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HEPATOCELLULAR CARCINOMA IN ASIA: PHYSICIAN AND PATIENT PERSPECTIVES ON SURVEILLANCE, DIAGNOSIS, AND TREATMENT

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SELECTED HIGHLIGHTS

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BACKGROUND

- In 2020, liver cancer caused 830,000 deaths, making it the **third leading cause of cancer-related deaths worldwide**. In Asia, liver cancer accounts for 72.5% of global cases, with the majority being hepatocellular carcinoma (HCC)[1,2]

- **The primary causes of HCC in Asia are chronic infections by hepatitis B virus (HBV) and hepatitis C virus (HCV)**. Additional risk factors include aflatoxin exposure, excessive alcohol intake, smoking, obesity, type 2 diabetes mellitus, and non-alcohol-related steatohepatitis (NASH)[2,3,4]

- The treatment landscape for HCC in Asia is changing, with systemic treatment options increasing. **The combination of atezolizumab and bevacizumab is now preferred for first-line treatment of advanced HCC**, according to the latest international guidelines[5,6]

1. Sung H, et al. CA Cancer J Clin. 2021;71:209-49; 2. Zhang CH, et al. Liver Int. 2022;42:2029-41; 3. Chen LT, et al. Ann Oncol. 2020;31:334-51;
4. Goh GB, et al. Best Pract Res Clin Gastroenterol. 2015;29:919-28; 5. Gordan JD, et al. J Clin Oncol. 2020;38:4317-45;
6. Su GL, et al. Gastroenterology.2022;162:920-34

STUDY OBJECTIVES

1. Provide an overview of the **different screening, diagnosis & treatment strategies** for HCC in the Asia Pacific countries

2. Explore **HCC patient journeys** across the Asia Pacific region

3. Improve the **HCP & patient collaboration** on HCC management in the Asia Pacific region

……..in order to provide an overview of HCC management in the Asia Pacific region, comparison with international guidelines and insights on what should be improved as a priority

HCC, Hepatocellular carcinoma; HCP, healthcare professional

Mohamed, R et al. J Gastrointest Canc (2024). https://doi.org/10.1007/s12029-024-01089-5

PARTICIPANTS AND METHODS

- **Survey development**
  - Survey questions were crafted with input from the Scientific Committee, comprising HCPs and patient representatives from regional and national organisations
  - Two surveys were created, one of 55 questions for physicians diagnosing and treating HCC, and one of 36 questions for patients diagnosed with HCC and ≥18 years old
  - Online surveys were disseminated using a range of approaches in Indonesia, Korea, Malaysia, Singapore, Taiwan, Thailand and Vietnam

- **Survey participation and approach**
  - Two cross-sectional, anonymized, online surveys were conducted between July and December 2022
  - Surveys were distributed via email and social media by physician authors and patient advocacy groups. Some patient surveys were administered on paper due to poor internet access
    - 276 responses received from physicians diagnosing and treating HCC across Indonesia, Korea, Malaysia, Singapore, Taiwan, Thailand, and Vietnam
    - 130 responses received from HCC patients in Thailand, Taiwan, and Vietnam

HCC, Hepatocellular carcinoma; HCP, healthcare professional

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HCP AND PATIENT SURVEY: RESPONDENTS DEMOGRAPHICS

HCP, healthcare professional

SURVEY RESPONDERS: HCP CHARACTERISTICS

	Indonesia	Korea	Malaysia	Singapore	Taiwan	Thailand	Vietnam	Total
Physician respondents, n	38	31	43	33	34	65	32	276
Hepatologist or gastroenterologist, %	71	65	58	58	62	97	19	66
Oncologist, %	13	16	19	24	15	0	50	17
Interventional radiologist, %	5	13	9	9	3	2	13	7
Hepatobiliary surgeon, %	11	6	7	9	3	0	16	7
Nurse, %	0	0	0	0	18	0	3	3
Other, %	0	0	7	0	0	2	0	1
Primary institution								
Large national hospital or medical centre, %	55	58	58	64	71	49	63	59
Mid-sized or regional hospital, %	42	39	33	33	26	34	31	34
Private clinic, %	3	3	5	3	3	11	3	5
Rural or local hospital, %	0	0	0	0	0	2	3	1
Other, %	0	0	5	0	0	2	0	1

