

Management of Liver Cancer

Treatment options for liver cancer depend on the number, sizes, and locations of tumors.

Hepatocellular Cancer (Most Common)

- For a single tumor <3 cm in a cirrhotic liver, liver transplantation, percutaneous ablation (<https://www.radiologyinfo.org/en/info/thermal-ablation-therapy>) (destroying tumor using microwave or thermal energy), or liver resection (piece of liver removed) is usually appropriate.
- For a single tumor 3 to 5 cm in a cirrhotic liver, liver transplantation, combination therapies, liver resection, and treatments to block tumor blood flow are usually appropriate.
- For multiple tumors in a cirrhotic liver (both lobes), with at least 1 tumor >5 cm, blocking tumor blood flow and systematic treatments (chemotherapy) are usually appropriate.
- For single or multiple tumors in a cirrhotic liver with vascular invasion (cancer has grown into a blood vessel), systematic therapies and transarterial radioembolization (<https://www.radiologyinfo.org/en/info/radioembol>) (blocking tumor blood flow using radio waves) are usually appropriate.

Cholangiocarcinoma (Bile Duct Cancer)

- For bile duct cancer in peripheral liver <3 cm, with no biliary ductal dilatation, vascular invasion, regional lymphadenopathy, or metastases, liver resection and percutaneous ablation liver are usually appropriate.
- For cancer in central bile ducts >3 cm with poorly defined margins, vascular invasion, and periportal lymphadenopathy, systematic therapies are usually appropriate.

Metastatic Liver Disease (Cancer Has Spread to the Liver From Elsewhere in Body)

- For a multifocal metastatic neuroendocrine tumor, long-acting somatostatin analogs (which slow down production of hormones), peptide receptor radionuclide therapy (which delivers radiation directly to cancer), and blocking blood flow to the tumor are usually appropriate.
- For single metastases to the liver from colorectal cancer, systematic therapies, liver resection, and percutaneous ablation liver are usually appropriate.
- For multifocal metastases to both the right and left liver from colorectal carcinoma: systematic therapies are usually appropriate.

— By Samantha Greben and Aya Kamaya, MD. This information originally appeared in the *Journal of the American College of Radiology*.

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