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Yttrium Y 90-DOTA-Biotin

National Cancer Institute

Source

National Cancer Institute. *Yttrium Y 90-DOTA-Biotin*. NCI Thesaurus. Code C1808.

A radioconjugate of biotin and yttrium Y 90 (Y-90) linked through the bifunctional macrocyclic chelating agent tetra-azacyclododecanetetra-acetic acid (DOTA) with radioimmunotherapy property. Biotin is a water-soluble B-complex vitamin, present in minute amounts in every living cell, while its level in cancerous tissue is higher than that of normal tissue. Y 90-DOTA-Biotin could be used in 3-step pre-targeting radioimmunotherapy that employs a tumor targeting antibody conjugated with streptavidin, the natural ligand of biotin.