Expertise: Exploring the Role of Radiomics in Multidisciplinary Tumor Boards

## Description

This review article discusses the relationship between artificial intelligence (AI) and radiomics in oncology decision-making, exploring the fundamentals of AI-powered radiomics, its workflow, and the role of radiomic features. The article also describes the integration of AI in radiology, radiation oncology, and medical oncology, particularly its impact on multidisciplinary tumor board (MDT) decision-making, treatment planning, and predicting treatment responses, prognosis, and disease progression. Additional highlights include the role of machine learning algorithms and their impact on MDT decision-making, as well as challenges and implications of AI-driven radiomics in MDTs regarding ethical, financial, and regulatory aspects.

## Learning Objectives

Upon completing this activity:

1. Clinicians will understand how AI-driven radiomics and advancements in oncology have the potential to personalize treatment, reduce diagnostic variability, and improve treatment plans.
2. Clinicians will be better prepared to enhance MDT decision-making by learning how radiomic analyses can help provide precise, quantitative data for noninvasive, tailored treatments, with combined radiogenomics enhancing predictive accuracy.

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## Target Audience

1. Radiation oncologists
2. Related oncology professionals

## Commercial Support

None

## Accreditation/Designation Statement

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2. Visit [appliedradiology.org/SAM](http://appliedradiology.org/SAM).
3. Log in or create an account.
4. Complete the post test and review the discussion and references.
5. Complete the evaluation.
6. Print your certificate.

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