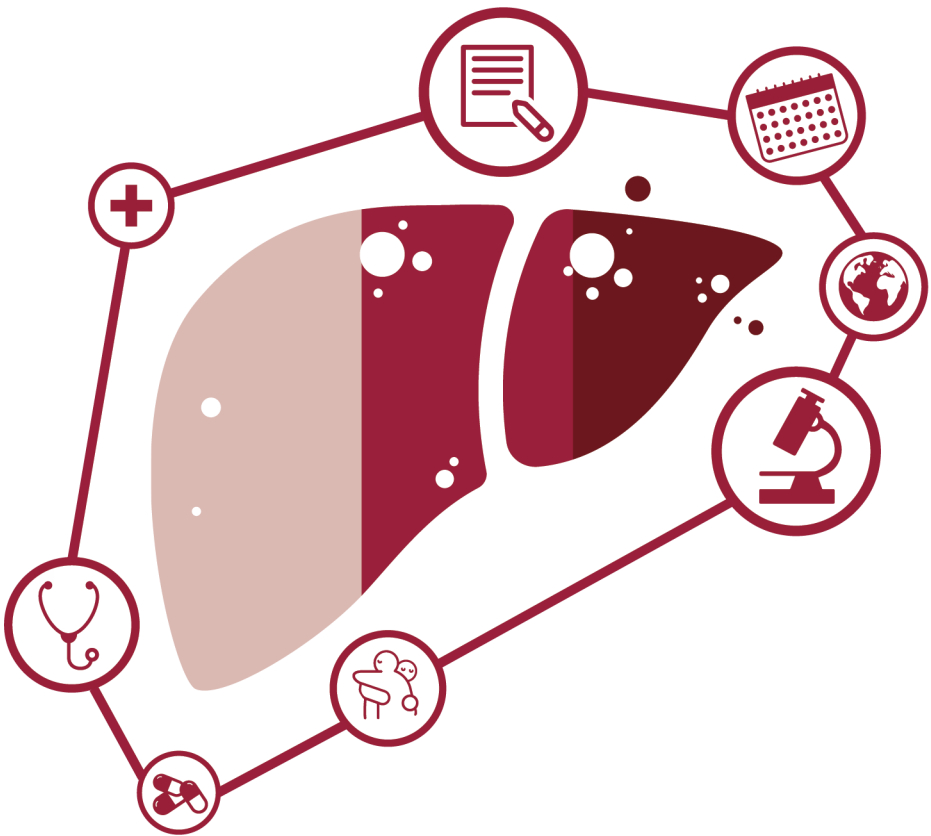


Understanding Hepatocellular Carcinoma (HCC)



Liver Cancer Lessons

Understanding HEPATOCELLULAR CARCINOMA

Hepatocellular carcinoma (HCC) is the most common form of liver cancer, making it the sixth most common cancer worldwide¹. Men over the age of 60 have a higher risk of developing HCC than women and younger men². HCC develops in liver cells called hepatocytes. Hepatocytes are the main liver cells responsible for secreting bile to aid digestion; secreting albumin which prevents fluid leakage from blood vessels into other organs; filtering toxins; and breaking down carbohydrates, lipids, and proteins. In total, your liver does more than 500 jobs to keep your body healthy.

HCC is the **most common** form of liver cancer making it the

6th

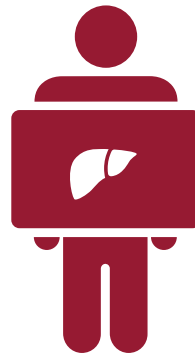
most common cancer **worldwide**¹

Pre-existing chronic liver diseases significantly increase your likelihood of HCC³. These conditions can drain your liver's ability to regenerate and cause cirrhosis (or severe scarring), which may lead to the overproduction of unhealthy liver cells. Uncontrollable growth of these cells can then form into cancerous tumors.

Once identified, a diagnosis is determined based on the cancer's location and stage⁴. Cancer staging is usually determined by:

- Physical exams
- Imaging tests (i.e. x-rays, CT scans)
- Endoscopy exams (procedures that allow doctors to see inside the body)
- Biopsies (in which a small piece of your tissue is removed for investigation outside the body)⁴

Results then allow physicians to decide the most appropriate treatment option based on the number, size, and location of the tumor(s)⁵. It is important to work with a multidisciplinary care team to create a treatment plan that is unique to your needs.

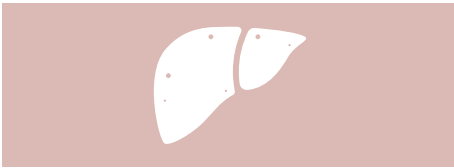


Pre-existing chronic liver diseases **significantly increase** your likelihood of HCC³.



STAGES OF HCC

With **very early** or **early stage** HCC, small tumor(s) are located in your liver, and you are eligible for vigorous treatments such as resection (removal of a part of the liver) or liver transplantation⁶.



At the **intermediate stage**, primary liver cancers have not spread to your lymph nodes or distant organs, and cannot be completely removed by surgery, but can be treated or managed⁶.



