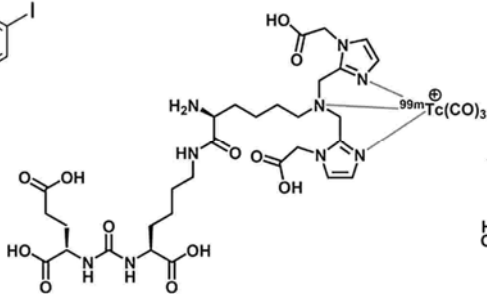**MIP-1072**   **99mTc-MIP-1405**   **99mTc-MIP-1404**
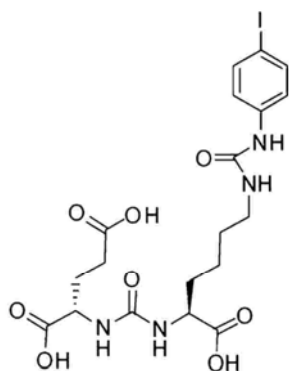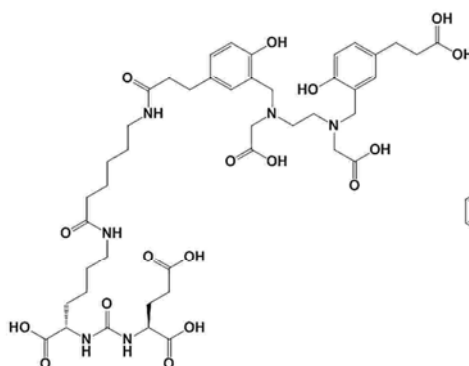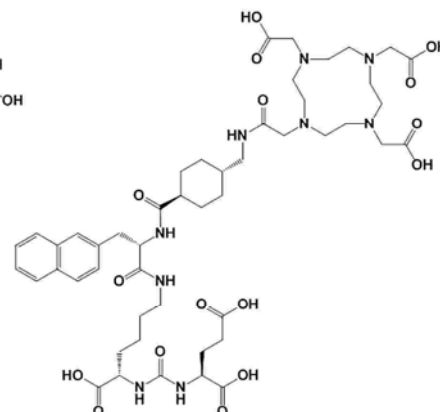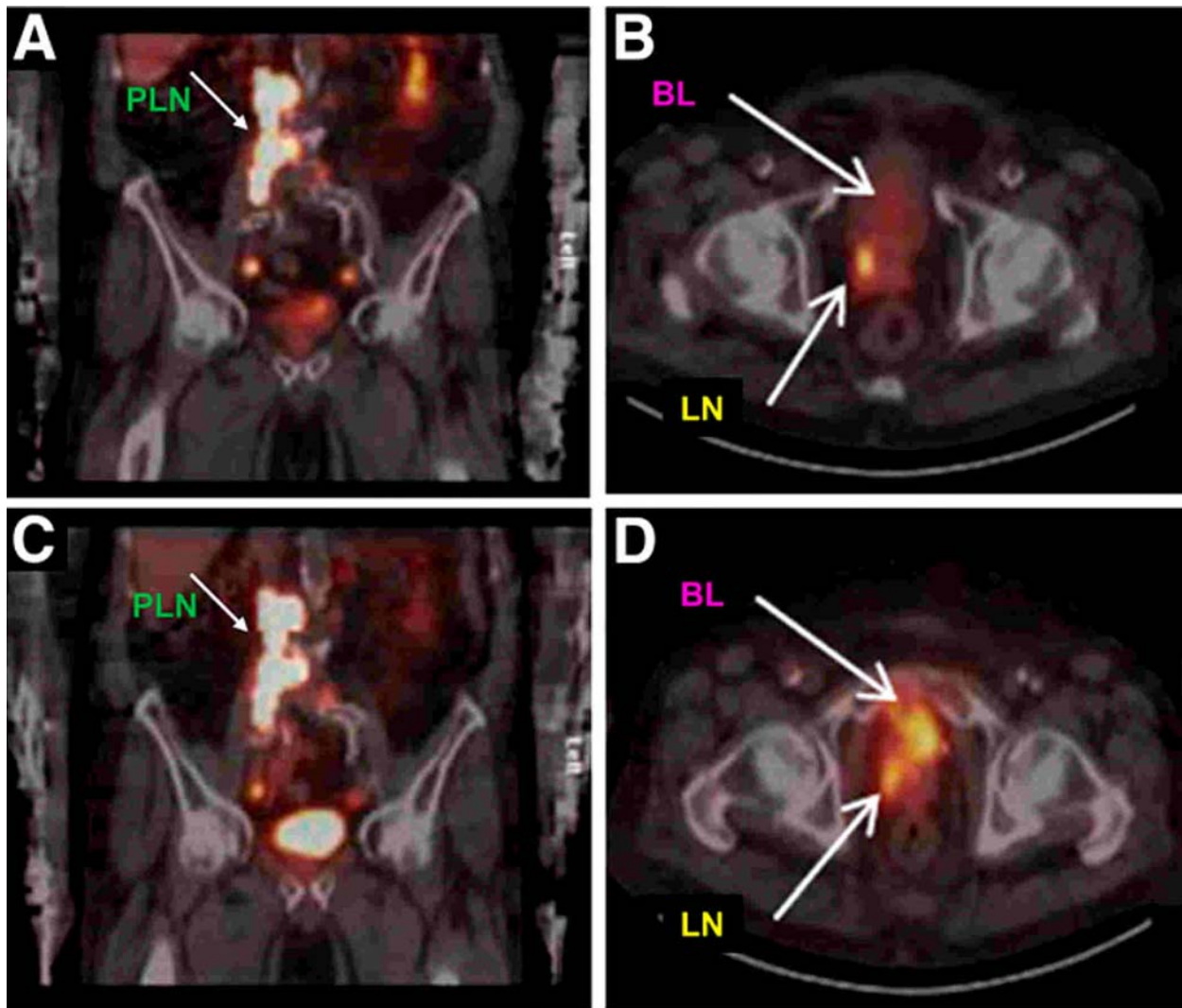
MIP-1095   **PSMA-11**   **PSMA-617**

SUPPLEMENTAL FIGURE 1. Chemical structures of different PSMA ligands.

SUPPLEMENTAL FIGURE 2. SPECT/CT images of ^{99m}Tc-MIP-1404 (A and B) compared with ^{99m}Tc-MIP-1405 (C and D) in the same subject approximately a week apart. Images identify PCa in pelvic lymph nodes (LN) and paraaortic lymph nodes (PLN). ^{99m}Tc-MIP-1404 shows minimal urinary excretion and bladder (BL) activity compared with ^{99m}Tc-MIP-1405. (Reprinted from *J Nucl Med.* 2014;55:1791–1798.)

