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# Lutetium Lu-177 PSMA-R2

National Cancer Institute

## Source

National Cancer Institute. *Lutetium Lu-177 PSMA-R2*. NCI Thesaurus. Code C150467.

A radioconjugate composed of PSMA-R2, a human prostate-specific membrane antigen (PSMA)-targeting ligand, conjugated to the beta-emitting radioisotope lutetium Lu 177 (<sup>177</sup>Lu), with potential antineoplastic activity against PSMA-expressing tumor cells. Upon intravenous administration of <sup>177</sup>Lu-PSMA-R2, the PSMA-R2 moiety targets and binds to PSMA-expressing tumor cells. Upon binding, PSMA-expressing tumor cells are destroyed by <sup>177</sup>Lu through the specific delivery of beta particle radiation. PSMA, a tumor-associated antigen (TAA) and type II transmembrane protein, is expressed on the membrane of prostatic epithelial cells and overexpressed on the majority of prostate tumor cells.