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# Zirconium Zr 89 Trastuzumab

National Cancer Institute

## Source

National Cancer Institute. *Zirconium Zr 89 Trastuzumab*. NCI Thesaurus. Code C90575.

A radioimmunoconjugate containing the recombinant humanized monoclonal antibody trastuzumab labeled with the radioisotope zirconium Zr 89 with radioisotopic activity and potential use as an imaging agent. The trastuzumab moiety of zirconium Zr 89 trastuzumab binds with high affinity to the extracellular domain of human epidermal growth factor receptor 2 (HER2). Upon binding, the radioisotope moiety may be detected using positron emission tomography (PET), thereby allowing the imaging and quantification of HER2-expressing tumor cells. HER2, a tyrosine kinase client protein of heat shock protein 90 (Hsp90), may be overexpressed on the cell surfaces of various tumor cell types.