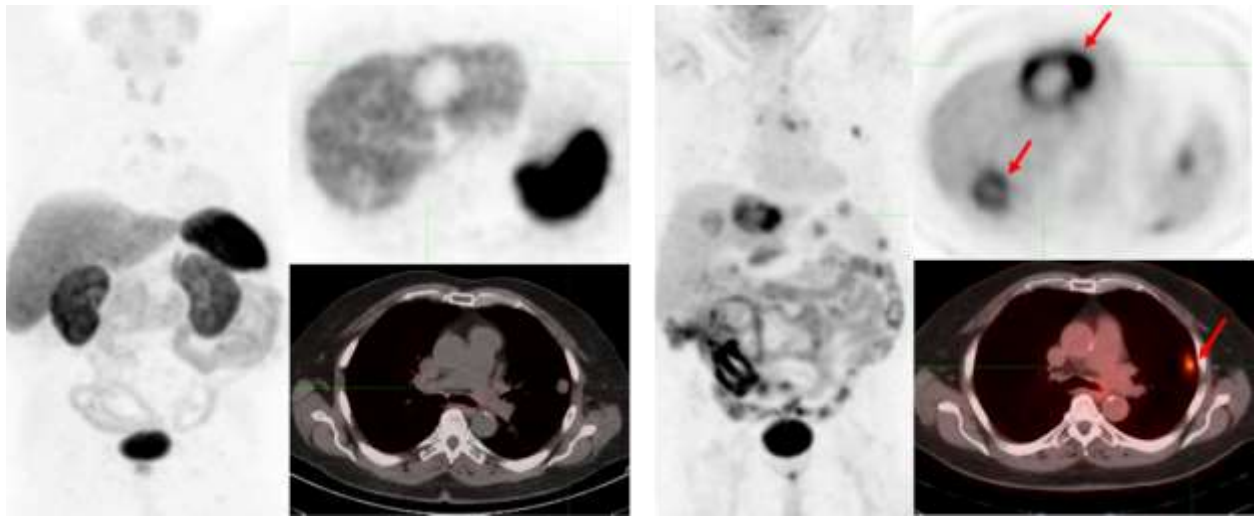
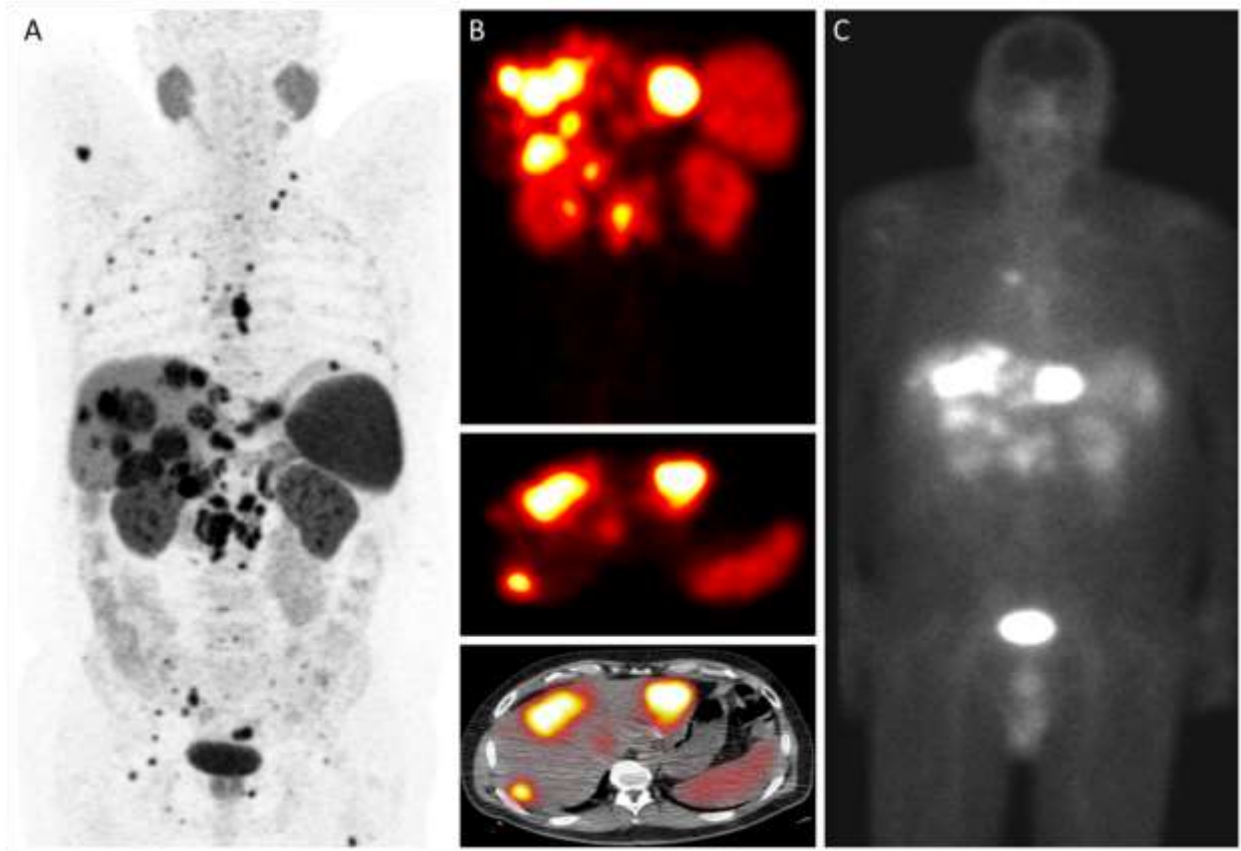


