11th International Viral Hepatitis Elimination Meeting (IVHEM) 2025

Commitments to Hepatitis Elimination in Taiwan

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TAIWAN
September 13, 2025



Outline

- Taiwan Profile and Current Status of Hepatitis and HCC
- **Policies for Hepatitis and Liver Cancer Care**

3 Future Perspective

Taiwan's Healthcare Statistics as of 2024

 Taiwan has consistently ranked first in the Numbeo Health Care Index from 2019 to 2024.

Life Expectancy

83.7(F)/76.9(M)

(As of December 31, 2023)

Infant Mortality Rates

4.3 %

(As of December 31, 2023)

National Health Insurance Coverage

99.93%

(As of December 31, 2023)

Beds

Hospitals 138,664 Clinics 33,053

(As of December 31, 2023)

	Doctors	Clinics
Western Medicine	54,016	12,200
Chinese Medicine	7,883	4,194
Dentistry	16,285	7,026
Total	78,184	23,420

Hospitals

Public 82

394

Private

(As of December 31, 2023)

Registered Nurses

187,725

(As of December 31, 2023)

Pharmacy

9217

(As of October 31, 2024)

Pharmacists

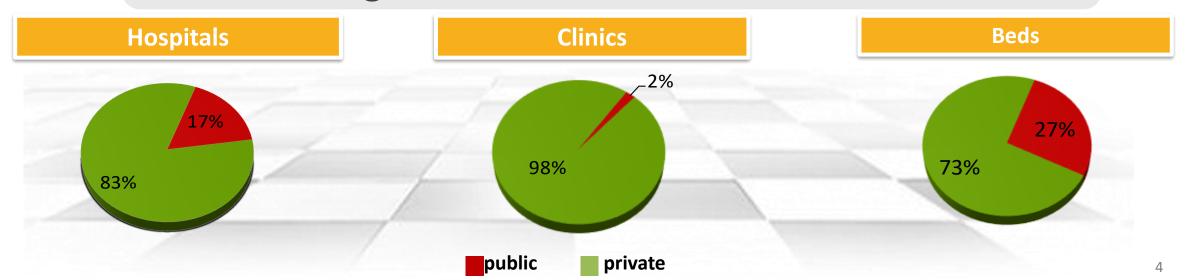
36,726

(As of December 31, 2023)

(As of December 31, 2023)

Taiwan's Healthcare Delivery System

- Dominated by the private sector
- A closed-staff model for hospitals
- No gatekeeper system
- High volume of hospital OPD services
- No waiting lists as defined in western countries

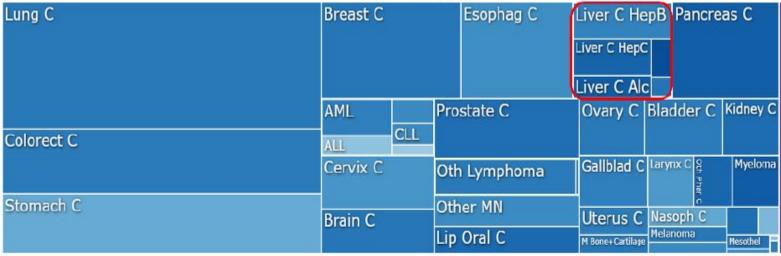


NHI Characteristics

Coverage	Compulsory enrollment for all citizens and legal residents
Administration	Single-payer system run by the government
Financing	Premiums
Benefits	Uniform package, copayment required
Providers	Contract-based About 92% of healthcare providers are contracted with NHI
Payment	Plural payment programs within the global budget payment system
Privileges	Premium subsidies and copayment waivers for disadvantaged individuals

Burden of Liver Diseases





Death Rate	Liver Cancer	Attributed to Hepatitis B or C
Global	0.72%	68%
Taiwan	2.25%	80%

Both sexes, All ages, 2021, Deaths Lung C Breast C Esophag C Liver C HepB Pancreas C Liver C HepC Ovary C Bladder C Prostate C Kidney C AML Colorect C Oth Lymphoma Oth Phar C Myeloma Gallblad C Cervix C Other MN Lip Oral C Brain C Stomach C Uterus C Nasoph C

Taiwan (Province of China)

Taiwan has a higher burden of liver diseases compared to the global average.

