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# PSMA-targeted Tubulysin B-containing Conjugate EC1169

National Cancer Institute

## Source

National Cancer Institute. *PSMA-targeted Tubulysin B-containing Conjugate EC1169*. NCI Thesaurus. Code C117291.

An injectable, water soluble, small molecule drug conjugate (SMDC) containing a ligand specific for prostate-specific membrane antigen (PSMA), conjugated via a stable, enzyme-cleavable linker to the cytotoxic agent tubulysin B hydrazide (TubBH), with potential antineoplastic activity. Upon administration of PSMA-targeted tubulysin B-containing conjugate EC1169, the PSMA ligand specifically targets and binds to PSMA, a protein which is abundantly expressed on the surface of metastatic and hormone-refractory prostate cancer cells as well as on the neovasculature of many solid tumors. This allows for the specific delivery of TubBH to PSMA-expressing cancer cells. Upon internalization and cleavage, tubulysin B binds to tubulin and inhibits microtubule polymerization, which blocks cell division and results in G2/M phase arrest, tumor cell apoptosis and a decrease in PSMA-expressing tumor cells.