



*Review article*

# Recent Approach in Prophylactic Vaccine Development against Hepatocellular Carcinoma: Insights from Reverse Vaccinology

Afrin Yasmin<sup>\*1</sup>

<sup>1</sup> Department of Biotechnology, Assam University, Silchar 788011, Assam, India

<sup>\*</sup>Corresponding author email: yasafrinl@gmail.com

**Abstract:** Hepatitis C virus (HCV) has chronically infected more than 200 million populations. It is a giant global public-health issue of this era. A significant effort has been made in the field of HCV therapy both in prophylactic and therapeutic strategies. There appears to be a high degree of variation and inconsistency in the understanding of pathophysiology of the disease and its pathogen due to different patterns of study, diagnostics and prediction criteria of the vaccine against the pathogen. However, few studies have so far been reported across the world on the reverse vaccinology approach and peptide vaccine prediction. Nevertheless, more study is required in order to enhance the accuracy and fine-tuning the previously known facts. This review summarizes the risk factors associated with the virus and its complete understanding of HCV linked cancer based on findings from epidemiologic and meta-analyses data.