

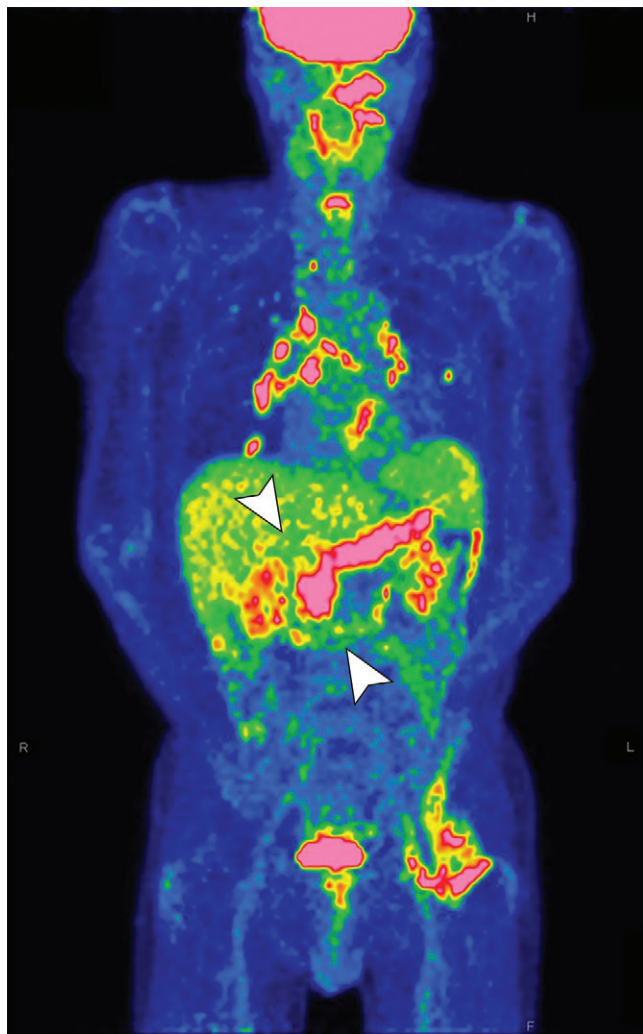
# Nivolumab-induced Pancreatitis: An Immune-related Adverse Event

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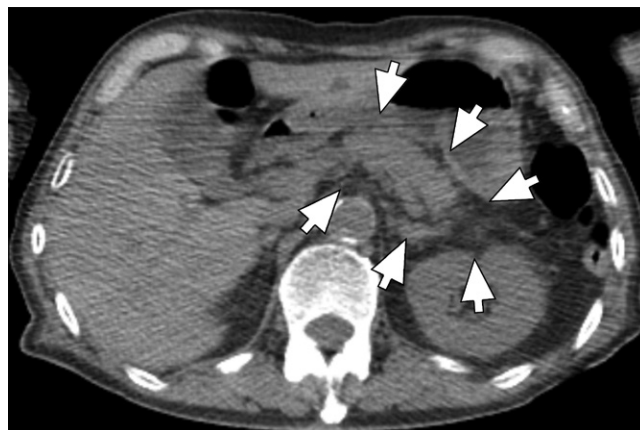
Conflicts of interest are listed at the end of this article.

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**Figure 1:** Coronal maximum intensity projection fluorine 18 fluoro-2-deoxy-D-glucose (FDG) PET scan in 72-year-old man being treated with nivolumab for metastatic squamous cell carcinoma (primary lung cancer) shows increased uptake in the pancreas (arrowheads), which is diagnostic for pancreatitis from an immune-related adverse event. Other sites of metastatic disease (mediastinal lymph nodes, both lungs, and left iliopsoas muscle abscess) also show increased FDG uptake.

A 72-year-old man treated with nivolumab for widely metastatic squamous cell carcinoma of the lung (pleural, bone, and brain metastases) presented to the hospital for follow-up fluorine 18 fluoro-2-deoxy-D-glucose (FDG) PET/CT. This examination showed a diffusely enlarged pancreas with a markedly elevated



**Figure 2:** Axial reference CT scan (attenuation correction scan) from the same PET/CT examination as in Figure 1 shows an enlarged pancreas with inflammation in anterior pararenal space (arrows), which is consistent with pancreatitis.

standardized uptake value of 7.1 (Figs 1, 2). The patient was asymptomatic; however, laboratory evaluation revealed elevated amylase, lipase, elastase, and C-reactive protein levels. This finding was consistent with the diagnosis of pancreatitis related to an immune-related adverse event from nivolumab therapy. As the patient had an ongoing infection of the left iliopsoas bursa, no steroids were prescribed for this complication. After 2 months, a repeat FDG PET/CT examination showed resolution of the pancreatic uptake.

Pancreatitis is a rare immune-related adverse event from nivolumab (immune checkpoint inhibitor) therapy (1). The imaging features are similar to those found in autoimmune pancreatitis (2). Steroids (glucocorticoids) are often used to treat immune-related adverse events. However, as in this case, simple cessation of nivolumab therapy allowed the immune-related pancreatitis to resolve on its own.

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