CLAIMS

1. A compound, or a pharmaceutically acceptable salt thereof, said compound comprising:
    - a progastrin moiety of sequence SEQ ID NO.1 and
    - a chelating moiety,

wherein said chelating moiety is ~~optionally~~ associated with a radioisotope and wherein said progastrin moiety and said chelating moiety are covalently linked.

2. The compound or pharmaceutically acceptable salt thereof of claim 1, wherein the chelating moiety is a bifunctional chelator.

3. The compound or pharmaceutically acceptable salt thereof of claim 2, wherein said bifunctional chelator is selected in the list of NODAGA, NOTA, *p*-SCN-Bn-NOTA, *p*-SCN-Bn-PCTA, *p*-SCN-Bn-oxo-DO3A, desferrioxamine-p-SCN, DTPA, and TETA.

4. The compound or pharmaceutically acceptable salt thereof of any one of claims 2 or ~~4~~3, wherein the bifunctional chelator is NODAGA or NOTA~~, preferably NODAGA~~.

5. The compound or pharmaceutically acceptable salt thereof of any one of claims 2 to 4, wherein the bifunctional chelator is NODAGA.

~~5.~~6. The compound or pharmaceutically acceptable salt thereof of any one of claims 1 to ~~4~~5, wherein the radioisotope is selected in the list consisting of ^{68}Ga, ^{64}Cu, ^{89}Zr, $^{186/188}$Re, ^{90}Y, ^{177}Lu, ^{153}Sm, ^{213}Bi, ^{225}Ac, ^{111}In, ^{99m}Tc, ^{123}I, or ^{223}Ra.

~~6.~~7. The compound or pharmaceutically acceptable salt thereof of any one of claims 1 to ~~5~~6, wherein the radioisotope is ^{68}Ga or ^{64}Cu~~, preferably ^{68}Ga~~.

8. The compound or pharmaceutically acceptable salt thereof of any one of claims 1 to 7, wherein the radioisotope is ^{68}Ga.

~~7.~~9. A method of preparing the compound or pharmaceutically acceptable salt thereof of any one of claims 1 to ~~6~~8, comprising the steps of:

a) conjugating an amine-reactive chelating moiety to the progastrin moiety; and

b) recovering the conjugate of progastrin and chelator, or pharmaceutically acceptable salt thereof.

~~8.~~10. The method of claim ~~7~~9, wherein the amine-reactive chelating moiety is NOTA-NHS, or NODAGA-NHS ester.

~~9.~~11. The method of any one of claims ~~7~~9 and ~~8~~10, wherein the amine-reactive chelating moiety is NODAGA-NHS ester.

~~10.~~12. The method of any one of claims ~~7~~9 to ~~9~~11, further comprising a step of:

c) incubating the conjugate of progastrin and chelator with the complementary radioisotope;

thus generating the compound or pharmaceutically acceptable salt thereof of ~~the invention~~ any one of claims 1 to 8.

~~11.~~13. A method of imaging one or more cancer cells, organs or tissues in a subject in need thereof, comprising:

a) administering a compound or pharmaceutically acceptable salt thereof of any one of claims 1 to ~~6~~8, or a pharmaceutically acceptable salt thereof, to said subject; and

detecting said compound by in vivo PET or SPECT imaging.

~~12.~~14. A method of determining the localisation of a cancer in a subject in need thereof, comprising:

a) administering a compound or pharmaceutically acceptable salt thereof of any one of claims 1 to ~~6~~8, ~~or a pharmaceutically acceptable salt thereof,~~ to said subject; and

b) detecting said compound by in vivo PET or SPECT imaging.

~~13.~~15. The method of claim ~~11~~14, further comprising a prior step of determining the level of progastrin, ~~preferably with anti-progastrin antibodies~~, in a sample of said subject.

16. The method of claim 15, wherein the level of progastrin is determined with anti-progastrin antibodies.

~~14.~~17. A pharmaceutical composition comprising a compound or pharmaceutically acceptable salt thereof of any one of claims 1 to ~~6~~8 and a pharmaceutically acceptable carrier.

~~15.~~18. A kit comprising a compound or pharmaceutically acceptable salt thereof of any one of claims 1 to ~~6~~8.