HBV Has a Role in the aetiology of HCC





The Lancet

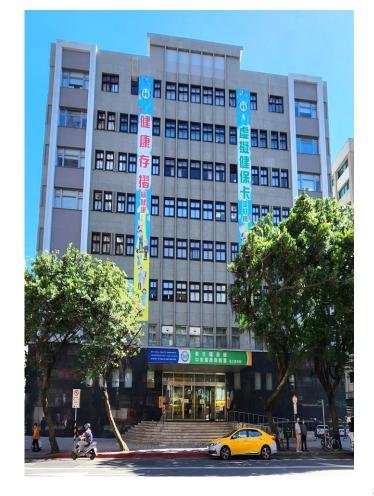
Volume 318, Issue 8256, 21 November 1981, Pages 1129-1133

HEPATOCELLULAR CARCINOMA AND HEPATITIS B VIRUS: A Prospective Study of 22 707 Men in Taiwan

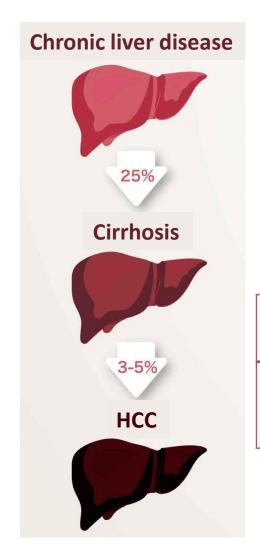
R.Palmer Beasley ^{a b}, Chia-Chin Lin ^{a b}, Lu-Yu Hwang ^{a b}, Chia-Siang Chien ^{a b}

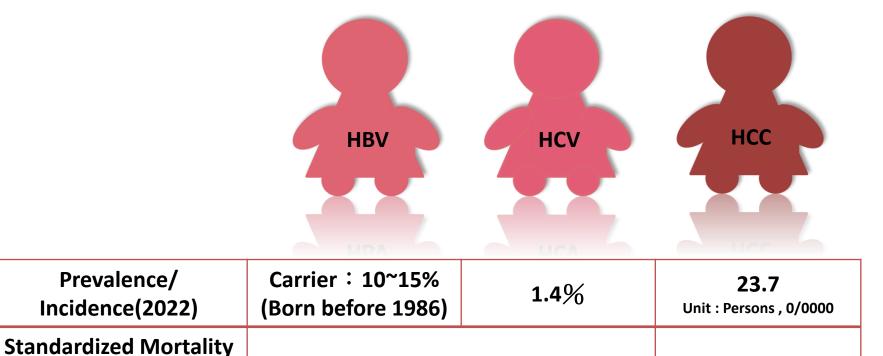
Abstract

A prospective general population study of 22 707 Chinese men in Taiwan has shown that the incidence of primary hepatocellular carcinoma (PHC) among carriers of hepatitis B surface antigen (HBsAg) is much higher than among non-carriers (1158/100 000 vs 5/100 000 during 75 000 man-years of follow-up). The relative risk is 223. PHC and cirrhosis accounted for 54-3% of the 105 deaths among HBsAg carriers but accounted for only 1-5% of the 202 deaths among non-carriers. These findings support the hypothesis that hepatitis B virus has a primary role in the aetiology of PHC.



Epidemiological Statistics on Hepatitis and Liver Cancer





National Hepatitis and Liver Cancer Prevention and Control Plan (2021–2025); p9 Observatory, P., Global change in hepatitis C virus prevalence and cascade of care between 2015 and 2020: a modelling study. Lancet Gastroenterol Hepatol, 2022. **7**(5): p. 396-415.

CANCER REGISTRY ANNUAL REPORT, 2022, TAIWAN Ministry of Health and Welfare (MHW)

Prevalence/

(2022)