HCP, healthcare professional

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SURVEY RESPONDERS: PATIENT CHARACTERISTICS

	Taiwan	Thailand	Vietnam	Total
Patient respondents, n	40	59	31	130
Age				
18-29 years, %	3	2	3	2
30-39 years, %	3	5	3	4
40-49 years, %	28	8	23	18
50-59 years, %	25	25	29	26
60-69 years, %	10	37	29	27
70-79 years, %	30	10	10	16
≥79 years, %	3	12	3	7
Sex: male, %	70	64	74	68
HCC stage at diagnosis				
Early, %	53	63	35	53
Intermediate, %	30	17	39	26
Advanced	5	0	13	5
Don’t know, %	8	17	10	12
Other, %	5	3	3	4
HCC stage currently				
Early, %	30	39	29	34
Intermediate, %	28	15	48	27
Advanced	13	5	16	10
Don’t know, %	13	27	3	17
Other, %	18	14	3	12

HCC, Hepatocellular carcinoma

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PATIENT SURVEY RESULTS
N=130

SINCE RECEIVING DIAGNOSIS, PATIENTS SUBSTANTIALLY IMPROVED THEIR KNOWLEDGE OF THE RISK FACTORS FOR HCC

Risk factor	Change in knowledge since diagnosis of HCC, % respondents				
	Significantly improved	Somewhat improved	Slightly improved	No change	Not aware of this factor
Cirrhosis	50	24	12	11	4
Alcohol consumption	49	25	14	8	4
Hepatitis B or C	45	27	15	7	5
HCV infection	45	27	12	7	9
HBV infection	42	28	12	7	11
Family History	42	26	12	12	8
NASH	40	20	18	7	15
Drug abuse	34	25	19	7	15
Metabolic syndrome[a]	34	26	15	12	12
Blood transfusion haemodialysis, shared needles	33	25	15	6	21

[a] Obesity, diabetes, arterial hypertension

HBV, hepatitis B virus; HCC, hepatocellular carcinoma; HCV, hepatitis C virus; NASH, non-alcohol-related steatohepatitis

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ONE THIRD OF PATIENTS WOULD HAVE LIKED BETTER COMMUNICATION TO HELP THEM UNDERSTAND THE DISEASE

Factor to improve	Patient respondents, %		
	Male	Female	Total
Communication by doctor	30	38	33
Speed of diagnosis	27	40	31
Access to imaging	15	33	20
Availability of patient association or group support	18	23	19
Other	9	8	8

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HCP SURVEY RESULTS
N=276

HCP, healthcare professional

HCC SURVEILLANCE IS NOT EFFICIENT TO IDENTIFY HCC PATIENTS, HOWEVER GROUPS AT RISK OF HCC ARE WELL UNDERSTOOD

	Indonesia	Korea	Malaysia	Singapore	Taiwan	Thailand	Vietnam	Total
Patients identified, respondents, %								
≤10%	32	0	28	0	21	22	53	22
10%-<20%	34	39	16	27	21	34	25	28
20%-<40%	29	55	23	33	21	20	9	26
40%-<50%	3	6	19	18	18	9	9	12
50%-<70%	3	0	9	12	12	6	3	7
70%-<90%	0	0	5	9	3	9	0	4
>90%	0	0	0	0	6	0	0	4
Group at risk, patients, %								
HBV infected	32	37	36	33	42	35	46	37
Liver cirrhosis	37	18	22	25	16	20	15	22
HCV infected	19	24	17	14	23	12	15	17
Fatty liver or NASH	10	9	16	17	6	12	10	12
Alcohol-related cirrhosis	6	12	8	10	10	20	13	12
Other	0	0	1	0	3	0	0	1

HBV, hepatitis B virus; HCC, hepatocellular carcinoma; HCV, hepatitis C virus; NASH, non-alcohol-related steatohepatitis

