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# Gallium Ga 68-DOTA-exendin-4

National Cancer Institute

## Source

National Cancer Institute. *Gallium Ga 68-DOTA-exendin-4*. NCI Thesaurus. Code C115980.

A radiopharmaceutical composed of the glucagon-like peptide 1 receptor (GLP-1R) agonist exendin-4 linked by the macrocyclic chelator 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetic acid (DOTA) to the positron-emitting radionuclide gallium Ga 68, with potential use in diagnostic imaging upon positron emission tomography (PET). Upon administration of gallium Ga 68-DOTA-exendin-4, the exendin-4 moiety binds to GLP-1R and is subsequently internalized. The radionuclide moiety can be detected using PET and GLP-1R-expressing tumors can be localized. GLP-1R, located on beta cells, is overexpressed on insulinomas, which are insulin-secreting neuroendocrine tumors.