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# Lutetium Lu 177-PSMA-617

National Cancer Institute

## Source

National Cancer Institute. *Lutetium Lu 177-PSMA-617*. NCI Thesaurus. Code C148145.

A radioconjugate composed of PSMA-617, a human prostate-specific membrane antigen (PSMA)-targeting ligand, conjugated to the beta-emitting radioisotope lutetium Lu 177 ( $^{177}\text{Lu}$ ), with potential antineoplastic activity against PSMA-expressing tumor cells. Upon intravenous administration of  $^{177}\text{Lu}$ -PSMA-617, the PSMA-617 moiety targets and binds to PSMA-expressing tumor cells. Upon binding, PSMA-expressing tumor cells are destroyed by  $^{177}\text{Lu}$  through the specific delivery of beta particle radiation. PSMA, a tumor-associated antigen and type II transmembrane protein, is expressed on the membrane of prostatic epithelial cells and overexpressed on prostate tumor cells.