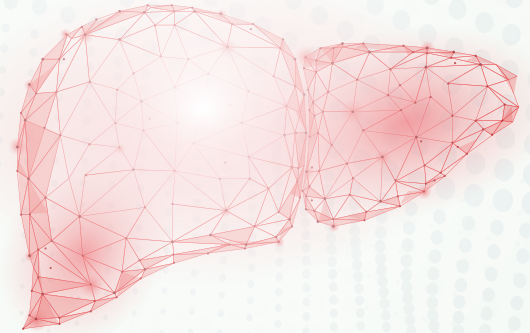


## YOUR RIGHT PATH TO TRUSTED BIOMARKERS FOR EARLY DIAGNOSIS OF HEPATOCELLULAR CARCINOMA



Liver cancer is currently the 6th most common cancer worldwide. Accurate and prompt diagnosis are crucial to improve early-stage detection.



**AFP/AFP-L3%/DCP complement each other to improve early liver cancer detection rate<sup>(1)</sup>.**

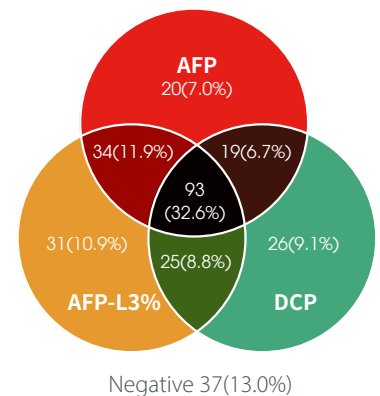
**AFP:** Routinely used in HCC screening and **clinical diagnosis**.

**AFP-L3%:** **Extremely high specificity** for liver cancer and is **not affected by AFP** levels. U.S. FDA approved AFP-L3% with the cut-off value of **AFP-L3  $\geq$  10%**.

**DCP:** Serum biomarker **independent from AFP-L3%** and **AFP** for HCC risk assessment. The elevation of both AFP-L3 and DCP indicate **progression of HCC**.






(1) Best J, Bilgi H, Heider D, et al. Zeitschrift Für Gastroenterologie, 2016, 54(12): 1296-1305.

Detection rate of liver cancer in 285 patients



### Early screening, early diagnosis and early treatment is critical

The earlier it is found, the higher the survival rate, the lower the treatment cost, and the better the treatment effect!

Super Early (0)	Early (A)	Middle Stage (B)	Late Stage (C)	Terminal Stage (D)
<b>Tumor burden</b>				
 Single tumor $\leq$ 2cm	 Single tumor > 2cm 2-3 tumors all $\leq$ 3cm	 Multiple tumors > 3 or $\leq$ 2 And any tumor $\geq$ 3cm	 Large vessel invasion or extrahepatic spread	 HCC not amenable to liver transplantation
<b>Treatment options</b>				
Ablation Excision	Suitable for surgical resection Liver transplantation Ablation	Suitable for liver transplantation Ablation	Chemoembolization	Systemic therapy, drug therapy Best supportive care
<b>Estimated survival time</b>				
>5 years	>2 years	11-13 months (first-line) 8-10 months (second-line)	3 months	



## Diagnostic advantages of AFP/AFP-L3%/DCP

- **Efficient:** Early liver cancer can be found **3-28 months earlier** than Magnetic Resonance Imaging (MRI).
- **Accurate:** The early **screening rate** of liver cancer can reach **81.6%-87.8%**; the screening rate of middle and advanced liver cancer can reach **96% of accuracy**.
- **Convenient:** **Only 1-4 ml of serum** is needed to complete the test.
- **Surveillance:** Treatment effect and **recurrence monitoring** of HCC patients.

## Recommendation guidelines:



## HOTGEN Liver Cancer Detection Solution: Chemiluminescence Immunoassay Analyzer







MQ60 proB



MQ60 Smart

Tests	Sample	Detection range	Reference	Testing analyzers
AFP	Serum, plasma	0.6-1200 ng/mL	$\geq 7$ ng/ml	MQ60 Smart, MQ60proB
AFP-L3%	Serum, plasma	5%-50%	$\geq 10\%$	MQ60proB
DCP	Serum	5-20000 ng/mL	$\geq 40$ ng/ml	MQ60 Smart, MQ60proB

### Application Scenario:

-  (a) Hepatitis B virus and/or hepatitis C virus infection
-  (c) Non-alcoholic steatohepatitis
-  (e) Liver cirrhosis caused by various causes such as schistosomiasis
-  (g) People with diabetes, obesity or severe obesity
-  (b) Long-term alcohol abuse (alcoholic liver disease)
-  (d) Exposure to contamination of aflatoxin
-  (f) People with a family history of liver cancer
-  (h) Men over 35 years old, women over 45 years old