## Open Peer Review on Qeios

## Anti-AXL/PBD Antibody-drug Conjugate ADCT-601

National Cancer Institute

## Source

*National Cancer Institute. <u>Anti-AXL/PBD Antibody-drug Conjugate ADCT-601</u>. NCI Thesaurus. Code C160890.* 

An antibody-drug conjugate (ADC), consisting of a humanized immunoglobulin (Ig) G1 monoclonal antibody directed against AXL receptor tyrosine kinase (AXL; UFO) that is sitespecifically conjugated to PL1601, which contains a valine-alanine cleavable linker and SG3199, a cytotoxic pyrrolobenzodiazepine (PBD) dimer, with potential antineoplastic activity. Upon administration, the monoclonal antibody moiety of anti-AXL/PBD antibodydrug conjugate ADCT-60 binds to AXL, which is expressed on the surfaces of a variety of cancer cell types. Upon endocytosis and enzymatic cleavage, free PBD is released and forms highly cytotoxic DNA interstrand cross-links, thereby blocking cell division and killing AXL-expressing cancer cells. AXL, a member of the TAM (TYRO3, AXL and MER) family of receptor tyrosine kinases, is overexpressed by many tumor cell types, and plays a key role in tumor cell proliferation, survival, invasion and metastasis; its expression is associated with drug resistance and poor prognosis.