Advanced stage and **metastatic stage** HCC indicates that the cancer has spread to lymph nodes or other organs beyond the liver⁶. Systemic therapy is recommended and is given by pills or injected into the bloodstream.



RISK FACTORS



Chronic viral hepatitis B & C



Obesity



Chronic alcohol use



Cigarette smoking



Fatty liver disease



Type 2 diabetes



Fibrosis/cirrhosis

(scar tissue that permanently damages healthy liver cells, caused by other liver disease)

TWO COMMON HCC STAGING SYSTEMS

1 Barcelona Clinic Liver Cancer Staging System (BCLC)

- 5 stages classified based on tumor stage, a Child-Pugh Score (a test that measures cirrhosis), and liver performance
- Stages 0, A, B, C, D

STAGE 0*

(very early HCC) (Child-Pugh A)

- Tumor is less than 2 cm.
- The liver remains working normally.
- You may feel well and fully active.

STAGE A*

(early HCC) (Child-Pugh A)

- One tumor in the liver that is smaller than 5 cm, or a max of three tumors in the liver that are each smaller than 3 cm
- The liver remains working well.
- You may experience portal hypertension and abnormal bilirubin levels.
- You may feel well and active.

STAGE B

(Intermediate HCC) (Child-Pugh A or B)

- Large tumors with many nodes in the liver, usually 4+ lesions
- The maximum size of any tumor is 5 cm.
- The liver remains working well.
- You may feel well and active.

STAGE C

(Advanced HCC) (Child-Pugh A or B)

- Tumors have spread into the blood vessels, lymph nodes, or surrounding organs.
- The liver has mild to moderate damage.
- You will most likely not be able to carry out heavy physical activities.

STAGE D

(Metastatic HCC) (Child-Pugh C)

- The tumors have spread into the blood vessels, lymph nodes, or surrounding organs.
- There is severe liver damage.
- You are no longer well, often bedridden, and need assistance to perform daily tasks.

**During stages 0 & A, removal of cancer is possible depending on your health status*

2

Tumor Node Metastasis Staging System (TNM)

- TNM combines features of the tumor into stage groups that both correlate with prognosis and are also linked to treatment recommendations.
- TNM describes:
 - The **size** of the primary tumor (T)
 - Whether the cancer has **spread** to the lymph nodes (N)

TO CAREGIVERS:

Your role in your loved one's treatment journey is crucial. It can be an overwhelming and difficult time for both you and your loved one. Your journey may also be challenging, but your efforts do not go unrecognized. Stay grounded with the following tips:

Maintain Communication

Maintain thorough and regular communication with your loved one throughout the treatment process as well as with their healthcare team, which can include a:

- Primary care physician (PCP)
- Nurse navigator
- Social worker
- Nutritionist
- Therapist
- Oncologist
- Hepatologist
- and more

Take Care of Yourself

Take care of yourself physically, mentally, and socially – though it can be hard to step away from your responsibilities caring for your loved one, you'll be able to provide the best support when you manage your wellness, too. Utilize:

- Counseling or therapy
- Community support
- Exercise
- Nutrition
- Plenty of rest

Connect

Connect with other HCC survivors and caregivers to build a community of peers who understand your experience.

Collect Medical Information

Collect important medical information and notes; keep track of all medical paperwork and medications. Don't hesitate to ask questions when you are confused or feel you are missing something.



Stay Empathetic and Caring



IMPORTANT QUESTIONS TO ASK

First, establish a trusting relationship with a physician that fits you best.



About Your Care Team

- What is your experience treating liver cancer?
- Will you be consulting with experts to discuss my care?
 - Whom will you consult?
- How do I go about establishing a multidisciplinary care team?
 - Who can you refer me to?
- Who can help me gather my records for a second opinion?



About Your Liver Health

- What is my diagnosis?
- Can you explain my staging prognosis in depth?
- Where is the cancer in my liver?
 - Is it anywhere else in my body?
- How healthy is my liver?



About Care

- What are all my treatment options, and what do they entail?
- What treatment do you recommend and why?
- If I cannot have the recommended treatment, what happens?
 - What does that mean for me and my future health?
- What will follow-up after treatment look like?



About Support

- Are there support groups for me and my family?
- How can your hospital/office help me manage the costs of cancer care?
- What groups can I connect with for more resources?
- Am I eligible for a nurse navigator?

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About Global Liver Institute

Global Liver Institute (GLI) is a 501(c)3 nonprofit organization founded in the belief that liver health must take its place on the global public health agenda commensurate with the prevalence and impact of liver illness. GLI promotes innovation, encourages collaboration, and supports the scaling of optimal approaches to help eradicate liver diseases. Operating globally, GLI is committed to solving the problems that matter to liver patients and equipping advocates to improve the lives of individuals and families impacted by liver disease. GLI holds Platinum Transparency with Candid/GuideStar, is a member of the National Health Council, and serves as a Healthy People 2030 Champion. Follow GLI on Facebook, Instagram, LinkedIn, and YouTube or visit www.globalliver.org.



