Precise gene editing seems to be an elegant approach for understanding target gene function and to support the development of personalized therapy for various disorders like inherited genetic diseases, metabolic disorders, viral diseases and cancer. One such versatile and technological breakthrough during past decade is CRISPR/Cas9 system which transposes the landscape of genome editing in a diverse array of cell types and organisms [1]. CRISPR/Cas9 (Clustered regularly interspaced short palindromic repeats/CRISPR associated protein), a bacterial adaptive immune system that employs a single guide RNA which identifies the target genomic sequences via Watson crick base pairing and serve as a scaffold for Cas9 endonuclease binding. These endonucleases create double-strand breaks (DSBs) in the DNA which is then repaired by the endogenous cellular DNA repair mechanisms

(i.e., deletion of 558 bp) which encodes viral microRNAs, a causative region/segment for this carcinoma [3]. Yet another milestone has been stepped up against the dreadful disease, AIDS. The two different regions of the viral

5. Liang C, Li F, Wang L, Zhang ZK, Wang C, et al. (2017) Tumor cell-targeted delivery of CRISPR/Cas9 by aptamer-functionalized lipopolymer for therapeutic genome editing of VEGFA in osteosarcoma. Biomaterials 147: 68-85.

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