

PET/MRI, CT metrics assess pathologic response of pancreas cancer to neoadjuvant therapy

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According to an open-access Editor's Choice article in ARRS' *American Journal of Roentgenology* (AJR), post-neoadjuvant therapy (NAT) changes in metabolic metrics from PET/MRI and morphologic metrics from CT were associated with pathologic response and overall survival in patients with pancreatic ductal adenocarcinoma (PDA).

"Imaging metrics associated with pathologic response and overall survival in PDA could help guide clinical management and outcomes for patients with PDA receiving emergent therapeutic interventions," wrote first author Ananya Panda of the department of radiology at the Mayo Clinic in Rochester, Minnesota.

Panda and colleagues' retrospective study included 44 patients (22 men, 22 women; average age 62) with 18F-FDG avid borderline resectable or locally advanced PDA on pre-treatment PET/MRI, who also underwent post-NAT PET/MRI

prior to surgery between August 2016 and September 2019. CA 19-9, metabolic metrics from PET/MRI, and morphologic metrics from CT (n = 34) were compared between pathologic responders (College of American Pathologists scores 0 and 1] and nonresponders (scores 2 and 3).

In borderline resectable or locally advanced pancreatic cancer undergoing [neoadjuvant therapy](#), pre- vs. post-treatment changes in tumor metrics on PET/MRI (complete metabolic response, ?SUVmax, ?SUVgluc) and CT (RECIST, volume change) were associated with major pathologic response (AUC = 0.71-0.83; p

Reiterating that PET/MRI and CT metrics can help guide post-NAT [pancreatic cancer](#) treatment decisions, the authors of this AJR article concluded that by comparison, serum CA 19-9 was not associated with pathologic response or survival.

More information: Ananya Panda et al, Borderline Resectable and Locally Advanced Pancreas Cancer: FDG PET/MRI and CT Tumor Metrics for Assessment of Neoadjuvant Therapy Pathologic Response and Prediction of Survival, *American Journal of Roentgenology* (2020). [DOI: 10.2214/AJR.20.24567](https://doi.org/10.2214/AJR.20.24567)

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