UC San Diego News Center

July 21, 2015 | By Michelle Brubaker

New Drug Combination Treats Hepatitis C Patients also infected with HIV

Novel treatment has 97 percent success rate in co-infected patients

Roughly 20 to 30 percent of patients with hepatitis C virus (HCV) are also infected with human immunodeficiency virus type 1 (HIV). Both blood-borne viruses share the same modes of transmission, but many HCV medications currently have significant limitations due to adverse interactions with HIV treatments. Researchers at University of California, San Diego School of Medicine report a new combination that effectively treats HCV in patients co-infected with HIV.

The study, published online in the *New England Journal of Medicine*, found the combination of HCV drugs daclatasvir and sofosbuvir – both pills – cured HCV in 97 percent of patients also infected with HIV.

"In many HCV/HIV co-infected patients, HCV therapies can have a strong interaction with HIV medications that complicate or potentially exclude them from HCV treatment," said David Wyles, MD, lead author of the study in the Division of Infectious Diseases. "This study is novel because it shows the new drug combination was not compromised when used with a wide range of HIV medications, increasing the number of HCV/HIV patients who can be treated without modifying their HIV medications."

The 12-week study involved 151 patients and was the first to test this treatment regimen in those with HIV/HCV. Patients who participated in the clinical trial were closely monitored up to 24 weeks post treatment.

Another reason the study findings are important, said Wyles, is because HCV is a major cause of chronic liver disease in the United States, and liver damage progresses more rapidly in those also infected with HIV.

"Liver disease is a leading cause of death among HIV patients, so it is a high priority to treat coinfected patients and reduce the potentially fatal effect," said Wyles, also associate professor of medicine at UC San Diego School of Medicine. Sofosbuvir is already approved for use in the United States; daclatasvir is scheduled to be reviewed by the Food and Drug Administration in August.

"These findings are very exciting in the infectious diseases world, as they could help an entire demographic that has historically struggled finally receive successful treatment for HCV," said Wyles.

Co-authors include Peter J. Ruane, MD, Ruane Medical and Liver Health Institute; Mark S. Sulkowski, MD, Johns Hopkins University, Lutherville, MD; Douglas Dieterich, MD, Icahn School of Medicine at Mount Sinai, New York; Anne Luetkemeyer, MD, Los Angeles, the University of California, San Francisco, San Francisco; Timothy R. Morgan, MD, Veterans Affairs Long Beach Healthcare System, Long Beach; Kenneth E. Sherman, MD, PhD, University of Cincinnati College of Medicine, Cincinnati; Robin Dretler, MD, Infectious Disease Specialists of Atlanta, Decatur, GA; Dawn Fishbein, MD, MedStar Washington Hospital Center; Joseph C. Gathe, Jr., MD, the Cure C Consortium, Houston; Sarah Henn, MD, Whitman-Walker Health; Federico Hinestrosa, MD, Orlando Immunology Center, Orlando; Charles Huynh, DO, the Jeffrey Goodman Clinic, Los Angeles LGBT Center; Cheryl McDonald, MD, Tarrant County Infectious Disease Associates, Fort Worth; Anthony Mills, MD, Southern California Men's Medical Group-Men's Health Foundation; Edgar Turner Overton, MD, the University of Alabama at Birmingham, Birmingham; Moti Ramgopal, MD, Midway Immunology and Research Center, Fort Pierce; Bruce Rashbaum, MD, Capital Medical Associates; Graham Ray, MSN, ANP, the University of Colorado, Denver; Anthony Scarsella, MD, Pacific Oaks Medical Group, Beverly Hills; Joseph Yozviak, DO, Lehigh Valley Health Network, Allentown, PA; Fiona McPhee, PhD, Philip D. Yin, MD, PhD, Peter Ackerman, MD - all with Bristol-Myers Squibb, Wallingford, CT; Eric Hughes, MD, PhD, Stephanie Noviello, MD Zhaohui Liu, PhD – all with Princeton, NJ.

Funding for this research came, in part, from Bristol Myers Squibb.

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