Supplemental Figure 1. MIP and trans-axial PET and fused PET/CT images of a patient with metastatic Grade-3 (Ki67 50%) well-differentiated pancreatic NET. ^{68}Ga -DOTATATE PET (left) shows prominent uptake in the primary tumor and extensive liver and osseous metastases. ^{18}F -FDG PET (right) shows mild-to-moderate uptake in the primary tumor and liver metastases, with no uptake in additional liver and extensive osseous metastases. A right ovarian metastasis (arrow) shows uptake with both tracers.



Supplemental Figure 2. MIP and trans-axial PET and fused PET/CT images of a patient with metastatic high-grade large-cell pulmonary neuroendocrine carcinoma. ⁶⁸Ga-DOTATATE PET (left) shows no abnormal uptake. ¹⁸F-FDG PET (right) shows uptake in the primary lung tumor as well as nodal, liver, and splenic metastases.



Supplemental Figure 3. Comparison of ^{68}Ga -DOTATATE PET and ^{111}In -Pentetreotide. The higher resolution of PET (A) allows for visualization of additional lesions than planar scintigraphy (C) or SPECT/CT (B). This may result in smaller lesions having a higher Krenning score. However, as this example shows, all imaging modalities show an overall Krenning score of 5 for this patient. Reprinted with permission from *JNM*. Hope TA et al. *J Nucl Med*. 2019;60:1266-1269.

EXAMINATION: ⁶⁸Ga-DOTATATE PET/CT IMAGING

DATE OF STUDY: 01/01/0001

SCANNER: ABC

RADIOPHARMACEUTICAL: 5.2 mCi ⁶⁸Ga-DOTATATE i.v. Injection site: Left antecubital

HISTORY: Incidentally detected hyper-enhancing pancreatic uncinate process mass on CECT – underwent endoscopic biopsy 1 month back, with pathology showing Grade-2, well-differentiated neuroendocrine tumor (Ki-67: 5.9%). Chromogranin A levels are elevated (128 ng/mL; normal: < 93 ng/mL). The study is requested for initial staging.

TECHNIQUE: After intravenous administration of ⁶⁸Ga-DOTATATE, non-contrast CT images were obtained for attenuation correction and for fusion with emission PET images to allow for anatomical localization of PET findings. Emission PET images were then obtained. The study was interpreted on the XYZ workstation.

Scanned area: Skull vertex to the proximal thighs; the time from injection of tracer to start of imaging for this scan position was 71 minutes.

COMPARISON: Outside hospital CT chest abdomen pelvis dated 02/02/0001

FINDINGS:

Markedly tracer-avid mass in the pancreatic head measuring 4.0 x 3.0 cm in axial dimensions with a SUVmax of 53.5 (axial image #222). No other focus of pathologic tracer avidity in the pancreas.

There is a 0.7 cm markedly tracer-avid peripancreatic/ pericaval lymph node just anterior to the right renal vein with SUVmax of 38.2 (axial image #333).

No other focus of pathologic tracer avidity in the rest of the whole-body survey.

Additional CT FINDINGS: Calcified hilar mediastinal lymph nodes from old granulomatous disease. Scattered calcified granulomas in the lungs. Coronary artery atherosclerotic disease.

IMPRESSION:

1. Markedly ⁶⁸Ga-DOTATATE avid mass in the pancreatic head consistent with the patient's biopsy-proven well-differentiated neuroendocrine tumor.
2. ⁶⁸Ga-DOTATATE avid caval lymph node consistent with site of locoregional nodal spread. No ⁶⁸Ga-DOTATATE PET evidence of distant metastatic disease.

Dictated by:

Electronically signed by:

Supplemental Figure 4. Standardized reporting for ⁶⁸Ga-DOTATATE PET in a patient with NET.