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PSMA-targeted PET Imaging Agent Fluorine F 18 CTT-1057

National Cancer Institute

Source

National Cancer Institute. *PSMA-targeted PET Imaging Agent Fluorine F 18 CTT-1057*.
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A radioconjugate composed of the phosphoramidate agent CTT 1057, a human prostate specific membrane antigen (PSMA) inhibitor, and labeled with the radioisotope fluorine F 18, with potential use as a tracer for PSMA-expressing tumors during positron emission tomography (PET). Upon intravenous administration of PSMA-targeted PET imaging agent fluorine F 18 CTT-1057, the CTT-1057 moiety targets and irreversibly binds to the extracellular domain of PSMA-expressing tumor cells. Upon rapid internalization, and following PET imaging, PSMA-expressing tumor cells can be detected. PSMA, a tumor-associated antigen (TAA) and type II transmembrane protein, is expressed on the membrane of prostatic epithelial cells and overexpressed on prostate tumor cells.