THERANOSTICS INSIGHTS

^{177}Lu-FAP-2286

Oncidium foundation

Radioisotope

Lu-177, lutetium-177
Transition metals
T ½ : 6.71 days

Production

In nuclear reactor:
^{176}Yb (n, γ) ^{177}Yb (β-)^{177}Lu

Radiation

Beta particles (β-)
Gamma photons (γ)

Use

Potential cancer treatment: pancreatic, colon, bladder, sarcoma, NSCLC, head and neck, and agnostic tumors.

Target/Mechanism

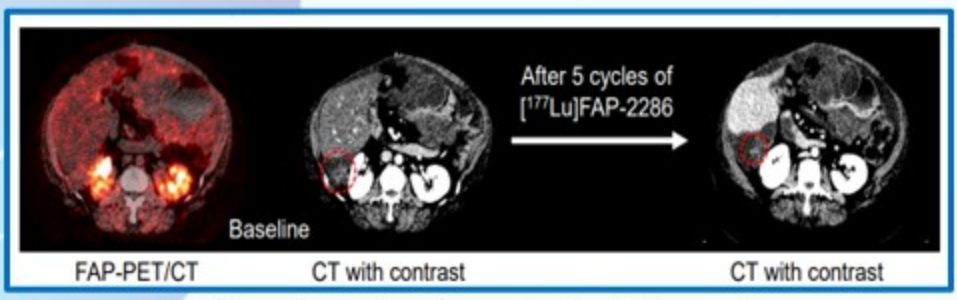
FAP-2286 acts as a fibroblast-activated protein inhibitor. The FAP protein is expressed at very low levels throughout the body; and it is overexpressed in fibroblasts associated with several types of cancer, the Cancer Associated Fibroblasts (CAF).

Insight

Clinica trial "LuMIERE: A Phase 1/2, Multicenter, Open-label, Non-randomized Study to Investigate Safety and Tolerability, Pharmacokinetics, Dosimetry, and Preliminary Activity of ^{177}Lu-FAP-2286 in Patients With an Advanced Solid Tumor" (NCT04939610).

Phase 1: safety and tolerability of ^{177}Lu-FAP-2286 and will determine the dose to be used in Phase 2. Dose-limiting toxicity (DLT) per CTCAE v5.0

Phase 2: objective response rate (ORR) in patients with solid tumors. Selection of patients with 68Ga-FAP-2286.



Source: McConathy et al. J Nucl Med. 2022, 63 (suppl 2) 2271 © SNMMI

Initial results: no DLTs or grade 3/4 AEs reported in the first dose cohort. Confirmed partial response in 1 patient who completed 6 administrations of ^{177}Lu-FAP-2286 in the 3.7 GBq (100 mCi) dose cohort