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Fluorine F 18-Al-NOTA-MATBBN

National Cancer Institute

Source

National Cancer Institute. *Fluorine F 18-Al-NOTA-MATBBN*. NCI Thesaurus. Code C148508.

A radioconjugate containing a bombesin (BBN) peptide analog, derived from an unspecified GRPR antagonist (MATBBN) that targets the gastrin-releasing peptide receptor (GRPR), and is linked to the radionuclide fluorine F 18 (18F), by the macrocyclic chelating agent, 1,4,7-triazacyclononane-N,N',N''-triacetic acid (NOTA), through a method that first couples 18F to aluminum (Al), with potential use in diagnostic imaging using positron emission tomography/computed tomography (PET/CT). Upon administration of fluorine F 18-Al-NOTA-MATBBN, the peptide moiety targets and binds to GRPR. Upon PET/CT, GRPR-expressing tumor cells can then be visualized. GRPR, also called bombesin receptor 2 (BB2), is a seven-transmembrane G protein-coupled receptor belonging to the bombesin receptor family. It is overexpressed in certain types of cancers. Bombesin is a peptide exhibiting high affinity for the gastrin-releasing peptide receptor (GRPR).