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Zirconium Zr 89 Girentuximab

National Cancer Institute

Source

National Cancer Institute. *Zirconium Zr 89 Girentuximab*. NCI Thesaurus. Code C118295.

A radioimmunoconjugate comprised of the recombinant chimeric monoclonal antibody girentuximab, that binds an extracellular epitope of carbonic anhydrase IX (CAIX), and labeled with the radioisotope zirconium 89 (Zr 89) with potential use as an imaging agent upon positron emission tomography (PET). The antibody moiety of zirconium Zr 89 girentuximab binds to CAIX expressed on tumor cells. Upon binding, the radioisotope moiety may be detected using PET, which enables the imaging and quantification of CAIX-expressing tumor cells. CAIX, a hypoxia-inducible transmembrane glycoprotein, is overexpressed on renal cell carcinoma (RCC) and various other tumors; it plays a key role in intra- and extracellular pH regulation, cancer cell progression, survival, migration and invasion.