

New study challenges the concept of treatment failure in hepatitis C

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Electron micrographs of hepatitis C virus purified from cell culture. Scale bar is 50 nanometers. Credit: Center for the Study of Hepatitis C, The Rockefeller University.

Data presented today demonstrate that choosing a different combination of direct-acting antiviral (DAA) treatment for Hepatitis C can eradicate the virus at four weeks in patients who had already failed on previous medication regimens.

The results were presented at The International Liver Congress in Barcelona, Spain and suggest that with the amount of DAAs available, the right combinations must be chosen for the right patients in order to eradicate the virus from the body.

Between 130 and 150 million people globally have chronic Hepatitis C virus (HCV) infection.¹ It is estimated that 15 million people in the World Health Organization's EU Region are living with Hepatitis C, representing 2% of adults.² Direct-acting antivirals are the treatment of choice for HCV, and these medicines have been used to treat and cure almost all patients.^{3,4,5,6}

"As a result of the emergence of resistance associated variants, the re-treatment of patients with HCV remains challenging," said Dr Johannes Vermehren, Universitätsklinikum Frankfurt, Germany and lead author of the study. "While treatment failure was observed in all of the various medication regimens, there is hope for these patients that re-treatment with differing combinations can be effective."

The German study drew patients with failure to DAAs from a large European HCV DAA-resistance database made up of more than 3,500 patients. Patients were included if they had received interferon-free DAA regimens. Treatment combinations were specific to HCV genotype.

The study identified 310 patients with failure to direct-acting antivirals. Among patients with genotype 1 and 3, 84% and 42% had developed resistance associated variants (RAVs), respectively.

Re-treatment was started in 29% (n=57/195) of patients with genotype 1; the majority of these patients had failed treatment with the combination of simeprevir and sofosbuvir, and were re-treated with the combinations of ledipasvir and sofosbuvir or paritaprevir, ombitasvir, and dasabuvir.

SVR12 was achieved in 90% of the re-treated patients with genotype 1. In the genotype 3 group, 23% (n=16/69) of patients were re-treated with sofosbuvir, daclatasvir \pm ribavirin. All of the re-treated [patients](#) with available follow-up [data](#) achieved SVR12.

"The concept of failed Hepatitis C [treatment](#) may be increasingly out of date. It may indicate that we have not yet found the right combination of drugs to eradicate the virus in a particular patient. With the plethora of direct-acting antivirals available, the medical community must work to find the right combination of medicines for the right patient," said Professor Frank Tacke, member of the EASL Governing Board.

More information: References:

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