Open Peer Review on Qeios

Inotuzumab Ozogamicin

National Cancer Institute

Source

National Cancer Institute. Inotuzumab Ozogamicin. NCI Thesaurus. Code C71542.

A CD22-targeted cytotoxic immunoconjugate composed of a humanized IgG4 anti-CD22 antibody covalently linked to N-acetyl-gamma-calicheamicin dimethyl hydrazide (CalichDMH) with potential antineoplastic activity. Inotuzumab ozogamicin is rapidly internalized upon binding of the antibody moiety to B cell-specific CD22 receptors, delivering the conjugated CalichDMH intracellularly; the CalichDMH moiety binds to the minor groove of DNA in a sequence-specific manner, resulting in double-strand DNA breaks and apoptosis. CalichDMH is a derivative of gamma calicheamicin, a cytotoxic antibiotic produced by the bacterium Micromonospora echinospora.