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Gallium Ga 68-NOTA-anti-HER2 Nanobody VHH1

National Cancer Institute

Source

National Cancer Institute. *Gallium Ga 68-NOTA-anti-HER2 Nanobody VHH1*. NCI Thesaurus. Code C155898.

A radioconjugate composed of a nanobody directed against human epidermal growth factor receptor 2 (HER2, EGFR2, ERBB2) that is linked, through the macrocyclic chelating agent 1,4,7-triazacyclononane-N,N',N''-triacetic acid (NOTA) to the radionuclide gallium (Ga) 68, with potential use in diagnostic imaging using positron emission tomography/computed tomography (PET/CT). Upon administration of gallium Ga 68-NOTA-anti-HER2 Nanobody VHH1, the anti-HER2 antibody moiety targets and binds to HER2-expressing cells. This facilitates both detection of HER2-expressing tumor cells and assessment of responses to HER2-targeted chemotherapeutic agents during PET/CT. HER2, a tyrosine kinase is overexpressed on the cell surfaces of various tumor cell types.