Zirconium Zr 89 DFO-Daratumumab

National Cancer Institute

Source

National Cancer Institute. Zirconium Zr 89 DFO-Daratumumab. NCI Thesaurus. Code C156021.

A radioimmunoconjugate containing daratumumab, a human immunoglobulin G1 kappa (IgG1k) monoclonal antibody directed against the cell surface glycoprotein CD38, and linked, via the chelator desferrioxamine (DFO), to the radioisotope zirconium Zr 89 (Zr89), with potential diagnostic properties upon positron emission tomography (PET) imaging. Upon administration, the monoclonal antibody moiety of zirconium Zr 89-DFO-daratumumab specifically targets and binds to cell surface antigen CD38. Upon binding, the radioisotope moiety may be detected using PET, thereby allowing the imaging and quantification of CD38-expressing tumor cells. CD38, a cell surface glycoprotein, is expressed on various hematopoietic cells and is overexpressed on multiple myeloma (MM) cells.