Unit: Persons, 0/0000

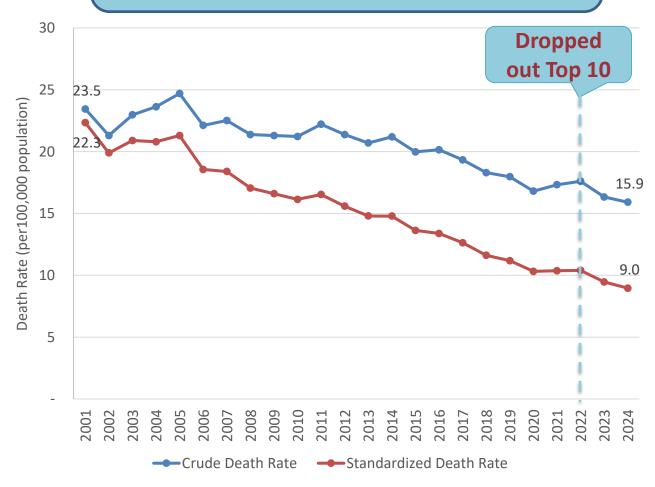
15.3

Trends in Mortality Rates of Chronic Liver Disease and **Cirrhosis**

Causes of Death

2024





	Death Rate			Death Rate
ALL	410.3		ALL	558.7
Malignant neoplasms	113.3		Malignant neoplasms	143.1
Heart diseases	45.5	2	Cerebrovascular diseases	57.8
Pneumonia	30.1	3	Heart diseases	48.8
Cerebrovascular diseases	23.9	4	Accidents and adverse effects	41.5
Diabetes mellitus	20.2	5	Hypertensive diseases	39.8
Hypertensive diseases	16.0	6	Chronic liver disease and Cirrhosis	22.3
Accidents and adverse effects	19.2	7	Nephritis, nephrotic syndrome, and nephrosis	17.9
Chronic lower respiratory diseases	10.7	8	Pneumonia	16.8
Nephritis, nephrotic syndrome, and nephrosis	10.4	9	Suicide	11.7
Intentional self-harm (suicide)	13.4	10	Hypertensive disease	7.9
Vascular and unspecified dementia	6	11		
Chronic liver disease and cirrhosis	9	12		
				9

Rank

Standardized

Death Rate

2001

Causes of Death

Standardized

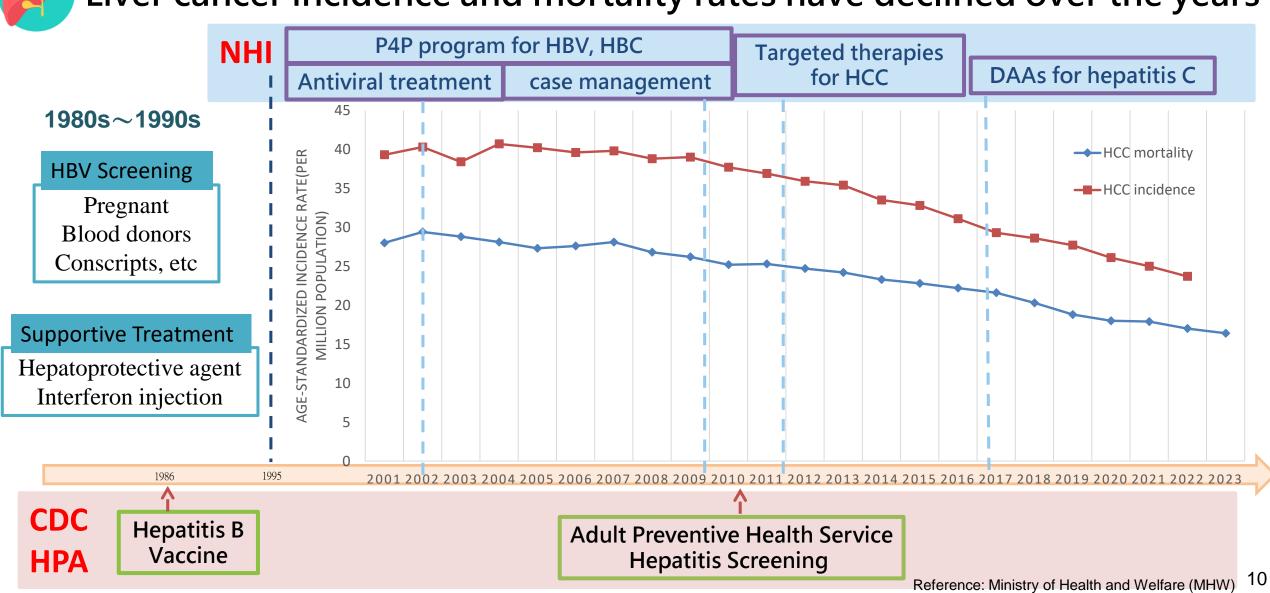
Death Rate

Reference: Ministry of Health and Welfare (MHW)

Policies for Hepatitis and Liver Cancer Care



Liver cancer incidence and mortality rates have declined over the years



Hepatitis B Vaccine Immunization

Pregnant Women: Screening for Hepatitis B in Early Pregnancy





Pregnant Women:

A clinical evaluation by a physician is needed to determine the need for medication.