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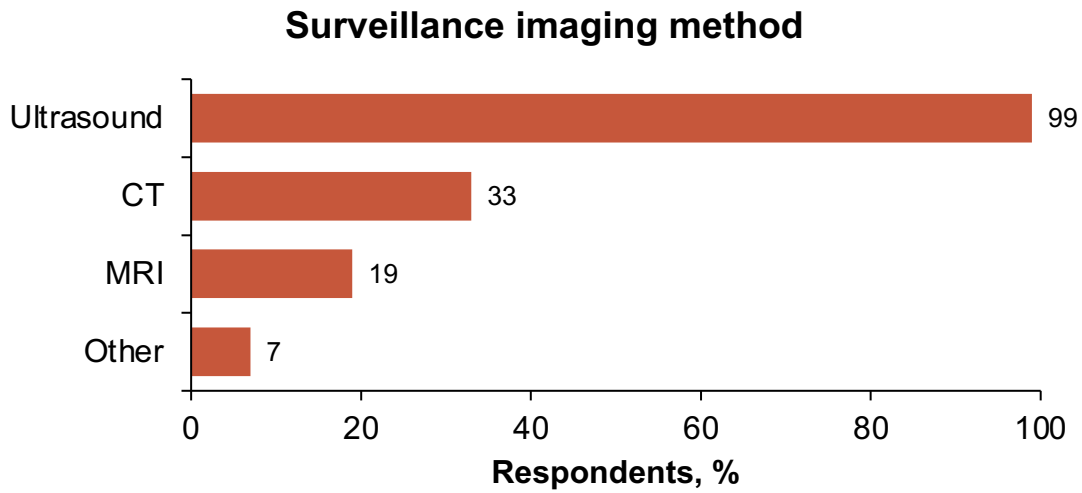
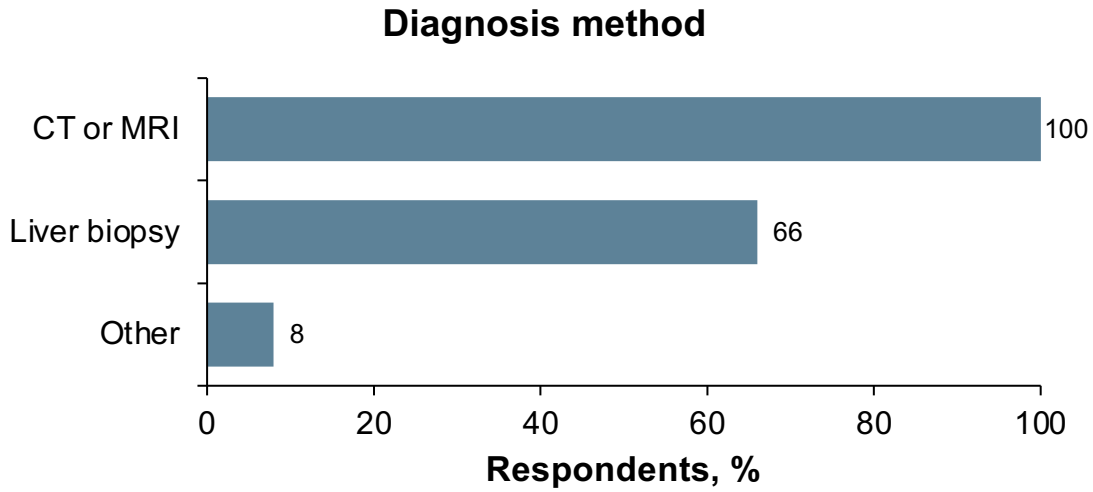
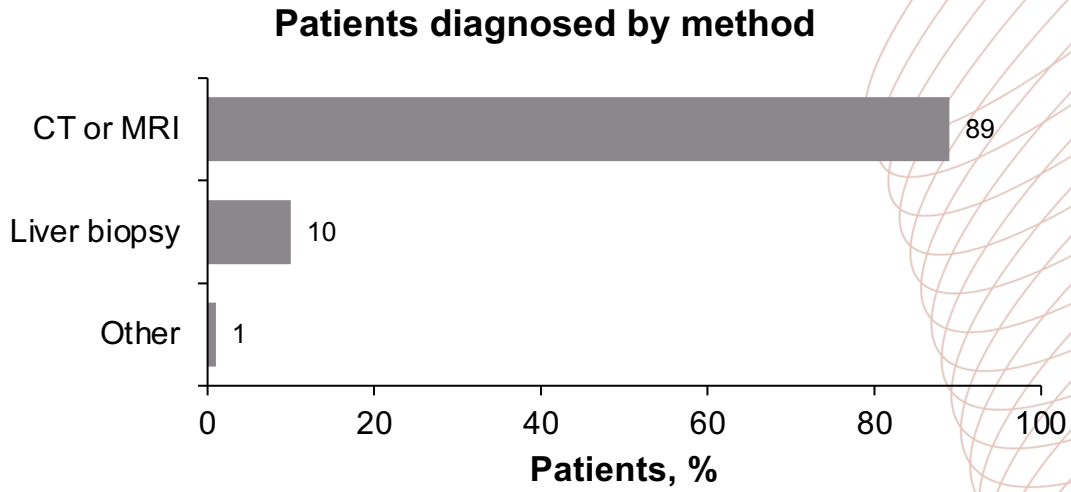
HCC SURVEILLANCE: PRIMARY IMAGING METHOD USED FOR SURVEILLANCE IS ULTRASOUND







