



US 20070269375A1

(19) **United States**(12) **Patent Application Publication****Chen et al.**(10) **Pub. No.: US 2007/0269375 A1**(43) **Pub. Date: Nov. 22, 2007**(54) **STABLE RADIOPHARMACEUTICAL COMPOSITIONS AND METHODS FOR PREPARATION**(75) Inventors: **Jianqing Chen**, Bordentown, NJ (US); **Karen E. Linder**, Kingston, NJ (US); **Edmund R. Marinelli**, Lawrenceville, NJ (US); **Edmund Metcalfe**, Kingston, NJ (US); **Adrian D. Nunn**, Lambertville, NJ (US); **Rolf E. Swenson**, Princeton, NJ (US); **Michael F. Tweedle**, Princeton, NJ (US)

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**NEW YORK, NY 10036 (US)**(73) Assignee: **Bracco Imaging S.p.A.**, Milan (IT)(21) Appl. No.: **10/566,112**(22) PCT Filed: **Jul. 23, 2004**(86) PCT No.: **PCT/US04/23930**

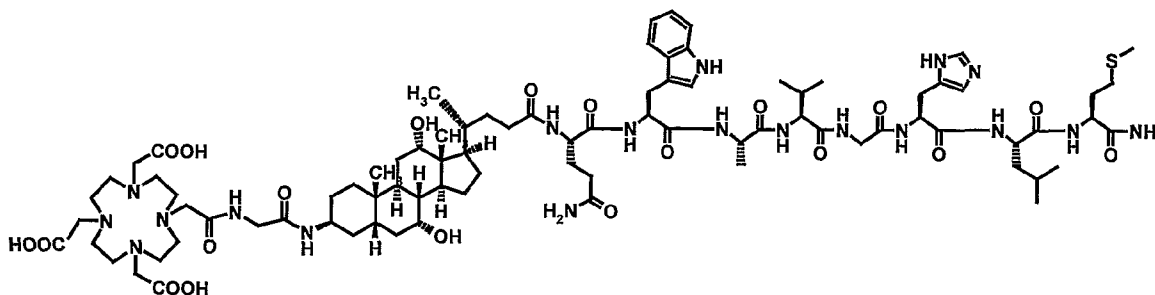
§ 371(c)(1),

(2), (4) Date: **Jul. 9, 2007****Related U.S. Application Data**

(60) Provisional application No. 60/489,850, filed on Jul. 24, 2003.

**Publication Classification**(51) **Int. Cl.****A61K 51/08** (2006.01)**A61K 103/10** (2006.01)**A61K 103/30** (2006.01)**A61K 103/36** (2006.01)**A61K 103/40** (2006.01)**A61K 31/198** (2006.01)(52) **U.S. Cl.** ..... **424/1.69**; 424/1.65; 514/561(57) **ABSTRACT**

Stabilized radiopharmaceutical formulations are disclosed. Methods of making and using stabilized radiopharmaceutical formulations are also disclosed. The invention relates to stabilizers that improve the radiostability of radiotherapeutic and radiodiagnostic compounds, and formulations containing them. In particular, it relates to stabilizers useful in the preparation and stabilization of targeted radiodiagnostic and radiotherapeutic compounds, and, in a preferred embodiment, to the preparation and stabilization of radiodiagnostic and radiotherapeutic compounds that are targeted to the Gastrin Releasing Peptide Receptor (GRP-Receptor).



