

ovary, colon, pancreas lungs and prostate). Targeting these glycoforms is a powerful approach because they are expressed only on cancer cells and are distinct from those expressed on normal cells [7,8].

In conclusion, the siRNAs designed to target the PA biosynthetic genes, ODC, SAMDC and SPDSYN the results will be shown in cell growth inhibition in oral (KB) and breast (MCF7 and MDA MB 231) cancer cell lines. One gene can be silenced simultaneously by siRNAs along with reduction in siRNA concentration. The mechanism of cell death was apoptosis. At molecular level, PA depletion leads to increased expression of pro-apoptotic and cell cycle inducing genes while the anti-apoptotic and cell cycle inhibitors were down-regulated and also demonstrated that ASPN could encapsulate, protect and specifically deliver siRNA to MCF 7 cancer cells. This study will prove that PA biosynthesis pathway plays an important role in the progression of oral and breast cancer, and silencing ODC, SAMDC and SPDSYN genes using RNAi technique may be a novel therapeutic option for abrogating cancer growth.

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