**SUPPLEMENTAL FIGURE 3.** Maximum-intensity projection of a patient with a normal distribution of ^{68}Ga-PSMA-11 at 1 h after injection. Physiologic accumulation is seen in lacrimal and salivary glands, nasal mucosa, liver, spleen, bowels, and kidneys. The surplus tracer is excreted via the urinary tract and urinary bladder.
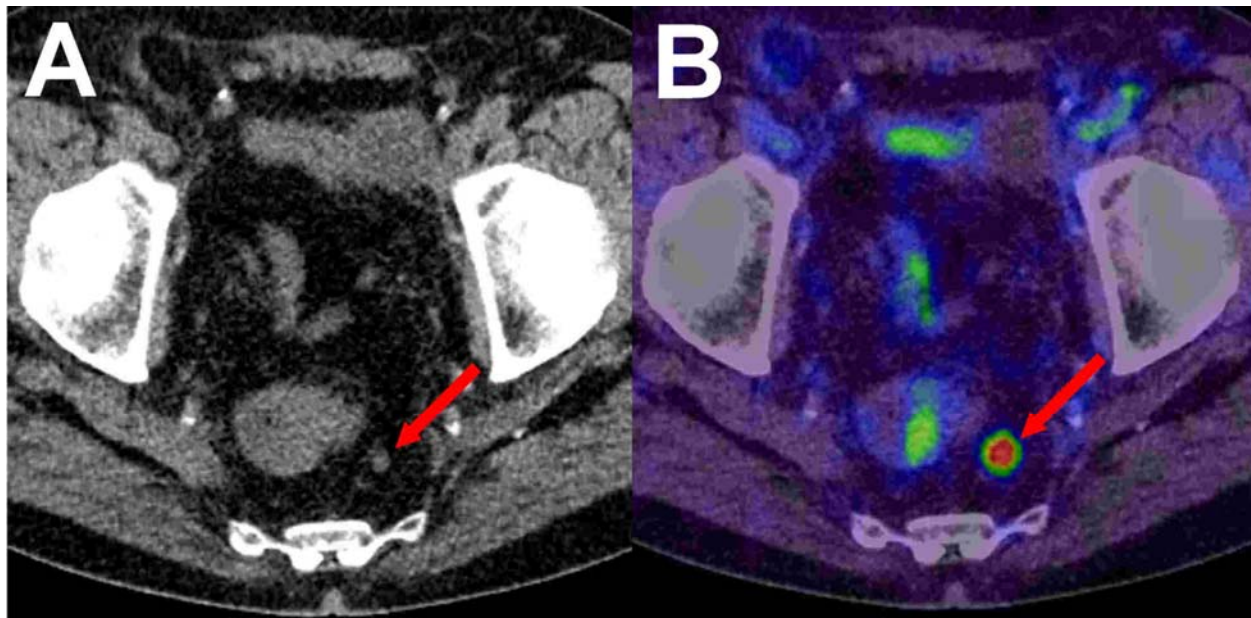
SUPPLEMENTAL FIGURE 4. ^{68}Ga-PSMA-11 PET/CT images at 1 h after injection. Red arrows point to a lymph node metastasis with an SUV$_{max}$ of 21.7 at 1 h (32.6 at 3 h after injection). (A) Low-dose CT. (B) Fusion of PET and CT.
