

# ELIMINATING ASIA'S SILENT EMERGENCY: HEPATITIS AND HEPATOCELLULAR CARCINOMA



White Paper Prepared by Vista Health July 2023



## About the APAC Liver Disease Alliance

The Alliance was launched in January 2023 and consists of founding members including diagnostics companies such as Abbott and Roche, as well as academia, NGOs, liver coalitions, patient groups, and experts. The APAC Liver Disease Alliance is the first platform in the Asia-Pacific region dedicated to addressing a wide range of liver diseases, including cirrhosis, hepatocellular carcinoma, and viral hepatitis. Its primary goals are to promote prevention, early detection, timely referral, and research in the field of liver diseases. This Alliance serves as a neutral platform for public-private dialogues, emphasizing the importance of effective liver disease prevention, control, and management while advocating for optimal policies that benefit both health systems and society as a whole.

To find out more about or get involved with the APAC Liver Disease Alliance, please visit https://apacliverdiseasealliance.org/.

#### **Co-authors**

2

We would also like to thank the following representatives from the strategic partners of the APAC Liver Disease Alliance for co-authoring this White Paper:

**Dr Bethany Holt** Harvard Medical School

**Ms Capucine Pénicaud** EndHep2030 (The Hepatitis Fund)

**Dr John Ward** Coalition for Global Hepatitis Elimination

**Ms Lindsey Hiebert** Coalition for Global Hepatitis Elimination

**Ms Roberta Sarno** APAC Liver Disease Alliance

## **Table of Contents**

1.	Fo	reword		4
2.	2. Executive Summary			5
	►	21.	Critical success factors for hepatitis elimination	6
	►	2.2.	Critical success factors for comprehensive HCC management	6
	►	2.3.	The investment case for hepatitis and HCC	6
	►	2.4.	Policy recommendations for hepatitis and HCC	7
3.	Int	roductio	on	8
4.	Methodology			15
5.	HBV, HCV and HCC landscape assessment of select APAC markets			17
	►	5.1.	Key challenges in the hepatitis and HCC patient journeys	17
	►	5.2.	Gaps in HBV and HCV policy, funding, screening and linkage to care	18
	►	5.3.	Gaps in HCC surveillance and funding	28
6.	Th	e invest	ment case for hepatitis elimination and HCC management	37
	►	6.1.	The investment case for Hepatitis B elimination	38
	►	6.2.	The investment case for Hepatitis C elimination	39
	►	6.3.	The investment case for HCC surveillance	40
7.	Key policy recommendations for HBV, HCV and HCC			41
	►	7.1.	Action point 1: Hepatitis national action plans need to be more comprehensive	43
	۲	7.2	Action point 2: Expand hepatitis screening and treatment, integrated within existing health systems and tailored to the needs of affected populations in different settings	46
	Þ	7.3	Action point 3: Governments can secure greater funding by integrating hepatitis and HCC into broader health initiatives and employing blended financing models	49
	۲	7.4	Action point 4: Implement a comprehensive national HCC surveillance program and ensure timely access to treatment for HCC and hepatitis	53
	۲	7.5	Action point 5: Increase awareness and identify policy champions to drive political commitment	57
8.	Conclusions		59	
9.	Appendix		60	
10.	Ac	Acknowledgement		67
11.	Re	References		

### **01 Foreword**



#### **Ms Capucine Pénicaud** Director, Program and Partnership, The Hepatitis Fund

The release of the first APAC Liver Disease Alliance White Paper is timely. It addresses the clear need for better linkage between hepatitis care and cancer care in the APAC region, where liver diseases contribute to significant mortality, economic losses, and grief in communities from this region. Hepatitis deaths in Asia-Pacific account for more than half of the global death toll and hepatitis is the leading cause of liver cancer.

This Paper highlights the gaps in HBV and HCV policy, funding, and screening. Importantly, it provides a strong, practical five-point plan to address gaps in the hepatitis and liver cancer landscapes across APAC. At the Hepatitis Fund, we firmly believe that hepatitis care is cancer prevention, and we are pleased that the Alliance is actively working to fill that gap and working towards integration, both upstream towards public health approaches to infectious diseases and downstream towards cancer screening and care.

