## Open Peer Review on Qeios

## Zirconium Zr 89-DFO-REGN3504

National Cancer Institute

## Source

*National Cancer Institute. <u>Zirconium Zr 89-DFO-REGN3504</u>. NCI Thesaurus. Code C158733.* 

A radioimmunoconjugate consisting of an antibody directed against the immunosuppressive ligand programmed cell death-1 ligand 1 (PD-L1; cluster of differentiation 274; CD274), 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 antibody moiety of zirconium Zr 89-DFO-REGN3504 specifically targets and binds to PD-L1. Upon binding, the radioisotope moiety may be detected using PET, thereby allowing the imaging and quantification of PD-L1-expressing tumor cells. PD-L1, a transmembrane protein expressed on activated T-cells, is overexpressed in some cancer types and plays a significant role in immune evasion by tumor cells.