SPECIFIC LIVER CANCER TREATMENTUSING DENDRITIC STEM CELLS AND GOLD NANOPARTICLESFUNTIONALIZED WITH CANCER EPITOPES

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Hepatocellular carcinomaa lethal human malignancy, is one of the most common diagnosed cancer world wide.With its impressive mortality rate as well as very low survival rate combined with chemoresitancerepresents one of the most important global health issue. We have develop a distinct nanostructured HCC vaccine model based on a nano-biosystem based on 37 nm gold nanoparticles conjugated to liver cancer epitopes. We used immunocytochemistry, flowcytometry and hyperspectral microscopy proteomic analysis, to show that our nanobioconjugatewas able to contribute to an ideal therapeutic effect against HCCby promoting major histocompatibility complex mediated (MHC) antigen presentation by dendritic cells. The proposedimmunoprophylactic approach could be highly attractive because it promotes recognition of the tumoral antigens by the immune system.