CT, computed tomography; MRI, magnetic resonance imaging

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TREATMENT OF HCC: HCP PERSPECTIVES FROM ASIA

Treatment	Indonesia	Korea	Malaysia	Singapore	Taiwan	Thailand	Vietnam	Total
Early or intermediate HCC								
Resection, %	95	97	98	97	97	97	100	97
Local ablative therapy, %	76	81	88	82	100	94	81	87
TACE, %	97	68	86	64	94	92	88	86
Transplantation, %	53	87	67	97	91	68	75	75
Radioembolisation or TARE, %	53	39	70	64	62	62	69	60
Radiation therapy, %	37	61	44	61	79	49	44	53
Advanced HCC								
First line								
Sorafenib, %	97	100	88	73	97	77	100	89
Lenvatinib, %	89	97	91	85	97	49	88	81
Atezolizumab + bevacizumab, %	76	58	63	82	82	54	72	68
Second line[a]								
Regorafenib, %	84	100	28	76	88	45	88	68
Pembrolizumab, %	32	81	51	70	82	45	88	56
Nivolumab, %	87	65	26	52	85	46	6	51
Ramucirumab, %	55	77	0	58	74	20	28	40
Cabozantinib, %	18	58	26	73	56	14	6	33
Nivolumab + ipilimumab, %	18	23	12	42	62	34	9	29

[a] Other treatments (immunotherapy, tyrosine kinase inhibitor, or other) are used by ≤7% of respondents

HCC, hepatocellular carcinoma; TACE, transarterial chemoembolisation; TARE, transarterial radioembolization

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DISCUSSION

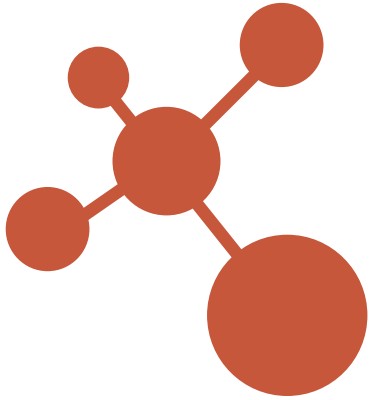
- **Surveillance strategies for HCC need enhancement** as fewer than 20% of cases are diagnosed at an early stage. **Increasing the role of general practitioners and primary care providers** in raising suspicion and awareness of HCC is essential for **early detection**

- There is a **significant need to improve patient education regarding HCC risk factors**, as **knowledge typically increases only after diagnosis**. Programmes targeting both the general population and primary care can aid in early detection and management

- While newer treatments like **atezolizumab and bevacizumab are becoming more common, access and affordability remain issues**. Improved management of **treatment side effects and better support systems**, including case managers and social care workers, can enhance patient care and satisfaction

HCP, healthcare professional; NET, neuroendocrine tumour; SRL, somatostatin receptor ligand

CONCLUSION



Awareness

Efforts should focus on increasing awareness of HCC risk factors among primary care providers and the general population to enable early diagnosis and improve chances of curative treatment

Doctor-patient communication

Doctors should better understand their patients' needs and concerns, particularly in managing side effects, to provide more effective support. Including trained nurses or case managers can improve patient education and support

Access to treatments

Programmes are needed to enhance patients' access to proven HCC treatments that prolong survival, ensuring that financial and system barriers do not prevent patients from receiving the best available care

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