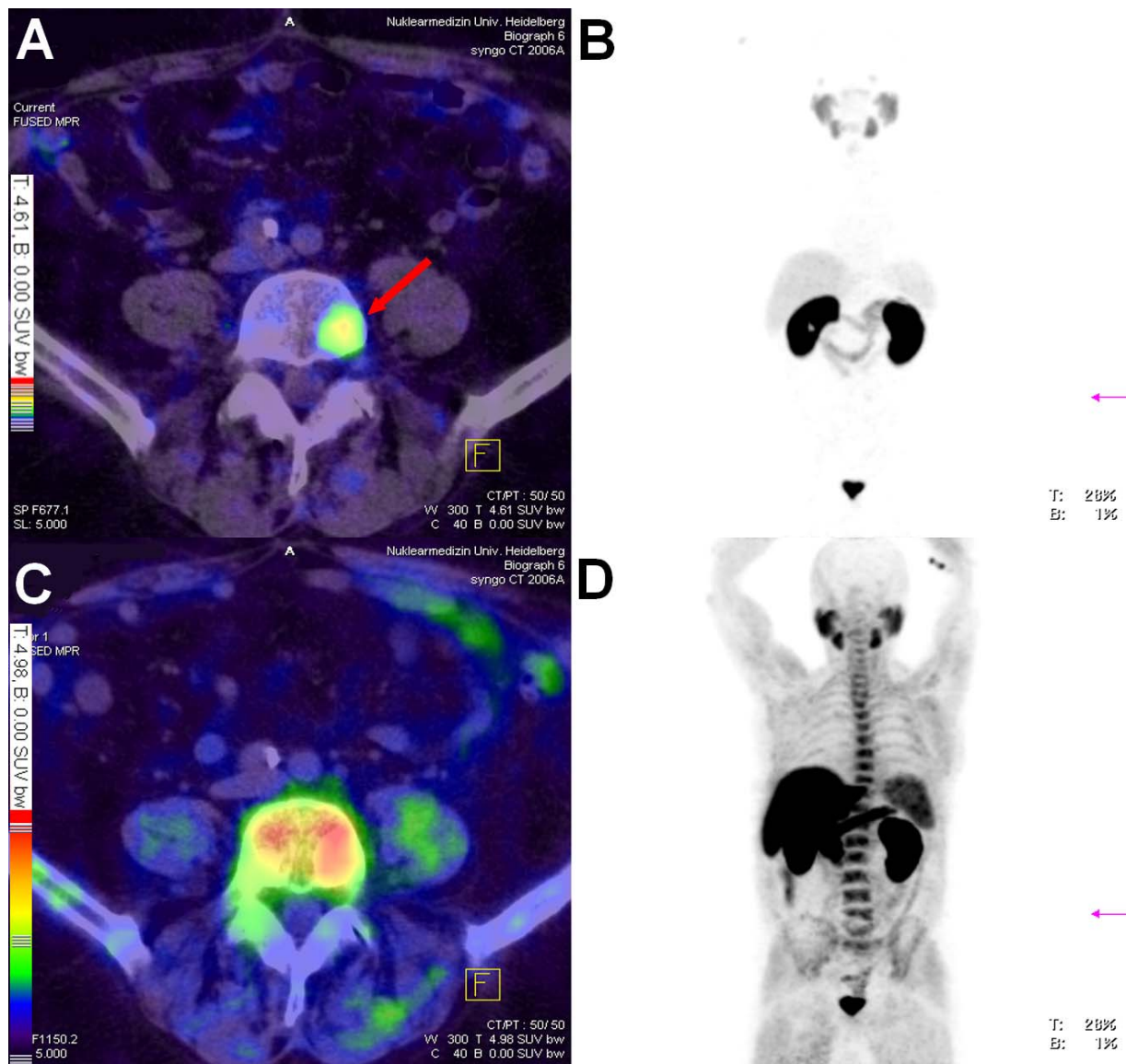
SUPPLEMENTAL FIGURE 5. Comparison between ¹⁸F-FM-choline and ⁶⁸Ga-PSMA-11 in a patient with recurrent PCa. Red arrow points to a vertebral metastasis visible on ⁶⁸Ga-PSMA-11 PET/CT only (A). Because of physiologic high background activity in the vertebral column, metastases are frequently difficult to detect on choline PET (C). Also typical of choline PET is a relatively high background activity, as seen in the maximum-intensity projection (D). Image data are provided as automatically produced by the PET/CT machine to demonstrate that the filtering of the maximum-intensity projections was set equal. (A) Fusion of ⁶⁸Ga-PSMA-11 PET and CT. (B) Maximum-intensity projection of ⁶⁸Ga-PSMA-11 PET. (C) Fusion of ¹⁸F-FM-choline PET and CT. (D) Maximum-intensity projection of ¹⁸F-FM-choline. Color scales are as automatically produced by the PET/CT machine. (Reprinted with permission from *Eur J Nucl Med Mol Imaging.* 2014;41:11–20 (57).
