

Inovio Pharma, Geneone Lifesciences announce Ph1 study of Hep C vaccine

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Inovio and its Korean Partner Dose 1st Subject In Trial to Develop World's First Vaccine to Prevent Hepatitis C Infection



Inovio Pharmaceuticals and Korea's GeneOne Life Science have announced that they have dosed the first patient in a Phase 1 study designed to evaluate a preventive vaccine against hepatitis C infection. Recruitment has already begun in South Korea, where GeneOne is responsible for conducting and funding this Phase 1 trial to assess the ability of Inovio's hepatitis C vaccine (GLS-6150) to boost immunity in people who have been treated and cleared of the virus. Pending study results, Inovio's vaccine could be employed to prevent infection and re-infection.

Dr. J. Joseph Kim, Inovio's President & CEO, said, "Developing the first successful vaccine against hepatitis C virus is a highly ambitious endeavor but a truly impactful effort for global health as well as being transformative for us commercially. The key to a successful hepatitis C vaccine will be its ability to activate the body's immune system to prevent or treat infection by a virus with multiple or ever-changing strains. Inovio's innovative DNA-based technology platform is uniquely positioned to address this challenge and it has been optimizing over the last several years in demonstrating strong *in vivo* immune responses against very tough-to-treat viruses like HIV, Zika and flu. We are very excited to launch this study with GeneOne's funding and execution in Korea and we look forward to the data in 2019."

Many insurers and governments, including the U.S., are seeking ways to control the high medical costs of treating hepatitis C infection and frequent re-infections especially in at-risk patient populations. Efforts to develop a hepatitis C vaccine started more than 25 years ago when the hepatitis C virus was first identified.

Progress has been slow because the hepatitis C virus is more variable than are the viruses that cause hepatitis A and B. The hepatitis C virus occurs in at least six genetically distinct forms (genotypes) with multiple strains. About 50 subtypes have been identified to date. Inovio's synthetic DNA vaccines have an advantage over inactivated or attenuated virus products since they are not limited to one specific strain of virus. As such, they are well matched against viruses with multiple strains and have demonstrated in clinical trials the ability to produce broad-spectrum immune responses against numerous strains of targeted pathogens.