Successful phase 3 trial of drug for liver cancer

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An international phase 3 trial has found that the drug regorafenib improved survival in patients with advanced hepatocellular carcinoma (HCC), a form of liver cancer, giving people who previously had no other options a better chance at survival. Results from the study, which included researchers at The Tisch Cancer Institute at the Icahn School of Medicine at Mount Sinai, were recently published online in *The Lancet*. The trial, funded by Bayer, included 152 sites in 21 countries.

About 40 percent of HCC cases are diagnosed at advanced stages, a point when HCC is particularly difficult to treat. This trial provides evidence that regorafenib is the first systemic treatment for patients whose HCC progressed during treatment with sorafenib, the only other drug with proven clinical benefit.

This study tested regorafenib's effectiveness as a second-line therapy on 573 patients previously treated with sorafenib, 194 of whom were given a placebo. Regorafenib, a multikinase inhibitor, significantly improved overall survival, from 7.8 months on placebo to 10.6 months with regorafenib. Two patients treated with regorafenib had their tumor shrink to an undetectable level, according to the study.

"This study represents a breakthrough in the management of hepatocellular carcinoma, since it provides evidence for clinical benefits in an area that was an unmet medical need," said Josep M. Llovet, MD, founder and Director of the Liver Cancer Program and Professor of Medicine and Liver Diseases at the Icahn School of Medicine at Mount Sinai. "Regorafenib has shown it can improve survival in patients with advanced hepatocellular carcinoma progressing on sorafenib. Previously, no treatment was available for these patients."

Dr. Llovet was a member of the clinical trial's steering committee, and Charissa Chang, MD, Assistant Professor of Medicine and Liver Diseases at the Icahn School of Medicine, was principal investigator of the Mount Sinai testing site.

The success of this trial opens the field for testing drugs in third-line treatment of HCC and provides a rationale to test regorafenib as a first-line treatment or in combination with therapies administered directly into the tumor or diseased liver in patients in an earlier stage of HCC, according to Dr. Llovet. In this trial, regorafenib was well-tolerated with manageable adverse events, according to the paper in Lancet.

In January, Bayer announced that the U.S. Food and Drug Administration (FDA) had granted priority review status for Stivarga (regorafenib) as a second-line systemic treatment for patients with hepatocellular carcinoma. This research was also presented during the European Society of Medical Oncology's World Congress on Gastrointestinal Cancer in June.

Liver cancer is the second-leading primary cause of cancer-related deaths worldwide.

More information: Regorafenib for patients with hepatocellular carcinoma who progressed on sorafenib treatment (RESORCE): a randomised, double-blind, placebo-controlled, phase 3 trial, dx.doi.org/10.1016/S0140-6736(16)32453-9

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