CLAIMS

1. A carcinoma-targeting conjugate comprising Formula I:

T-L-X

wherein T is a radiolabeled SST2R targeting ligand;
L is a linker, and
X is a chelator,
for the therapeutic treatment and medical imaging of cancer.

2. The conjugate of claim 1, wherein the SST2R targeting ligand is a peptide.

3. The conjugate of claim 1, wherein the SST2R ligand is an antibody or antibody fragment, or a small molecule.

4. The conjugate of claim 2 or 3, wherein the SST2R ligand is radiolabeled with a radionuclide that is used for medical imaging and/or therapy of the cancerous tumors.

5. The conjugate of claim 4, wherein the radionuclide is selected from the group consisting of Ga-68; In- 111; Pb-203; F-18; C-11; Zr-89; Sc-44; Tc-99m; Cu-64 and other medical radionuclide used for imaging.

6. The conjugate of claim 4, wherein the radionuclide is selected from the group consisting of Y-90; Pb-212; Bi-212; Bi-213; At-21 1; Lu-177; Re-188; Cu-67 (or other Cu radionuclide) and other medical radionuclide used to treat the cancerous tumors.

7. The conjugate of claim 1 whereby T is Tyr^3-octreotide.

8. The conjugate of any one of claims 1-7, wherein L is a chemical linker.

9. The conjugate of any one of claims 1-7, wherein L is a polyether linker comprising up to 4 carbons consisting of an aliphatic carbon chain that connects the chelator to the peptide backbone.

10. The conjugate of any one of claims 1-9 wherein L is PEG_n, wherein n is 1-4.

11. The conjugate of claim 10 whereby n is 2 or 4.

12. The conjugate of any one of claims 1-11, wherein X is a chelating agent based on 1,4,7,10-tetraazacyclododecane-7-acetamide-1,4,10-triacetic acid.

13. The conjugate of any one of claims 1-12 that is PSC-PEG_2/PEG_4-TOC.

14. Use of the conjugate of claim 1 in the manufacture of a medicament for the treatment of cancer.

15. The use of claim 14 whereby the conjugate is to be administered by a method selected from the group consisting of orally, parenterally, and subcutaneously.

16. The use of claim 14 whereby the conjugate is to be administered with an anti-cancer composition.

17. The use of claim 14 whereby the conjugate is to be administered in a single dose.

18. The use of claim 14 whereby the conjugate is to be administered in multiple doses.

19. The use of claim 14 is whereby the conjugate is to be administered sequentially daily for several days.

20. The use of claim 14 whereby the conjugate is to be administered in a dose of up to 150 mCi.

21. The conjugate of claim 1 for use in the treatment of cancer.