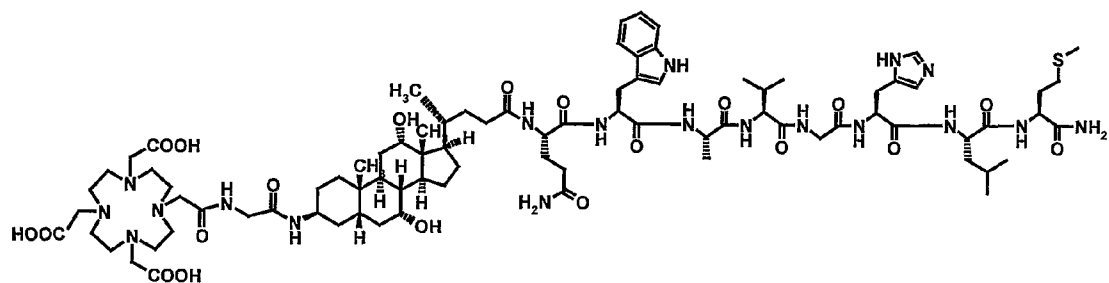


Fig. 1

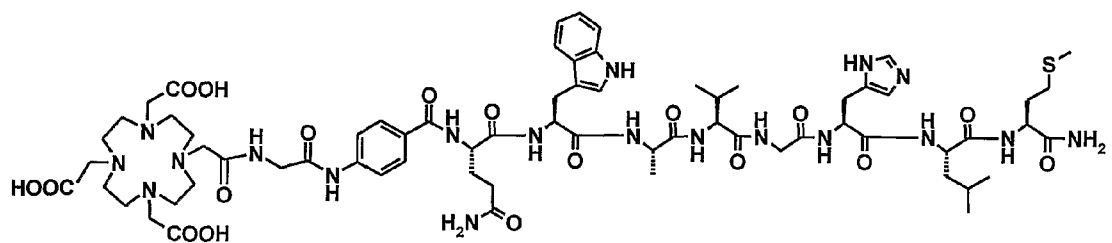


Fig. 2

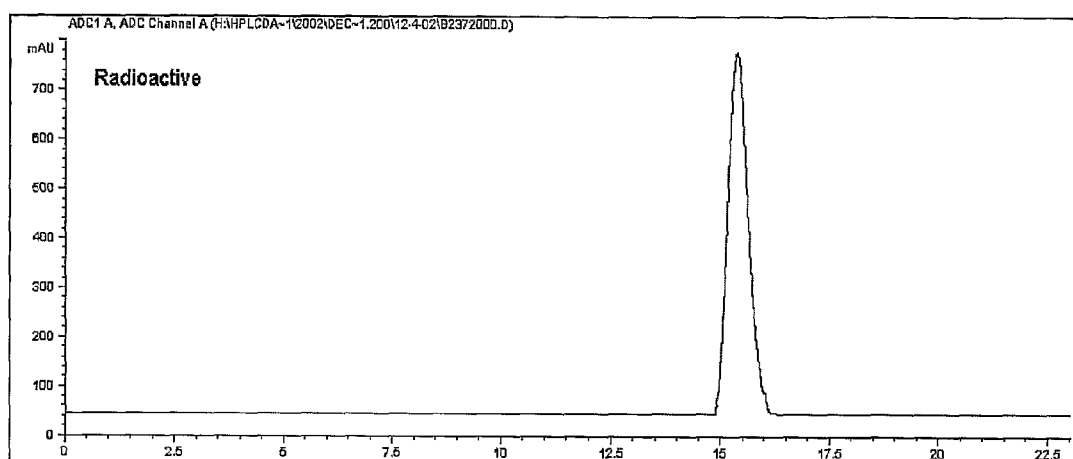


Fig. 3A

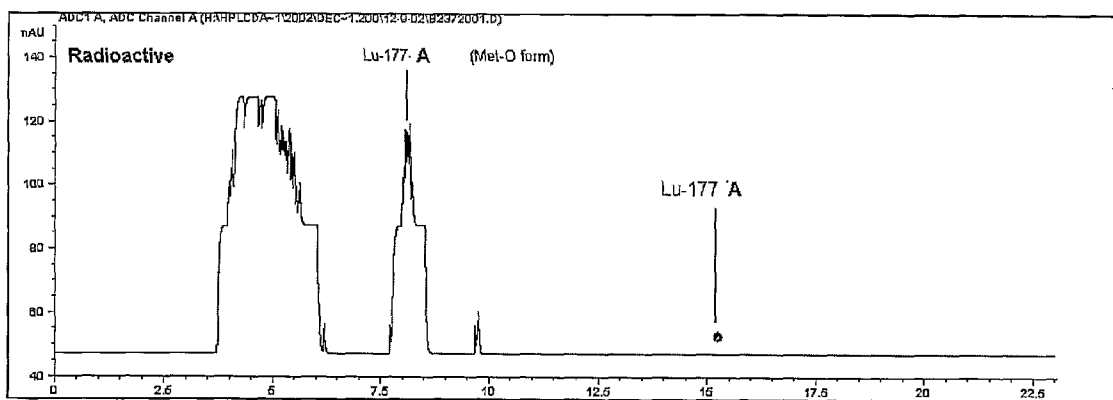


