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Potential of RNA aptamers in the prevention of HIV-1 subtype C infections

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ABSTRACT

Compounds that have been used to prevent human immunodeficiency virus type-I (HIV-1) infections include synthetic chemicals, plant extras and monoclonal antibodies. Although most of these compounds have potent antiviral activity, they often fail to progress to later stages of clinical trials due to high toxicity and lack of specificity. Therefore, as an alternative to circumvent the above mentioned limitations we used aptamers, which are small nucleic acid ligands that recognize their target with high specificity and have no toxicity in clinical applications.