

Presentation

13 March 2024

Porphyrin-coated gold nanoparticles associated with ionizing radiation in the treatment of triple-negative breast cancer

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Proceedings Volume PC12823, Optical Methods for Tumor Treatment and Detection: Mechanisms and Techniques in Photodynamic Therapy XXXII; PC1282301 (2024) <https://doi.org/10.1117/12.3000990>
Event: SPIE BIOS, 2024, San Francisco, California, United States

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Abstract

Triple-negative breast cancer (TNBC) is a subtype of the breast cancer that represents around 20% of all invasive breast cancer, which main characteristics is resistance to conventional treatments, such as exposure to ionizing radiation (IR). On the other hand, photodynamic therapy (PDT) using porphyrins has been described in the literature as a potential therapy against cancer and currently with the advance of nanomedicine, nanoparticles (NPs) have been used to deliver the photosensitizer with greater precision mainly in deep tumor. Thus, our goal in this work was to develop a NP coated with TMPyP and associate it with IR in the treatment of TNBC.

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Camila Ramos Silva, Zahra Kayani, Martha Simões Ribeiro, Guillaume Berionni, and Anne-Catherine Heuskin "Porphyrin-coated gold nanoparticles associated with ionizing radiation in the treatment of triple-negative breast cancer", Proc. SPIE PC12823, Optical Methods for Tumor Treatment and Detection: Mechanisms and Techniques in Photodynamic Therapy XXXII, PC1282301 (13 March 2024); <https://doi.org/10.1117/12.3000990>

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