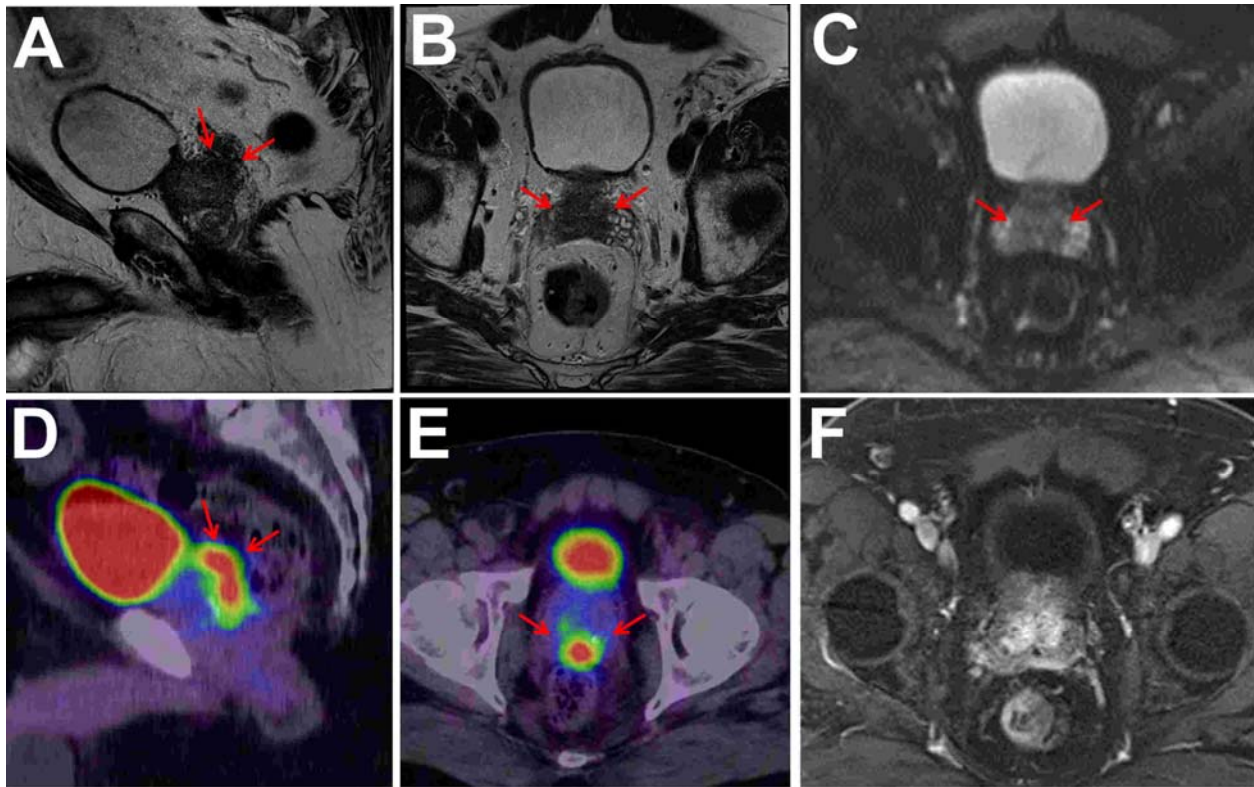
SUPPLEMENTAL FIGURE. 6. Primary PCa with infiltration of seminal vesicles visible on MRI (A–C) and on ^{68}Ga-PSMA-11 PET/CT (D and E). (A) Sagittal T2-weighted MR image. (B) Transversal T2-weighted MR image. (C) Diffusion-weighted MR image. (D) Sagittal ^{68}Ga-PSMA-11 PET/CT image. (E) Transversal ^{68}Ga-PSMA-11 PET/CT image. (F) Contrast-enhanced T1-weighted MR image.