

# Review of: "Sting Pathway Activation by Orally Administered Attenuated dsRNA Vaccine Virus for Therapy of Viral Diseases"

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Potential competing interests: No potential competing interests to declare.

In this paper, the author proposes the novel use of Infectious Bursal Disease Virus (IBDV), a poultry pathogen, as a non-specific therapeutic agent for various human viral infections as well as cancer. Double-stranded RNA from the non-pathogenic attenuated IBDV virus signals the innate Stimulator of Interferon Genes (STING) pathway during infection and enhances the immune response, thereby resolving the viral infection or enabling cancer cell destruction. In addition to citing various studies that have already been performed that point to the clinical safety and efficacy of IBDV, the author presents which research studies still need to be performed in order to show the safety and efficacy of the attenuated IBDV-R903/78 candidate for drug registration. The proposed use of IBDV as an immunostimulatory agent that can aid in the resolution of non-related human infections is a novel concept which would significantly aid the human population in the event of another pandemic, such as COVID-19, where virus-specific vaccines are not available. It would be interesting to investigate whether other dsRNA non-oncolytic viruses may function in the same manner and may also be used for this purpose. Is there any research that perhaps compares the immune response elicited by the dsRNA delivered by viruses to dsRNA delivered on its own, such as RNA-based vaccines? I commend the author on a well-written and conceptualized article and appreciate his recommendations for the research that needs to be undertaken for the IBDV-R903/78 drug candidate registration. I look forward to seeing the results of the proposed research. I would also like to point out that the first time that 'HCC' is mentioned on page 6, it should be replaced by 'Hepatocellular carcinoma (HCC)'.