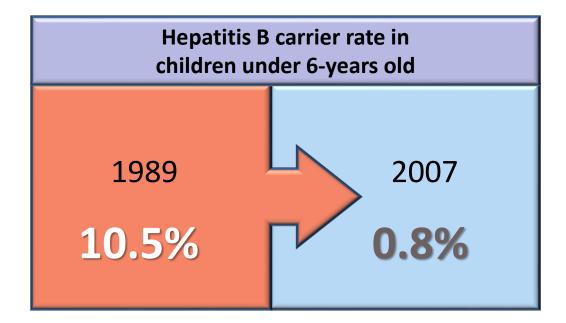
Babies:

- 1. One dose of hepatitis immune globulin and one dose of hepatitis B vaccine must be given within 24 hours of birth.
- 2. 2 doses of hepatitis B vaccine must be administered, one dose at each of the following ages: 1 month and 6 months.

Babies:

3 doses of hepatitis B vaccine must be administered, one dose at each of the following ages: within 24 hours of birth, 1 month, and 6 months.





Mothers must screen for hepatitis B and babies must receive hepatitis B vaccine to drastically reduce the risk of infection

National Programs for Hepatitis Screening

Adult Preventive Health Service (Since 2011)



Target Group:

- Citizens aged 45-79
- indigenous peoples aged 40-79

Service:

One-time free screening

Family Physician Program (Since 2024)



Target Group: Enrolled members

Policy Features:

- In 2024, "hepatitis B and C screening rate" was added as a performance indicator
- Combines health education with proactive referral to enhance early detection and treatment

Results (as of end of 2024).

- Approximately 5.26 million were eligible (52%)
- Around 2.34 million people (72%) had completed hepatitis B and C screening









Outpatient Dialysis Service Quality Improvement Program (Since 2020)

Target Group:

• Dialysis patients with chronic kidney failure

Screening Frequency:

Annual screening for HBsAg and HCV antibodies

Results:

• Screening rate has exceeded 96% over the past five years



Integrated P4P Program (Since 2010)

Target Group:

 Patients with diabetes, early-stage kidney disease, DKD, and Pre-ESRD

Mechanism:

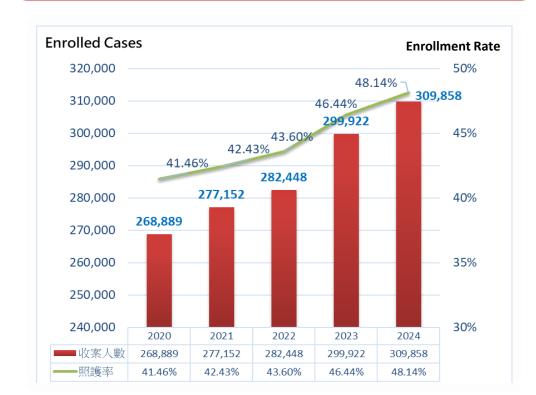
- B/C hepatitis screening is encouraged for patients eligible under the Adult Preventive Health Program
- HCV antibody testing is recommended as part of riskbased care in the DM/CKD program for other patients

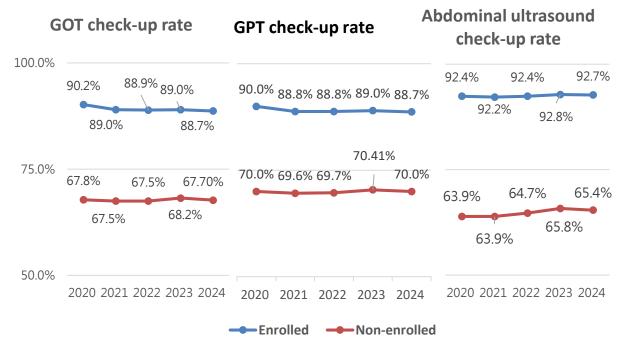
Hepatitis B and C Pay For Performance Program

Through the <u>quality-based payment system</u> and <u>incentive rewards</u>, healthcare institutions are encouraged to offer hepatitis B and C surveillance, strengthen case tracking and health education services, and provide comprehensive and continuous care.

