## Open Peer Review on Qeios

## Sofituzumab Vedotin

National Cancer Institute

## Source

National Cancer Institute. Sofituzumab Vedotin. NCI Thesaurus. Code C106119.

An antibody drug conjugate (ADC) consisting of a humanized IgG1 monoclonal antibody targeting the MUC16 protein (CA-125) conjugated to, via a cleavable linker, the antimicrotubulin agent monomethyl auristatin E (MMAE), with potential antineoplastic activity. The monoclonal antibody moiety of sofituzumab vedotin selectively binds to MUC16. After internalization of the drug conjugate and proteolytic cleavage of the linker, MMAE binds to tubulin and inhibits its polymerization, which results in G2/M-phase growth arrest and tumor cell apoptosis. MUC16, a transmembrane protein, is overexpressed on the cell surface of more than 80 percent of ovarian cancer cells but not on healthy cells.