We are confident that this White Paper will pave the way for more significant collaborations and partnerships that can make a real difference in the lives of those affected by liver diseases.



**Dr John Ward** Director, Coalition for Global Hepatitis Elimination

In an era characterized by advances in medical science and public health, an unyielding health crisis remains: viral hepatitis and its complications such as hepatocellular carcinoma. These present a significant socio-economic burden in the APAC region, where hepatitis deaths have accounted for 63% of the global death toll.

In response to this pressing issue, the APAC Liver Disease Alliance has released its first White Paper for hepatitis and HCC. Central to this White Paper is a pragmatic five-point action plan that represents a blueprint to encourage funding allocation and guide the implementation of national hepatitis action plans and national HCC surveillance programs, tailored to the Asia Pacific context.

As a diverse alliance focused on Asia Pacific, the APAC Liver Disease Alliance is uniquely positioned to support the outlined policy recommendations, and its work will play a pivotal role in implementing strategies that enable more robust linkages between public health approaches to infectious diseases and downstream HCC surveillance and care.

We at the Coalition for Global Hepatitis Elimination are committed to working together to expand access to HBV and HCV services and improve early detection of HCC. It is our sincere hope that this White Paper serves not just as a guiding document, but as an ignitor of further collaborations and partnerships to accelerate progress towards HBV and HCV elimination in APAC.

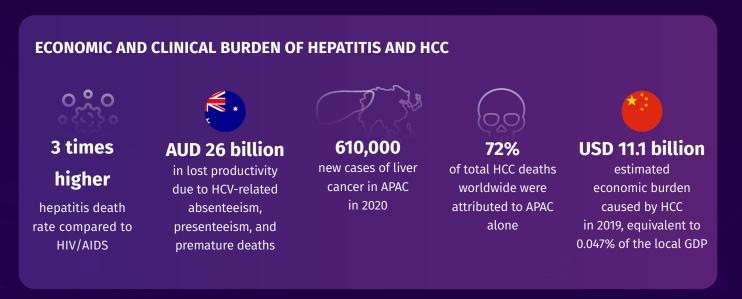
APAC Liver Disease Alliance

## **02 Executive Summary**

5

Liver diseases, which can be caused by viral infections, inherited conditions, obesity and alcohol misuse, have a significant impact on public health in the Asia-Pacific (APAC) region, where 63% of global deaths from liver diseases occur. Without systemic action, this public health emergency threatens to worsen. This paper focuses specifically on hepatitis and liver cancer, also known interchangeably as HCC (hepatocellular carcinoma) given that it is the most common type of liver cancer. While non-alcoholic steatohepatitis (NASH) and non-alcoholic fatty liver disease (NAFLD) contribute to HCC development, viral hepatitis, particularly HBV and HCV, remains the primary cause of HCC in APAC.

The aim of this white paper is to assess the current landscape of liver diseases in APAC, investigate gaps and provide evidence-based recommendations to reduce the clinical, economic, societal, and humanistic burden of hepatitis and HCC and improve public health in the APAC region.



The current landscape for liver diseases was assessed through a targeted literature review of international and national sources, including journal publications and expert roundtable outputs. Efforts towards eliminating hepatitis need to be intensified as most APAC territories are not on track to eliminate hepatitis and reduce the burden of liver cancer by 2030, despite the World Health Organization (WHO) Global Health Sector Strategy (GHSS) on viral hepatitis setting out this target for elimination of viral hepatitis.

### 2.1 CRITICAL SUCCESS FACTORS FOR HEPATITIS ELIMINATION

The presence of a national plan, sufficient political will and coordination, adequate funding, and well-established screening and treatment integrated within existing health systems and tailored to the needs of different populations in different settings are key to hepatitis elimination. The challenges and recommendations were raised, developed and refined through the collaborative efforts of leading hepatitis and HCC experts, including a Liver Alliance Charter workshop (*the Alliance Charter can be accessed here*) and a roundtable discussion organised by the alliance in Feb 2023.

