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# Zirconium Zr 89-labeled Atezolizumab

National Cancer Institute

## Source

National Cancer Institute. *Zirconium Zr 89-labeled Atezolizumab*. NCI Thesaurus. Code C122404.

A radioimmunoconjugate composed of atezolizumab, a humanized, Fc-optimized, monoclonal antibody directed against programmed cell death-1 ligand 1 (PD-L1) and labeled with the radioisotope zirconium Zr 89, with potential use for assessing PD-L1-expressing tumor cells using positron emission tomography (PET). Upon administration of zirconium Zr 89-labeled atezolizumab, the antibody moiety targets and binds to PD-L1. Following tumor cell uptake, the radioisotope moiety can be visualized using PET. This may result in the quantification of PD-L1-expressing tumor cells, an assessment of the expected response to treatment with atezolizumab as well as selection of patients that would respond to atezolizumab. PD-L1 is overexpressed on many human cancer cell types; PD-L1 binding to programmed cell death 1 (PD-1) on T-cells suppresses the immune system and results in increased immune evasion.