

# Awareness & Medicine Development for Nipah Virus <sup>†</sup>

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<sup>†</sup> Presented at Virtual symposium to observe World Antimicrobial Awareness week “Applications of biotechnology and microbiology with special emphasis on Antimicrobial resistance”, 18-24 November 2020, Chennai, India

**Received: 10.11.2020; Revised: 15.11.2020; Accepted: 17.11.2020; Published: 10.01.2021**

**Abstract:** Nipah infection disease is a zoonotic ailment that is communicated to individuals from creatures and can likewise be sent through sullied food or legitimately from individual to individual. It was first identified in 1999 in Malaysia. Nipah virus is an emerging pathogen found primarily in Bangladesh and India. Among the Asian continents, India, Bangladesh, and Indonesia have the highest number of people infected with the Nipah virus. The virus is spread to humans, especially from bats and pigs. Posters have been published to raise public awareness about the Nipah virus and the recent developments in the treatment and medicine for the Nipah virus. Docking was used to identifying putative small molecules that can potentially bind and inhibit the NiV proteins' activities. The target proteins were prepared for docking by Autodock4 by adding missing polar hydrogen atoms and Gasteiger charges. And 15 different NiV protein sequences from 3 different countries – Bangladesh, India & Malaysia. This study covers the structural model of NiV proteome, stability and design of protein-peptide inhibitor complexes, and isolation of the sequence of NiV variations. NiV is a deadly zoonotic virus with a mortality rate of 72% and 86% in Bangladesh and India, respectively. There are no approved drugs/therapeutics against NiV. The overarching aim of this study is to computationally design inhibitors and predict small molecule drugs against NiV proteins.

**Keywords:** NipahVirus(NiV); peptide inhibitor; protein sequence; NiV proteome; Asian continents; etc.

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## Funding

This research received no external funding. This research received no external funding.

## Acknowledgments

We, like to thank Dr. Ashok Kumar, BSACIST to give me the chance of expressing the findings of this review via a poster at the conference as well as for this publication.

## Conflicts of Interest

The authors declare no conflict of interest.