Enrollment rate increased from 41.5% (2020) to 48.1% (2024)

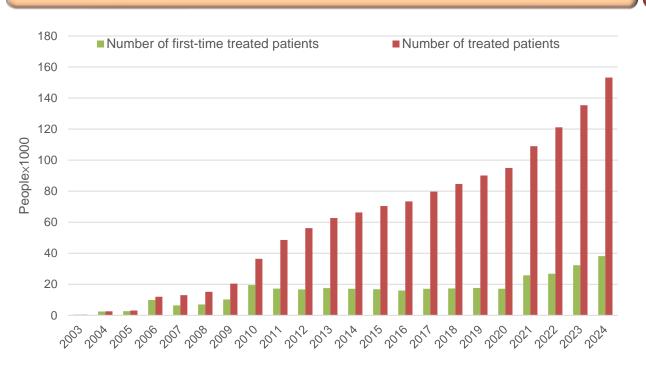
GOT \ GPT and ultrasound check-up rate of the enrolled cases were higher than non-enrolled





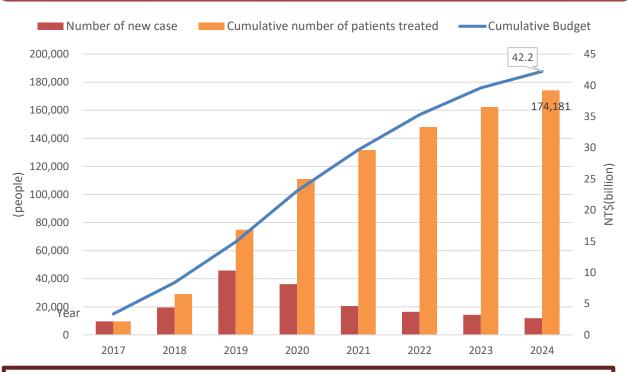
Reimbursement of Antiviral Therapy for Hepatitis Proactively Improves the Treatment Rate

Hepatitis B Treatment



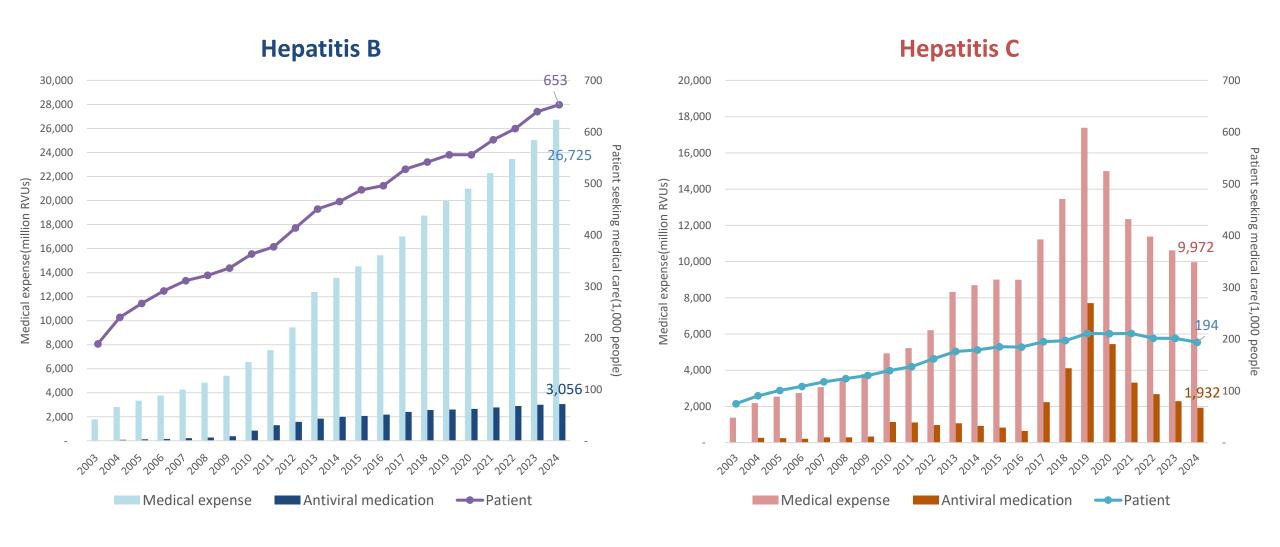
- Since October 2003, NHI has covered antiviral treatment for hepatitis B
- As of 2024, 352,000 patients have received treatments

