Genetically Modified Adeno-associated Virus's Improved Neutralizing Antibody Escaping and Breast Cancer Cell Targeting Ability

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Adeno-associated viruses are considered as the safe tools for gene delivery but there is one limitation that neutralizing antibodies tend to reduce the effect of these vectors. We found that the genetically modified vectors have better ability to evade from the antibody, and show the higher transduction efficiency to the breast cancer cells. Moreover, we applied some polymer to the genetically modified vectors to strengthen these vectors' properties of antibody escaping and gene delivery. Finally, these vectors were utilized for the therapeutic gene delivery for the cancer therapy.