

[Open Peer Review on Qeios](#)

Zirconium Zr 89 Panitumumab

National Cancer Institute

Source

National Cancer Institute. *Zirconium Zr 89 Panitumumab*. NCI Thesaurus. Code C156043.

A radioimmunoconjugate composed of panitumumab, a human immunoglobulin G2 (IgG2) monoclonal antibody directed against the epidermal growth factor receptor (EGFR; HER1; ErbB1), labeled with the radioisotope zirconium Zr 89, with potential use as an imaging agent upon positron emission tomography (PET). Upon administration of zirconium Zr 89 panitumumab, the antibody moiety targets and binds to the extracellular domain of EGFR on tumor cells. Upon PET imaging, EGFR-expressing tumor cells can be visualized and assessed. This allows quantification of EGFR-expressing tumor cells and may allow selection of patients that would respond to panitumumab therapy. EGFR, a receptor tyrosine kinase overexpressed on the cell surfaces of many tumor cell types, plays a key role in tumor cell proliferation.