

MULTI-TECHNIQUE MOLECULAR IMAGING AGENTS AND THEIR DIAGNOSTIC KITS

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Introduction

This invention presents formulations of diagnosis nano-agents by multi-technique imaging and also their diagnosis kits based on these formulations. Which ones are able to be concentrated on tumors and indicate their existence and localization by using techniques such as nuclear magnetic resonance imaging, positron emission tomography (PET), PET-CT, SPECT, SPECT/CT, PET/MRI and scintigraphy. Moreover, it eventually can be used as therapeutics agents (radiopharmaceuticals).

Purposes

This invention has as main purpose to confer greater sensitivity on imaging diagnosis techniques. In addition, it will be able to carry radiopharmaceuticals towards the precise local of treatment in a less invasive manner; which function allows a precocious diagnosis and more efficient tumors treatment, what increase the possibilities of healing. These formulations are also available as 'cold kits', which procedure for use is already known by medical community, what makes easier its adoption for diagnosis and treatment.

Application and Target Markets

This invention is especially relevant to laboratories, hospitals, public and private health institutions that are or aim to be acknowledged as reference center in cancer treatment and prevention.

Development Stage

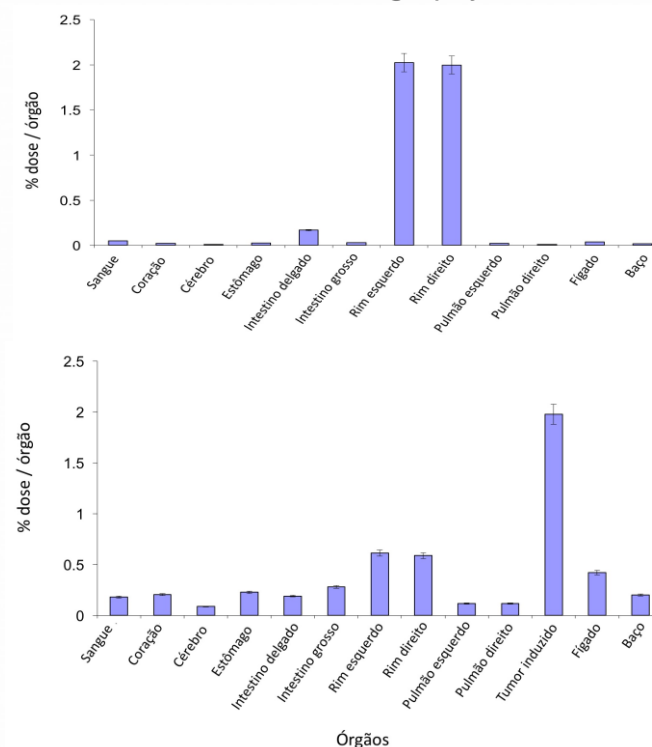
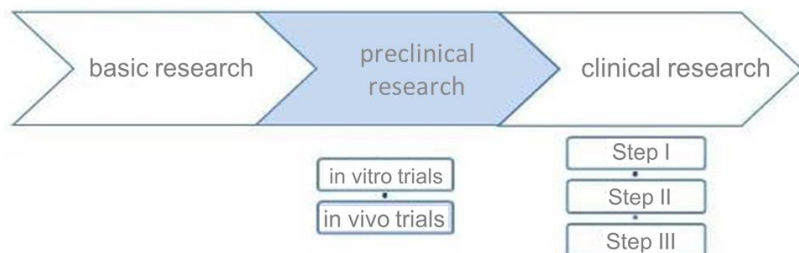


Fig. 1: bio distribution of NP combined with trastuzumab and radio-labeled with Tc-99m in Balb-C healthy organ (above) and with induced breast cancer (below).

Field: Health and Care

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