Hepatitis C Treatment



- NHI has covered Direct-Acting Antivirals (DAAs) for hepatitis C since 2017
- With designated funding for hepatitis C treatment, more than 174,000 people received DAAs treatment up to 2024

Reimbursement and Treatment for Hepatitis B, C patients by NHI



Family Physician Program Launched in 2003

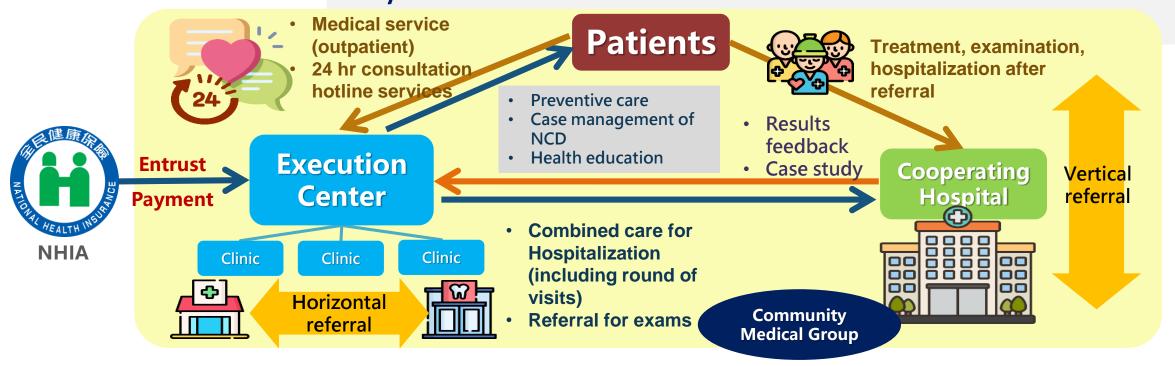
2025
Enrolled
Cases:
6.47 million
people

471 Community
Medical Groups

5,456 Clinics
8,026 Physicians

- Encouraging the formation of "Community Medical Groups"—coalitions of five or more local clinics and referral hospitals, to offer the holistic care for NCD patients.
- Priority is given to elderly individuals, chronic disease patients, and those with high utilization, who are assigned to clinics participating in the program for health management.
- Hepatitis B and C screening rate is one of KPIs since 2024, the rate that year was 71.9%.

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District hospital Holistic Community Care Program

Launched on August, 2024

Program Description

- ✓ To strengthen the prevention of the Triple High Diseases—hypertension, hyperglycemia and hyperlipidemia.
- ✓ Aims to include patients with the Triple High Diseases who are not yet under managed care.
- ✓ District hospital deliver comprehensive and continuous care services, including primary care (such as preventive health services and cancer screenings), lifestyle counseling, disease treatment, and health education.

2024 Progress

- √ 127 local hospitals, 471 physicians, 45,655 patients enrolled.
- ✓ Referral system with 80 regional or higher-level hospitals and 703 clinics.
- ✓ Hepatitis B/C screening rate: 68%.
- ✓ Preventive service rates (e.g. Fecal occult blood tests rate, Influenza vaccinations for the elderly rate, Hepatitis B/C screening rate) above national average.

