

The International Debate on Nanotechnology based approaches for Cancer Diagnosis and Therapy

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Polymeric nanoparticles offer a great flexibility adapting its chemistry composition, size, stability, morphology and surface functionality. As a result, they are used in Biomedicine as transporters of drugs and diagnostic agents for a wide range of applications in diagnosis and therapy. Our research team focussed its research on the design and development of chemical based therapeutic and diagnosis strategies based on nanotechnology with a clear translation outcome. A major goal of this research group is to apply our knowhow in both nanotechnology and chemical biology techniques to develop radical approaches for developing efficient diagnosis probes and selective therapies against cancer. This presentation will describe nanotechnology based diagnostic probes and therapies against cancer that are currently in clinical use and in clinical trials and the contribution of our team NanoChemBio to this area of research. Herein our more recent developments in the design of multifunctional nanoplatforms for

cancer therapy and diagnosis will be presented.

Biography

Dr. Sánchez-Martín completed her PhD at the Faculty of Pharmacy of Granada University and postdoctoral studies from Southampton University. She started her independent researcher career at the University of Edinburgh when she was awarded a prestigious Dorothy Hodgkin Fellowship from the Royal Society. In January 2011, she was awarded a Marie Curie CIG reintegration fellowship and she moved to the University of Granada. In 2013, Dr. Sánchez-Martín has been granted with her own research lab in the Centre for Genomics and Oncological Research (GENYO) integrated by Pfizer - Universidad de Granada - Junta de Andalucía. Since then, she has been leading the NanoChemBio lab. Nowadays, her research activity is focused on the development of nanotechnology based platform for diagnosis and therapy (sl.ugr.es/UGRNanoChemBio). (Up to 100 words)