Simple HCV Regimen shows Promise

BOSTON – A simplified hepatitis C (HCV) regimen with just two oral drugs had promising results in a difficult-to-treat population, a researcher reported here.

The combination of ribavirin, dosed according to weight, and GS-7977, an investigational nucleotide polymerase inhibitor, reduced HCV levels to undetectable in almost three-quarters of the patients, according to Anu Osinusi, MD, of the NIH in Bethesda, Md.

But a similar regimen, using a reduced dose of ribavirin, was less effective, Osinusi told a latebreaker session at the annual meeting of the American Association for the Study of Liver Diseases.

Osinusi reported data from a 24-week, two-arm trial with 50 patients that compared GS-7977 with full-dose ribavirin (between 1,000 mg and 1,200 mg) to the same drug combined with a 600-mg dose of ribavirin.

That trial had been prompted by promising results from a small pilot study, with 10 patients, in which all participants got the GS-7977 compound as well as full-dose ribavirin for 24 weeks.

But in both studies, the patients were difficult to treat – most of them were African-Americans, who do not respond as well as other groups to most HCV treatments.

Also working against them, a majority had the refractory genotype 1a strain, were overweight or obese, or had an unfavorable genetic make-up. Many were also at an advanced stage of fibrosis, Osinusi reported.

The research is an "innovative and important" attempt to deal with both a public health issue and an unmet treatment need, said hepatologist Paul Pockros, MD, of Scripps Clinic in La Jolla, Calif., who was not involved in the study.

And the outcome shows that both needs can be met with a simple, all-oral regimen, he told MedPage Today.

The primary endpoint of both studies was the proportion of patients who had undetectable virus 12 weeks after the end of therapy – the so-called SVR12. But Osinusi was only able to report SVR4 rates for the trial because, so far, not all patients have been off treatment for 12 weeks.

In the pilot study, Osinusi reported, the 10 participants – nine of them African-American – responded well to 24 weeks of therapy.

With the exception of one patient who dropped out of the pilot study in the third week of treatment, all reached an SVR12, Osinusi said.

In the trial, 72% of participants had genotype 1a disease, 82% were African-American, 84% had the unfavorable variants of the IL28B gene, and 26% were at an advanced stage of fibrosis. The median body mass index was 28 in the full-dose arm and 30 in the low-dose arm.

Despite those handicaps, Osinusi reported, the proportion of patients who reached an SVR4 was 72% in the full-dose arm and 56% in the low-dose arm.

The first figure is "great," Pocks commented, and the second "not so great."

"That tells us that low-dose ribavirin is not a go," he said.

But the trial also "tells us that – although you do need ribavirin – in this difficult-to-treat population, you can get almost a 75% response," Pocks added.

Osinusi noted that the regimens were well tolerated, with no grade 4 adverse events and only two grade 3 events – one case of nausea and one of hyperbilirubinemia.

The only difference in the adverse events was an increased rate of low hemoglobin in the fulldose ribavirin arm, Osinusi reported.

The findings are "all very promising," Pocks commented, adding that Gilead Sciences, the maker of GS-7977, deserves credit for working with the NIH on the study.