Preventive service	Adult Preventive Health Care rate	Papanicolaou test rate	Fecal occult blood tests rate	Influenza vaccinations for the elderly rate	Hepatitis B/C screening rate
patients in the program	32.6%	20.5%	36.4%	51.0	68.0%
ALL	33.6%	24.0%	30.9%	46.0%	56.5%

HCC Treatment Aligning with International Guidelines

- Dual immune checkpoint inhibitor therapy (Durvalumab, tremelimumab) for HCC was reimbursed on February 1, 2025 (NCCN category 1, preferred)
- HCC drugs currently reimbursed

Class	Drugs		
First-Line			
Immunotherapy + Targeted Therapy	atezolizumab + bevacizumab (August 1, 2023)		
Dual Immunotherapy	durvalumab+tremelimumab (February 1, 2025)		
Target Therapy	sorafenib (e.g. Nexavar®)lenvatinib (e.g. Lemima®)		
Second-Line			
Target Therapy	regorafenib (e.g. Stivarga®)		
Monoclonal Antibody	ramucirumab (e.g. Cyramza®)		



Taiwan's National Strategy to Reduce Cancer





By 2030, cancer mortality rate will be reduced by





APRIL 27, 2024
NATIONAL FORUM
PRESIDENTIAL SUMMARY

Three stemp for cancer treatment



Improving Cancer Early Detection

Genetic Testing & Precision Medicine



Cancer Drugs Fund to Enhance Access for New Drugs

2023

Conditional Listing Mechanism

- ✓ Urgent clinical needs but uncertain in efficacy and safety
- √ Temporarily pay for 2 years
- ✓ Collect real world data (RWD) or clinical trial results for review

2024

Dedicated Fund within Global Budget

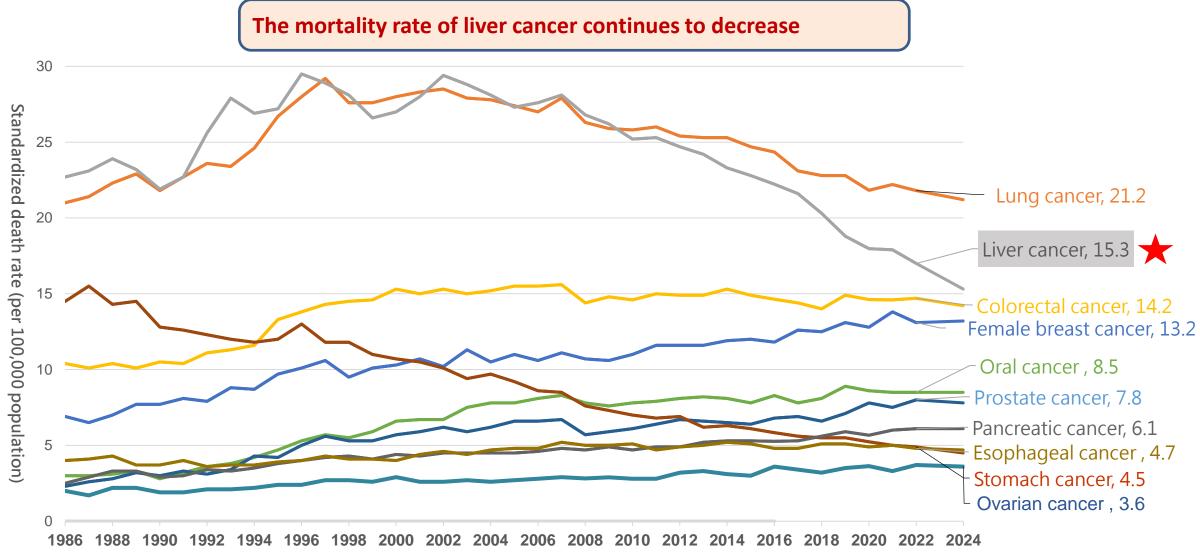
✓ Dedicated funding \$2.43 billion NTD for year 2024

2025~Furure

Independent Funding For TCDF

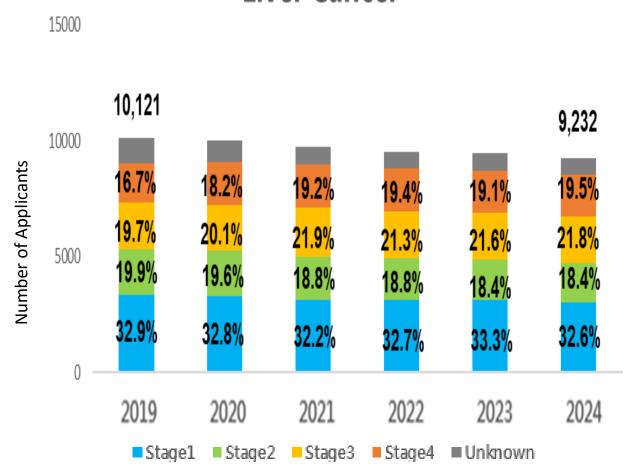
- The government allocated \$5 billion NTD in 2025 from the public budget to the NHI, specifically for the "Taiwan Cancer Drugs Fund" outside the NHI global budget
- Planning to stablish a \$10 billion NTD Taiwan Cancer Drug Fund starting 2027

