Cancer Science-2013

OMICS Group Conferences
Accelerating Scientific Discovery

3rd World Congress on
Cancer Science & Therapy

October 21-23, 2013 DoubleTree by Hilton Hotel San Francisco Airport, USA

Radiolabeled nanoparticles for diagnostic purposes: Focus on cancer

Andre Luis Branco de Barros
Federal University of Minas Gerais, Brazil

Abstract

This lecture will address a variety of topics related to the use of radiolabeled nanoparticles for imaging purposes. Starting with the concept of this technology, but also providing an overview about each nanoparticle that have been used for in such approach, including liposomes, micelles, iron oxide, gold nanoparticles, silica nanoparticles, dendrimes, etc. In addition, this lecture will include discussion of how to plan rationally the synthesis and labeling of the nanoparticles, in order to achieve dependable data from in vitro and in vivo studies. We will also have an opportunity to present some data from our laboratory using nanoparticles (liposomes, iron oxide nanoparticles, and mesopouros silica nanoparticles) for tumor identification or treatment.

Biography

Dr Andre Luis Branco de Barros worked with radiolabeled nanoparticles for tumor detection during his Master Degree, PhD and also in his Post-doc. Dr de Barros had a opportunity to work with Dr Andrew Tsoukas and Dr Abass Alavi at University of Pennsylvania where he worked with iron and gold nanoparticles for assess atherosclerotic plaque burden. He is reviewer for the International Journal of Nanomedicine, Current Molecular Imaging, Nanotechnology, Science and Application.