Fig. 3B

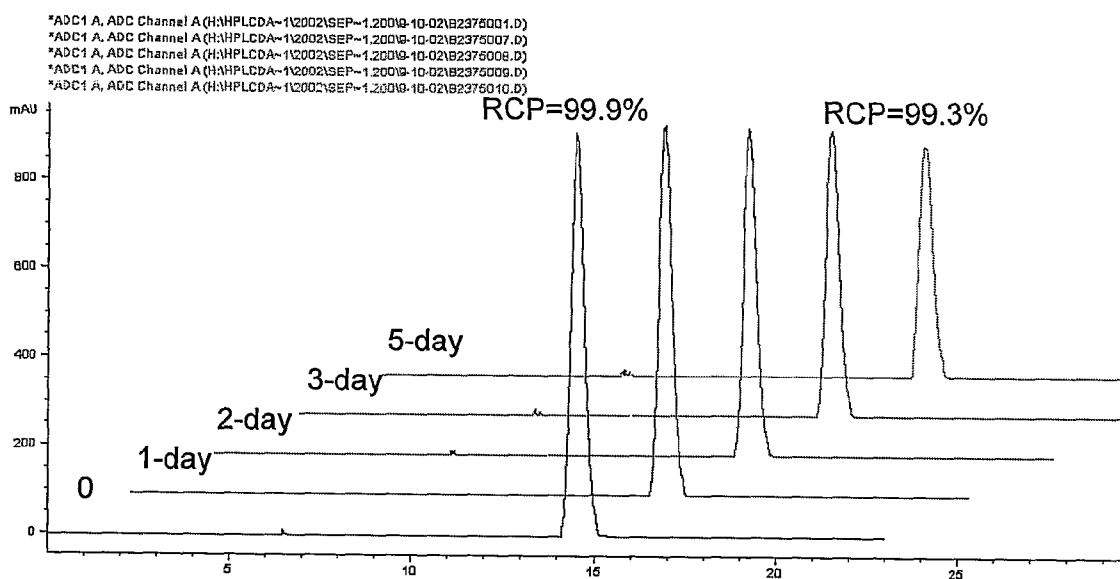


Fig. 4

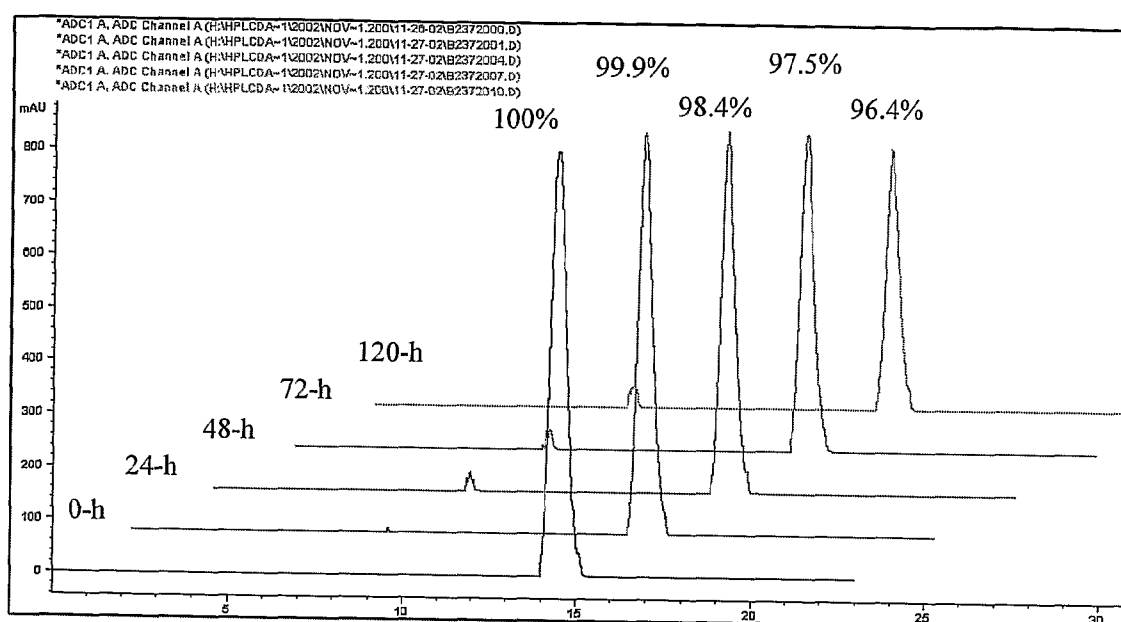


Fig. 5

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