Trends in Standardized Mortality Rates of the Top 10 Cancers in Taiwan



Early Detection is Critical for Improving Cancer Survival

Liver Cancer



According to **Taiwan Cancer Registry data** (2017-2021), the **5-year relative survival rate** for early-stage cancer of the liver cancers.

Stage	0	1	2	3	4
Liver Cancer	76.9	66.7	51.5	12.9	3.3



Eliminating Viral Hepatitis by 2030

High Hepatitis Transmission

Uncontrolled global viral spread

Reduce New Infections

Lower hepatitis B/C infections by **90%**

Reduce Hepatitis Deaths

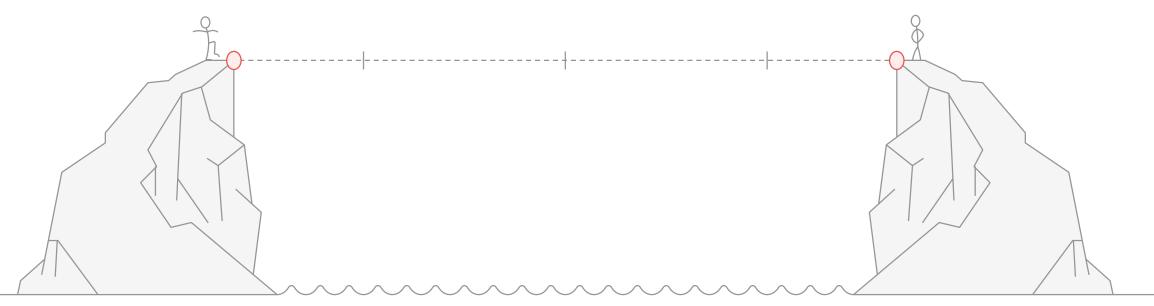
Lower hepatitis B/C deaths by 65%

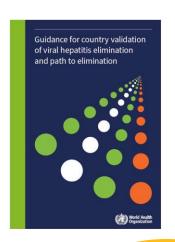
Treat Eligible Patients

Treat **80%** of chronic hepatitis B/C

No Hepatitis Transmission

Controlled global viral spread

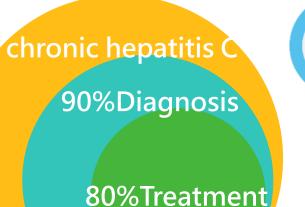




Eliminating Viral Hepatitis in Taiwan

WHO Goal: Eliminate Viral Hepatitis by 2030

- Diagnosis of individuals with chronic hepatitis ≥ 90%
- Treatment of those diagnosed ≥ 80%





Goal Achievement Status of Hepatitis C

According to HPA statistics, over 95% of diagnosed chronic hepatitis C patients in Taiwan received treatment → exceeding the WHO 2030 target (≥80%)



Hepatitis C Elimination Validation

The application for hepatitis C elimination validation will be submitted to the WHO Western Pacific Region ASAP.

Status of Hepatitis B

The national program for hepatitis B elimination is still ongoing.

Advancing HCC Outcomes through Strategic **Health Financing**

- 0

NHI Coverage

Ensures equitable access to treatments through comprehensive

coverage

\$ 0

Viral Hepatitis Screening/Control

Focuses on screening, early detection, and treatments to reduce disease burden

P4P Programs for Case Management

Enhances care quality through performancebased incentives

HCC Patients Health Outcomes

Accelerates inclusion of new drugs to align with international guidance

Sustainable Financing for Cancer

Optimizes cancer drug spending through value-based payments



My Commitment for Viral Hepatitis Elimination in the Highest HCV Prevalence Area in Taiwan 12 Years Ago



Actively promote case management of patients with hepatitis B, C and chronic kidney disease to reduce the number of patients with liver cancer or dialysis

