

Review of: "Novel Derivatives of BCV and (S)-HPMPA Inhibit Orthopoxviruses and Human Adenoviruses More Potently Than BCV"

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Potential competing interests: No potential competing interests to declare.

In light of the global threat that viruses pose to human health, the authors of this work synthesized two novel (S)-HPMPA prodrugs—ODE-(S)-HPMPA formate and HDP-(S)-HPMPA formate—along with a new CDV prodrug, BCV formate. They tested the antiviral effects of these compounds alongside BCV both in vitro and in vivo. Furthermore, the authors demonstrated that combining cytidine and adenine analogs provides excellent protection against vaccinia and HSV-1 infections in mice, suggesting that a combination of purine and pyrimidine analogs could be a promising strategy for developing broad-spectrum antiviral therapies. Additionally, they showed that ODE-(S)-HPMPA formate is a potent anti-hAdV agent, with a good safety profile and stronger inhibitory effects compared to BCV. Overall, the authors employed well-established tools and methods to address their research questions, and this manuscript may garner significant interest from multidisciplinary research communities due to its promising applications.