Are Fibrosis Tests a Cost-Effective Way to Decide on Hep C Treatment?

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Using tests to determine liver fibrosis severity among people with hepatitis C virus and only treating those with advanced fibrosis is not cost-effective compared with a strategy of treating all, regardless of fibrosis stage. This finding may change, however, as new treatments enter the market, possibly with higher price tags.

Publishing their findings in Hepatology, researchers conducted a systematic review and meta-analysis to calculate the accuracy of various non-invasive tests (NITs) at determining fibrosis stage. Then they used the data from that meta-analysis, along with medical literature and national data from the United Kingdom, to compare the cost-effectiveness of four different strategies: conducting fibrosis staging with NITs and then treating those with a fibrosis stage 2 or above; staging with a liver biopsy and treating those with a fibrosis stage 2 or above; treating no one; and treating everyone regardless of their fibrosis stage.

Determining the cost-effectiveness of treating with the older generation of hep C drugs, Victrelis (boceprevir) or Incivek (telaprevir), the researchers found that the most cost-effective strategy was treating all people regardless of fibrosis stage, which yielded an incremental cost-effectiveness ratio (ICER) of about $15,000 per additional quality-adjusted life year (QALY) gained. The researchers conducted an exploratory analysis of treating with Sovaldi (sofosbuvir) and found that the strategy of treating everyone would still be cost-effective, compared with letting an NIT determine whether to treat, for an ICER of about $26,000 per QALY gained. An exploratory analysis of new treatments determined that if cure rates rise above 90 percent for those with hep C genotypes 1 through 4, then the extra associated costs for treatment, when compared with Incivek or Victrelis treatment, would have to remain below about $60,000 for the “treat all” strategy to remain the most cost-effective.

To read the study abstract, click here.