### 2.2 CRITICAL SUCCESS FACTORS FOR COMPREHENSIVE HCC MANAGEMENT

We base the critical factors for effective HCC surveillance and management on Japan's gold standard surveillance model and opinions of other regional key opinion leaders in HCC. The factors identified include the presence of a national HCC surveillance program, sufficient political will and coordination, adequate funding, extensive surveillance protocols, public education, careful and accurate treatment selection, and high-quality treatment techniques. Adequate funding is crucial for the successful implementation of comprehensive HCC surveillance programs utilizing ultrasound and tumour markers.

### 2.3 THE INVESTMENT CASE FOR HEPATITIS AND HCC

We also present the investment case for increasing investment in hepatitis elimination and comprehensive HCC management in the region. A comprehensive HBV elimination program consisting of diagnosis, linkage to care, and treatment is costeffective and saves health system resources. Screening for HCV can lead to significant cost savings, and combining screening with treatment will lead to a high return on investment. Biannual ultrasound and AFP (Alpha Fetoprotein) tumour marker test are the most cost-effective surveillance methods for patients with cirrhosis and chronic HBV.

#### **HEPATITIS ELIMINATION AND HCC SURVEILLANCE IS COST SAVING**



By 2035, every USD 1 spent on HBV elimination in Philippines and Vietnam will return USD 2.23 and USD 1.70 respectively



#### **USD 9.1 billion**

net economic benefit in Pakistan by 2050 if USD1.45 billion is invested in HCV elimination



Cost of illness (COI) trended downwards in Japan with the presence of a national surveillance program while COI trended upwards in Taiwan between 2002 and 2014



### 2.4 POLICY RECOMMENDATIONS FOR HEPATITIS AND HCC

Based on the evidence of the health and economic benefits associated with tackling liver diseases, there is a clear need for APAC governments and all stakeholders to take decisive action. We propose five key actions that are needed to reduce the burden of Hepatitis and HCC in the APAC region:



In conclusion, there is an urgent need to address liver diseases in APAC, which are causing the death of approximately 1.5 million people every year in the region. Every stakeholder in the ecosystem, from policymakers and funders to physicians and patients, has something to offer and gain. The APAC Liver Alliance aims to unite all stakeholders to tackle the rising liver disease epidemic in the region. Investing in these diseases offers a positive return on investment and the opportunity to reduce suffering and death for millions every year.



### **10 Acknowledgements**

We would like to thank the following experts who kindly contributed to this White Paper by sharing their knowledge and experience.

Dr Arvinder Singh Soin Institute of Liver Transplantation and Regenerative Medicine, India

- Dr Edhel Tripon Hepatology Society of the Philippines
- Dr Emi Okamoto Clinton Health Access Initiative (CHAI)
- Dr Huma Qureshi Doctor's Plaza Hospital, Pakistan
- Dr Jasmine Pwu National Hepatitis C Program Office, Ministry of Health and Welfare, Taiwan
- Dr Nguyen Huyen Nguyen National Hospital for Tropical Diseases, Vietnam
- Dr Parag Govil Clinton Health Access Initiative (CHAI)
- Dr Saeed Hamid Coalition to Eradicate Viral Hepatitis in Asia Pacific (CEVHAP)
- Dr Shuichiro Shiina Department of Gastroenterology, Juntendo University, Japan
- Dr Tawesak Tawandee Siriraj Hospital, Thailand
- Dr Vu Ngoc Bao PATH
- Ms Hwei Lynn Lau The Hepatitis Fund

Prof Masatoshi Kudo Department of Gastroenterology and Hepatology, Kindai University Faculty of Medicine, Japan

Prof. Manal El-Sayed Egyptian National Committee for Control of Viral Hepatitis (NCCVH)

Prof. Yuen Man Fung Division of Gastroenterology and Hepatology, Department of Medicine, The University of Hong Kong, Hong Kong

Ms Yu Hui Chan Clinton Health Access Initiative (CHAI)